

Apostel · The Dead Sleep Below

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# The Dead Sleep Below

The Universal, Embodied Experience of  
Sleep and Dreaming and Its Relation to  
Concepts of Death and the Netherworld  
before 1500 BC

by  
Lilith Apostel



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To my Oma, who missed seeing me in a doctoral cap by just a couple of months.  
And to my daughter, whose birth outshines this book.





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# 1 INTRODUCTION

## 1.1 RESEARCH QUESTION AND THEORETICAL BACKGROUND

Sleep and dreaming are characterised by specific traits, which incline them to religious interpretations, particularly to religious concepts of death and life after death. Several aspects are relevant here, the most important being the formal resemblance of sleep and death: the immobility of the body and the (seeming) absence of consciousness. At the same time, the dreamer experiences in the mind's eye an alternate reality that is structured in much the same way as the waking world but can still be distinctly different with respect to its content, prompting ideas about other realms.<sup>1</sup> Theoretical considerations about the role of sleep and dreaming for concepts of death and immortality can be traced back to 1871 when Edward Burnett Tylor, in his work *Primitive Culture*, promoted animism as the first step in what he considered the evolution of religions:

“The soul, as recognized in the philosophy of the lower races, may be defined as an ethereal surviving being, conceptions of which preceded and led up to the more transcendental theory of the immaterial and immortal soul, which forms part of the theology of higher nations. It is principally the ethereal surviving soul of early culture that has now to be studied in the religions of savages and barbarians and the folklore of the civilized world. That this soul should be looked on as surviving beyond death is a matter scarcely needing elaborate argument. Plain experience is there to teach it to every savage; his friend or his enemy is dead, yet still in dream or open vision he sees the spectral form which is to his philosophy a real objective being, carrying personality as it carries likeliness. This thought of the soul's continued existence is, however, but the gateway into a complex region of belief.”<sup>2</sup>

Having thus discerned belief in a soul that survives beyond death as crucial for early religions and deduced it from experiences in dreams, he goes on to exemplify his hypothesis:

“Moreover, visits from or to the dead are matters of personal experience and personal testimony. When in dream or vision the seer be-

holds the spirits of the departed, they give him tidings from the other world, or he may even rise and travel thither himself, and return to tell the living what he has seen among the dead. It is sometimes as if the traveller's material body went to visit a distant land, and sometimes all we are told is that the man's self went, but whether in body or in spirit is a mere detail of which the story keeps no record. Mostly, however, it is the seer's soul which goes forth, leaving his body behind in ecstasy, sleep, coma, or death.”<sup>3</sup>

Whereas the embedding of his observations into an evolutionistic theory of religions requires caution, the theory's respective elements are nevertheless subject to empirical study, and it would be premature to discard them due to ideological rather than scientific reasons.<sup>4</sup> The appearance of the deceased in dreams, for example, and them delivering as well as receiving messages is a common occurrence during the grieving process as described in the psychological literature (see chapter 2.9).<sup>5</sup>

Therefore, it is the aim of my work to explore the interconnectedness of ideas about sleep and dreaming with ideas about death and the netherworld. To address this topic, I will investigate how far back in time this connection can be traced and under which circumstances it manifests itself to what extent and in what form. Comprised in this main issue is another subordinate question, namely the role that sleep and dreaming play in religious contexts, especially for burial rites and cosmological ideas. By integrating textual and archaeological data with findings from the natural sciences and examining them against the background of cognitive archaeology and the cognitive science of reli-

<sup>3</sup> Tylor 1889 II, 49.

<sup>4</sup> Although social evolutionism has in its beginnings been used as a justification for colonial exploitation, recent archaeological research with an evolutionary perspective, on the contrary, has undermined justifications for colonialism by emphasising the creativity of and progress advanced by indigenous peoples in prehistoric times and therefore strengthened independence movements. Also, cultural evolution is simply undeniable as all modern societies trace their ancestry to Palaeolithic hunter-gatherer societies and have since undergone changes in social organisation as well as in terms of their worldview (Trigger 2001, 5–6). Preucel has even termed evolutionary theory “the only viable unitary theory in the human sciences” (Preucel 2006, 152).

<sup>5</sup> Garfield 1996, 188.

<sup>1</sup> Revonsuo 2010, 236.

<sup>2</sup> Tylor 1889 II, 24.

gion, a broader perspective on culture-specific manifestations of sleep and dreaming is enabled, particularly in relation to human universals.

The four key concepts – sleep and the dream-world as well as death and the netherworld – form a box whose segments designate the possible combinations between the mental and the physical as well as between this world and other realms (table 1). Because of the fragmentariness of the textual and archaeological record, only in rare cases can we expect to come by sources that pertain to all four concepts, and I will aim to work out the logic behind this interrelation so that inferences about missing information become possible. To do so, an approach is followed in which archaeological and textual sources from the Near East, Egypt and Europe which are older than 1500 BC are compiled and correlated to modern scientific findings.

*Tab. 1 Key concepts of the present study*

	<i>Physical</i>	<i>Mental</i>
<i>This world</i>	Sleep	Dreamworld
<i>Other realms</i>	Death	Netherworld

Like any other phenomenon that is based on biological properties, dreaming can be studied in a multilevel explanatory framework as illustrated in table 2.<sup>6</sup> My work investigates the phenomenon from a historical and archaeological perspective and is thus mostly concerned with the contextual level of explanation, i.e. how dreaming relates other phenomena, strictly speaking with the social and particularly with the religious consequences of dreaming. Yet, as the different level approaches examine the same phenomenon from different perspectives, valuable insights concerning the contextual can be gained by tying it to discoveries on the constitutive and etiological level, i.e. to human universals. Of significance here are the mental, cognitive or neural constituents of dreaming as well as its developmental level and evolutionary causes.

Although initially, historical texts seem more accessible, the objection that archaeological remains do not constitute plain texts that can be understood hermeneutically<sup>7</sup> applies in some

way to past written sources also, and in both cases a certain degree of interpretation is necessary.<sup>8</sup> Especially when religious topics are concerned, core aspects can stay unmentioned either deliberately or because they were taken for granted.<sup>9</sup> Moreover, if historical texts refer to religious issues, this often happens with apologetic intentions, rendering them unreliable concerning realistic depictions of past religious practices. On this account, the most promising approaches can be found in areas where the different categories of evidence intermingle and therefore allow for reciprocal verification.<sup>10</sup> Sleep and dreaming are a case in point, and both are mentioned regularly in the early written sources. In contrast, whereas sleep can show up in the archaeological record, for example in the form of sleeping places or pictorial representations, dreaming usually leaves no trace. Additionally, both sleep and dreaming are universal human phenomena, which is why scientific studies are of use in understanding both the textual and the archaeological sources. While conclusions by analogy are never without problems, those based on quasi-scientific laws are less uncertain.<sup>11</sup>

Cognitive archaeology and the cognitive science of religion may offer a way to advance the

<sup>7</sup> Hansen 2003, 113.

<sup>8</sup> Gianluca Miniaci's opinion that written sources offer an emic perspective as opposed to the etic perspective gained from archaeological remains seems too simplified (Miniaci 2016, 89). Instead, both categories of source material encompass an emic as well as an etic component as they were both produced by a cultural insider and are now interpreted by a cultural outsider. Concerning the oft-quoted dichotomy between inductive and deductive method (Zgoll 2006, 40–41), it seems highly doubtful that a scholar could ever be free of presuppositions and solely guided by the material. Instead, these presuppositions must be constantly re-evaluated in the light of the source material employed, i.e. a progressive induction that shifts between induction and deduction, similar to the hermeneutic circle (Bernbeck 1997, 50–51, 60, 280).

<sup>9</sup> Hansen 2003, 117.

<sup>10</sup> Kristiansen 2013, 81–82. Needless to say, the comparison between written and archaeological sources is most valuable in cases where they disagree.

<sup>11</sup> Hansen 2003, 117. Generally speaking, the more data an analogy is based on, the more reliable it gets (formal analogy), particularly if the respective elements are in themselves causally interrelated (relational analogy) or if several analogies are employed (complex analogy) (Bernbeck 1997, 85, 94, 98–99, 101, 106–107).

<sup>6</sup> Valli 2011, 1084–1088. See also Revonsuo 2015, 53–54.

*Tab. 2 Dreaming in the multilevel frame-work*

<i>Etiological explanation (backward-looking)</i>	<i>Constitutive explanation (downward-looking)</i>	<i>Contextual explanation (upward-looking)</i>
<p>The causal history of dreaming:</p> <ul style="list-style-type: none"> <li>• Neural and cognitive level proximate causes for dreaming</li> <li>• Developmental level causes, ontogeny of dreaming</li> <li>• Evolutionary, ultimate causes for dreaming: why the brain has the ability to produce dreams</li> </ul>	<p>The mental, cognitive or neural constituents of dreaming</p>	<p>How dreaming relates to other phenomena:</p> <ul style="list-style-type: none"> <li>• Intra-individual level</li> <li>• Behaviour</li> <li>• Organism-environment interaction</li> </ul>

topic. Generally speaking, cognitive archaeology consists of two research areas – “evolutionary studies” and “cognitive processual studies”<sup>12</sup> – which can be distinguished on temporal grounds.<sup>13</sup> Apart from a glance at the evolution of sleep and dreaming in chapter 3, my work is concerned with the Holocene and therefore roughly falls into the latter category. While in the beginning only defined as the study of “the ancient mind”<sup>14</sup> by Colin Renfrew and torn by the controversy between processual and post-processual archaeologists, the last two decades have seen an increase in both quality and quantity of research concerned with cognitive processes of prehistoric humans, although there is still no theoretical or methodological consensus apart from a positivist stance. Robert Preucel gives a detailed literary overview of the different trends in cognitive archaeology.<sup>15</sup> I do not wish to enter the debate between conflicting schools in archaeology here; instead, I would merely rather point out that both the criticism directed at processualists, namely that by taking a functionalist perspective they overestimate adaptive factors, as well as the criticism directed at post-processualists, namely that they do not produce significant insights because of a relativist perspective, is to some extent justified.<sup>16</sup> The distinction between innate and culturally determined behaviour should not be a question of theoretical dogma but one of empirical research in a framework that understands environment

and behaviour as mutually influential systems. Instead of confining oneself to the study of the use of symbols, for example in writing or in systems of measurement,<sup>17</sup> or to lower expectations, meaning that one just tells a story, it seems possible to make statements about the mental structures of ancient humans that are verifiable or at least highly plausible. Religion and cosmology are key topics in cognitive archaeology, although, again, they have been mostly studied from a functionalist perspective.

A central premise of the cognitive science of religion lies in the idea that the origin, acquisition and transmission of religion are deducible from the evolution of the human brain, and that therefore religious ideas and religious behaviour can be explained by the sciences, particularly biology, cognitive psychology and evolutionary theory.<sup>18</sup> In this context, a major focus is on the way unconscious processing of information works rather than on mental contents, the former being considered superordinate to the latter. Because religious ideas are understood to arise from natural thinking, religion is considered to be part of every historic and prehistoric culture, and attempts are made to work out the underlying universal cognitive architecture that gives rise to these ideas. These structures are considered to form an integrated whole (connectionism)<sup>19</sup> or to consist of domain-specific cognitive modules (modularism)<sup>20</sup> and are supposed to shape the way we think. Still, religions do not solely consist of mental representations (bottom-up processes) but need to be studied

<sup>12</sup> Preucel 2006, 148.

<sup>13</sup> Preucel 2006, 147–148, 162–164.

<sup>14</sup> Renfrew 1994, 3, 5.

<sup>15</sup> Preucel 2006, 147–172.

<sup>16</sup> Bernbeck 1997, 272, 285; Renfrew 1994, 3, 6, 9; Sanders 1990, 44; Trigger 2003, X, 11, 686–687.

<sup>17</sup> Renfrew 1998, 1.

<sup>18</sup> Schüler 2012, 19, 27, 36–39, 46, 48.

<sup>19</sup> For example Wynn and Coolidge 2012.

<sup>20</sup> For example Mithen 1996.

holistically, considering the sociocultural dynamics that influence biology and psychology (top-down processes). Fundamental research in the cognitive science of religion has been conducted by E. Thomas Lawson and Robert McCauley,<sup>21</sup> Pascal Boyer,<sup>22</sup> Harvey Whitehouse<sup>23</sup> and others. A detailed literary overview is provided by Sebastian Schüller.<sup>24</sup>

Previous attempts in the study of prehistoric religion can be roughly divided into two categories, namely historico-sociological, i.e. functional, and phenomenological, i.e. substantial, explanations.<sup>25</sup> These were mostly tied to the broader ideological climate of a given time, and a focus on the social organisation of religious customs predominated in periods of rational, positivistic thinking, while attempts to comprehend the inherent nature of religion prevailed in more romantic periods of cultural-historical thinking. It is my opinion, however, that research need not be limited to functional<sup>26</sup> aspects but that it is possible to gain empirical insights about the underlying mental constitution of past religious phenomena, comparable to structuralist approaches.<sup>27</sup> Yet, while structuralism focused on association and on classification by opposition, in accordance with the above considerations, the embodied processes of spatial organisation and movement will soon become apparent as the main themes significant in this work. Corresponding to this emphasis on mental concepts, myth rather than ritual and cult will dominate in the sources that are discussed.

No comprehensive definition of religion has been generally accepted so far, as is to be expected due to the inherent difference between substantial and functional definitions.<sup>28</sup> Whereas a variety of criteria have been suggested,

they have mostly proven too narrow, inflating aspects of individual religions and then transferring them onto others.<sup>29</sup> A basic definition is given by Armin Geertz, who sees religion as “a cultural system and a social institution that governs and promotes ideal interpretations of existence and ideal praxis with reference to postulated transempirical powers or beings”.<sup>30</sup> Hartmut Zinser also emphasises religious acts and concepts as well as their embeddedness into their socio-cultural context:

„Ausgehen möchte ich davon, daß unter heuristischen Gesichtspunkten vorläufig das als Religion anzusehen ist, was von den Anhängern einer Religion und ihrer sozialen Umwelt als Religion betrachtet wird. Religionen sind gesellschaftliche und geschichtliche Bildungen und bestehen aus Vorstellungen und daraus folgenden Handlungen von Menschen. Religionen waren und sind eine soziale Wirklichkeit, wie andere kulturelle Phänomene, z. B. das Recht oder das Geld. Von diesen unterscheiden sie sich dadurch, daß beim Recht und Geld, so undurchschaubar für den einzelnen deren Zustandekommen und gesellschaftliche Wirklichkeit sein kann, jeder wissen kann, daß sie von Menschen gemacht sind. Von Religionen aber wird angegeben, von Gott oder Göttern offenbart zu sein, von den divinisierten Ahnen oder Heroen eingesetzt zu sein oder von einer anderen nicht-menschlichen oder nicht-mehr-menschlichen Instanz herzustammen und häufig sich auf ein Jenseitiges, der Erfahrung Entzogenes zu beziehen oder Aussagen darüber zu machen, z. B. über die Frage eines Weiterlebens nach dem Tode.“<sup>31</sup>

With respect to the cultures considered in this work, both the reference to other realms, particularly to life after death, as well as the claim to revelations of the gods will become evident in the following. As opposed to this, the social and cultural differentiation between religion and other aspects of life is less pronounced than in later epochs,<sup>32</sup> and the perceived assignments of the gods are, for example, regularly employed as a legitimization of political action. The above definition, however, leaves out experience as

<sup>21</sup> Lawson and McCauley 1990.

<sup>22</sup> Boyer 1994.

<sup>23</sup> Whitehouse 2004.

<sup>24</sup> Schüller 2012, 33–36.

<sup>25</sup> Hansen 2003, 122–128, 131–132, 140–141; Kristiansen 2013, 78–79.

<sup>26</sup> Functionalist explanations also face the logical problem that they must be descriptive rather than explanatory as illustrated by the sentence: “The function of x is to do what it does.” (Lewis-Williams and Pearce 2009, 78).

<sup>27</sup> Bernbeck 1997, 273–274, 283. See also Hansen 2003, 141.

<sup>28</sup> Hansen 2003, 114. Additionally, questions such as whether humans have always believed in gods or at what time these beliefs came into being are still

intensely debated (Hansen 2003, 118; Junker 2014, 67–76; Kristiansen 2013, 80).

<sup>29</sup> Zinser 2010, 65.

<sup>30</sup> Geertz 2010, 305.

<sup>31</sup> Zinser 2010, 67.

<sup>32</sup> The Egyptian language, for example, does not have a word for “religion” (Trigger 2003, 409).



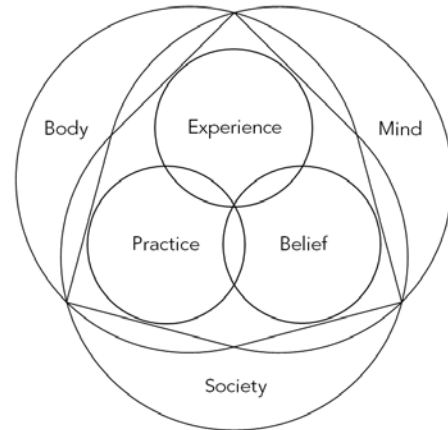
the third sphere of religion besides practice and belief, as stated by David Lewis-Williams and David Pearce.<sup>33</sup> They have also argued that the three areas are embedded in what they, following Jean-Jacques Rousseau, term “the social contract” and “the consciousness contract”, i.e. the basic workings of the nervous system and the cultural milieu that provide most of its particular content:

“Euphoric and transcendent religious experience derives from the human nervous system. Religious beliefs derive fundamentally from attempts to codify religious experiences. Religious practices lead people into religious experiences and manifest beliefs.”<sup>34</sup> “The three dimensions of religion are set within social and consciousness contracts. Some people veer to the left and emphasize experience, others to the right and emphasize intellectual belief and ritual practice.”<sup>35</sup>

Yet, a “biocultural theory of religion” acknowledges that humans are at the same time biological and cultural creatures, and sees cognition as inextricably tied to brain and body (embrained and embodied), contingent on culture (enculturated), as well as extended and distributed beyond individual brains.<sup>36</sup> A central element in the contemporary cognitive science of religion is the “dynamic systems theory”/“dynamic cognition” that emphasises cognition as an aspect in the complex dynamic interaction between brain, body and its physical and social environment.<sup>37</sup> Any cognition is always embedded in a bodily, social and situational context:

„Kognitionen sind einerseits selbst emergente Ganzheiten, die durch das Zusammenwirken vieler einzelner Neuronen entstehen. Zugleich beeinflussen bewusst und unbewusst ablaufende kognitive Prozesse das Zusammenspiel und die Struktur von neuronalen Netzwerken. Andererseits können Kognitionen als mentale Prozesse beim Menschen verstanden werden, wobei jedes Individuum seine eigenen Bewusstseinsinhalte besitzt. Diese erlangen aber erst in der Interaktion vieler Individuen ihre Eigenschaft als soziale Kognitionen und Repräsentationen. Somit können Kognitionen selbst als

funktionale Schnittstelle oder als Feld verstanden werden, bei dem der Übergang von neuronalen zu sozialen Prozessen sichtbar wird. Das Einzelne (das Neuron / das Individuum) kann ohne seine übergeordnete Gesamtheit (Kognition und Körper / die Gesellschaft) nicht hinreichend verstanden und sollte daher auch nicht isoliert von dieser betrachtet werden.“<sup>38</sup>



*Fig. 1 Three spheres of religion within the mental, bodily and social domain*

Whereas Schüler is correct in pointing out the mutual influence of the biological, the psychological and the social (see chapters 2.9 to 2.12), dreams pose a case apart in which the individual operates in a simulated world and in which the structuring grip of society on its inner life is eased.<sup>39</sup> Then again, bodily sensations and emotions play a fundamental role in dreams, and they are therefore of great significance in the study of the universal traits of religions. Therefore, I have expanded the scheme by Lewis-Williams and Pearce to incorporate the bodily domain as illustrated in figure 1. That “embodied cognition”<sup>40</sup> has already been eminently important for the conceptualisation of the dreamworld in the earliest sources will become apparent in the course of this work.

<sup>38</sup> Schüler 2012, 62.

<sup>39</sup> Assmann 2007, 11, 114. In accordance with his focus of consciousness as mediated by society, Maurice Halbwachs considers dreaming, in which the mind is most removed from society, a defective form of consciousness (Halbwachs 1992, 41–42).

<sup>40</sup> “Cognition is embodied when it is deeply dependent upon features of the physical body of an agent, that is, when aspects of the agent’s body beyond the brain play a significant causal or physically constitutive role in cognitive processing.” (<http://plato.stanford.edu/entries/embodied-cognition/> 15 April 2017).

<sup>33</sup> Lewis-Williams and Pearce 2009, 25–28, 37–40, 152, 285, 287–288.

<sup>34</sup> Lewis-Williams and Pearce 2009, 25.

<sup>35</sup> Lewis-Williams and Pearce 2009, 287.

<sup>36</sup> Geertz 2010, 304, 306; Geertz 2013, 30.

<sup>37</sup> Schüler 2012, 109, 212.

1.2 STRUCTURE OF THE WORK,  
DATA BASE AND METHODOLOGY

In accordance with the considerations described above, I will firstly give an overview of scientific research concerning sleep and dreaming in chapter 2, complemented by evolutionary approaches in chapter 3. Like dreaming itself, taking an interest in dreams is a universal human phenomenon,<sup>41</sup> and chapter 4 on the Near East as well as chapter 5 on Egypt will investigate early written sources that mention sleep and dreaming and explore their connection to ideas about death and the netherworld by considering them in light of the information gathered in chapter 2. Finally, chapter 6 will examine prehistoric Europe for clues about behaviours and beliefs that can be compared and/or related to the ideas of ancient Egypt and Mesopotamia. Whereas in chapters 4 and 5 all known texts are compiled that are concerned with dreaming between 2500 and 1500 BC, chapter 6 constitutes an anthology of archaeological evidence for sleep in the prehistoric regions and therefore also includes earlier periods. Until now, the topic has passed completely unnoticed in the archaeological literature, and the present work constitutes the first study to systematically investigate prehistoric evidence for sleep. With chapters 4 and 5, on the other hand, I have not aimed for exhaustiveness in terms of information about sleep from the Near East and Egypt but have used exemplary sources to illustrate the connection to dreaming and concepts of death and the netherworld. The temporal and the geographic scope of my work are illustrated in the map of sites in figure 2 and in the chronology tables in tables 8, 9 and 10.

<sup>41</sup> Anthropologist Donald Brown states in his work *Human Universals*: “The UP [= Universal People] dream and attempt to interpret their dreams.” (Brown 1991, 139). “Dream interpretation”, however, is a misleading term because it evokes ideas about decoding dream images similar to Freudian approaches (see chapter 1.4). Therefore, a more neutral phrasing is preferred here. Universals in human behaviour are, as in this case, usually triggered by an underlying biological universal. This does not mean that cultural interpretation is determined by the biological phenomenon but rather that it is strongly motivated by it. For example, many human societies perform *rites de passage* for adolescents prompted by obvious bodily changes at a certain age, but the form that these rites will take differs from society to society.

Only dream accounts that can be dated reliably to the third millennium BC or to the first half of the second millennium BC have been included. Because we cannot be sure how individual versions of some text differ, texts dating back to the time considered here were left out if the dream episode in question occurs only in a later version (for example the stories of Etana<sup>42</sup> or Narām-Sîn<sup>43</sup>). I have chosen this temporal frame because shortly after the middle of the third millennium BC, the first written sources on dreaming appeared, whereas around the middle of the second millennium BC, major political and social changes took place, which affected people’s worldview and, accordingly, can be expected to have had an impact on concepts of sleep and dreaming as well.<sup>44</sup> For example, the earliest instance of an oneirocritic manual or “dream book”, i.e. the concept which is today commonly associated with ancient dream work, is only attested from New Kingdom Egypt.<sup>45</sup> Furthermore, a diachronic and cross-cultural study allows us to draw inferences about a topic’s various aspects by exploring how they change in relation to each other in the course of time.<sup>46</sup> Nevertheless, it is not a comparative cross-cultural study in the classic sense because it mostly investigates historically related cultures.<sup>47</sup>

A considerable number of dream accounts have been preserved from Mesopotamia between the Early Dynastic III and the Old Babylonian period. Chapter 4 draws upon *Traum und Welterleben im antiken Mesopotamien* by Annette Zgoll, which has been an invaluable source concerning Mesopotamian texts on dreaming.<sup>48</sup> However, as Zgoll has not included a text catalogue, translations for all sources will be provided in the following. Chapter 4 will first present an overview of Near Eastern archaeological findings concerning sleep in chapter 4.2 before turning to written sources that mention dreaming. Chapter 4.3 contains the earliest sources from ritual and administrative contexts, namely seals that depict likely dream-

<sup>42</sup> Haul 2000, 133–151.

<sup>43</sup> Westenholz 1997, 294–331.

<sup>44</sup> Trigger 2003, 34–35.

<sup>45</sup> Szpakowska 2003, 69–71.

<sup>46</sup> Trigger 2003, 36.

<sup>47</sup> Smith 2012; Trigger 2003.

<sup>48</sup> Zgoll 2006. For a detailed account of the history of research concerning Mesopotamian dreams, see Zgoll 2006, 23–35.



ing scenes, an incantation, two tablets that list rewards for incubations and the “song” *Nin-me-šara*, which mentions the tasks of a dream specialist. The custom of employing dreams of kings for various but mostly political means is illustrated in chapter 4.4 by way of the *Stele of the Vultures* of King Eanatum of Lagaš, cylinder A of King Gudea of Lagaš, the hymns Šulgi O & D of King Šulgi of Ur, King Iddin-Dagan of Isin’s hymn about Inana and a letter-prayer by King Sin-iddinam of Larsa. A glimpse into the dream life of lower-ranking people is offered in chapter 4.5, which deals with nineteen letters from the archive of King Zimri-Lim of Mari as well as with an administrative record and with five private letters. The majority of Mesopotamian sources, however, are literary compositions and include the following texts, which are collected in chapter 4.6: *Curse of Agade*, *Lugalbanda in the Cave of the Mountains*, *Enmerkar and EnSUHkešda’ana*, *Sargon Legend*, *Dumuzi’s Dream*, *Song of the Plowing Oxen*, *Origin of Grain*, *Epic of Gilgameš* and *Epic of Atramhasīs*. Lastly, chapter 4.7 illustrates what is known about ritual specialists and lists the four earliest examples of possible evidence for dream omens and dream rituals.

Although by no means as numerous as in Mesopotamia, several Egyptian dream accounts with a date between the Old and Middle Kingdom have been discovered. These are analysed in chapter 5, which is mostly based on *Behind Closed Eyes. Dreams and Nightmares in Ancient Egypt* by Kasia Szpakowska.<sup>49</sup> The chapter’s structure is similar to that of the Near East chapter, beginning with an overview of archaeological findings in chapter 5.2, followed by written sources. Of these, chapter 5.3 on texts about dreams and the netherworld is the most extensive. It starts with two letters addressed to the dead and then goes on to summarise studies about the significance of sleep and dreaming in the *Pyramid* and *Coffin Texts*. Chapter 5.4 is concerned with the role of dreams in rituals and teachings and contains passages from the *Execration Texts* and the *Teaching of Ptahhotep* along with the remains of a papyrus with prophylactic spells against bad dreams. Lastly, in chapter 5.5, two literary compositions, namely the *Tale of the Eloquent Peasant* and the *Tale of Sinuhe*, are discussed. As the stud-

ies by Zgoll and Szpakowska constitute general works in which all previous research concerning dreaming in Mesopotamia and Egypt is discussed, reference should also be made to their role for a literary overview. A detailed discussion of previous studies about dreaming in Mesopotamia and Egypt is therefore omitted here, apart from pointing out the classic works of A. Leo Oppenheim<sup>50</sup> and Adriaan de Buck.<sup>51</sup> With respect to the many different traditions of transcription, I have not aimed for consistency but have preserved the spelling used by individual authors.<sup>52</sup> For the same reason, namely, to avoid an accidental change of meaning, I have also refrained from translating most foreign language quotes into English.

Chapter 6 discusses references to sleep in archaeological findings from prehistoric Europe. Because such evidence has never been systematically examined until now, the chapter aims to address this topic as comprehensively as possible. Therefore, earlier sources than in the preceding chapters were included as well. Chapter 6 is subdivided into geographical sections, treating Anatolia (chapter 6.2), the Aegean and Greece (chapter 6.3), Malta (chapter 6.4), the British Isles (chapter 6.5) and central Europe (chapter 6.6).

Thus, the entirety of texts concerned with dreaming older than 1500 BC is analysed and interpreted in the context of archaeological evidence on the one hand and scientific findings on the other. That the dating, the origin and the type of sources encompasses a wide field and is dependent on the randomness of preservation conditions presents no methodological problem. On the contrary, the more diverse the sources are, the more complex a picture can be expected to emerge. Because of the wide scope of sources and their investigation within an interdisciplinary framework that includes the natural sciences as well as cognitive archaeology and cognitive science of religion, it is also not possible to specify any particular method.<sup>53</sup> Rather, the variety of sources calls for a variety of approaches useful under the respective circumstances. Still, it will become apparent in the following that, despite their

<sup>50</sup> Oppenheim 1956.

<sup>51</sup> De Buck 1939.

<sup>52</sup> Transcriptions of personal names follow Zgoll (Zgoll 2006) for Mesopotamia and Hornung and his colleagues (Hornung et al. 2006) for Egypt.

<sup>49</sup> Szpakowska 2003.

variation, certain themes are pervasive in the different sources.

As mentioned above, the archaeological findings from the Near East and Egypt do not claim to be exhaustive but illustrate the assumption that written and material sources are complementary, an assumption also important for the interpretation of findings from prehistoric regions. This means that, for example, only burials were included in which a reference to sleep is apparent. The question of what aspects matter for a reference to sleep, however, is not one of definition but has to be addressed in the context of the culture in question, and it will therefore be discussed in the respective chapters. Especially concerning Egypt, the evidence is vast, which is why Manon Schutz is currently preparing a dissertation on *Sleep, Beds and Death in Ancient Egypt*, in which she analyses both archaeological as well as linguistic evidence pertaining to these topics.<sup>54</sup> Additionally, the dissertation *Konzepte von Müdigkeit und Schlaf im alten Ägypten* by Simone Gerhards investigates the Egyptian concepts of fatigue, sleep and awakening.<sup>55</sup> The same applies to Egyptian burial customs and concepts of death, for which the sheer mass of information requires a limitation to secondary literature such as the works by John Taylor,<sup>56</sup> Hermann Kees<sup>57</sup> or Jan Zandee.<sup>58</sup> Concerning Mesopotamia, sleep has been investigated by Ulrike Steinert,<sup>59</sup> while the topic of beds and sleeping places has been treated by Armas Salonen,<sup>60</sup> Nadja Cholidis<sup>61</sup> and Maria Krafeld-Daugherty.<sup>62</sup> The role of the netherworld in cosmology has been addressed by multiple scholars in the course of time, among them Bruno Meissner,<sup>63</sup> Samuel Kramer,<sup>64</sup> Jean Bottéro<sup>65</sup> and Markham Geller.<sup>66</sup>

The sequence of written sources in the respective chapters is roughly chronological, and at the same time, they fall into different categories, reflecting the evolution of scripture. Especially for Mesopotamia, development of different forms of writing becomes apparent.<sup>67</sup> During the Uruk period, writing in a notation system unrelated to the structure of spoken language remained confined to administrative purposes, and accordingly, no dream accounts have been preserved. Long-term record keeping starts during the Early Dynastic period in a form of writing that now phonetically represents the structure of spoken language, and it is during this time that we come upon the first mention of dreams. With the reorganisation of kingship and palace administration during the Old Akkadian period, writing was standardised, a process that continued during the Ur III period when new forms of written literature and historiography appeared. Finally, the Old Assyrian and Old Babylonian periods are characterised by a high degree of systematisation as well as by a “democratization of writing”<sup>68</sup> in a time of progressive individualisation and privatisation. Furthermore, for the first time, many texts were transmitted in schools linked to temples instead of in the context of palace administration, where power resided. Among the new forms of written knowledge are the first Akkadian literary corpus, private legal documents and letters, as well as texts concerned with divination, astronomy, historiography, healing and grammar to name but a few, and it is therefore hardly surprising that the majority of sources treated in this work stem from this period. Contrary to Mesopotamia, where in the beginning, writing was closely connected to politico-economic administration, in Egypt, it was employed for monumental inscriptions that legitimated the authority of priests and rulers. Because dreaming in Egypt was, unlike in Mesopotamia, not employed for political means, dream accounts were far less abundant and only appeared during the First Intermediate Period.

In regard to the dating of sources, this is not the place to enter in the discussion on different chronology systems. As the purpose of my work is only to sketch a rough outline

<sup>53</sup> Hansen 2003, 131.

<sup>54</sup> Schutz forthcoming.

<sup>55</sup> Gerhards 2020.

<sup>56</sup> Taylor 2001.

<sup>57</sup> Kees 1956.

<sup>58</sup> Zandee 1960.

<sup>59</sup> Steinert 2010.

<sup>60</sup> Salonen 1963.

<sup>61</sup> Cholidis 1992.

<sup>62</sup> Krafeld-Daugherty 1994.

<sup>63</sup> Meissner 1925.

<sup>64</sup> Kramer 1960.

<sup>65</sup> Bottéro 1980.

<sup>66</sup> Geller 2000.

<sup>67</sup> Hyman and Renn 2012, 83–84, 86–87.

<sup>68</sup> Hyman and Renn 2012, 86.

of the temporal development in relation to other regions – some of them with highly debated chronologies as well – uncertainties in the range of a matter of decades can be disregarded as irrelevant. This also means that this work is not able and does not aim to answer questions connected to chronological subtleties, for example in what place a certain innovation connected to sleep and dreaming arose first. I will mostly refer to the relative chronological system of the individual regions, but when absolute dates are given for Mesopotamia, this text follows the work of Dietz Otto Edzard<sup>69</sup> and Marc Van De Mieroop,<sup>70</sup> both adherents of the middle chronology. For Egypt, absolute dates were taken from the volume edited by Erik Hornung, Rolf Krauss and David Warburton.<sup>71</sup> Chronology systems for the European regions mainly rely on Joseph Maran's work.<sup>72</sup> All sources are indicated in the individual chronology tables as well.

### 1.3 PRELIMINARIES: RELATIONS BETWEEN THE CULTURES UNDER INVESTIGATION

As the textual and archaeological evidence considered here covers a wide area, my work is based on the central assumption that the cultures of the late third and early second millennium BC were in continual contact. Highly controversial only a couple of decades ago, evidence has greatly increased recently, leading to a multi-faceted picture of the relations between the different regions.<sup>73</sup> The Levant and Mesopotamia have been grouped into one chapter because Mesopotamian material culture appears in Syria as early as the Ubaid period of the fifth millennium BC, with the ties becoming even closer in the course of time.<sup>74</sup> Under Sargon of Akkad (2334–2279 BC<sup>75</sup>) and his successors,

military campaigns were led to extract natural resources, and a veritable part of Syria was subjugated. Moreover, the migration of large groups of Amorites from Syria into southern Mesopotamia during the Third Dynasty of Ur and the subsequent establishment of individual city states under Amorite kings from the early second millennium BC to about 1600 BC pertains directly to the timeframe of this work. Permanent contact between these kings is attested from Mari, a city also conspicuous for its wide scope of documents concerned with dreams (see chapter 4.5), and a trading network that connected Babylonia and Assyria with southern Anatolia and that resulted in the foundation of *kāru*<sup>76</sup> existed. Cuneiform writing was eventually adopted by the Hittites, and by the sixteenth century BC, an adoption of Syrian elements into the Hittite religion is verifiable.<sup>77</sup> The ports of the Levant also played an important role in linking the interior and Mesopotamia to maritime trade.<sup>78</sup> This process already started with the foundation of cities on the coast during EB III, and, while declining again during EB IV, a time of upheaval that also ran parallel in Egypt and Mesopotamia, the coastal cities reached their zenith of economic growth and prosperity during the first half of the second millennium BC. In Sidon, Lebanon, imports from Crete (MM IIA), Egypt (Dynasty 12), Cyprus (MB II/II B) and Syria (MB I/II A) have been excavated.<sup>79</sup>

Regular contact between Egypt and the Levant is attested from the third millennium BC by a variety of textual sources, for example by pharaonic inscriptions at Byblos in Lebanon.<sup>80</sup> Trade in cedar, which only grows in Lebanon, Cyprus and Turkey, is mentioned on the Palermo Stone, which records events between Dynasty 1 and 5,<sup>81</sup> and is affirmed by finds of cedar objects in Early Dynastic contexts. Additionally, objects such as Naqada II pottery, a fragment of an Egyptian stone vase from Dynasty 2 and a gold axehead from Dynasty 4 appear in the Levant. During the Middle Kingdom, inter-

<sup>69</sup> Edzard 2009.

<sup>70</sup> Van De Mieroop 2007.

<sup>71</sup> Hornung et al. 2006.

<sup>72</sup> Maran 1998.

<sup>73</sup> Aruz et al. 2013.

<sup>74</sup> Schwartz 2013, 2–4, 10. Although the Mesopotamian city states regarded themselves as a culturally distinct group that did not include the kingdoms in the north (Trigger 2003, 35), this denial indirectly acknowledges a certain familiarity with them.

<sup>75</sup> Van De Mieroop 2007, 302.

<sup>76</sup> A *kārum* is an Assyrian trading establishment, literally a “port” (Edzard 2009, 114).

<sup>77</sup> Beckman 2013, 284, 287, 292.

<sup>78</sup> Al-Maqdissi 2013, 82–83.

<sup>79</sup> Doumet-Serhal 2013, 133–138.

<sup>80</sup> Bussmann 2014, 80, 82–83; Ward 2013, 47; Wiener 2013, 34–35.

<sup>81</sup> Hornung et al. 2013, 19.

actions persisted, and expeditions to the Near East are described in the court records of Amenemhet II (Dynasty 12, 1878–1843<sup>82</sup> BC). Of particular interest are the wall paintings in the tomb chapel of Khnumhotep II in Beni Hasan, Egypt (Middle Kingdom, ca. 1880 BC).<sup>83</sup> Here, a procession of foreigners in brightly patterned garments is depicted, who are designated with the Semitic loanword *Aamu* (usually translated as “Semites” or, more generally, “Asiatics”) in the caption. While opinions on the location of the homeland of the *Aamu* vary considerably, the painting shows that contact between Egypt and the Near East involved not only the movement of goods but also of people and therefore almost certainly information about their worldview. Similarly, in the Egyptian *Tale of Sinuhe*, the protagonist leaves Egypt to settle in the Near East (see chapter 5.5).

With respect to the more distant regions of the north-eastern Mediterranean, the evidence is almost as abundant. Large amounts of Anatolian pottery already appeared on Crete at the beginning of EM I and in EM II were followed by a variety of objects (gold, faience, ivory, stone vases, seals) from Egypt and the Near East.<sup>84</sup> Only slightly later, during EB II and III, did pottery of western Anatolian origin materialise on the Cyclades and in central Greece, while being attested from Crete only by two examples, an observation that points to a line of demarcation between Crete and the Cyclades. Whereas the scale of trade between Minoan Crete and its neighbours decreased for a while, it reached its former levels again by EM III–MM I, when intense contact to the Near East and especially to Egypt resumed, lasting for most of the following millennium and coinciding with the first appearance of literacy and monumentality in the Aegean. Among the goods attested are Egyptian stone vases, scarabs and faience, both imported and of local production, with even more evidence pointing to information transfer as regards manufacturing techniques and tools. Contact to the Cyclades and Cyprus is also documented in the occasional finds of foreign pottery, and, as Crete lacks significant metal resources, copper and tin as well as obsidian were imported either from there or from the Near East and Anatolia. Owing to its strate-

gic location between Cyprus and Crete, Thera was part of the metals route, and orientalia are present in late Middle Bronze Age horizons in Akrotiri.<sup>85</sup> Also, as early as from a late third or early second millennium BC horizon, pieces of charcoal from Cedar of Lebanon have been identified. Texts from Mari additionally remark on the export of tin to and the import of bronze weapons from a region that can almost certainly be identified as Crete. Furthermore, Mari and Qatna (see chapter 4.2) are only two of several cities for which there are indications of mutual influences with the Aegean in terms of architectural art, suggesting not only a transfer of goods but also a flow of ideas.<sup>86</sup> The question of the relations with the regions further west and north is, however, too complex to allow me to present an overview. Therefore, the respective evidence will be discussed in the context of the individual regions in chapter 6.

#### 1.4 PRELIMINARIES: FREUDIAN DREAM PSYCHOLOGY IN THE LIGHT OF CURRENT EMPIRICAL RESEARCH

Before turning to the science of sleep and dreaming, a few words must be given on psychological approaches from the beginning of the twentieth century, particularly as the work of Sigmund Freud is still associated by many with the study of dreams. More than a century has passed since the publication of Freud’s *Die Traumdeutung*,<sup>87</sup> and while he still has some standing as the “father of dream psychology”, most of his claims have since been refuted by empirical evidence and must be considered outdated today.<sup>88</sup> Admittedly, Freud correctly recognised certain features of dreams, like their highly emotional character and focus on primitive, instinctive drive mechanisms,<sup>89</sup> and

<sup>82</sup> Hornung et al. 2013, 491.

<sup>83</sup> Kamrin 2013, 156, 161–162.

<sup>84</sup> Wiener 2013, 34–36, 40–42.

<sup>85</sup> Doulas 2013, 181.

<sup>86</sup> Koehl 2013, 171–177; Pfälzner 2013, 200–202.

<sup>87</sup> Freud 1900.

<sup>88</sup> Hobson 2005, 16–17, 132–133; Revonsuo 2010, 236; Wamsley and Stickgold 2009, 331, 334. For a more in-depth critique of the dream theories of Freud and Carl Gustav Jung, see Domhoff 2003, 135–147.

<sup>89</sup> Among the most common primitive drive mechanisms and corresponding emotions at work during sleep are sex/approach behaviour (elation, joy, happiness, love), escape/avoidance behaviour (fear, anxiety, panic), and aggression/confrontational show-



he noted the incorporation of day residues into dreams (see chapter 2.7). Then again, his claim that most dreams deal with repressed memories from the distant past does not stand up to empirical data, which have shown that recent experiences constitute the largest proportion of memory references, whereas those to more remote memories decrease correspondingly with increased temporal distance. The observation that the distribution of dream memory sources mirrors waking experience also contradicts his idea that the hidden “latent” content of a dream needs to be discovered by some symbolic decoding process, which is applied to the “manifest” dream by the psychoanalyst. Apart from the fact that dream content appears quite straightforward, the attempt to interpret dreams seems hampered by a lack of objective criteria to do so, rendering dream interpretation more of a belief system than a method of investigation. Freudian dream interpretation can be considered a successor of the ever-popular dream books that first appeared in the second half of the second millennium BC in ancient Egypt<sup>90</sup> and gained widespread favour in antiquity. Its most widely known example, Artemidorus Daldianus’ *Oneirocritica* from the second century AD, was of course known to Freud, who was well versed in antiquity and regularly incorporated Greek and Roman sources into his works. Ironically, the works of Freud, who was inspired by ancient dream interpretation, were later considered descriptions of universal workings of the human mind and projected back onto antiquity, leading generations of scholars to think of dream interpretation as a method dating back to a time before the beginning of written sources. In the following, it will

be discussed that this is not the case and that messages in dreams were portrayed as quite unequivocal for most of human history.

### 1.5 WHY WE NEED A COGNITIVE APPROACH TO THE (PRE-)HISTORY OF SLEEP AND DREAMING

The question concerning the interconnectedness of ideas about sleep and dreaming with ideas about death and the netherworld can only be answered in a transdisciplinary framework that considers the mental, bodily and social dimension of the topic. Whereas sleep and dreaming have been extensively examined by the natural sciences, historical and archaeological studies have remained limited to the cultures in question and have mostly failed to incorporate scientific findings and to consider a broad historical context. Moreover, prehistoric regions have not been investigated at all, and the present work constitutes the first instance in which evidence of this sort is analysed. The role that sleep and dreaming played for religious belief, experience and practice – especially for burial rites and cosmological ideas – is furthermore a question of great significance for cognitive archaeology and the cognitive science of religion because in this case, mind, body and society interlock in a unique way. My study is thus characterised by a holistic approach that integrates archaeological, textual and scientific evidence with the goal of advancing our knowledge about embodied cognition as well as the mental structures and social dynamics at play in early religions.

down behaviour (fighting, assaulting, shooting) (Hobson 2005, 132).

<sup>90</sup> Szpakowska 2003, 69–71.

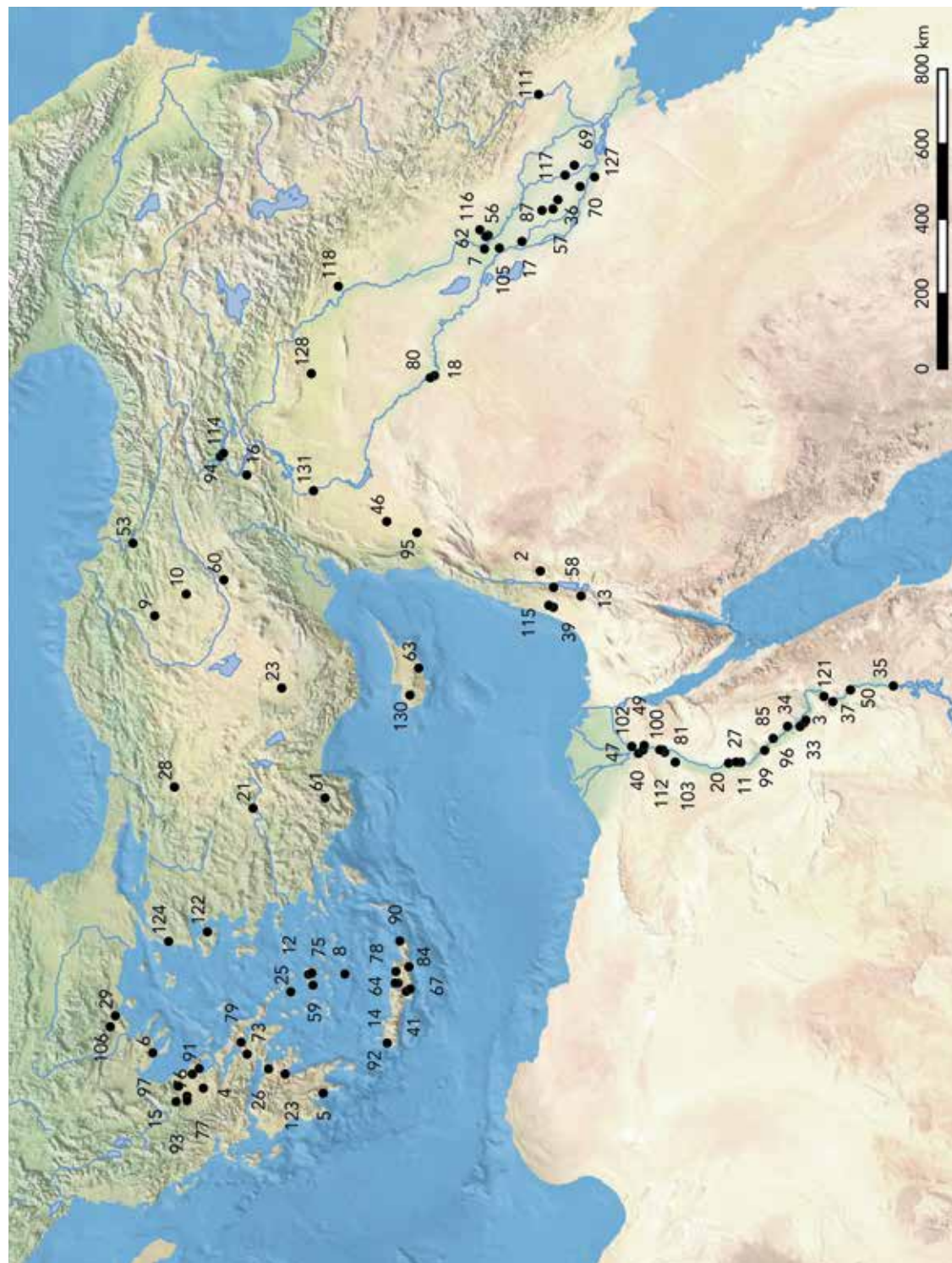


Fig. 2.1 Map of sites

44 Gruting	88 Oberbierbaum
45 Hal Safieni	89 Osmarsleben
46 Halawa	90 Palaikastro
47 Heliopolis	91 Pevkakia-Magula
48 Helmsdorf	92 Platanos
49 Helwan	93 Platia Magula Zarkou
50 Hierakonpolis	94 Pulur/Sakyol
51 Holešov	95 Qatna
52 Horgen	96 Qau
53 Horoztepe	97 Rachmani
54 Hörsching	98 Rebešovice
55 Hrušky	99 Rifeh
56 Ishchali	100 Riqqeh
57 Isin	101 Rumanová
58 Jericho	102 Saqqara
59 Kampos	103 Sedment
60 Kaneš/Kültepe	104 Singen
61 Karataş	105 Sippar
62 Khafajah/Tutub	106 Sitagri
63 Khirokitia	107 Skara Brae
64 Knossos	108 Slavkov u Brna
65 Kölsa	109 Stanydale
66 Köthen	110 Steckborn-Schanz
67 Koumasa	111 Susa
68 Kynna	112 Tarkhan and Kafr Ammar
69 Lagaş	113 Tarxien
70 Larsa	114 Taşkun Mevkii
71 Ledce	115 Tel Dalit
72 Les Canalettes	116 Tell Asmar/Eşnunna
73 Lithares	117 Telloh/Ġirsu
74 Löbnitz	118 Tepe Gawra
75 Louros Athalassou	119 Těšetice-Kyjovice
76 Magula Karamourlar	120 Thayngen-Weier
77 Magula Kastro	121 Thebes
78 Mallia	122 Thermi
79 Manika	123 Tiryns
80 Mari/Tell Hariri	124 Troy
81 Meidum	125 Trundholm
82 Moravsky Nova Ves	126 Unterhautzenthall
83 Mušov	127 Ur
84 Myrtos	128 Urkesh
85 Nag ed-Deir	129 Velké Pavlovice
86 Nebra	130 Vrysi
87 Nippur	131 Zeytinlibahçe Höyük

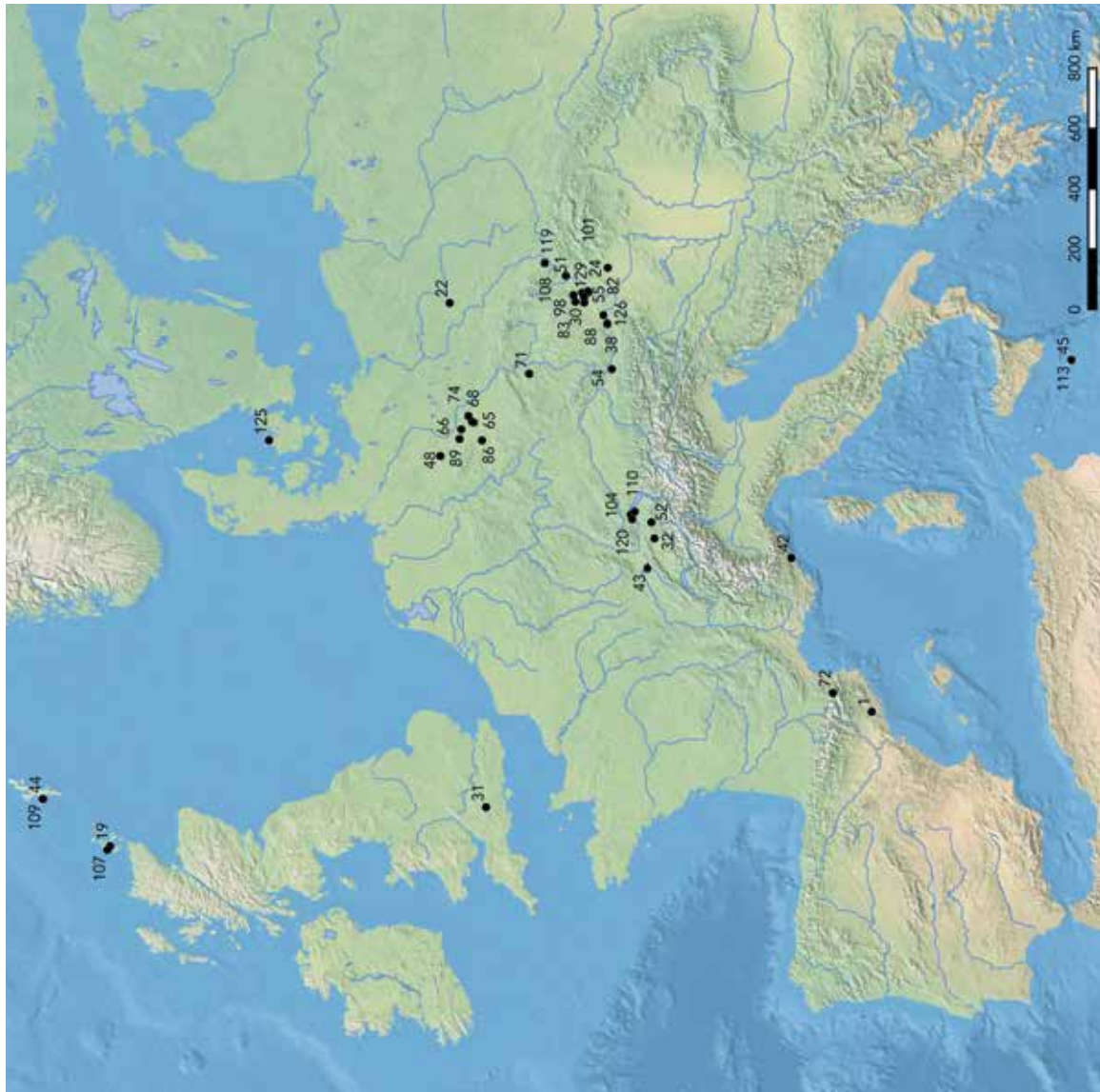


Fig. 2.2 Map of sites





I PREREQUISITES FOR A COGNITIVE APPROACH  
TO THE (PRE-)HISTORY OF SLEEP AND DREAMING



## 2 SLEEP AND DREAMING: SCIENTIFIC APPROACHES

### 2.1 STRUCTURE OF THE CHAPTER

The chapter presents an overview of the state of research concerning sleep and dreaming. Chapter 2.2 gives a definition of sleep, followed by a description of the different sleep stages in chapter 2.3, while chapter 2.4 explains the processes that control when we sleep. In chapter 2.5, a definition of dreaming is offered. Chapter 2.6 addresses the individual and evolutionary function of sleep and dreaming, whereas chapter 2.7 focuses on the neurological processes that accompany both. This topic is further discussed in chapter 2.8, which constitutes an excursus into the philosophy of consciousness. Chapter 2.9 treats typical dream content in general, and distinctive but related kinds of dreams, namely dreams with a strong sensorimotor component as well as lucid dreaming and sleep paralysis, are examined in chapter 2.10 and 2.11. Lastly, chapter 2.12 proposes a potential explanation for the special role of the body in dreams and its implications for theories about consciousness in general.

### 2.2 DEFINITION OF SLEEP

Although seemingly self-explanatory, sleep is not easy to define, and different researchers disagree about what is essential.<sup>1</sup> All terrestrial<sup>2</sup> mammals exhibit both NREM (high-amplitude, low-frequency) and REM (low-amplitude, high-frequency) EEG patterns<sup>3</sup> as well as the following behavioural criteria, which are used to define sleep:

- Rapid reversibility of the state of immobility and highly diminished sensory responsiveness.
- Decreased responsiveness to external stimuli and increased arousal thresholds.

<sup>1</sup> Lesku et al. 2009, 61–66; Lockley and Foster 2012, 41–42, 45; Nicolau et al. 2000, 384.

<sup>2</sup> Marine mammals pose an exception insofar as they show unihemispheric sleep, in which only one half of the brain is asleep at a time, allowing them to swim continuously (Lockley and Foster 2012, 42).

<sup>3</sup> For a definition, see chapter 2.3.

- Distinct posture and place preference specific to a certain species.
- Behavioural routines that precede sleep.
- Circadian regulation and an approximate 24-hour rhythm.
- Homeostatic regulation insofar as that lost sleep results in a subsequent “sleep rebound”. Yet, not all criteria apply to birds, much less to reptiles, amphibians, fish or invertebrates. If, as some scientists reason, sleep is to be defined on the basis of brainwaves, it could be argued that it is restricted to vertebrates. These can then be grouped into the following categories:
  - Fish and amphibians, which rest but do not display a clear sleep EEG.
  - The majority of reptiles, which display NREM sleep only.
  - Birds and some reptiles, which display NREM as well as partial or short episodes of REM sleep.
  - Mammals, which display distinct cycles of REM and NREM sleep.<sup>4</sup>

Both types of sleep seem to fulfil some biological function essential to all mammalian life,<sup>5</sup> and accordingly, it can be safely assumed that both behavioural criteria as well as REM and NREM sleep have existed throughout human evolution. In addition to physiological and behavioural criteria, sleep in humans can also be defined based on mental contents because it is during sleep that consciousness is either fully absent or that we enter an altered state of consciousness (for a definition of dreaming, see chapter 2.5).<sup>6</sup>

### 2.3 SLEEP ARCHITECTURE

Distinct stages of human sleep can be recorded by EEG,<sup>7</sup> in which the communication between

<sup>4</sup> Lockley and Foster 2012, 45.

<sup>5</sup> REM sleep differs with the stages of brain development, is quantitatively regulated within species as well as conserved across species, all of which point to its importance to mammalian biology (Hobson 2005, 64, 76–77). Furthermore, sleep-deprived rats die in the course of only several weeks (Hobson 2005, 75–76).

<sup>6</sup> Pace-Schott 2009, 11; Stickgold and Walker 2009, XIII.

<sup>7</sup> Electroencephalography (EEG, measuring neuronal activity), electrooculography (EOG, measuring eye movement) and electromyography (EMG, measuring muscle tone) are collectively termed polysomnography (PSG).

the brain's neurons is detectable as voltage changes on the surface of the brain.<sup>8</sup> Neurons interact by electrical and chemical (neurotransmitter) signals, and their activity varies greatly between different states of consciousness. Two distinct types of sleep, rapid eye movement (REM) and non-rapid eye movement (NREM) sleep, alternate during the night. NREM sleep stage 1, also called somnolence or drowsy sleep, is the transitional state between waking and deeper sleep and lasts only a few minutes. It is defined by theta waves and sometimes accompanied by sudden twitches of the limbs. People in this state are not yet completely disengaged from the world and can be aroused by certain stimuli such as hearing their names spoken.<sup>9</sup> In NREM sleep stage 2, awareness of the external world fades. The EEG shows sleep spindles (short bursts of activity, probably indicating mental activity from waking being reactivated in sleep) as well as K-complexes (high-amplitude and low-frequency events, probably in response to external or internal stimuli),<sup>10</sup> while muscular activity ceases. By now, external stimuli will produce a K-complex in the brain but are unlikely to wake the sleeper any longer. NREM sleep stages 3 and 4 are grouped together as slow-wave sleep, which is typified by delta waves. The increasing depth of sleep in the different stages can be described as a progressive decrease in the predominant EEG frequency along with a progressive increase in average wave amplitude. By definition, the fifth stage is characterised by rapid eye movement.<sup>11</sup> During REM sleep, the skeletal muscles relax (atonia), but from time to time muscle twitches occur. Blood flow to the brain and blood pressure rise, while breathing and heart rate become irregular, and thermoregulation is largely absent. REM sleep is also called paradoxical sleep because the EEG pattern is similar to that of a person fully awake while the body is paralysed. The amount of stimulation needed to wake someone up from REM sleep varies, possibly depending on how

captivating the current internal stimuli generated in the dream are. A distinctive feature of REM sleep consists of females experiencing clitoral engorgement and males erections, which last for most of the REM episode.<sup>12</sup> Like the REM episodes, the erections<sup>13</sup> increase in strength and duration throughout the night. They occur independently of outer circumstances (sexual activity before sleep, consumption of alcohol or the individual's health) and can be observed in other mammals as well. Still, although they might facilitate a dream with sexual content, the majority of nocturnal erections seem to be unconnected to dream content. A cycle of both NREM and REM sleep will take approximately 90 to 120 minutes to complete, resulting in four or five cycles per night on average. In the course of the night, the amount of slow wave sleep decreases, while the amount of REM sleep increases, with the last cycles usually made up entirely of sleep stages 1 and 2 and long stretches of REM sleep accompanied by vivid dreams.

## 2.4 SLEEP TIMING AND SLEEP DURATION

Various brain circuits and neurotransmitter systems are active during different sleep stages.<sup>14</sup> In wakefulness, neuronal clusters within the brainstem, hypothalamus and basal forebrain are activated, which in turn leads to arousal within the thalamus and cerebral cortex. Contrary to this, sleep onset occurs through a reduction in arousal connected to an inhibitory switch in the ventrolateral preoptic region (VLPO) of the anterior hypothalamus. As arousal and sleep-inducing circuits mutually inhibit each other, one changes rapidly between sleep and wake states. Activation of the VLPO by circadian and homeostatic sleep drivers (see below) induces both NREM and REM sleep. In turn, the cycle of NREM and REM sleep is controlled by neurons in the mid-

<sup>8</sup> Gander 2003, 37–41, 43; Lockley and Foster 2012, 7–9, Pace-Schott 2009, 11–14.

<sup>9</sup> Other names do not work as well, and sleeping mothers are much more likely to be woken by the cries of their own baby than by an unrelated one (Gander 2003, 38).

<sup>10</sup> Increased spindling following new learning trials could be observed in animals (Cartwright 2010, 14).

<sup>11</sup> Aserinsky and Kleitman 1953, 273–274.

<sup>12</sup> Cartwright 2010, 104–105; Jovanović 1972, 30–31, 56–69, 111–112, 134–139, 268–269; Lockley and Foster 2012, 10; Schönhammer 2004, 316–320; Schönhammer 2012, 255.

<sup>13</sup> Most studies have been done on males.

<sup>14</sup> Hobson 2009, 305; Lockley and Foster 2012, 34–37, Pace-Schott 2009, 14. For an exact description of the several interconnected processes, see Fuller and Lu 2009, 91–97.

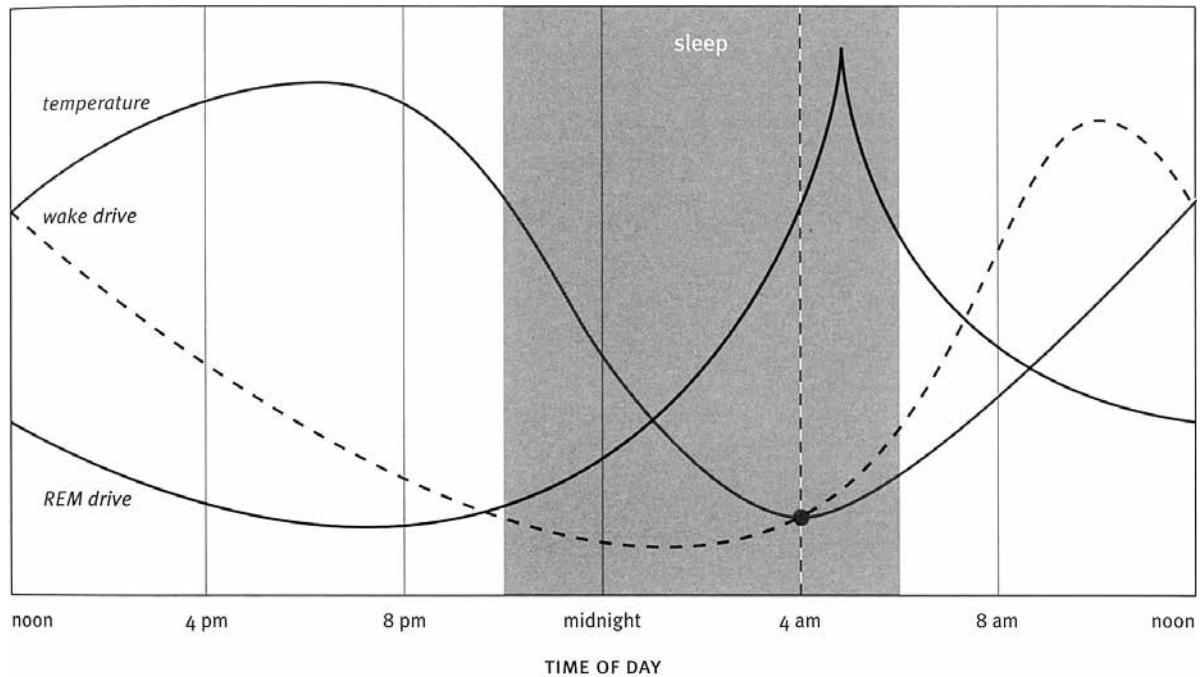


Fig. 3 Circadian drives affecting sleep

and hindbrain, which again mutually inhibit each other, leading to several alternations between the two types of sleep in the course of the night.

Two complementary and counteracting processes control the timing, duration and structure of sleep.<sup>15</sup> On the one hand, sleep pressure builds up the longer we have been awake and is reduced again during sleep, thus forming the homeostatic part of sleep-wake regulation (process S). It is believed by some scientists that this is caused by “endogenous somnogens”, i. e. substances that build up in the brain as a function of time spent awake. The amount of time spent in slow-wave sleep (stages 3 and 4) is directly dependent on the amount of time spent awake and is therefore used as a marker for sleep pressure. The way sleep pressure builds up and the depth of subsequent sleep are also influenced by exposure to light during waking as this increases alertness. The other process controlling sleep (process C) is the brain’s molecular circadian body clock, located in the two suprachiasmatic nuclei (SCN)<sup>16</sup> of the hypo-

thalamus, whose individual cells generate circadian rhythms by electrical signals they send out. The circadian clock regulates a variety of rhythmic processes, among them sleep propensity and sleep structure, temperature regulation and the production of certain hormones. Both the duration of sleep and the amount of time one spends in REM sleep is dependent on when in the circadian clock cycle one falls asleep because they are coupled to the low point in body temperature (figure 3). However, as the circadian clock only generates approximate twenty-four-hour rhythms, it is adjusted on a daily basis by the light-dark cycle and other environmental cues. For this entrainment to happen, light (particularly blue light at a wavelength of 480 nm) is detected in the eye by specialised photosensitive retinal ganglion cells (pRGCs). They in turn project to the hypothalamus, notably the SCN and the ventrolateral preoptic area (VLPO) via the retinohypothalamic tract and thus reset the circadian body clock. Exposure to light in the morning causes phase advances, while light in the evening results in phase delays. The SCN also directly controls

which the body and organ systems also give feedback to the SCN. Most cells can generate a circadian oscillation, pointing to a hierarchical organisation of multiple peripheral body clocks, which are synchronised by the SCN by chemical and neuronal signals (Lockley and Foster 2012, 31–32).

<sup>15</sup> Gander 2003, 1–2, 13–15, 22, 24–25, 28, 50–52; Lockley and Foster 2012, 12–14, 19–21, 23, Pace-Schott 2009, 15. For an exact description of the workings of the circadian clock and its genetic base, see Earnest 2009, 159–164; Gander 2003, 15–17. For Melatonin and other hormones, see Mullington 2009, 209–212.

<sup>16</sup> Strictly speaking, the circadian system consists of an elaborate structure of reciprocal interactions, in

the secretion of the hormone melatonin,<sup>17</sup> the production of which begins in the pineal gland in the late evening and stops in the morning. On the other hand, the SCN has special receptors sensitive to melatonin, which, in a process of feedback control, in turn, tell the biological clock when it is night-time. As melatonin production is inhibited by light, it differs not only during the course of the day but between the seasons as well (see below).

Sleep duration and timing also vary according to age, with younger people both going to bed later and getting up later as well as generally sleeping longer than older people.<sup>18</sup> In adolescents, sleep and the circadian rhythm shift by about two to three hours in relation to childhood, resulting in them becoming more “evening type”. The phase delay is caused by an altered timing between circadian and homeostatic control of sleep as well as by a reduction in slow-wave sleep of nearly 40% and a reduced build-up of sleep pressure. From the early twenties, the timing of the circadian body clock successively advances, making people gradually more “morning type”. Also, while the robustness of the homeostatic regulation of sleep decreases, the amount of slow-wave and REM sleep as well as the overall sleep duration lessen. In the elderly, sleep becomes more fragmented, with more awakenings during the night and a greater likelihood of daytime naps. Sleep duration, slow-wave and REM sleep reduce further, while stages 1 and 2 increase. The advancing of sleep timing continues as well, with older people being strongly morning type due to changes in the interaction between circadian and homeostatic processes. These changes can be explained by physiological mechanisms, however, it is notable that they also convey an evolutionary benefit by

ensuring that in a group of humans of mixed age it is highly likely that there will always be someone awake, acting as a natural sentinel and as such increasing night-time vigilance and the survivability of the group.<sup>19</sup> Most of all, the lighter and more fragmented sleep of the elderly results in the availability of someone to keep watch at any given time. This would thereby strengthen different age-dependent sleep patterns by increasing the fitness of a group exhibiting high variability. Additionally, the lagged sleep onset of teenagers contributes to a separation of their age group from the others and thus contributes to them becoming more independent from the parental generation and forming stronger cohesion among themselves. The group also benefits from a reduced degree of responsiveness during sleep in children and adolescents as this reduces their food needs while protection is provided by older family members.<sup>20</sup> Moreover, groups of people living together tend to develop a common sleep/wake cycle even in the absence of environmental cues.<sup>21</sup> For example, the contagiousness of yawning could have evolved to synchronise bedtimes in groups sleeping communally.<sup>22</sup>

According to recent surveys and experiments, adults sleep about 7 hours on average, although vast discrepancies exist between different persons.<sup>23</sup> If given enough time to sleep, however, most people will settle on periods of 8.5 hours in younger and 7.5 hours in older adults. Although there has been considerable debate as to whether or not sleep duration has declined significantly over the past fifty years,<sup>24</sup> with comparative data for the first half of the twentieth century remaining rare and methodically inconsistent,<sup>25</sup> it seems reasonable to assume that sleeping times were longer before artificial lighting became an easily affordable commodity and people spent a considerable part of their day in the dark. While in 1913 American chil-

<sup>17</sup> The role of melatonin in sleep is not fully known as both diurnal and nocturnal animals secrete it at night, while some animals do not produce any melatonin at all. Also, humans whose melatonin production is halted for different reasons still show circadian sleep-wake rhythms. Then again, in humans the opening of the “sleep gate” happens at the same time as the onset of melatonin production, possibly pointing to two parallel but separated processes initiated by the circadian system at the same time. (Lockley and Foster 2012, 24).

<sup>18</sup> Gander 2003, 11–12, 45–47; Heller and Frank 2009, 168; Lockley and Foster 2012, 64–67; Rissling and Ancoli-Israel 2009, 78; Tarokh and Carskadon 2009, 72–75.

<sup>19</sup> Samson and Nunn 2015, 227–228.

<sup>20</sup> Siegel 2011, 127.

<sup>21</sup> Gander 2003, 26.

<sup>22</sup> Moorcroft 2003, 67–68.

<sup>23</sup> Lockley and Foster 2012, 2.

<sup>24</sup> A review of studies from twelve industrial nations where information dated back to the 1960s offered no conclusive results concerning a reduction in sleep duration. Nathaniel Marshall, therefore, attributes the impression that people get less sleep than they used to to a decline in sleep quality rather than sleep duration (Marshall 2015, 1–2).

<sup>25</sup> Moorcroft 2003, 43–44.



dren aged eight to twelve years were found to sleep 10.5 hours per night on average, by 1964 this had dropped to 9.2 hours.<sup>26</sup> Recent studies showed a further decline with 8.4 hours for sixth grade, 7.5 hours for tenth grade and 6.9 hours for twelfth grade.<sup>27</sup> Furthermore, in an American study that mimicked the lighting conditions of winter without access to artificial light, young adults settled on 8.2 hours sleep on average as compared to their usual 7.2 hours, and a survey in Brazil showed that adolescents with access to electricity went to bed significantly later (~9.50 pm) than the ones without (~8.40 pm).<sup>28</sup> However, it needs to be conceded that these studies constitute only a small selection out of many, not all of which point to the same conclusion.

Most people today sleep for just one stretch, but there is increasing evidence that this is a product of artificial lighting, which compresses and consolidates sleep into an unnaturally short period.<sup>29</sup> When nights were lengthened from 8 to 14 hours in a laboratory setting, sleeping patterns changed considerably, both expanding and dividing into two discrete stretches of sleep of about equal length, which were separated by a period of quiet wakefulness that lasted between 1 and 3 hours. An alteration of circadian rhythms effected by this change in photoperiod could be inferred from the observation that the period of nocturnal melatonin secretion also expanded. While this seems surprising at first, a polyphasic sleep pattern is in fact much more common among animals, with many species exhibiting bimodal patterns. Moreover, infants have unconsolidated sleep before they are “taught” to rest without awakenings. Generally speaking, slow-wave sleep would be concentrated in the evening stretch of sleep and REM sleep in the morning stretch of sleep. This applies especially for winter when the amount of daylight is severely reduced, resulting in sleeping times of up to ten hours, a fact important for the prehistoric cultures of Middle and Northern Europe, although not as much for the regions surrounding the Mediterranean. Seasonal differences in sleep duration and melatonin se-

cretion are also backed by experiments. In cultures with a polyphasic pattern of sleep, people are more likely to remember their dreams as they almost always wake up out of REM sleep during the night, and these transitions occur frequently during periods of particularly intense phasic eye movements. Thomas Wehr, therefore, attributes the importance that was accorded to dreams by individuals from traditional societies at least partially to the changed physiology of sleep in long nights.

Additional evidence for a polyphasic, unconsolidated sleep pattern in humans can be found in written sources dating from ancient Greece to the close of the early modern era.<sup>30</sup> Many texts allude to two major stretches of sleep, of which the initial interval was called “first sleep”, “first nap”, or “dead sleep” and the succeeding interval “second sleep” or “morning sleep”. These two sleep phases, which lasted for roughly the same length of time, were separated by an hour or more of quiet wakefulness sometime after midnight, usually termed “watch” or “watching” and sometimes “first waking”.<sup>31</sup> Pondering previous dreams was a common occupation during the “watch”. Interestingly enough, the episode following first sleep sometimes constituted a state of semi-consciousness, “twixt sleepe and wake” or “dorveille”, and was characterised by “confused thoughts that wandered ‘at will’ coupled with pronounced feelings of contentment”.<sup>32</sup> I will return to states in-between sleeping and waking and their propensity for religious interpretations in chapter 2.11.

<sup>26</sup> Gander 2003, 4.

<sup>27</sup> Tarokh and Carskadon 2009, 75–76.

<sup>28</sup> Lockley and Foster 2012, 47.

<sup>29</sup> Wehr 1992, 103–105; Wehr 1999, 266–273; Wehr 2001, 348, 350–351, 357–358.

<sup>30</sup> Ekirch 2005, 300–312, 322–323.

<sup>31</sup> Ekirch 2005, 300–301. French: “premier sommeil”, “premier somme”, Italian: “primo sonno”, “primo sono”, Latin: “primo somno”, “concubia nocte”. Also note that *watch* derives from Old English *wæccan* and means “being awake” (Hoad 1991, 534). Moreover, the word *wake*, which denotes the watch or vigil that is held beside a dead body, derives from Old English *nibt-wacu* “night-watch” (Hoad 1991, 531–532).

Compare the Nandi of East Africa, where 11 pm is called “those who sleep early wake up” (Nilsson 1920, 32), and the Bangala, who call the time between 11 pm and 12 am “one set of the ribs or one side of a person, meaning that a person turns from lying on one side over on to the other” (Nilsson 1920, 24). The Wadschagga separate the night into three stretches: “the awakening in the evening, that in the middle (midnight), and that in the morning twilight” (Nilsson 1920, 39).

<sup>32</sup> Ekirch 2005, 311.

Combined with a shortened sleep latency in the middle of the light phase as is common in some adults (napping) as well as in certain cultures (siesta), this would even point to a triphasic sleep pattern for humans.<sup>33</sup> Naps usually last between 0.5 and 1.6 hours and usually occur between 2 and 4 pm, when daytime sleep propensity is highest and body temperature drops. Napping was of considerable relevance in historic periods, particularly in southern regions. By the first century BC, the verb *meridiare*, which was derived from the Latin word for “midday” *meridiēs*,<sup>34</sup> denoted the afternoon nap, whereas the word *siesta* preserves the term *sexta*,<sup>35</sup> i. e.

<sup>33</sup> Gander 2003, 67; Mednick and Drummond 2009, 254–255. The afternoon drop in alertness and performance is due to a mismatch between the building up of sleep pressure and the circadian body clock not yet counteracting it in some individuals (Lockley and Foster 2012, 16). As opposed to this, to explain the tendency to nap in tropical cultures as a result of the brain’s overheating seems less convincing (Hobson 2005, 74). Also, the common term “postprandial” (after a meal) is misleading, as the increase in sleep propensity also occurs without lunch and/or without knowledge of the time of day (Mednick and Drummond 2009, 255). However, the influence of diet patterns on sleep structure is not yet fully understood. It has been observed that many people feel sleepier after eating, a possible explanation being the gut’s release of peptides in response to food or the increases in metabolism after eating. Enquiries into the connection between the rise in sleepiness and general fat, protein or carbohydrate content have generated mixed results. Then again, sleep structure is affected by food and meals high in fat or protein increase REM sleep, while high-carbohydrate meals increase slow-wave sleep. Lastly, certain foods high in carbohydrates contain tryptophan that is eventually converted to melatonin and can therefore make people sleepy, while foods rich in protein contain tyrosine which increases wakefulness, although it is unlikely that the amount of tryptophan or tyrosine that is consumed in an average meal is enough to have a measurable effect on alertness (Gander 2003, 143; Lockley and Foster 2012, 23; Moorcroft 2003, 113, 116–117). Because of the multiple dietary factors influencing sleep, the actual effect of prehistoric food intake is difficult to estimate, especially as no data exists about the prehistoric changes in the gut’s microbiome, and detailed information about food patterns remains scarce. Nevertheless, some influence seems likely, especially before the advent of agriculture when the ratio of fats and proteins was much higher in relation to carbohydrates, pointing to a difference in sleep structure with a higher amount of REM sleep.

<sup>34</sup> Stowasser et al. 1979, 280.

<sup>35</sup> Stowasser et al. 1979, 419.

the sixth or noon hour, a time of prayer and rest in the terminology of the medieval church. The custom of taking an afternoon nap diminished in northern Europe with the industrial revolution but is still common in southern Europe and Latin America.<sup>36</sup>

It can therefore be assumed that prehistoric people without widespread access to artificial lighting slept significantly longer and less consolidated than we do today. Furthermore, as REM sleep increases in the course of the night (see chapter 2.3), longer general sleep times would have resulted in more dreams, thus adding further to the effects of polyphasic sleep patterns. Accordingly, pre- and early historic cultures would be expected to put a much stronger emphasis on sleep and dreaming than we do today. It will become clear in chapters 4 and 5 that this is precisely the case.

## 2.5 DEFINITION OF DREAMING

Contrary to widespread belief, during sleep, we are not unconscious but spend most of the time in an altered state of consciousness.<sup>37</sup> Based on the fact that all humans have brain activation during sleep and that after specifically enquiring for dreams after awakenings from REM sleep only 1 % of the people remember no dreams whatsoever, it seems likely that dreaming is a universal human phenomenon.<sup>38</sup> About 80 to 90 % of the time, people report some mental content if awakened during REM sleep, while NREM sleep awakenings produce such reports in about 25 to 50 % of cases.<sup>39</sup> Nevertheless, there is considerable debate as to what kind of subjective experience can be called dreaming, and it is, therefore, useful to distinguish between dreaming and sleep mentation divided by the complexity of the experience. Sleep mentation typically consists of only a single image in a single sensory modality that either repeats itself or remains static (a visual

<sup>36</sup> Moreover, napping is still common in Germany, especially in the south-west.

<sup>37</sup> Revonsuo 2010, 239–241.

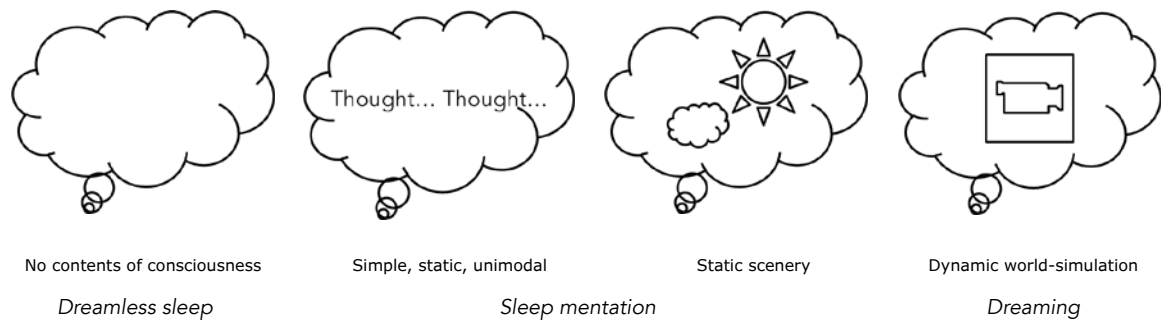
<sup>38</sup> According to the “amnesia theory of dreaming” held by some researchers, we even dream all the time while asleep, we just do not remember all of it. However, no real evidence exists for this theory (Revonsuo 2010, 238).

<sup>39</sup> Antrobus and Wamsley 2009, 310; Dang-Vu et al. 2009, 34; Domhoff 2003, 18; Revonsuo 2010, 241.



object, a word, sentence or sound, a recurring thought). As opposed to this, genuine dreaming constitutes a simulated world with animated imagery in multiple sensory modalities that develops in the course of time (sensory-perceptual impressions, objects and characters, events taking place). Notwithstanding this classification, sleep mentation and dreaming do not form wholly distinct states but gradually dissolve into each other. The continuum of consciousness in sleep is shown in figure 4.<sup>40</sup>

perceptual structure as well as a hallucinatory aspect. Most dreams that occur during REM sleep, on the other hand, are much longer and defined by features usually considered typical for dreaming, for example, they are more vivid, emotional, story-like and bizarre (see table 3).<sup>42</sup> NREM mentation also tends to be more logical and linear than REM dreaming, which is more perceptual and emotional. The association between dreaming and the REM stage as well as between sleep mentation and the NREM stage



**Fig. 4** *The continuum of consciousness in sleep*

These different types of experience are tied to different sleep stages (see chapter 2.3), although not in an exclusive manner.<sup>41</sup> Sleep onset dreaming is characterised by sensorimotor experiences, particularly on nights following unfamiliar motor behaviour, as well as by brevity and simplicity of the dream plot. When awakened from slow-wave sleep, people commonly report shorter and more thought-like imagery, often consisting of isolated, static images that lack

is, however, only partial as about 6 % of NREM reports are more dreamlike than the ones obtained from REM sleep. Genuine dreaming can occur in NREM sleep, as happens regularly in light sleepers, people deprived of REM sleep and those in a highly anxious state.<sup>43</sup> Reports also increase significantly in length in the morning hours for both sleep stages as both cortical activation and levels of the wake-promoting neuromodulator cortisol rise, a process controlled by the circadian body clock (see chapter 2.4). The longer, more dramatic and more bizarre imagery of the final hours of sleep is what most people remember and therefore consider typical for dreaming.

<sup>40</sup> The transitory nature of certain experiences during sleep defies the explanation to consider them separate states, with sleep mentation forming part of the constant stream of current concerns (Cartwright 2010, 167).

<sup>41</sup> Antrobus and Wamsley 2009, 310, 312–314; Cartwright 2010, 31; Domhoff 2003, 10; Hobson 2005, 7–10, 35, 44; Revonsuo 2010, 161. Another way of dividing mental activity during sleep is the Dream-Like Quality of Fantasy (Df) scale, which ranges from 1 to 5, with 1 = no recall, 2 = a thought-like report, 3 = a single image, 4 = two or more images connected in a story-like structure, and 5 = a complex perceptual experience with a story-like structure, emotion and belief that it is really happening. After awakenings from REM sleep, normal sleepers score 3.8 on average, with lower scores in the beginning and higher scores at the end of the night. NREM sleep scores are much more variable and mostly lie between 1 and 2 but can be as high as REM sleep scores in some individuals (Cartwright 2010, 174–175).

<sup>42</sup> Another possibility is to explain the differences with the greater length of REM dreams as compared to NREM ones (Antrobus and Wamsley 2009, 313). But although this is a valid observation, it seems doubtful whether a difference in quantity suffices as an explanation for features that seem qualitatively quite different. For example, characters (including the dreamer) in REM dreams tend to be more aggressive than in NREM dreams (Mc Namara 2009, 196).

<sup>43</sup> Cartwright 2010, XIII.

## 2.6 THE FUNCTION OF SLEEP AND DREAMING

Concerning the reasons for sleep, theories broadly fall into three categories: sleep enables cellular restoration, energy conservation or the consolidation of memory.<sup>44</sup> While there are observations in favour of any of the three explanations, none seems sufficient to explain the evolution of sleep across the whole of the animal world. It, therefore, looks like multiple explanations hold true, insofar as the establishment of a fixed rest-activity pattern for a certain species allows critical biological “house-keeping” processes to be secondarily integrated into the temporal framework, which then strengthens the pattern again. That REM and NREM sleep serve different functions can be inferred from the observation that after sleep deprivation they are not made up for in the same way. Slow-wave sleep (stages 3 and 4) is recovered first, at the expense of REM sleep, which has to wait until the next night. Additionally, in sleep restriction, light sleep (stages 1 and 2) and REM sleep are reduced, while the amount of slow-wave sleep stays roughly the same.

Experiments concerning sleep-dependent memory processing and sleep-dependent brain plasticity have shown that the different sleep stages contribute each in their unique way and that sleep plays a role for both memory formation (encoding) and strengthening (consolidation).<sup>45</sup> On the one hand, REM sleep increases after exposure to newly learned information, while sleep deprivation both before and after the learning task impairs memory. On the other hand, the greatest improvements occurred only when both deep early night (NREM) and long late-night (REM) sleep were obtained, a finding that applies both to procedural learning as well as to declarative memories, particularly those with high emotional salience.<sup>46</sup> Also,

it could be shown that different neuronal networks that had been engaged in previous learning were reactivated in the two types of sleep respectively. While the premotor and visual cortical areas connected to the implicit learning of a procedural motor task were activated in REM sleep, activation in NREM sleep occurred in the hippocampal areas connected to a learning task involving episodic memory. Currently, it is undecided whether REM sleep consolidates procedural learning, while NREM sleep strengthens declarative memory (dual process hypothesis) or whether the ordered succession of both types of sleep is necessary for both types of learning (sequential hypothesis), although more evidence seems to point in the direction of the latter. Interestingly, during the consolidation process, the memory in question does not only become stabilised but further enhanced without the need for additional practice (for a possible explanation, see chapter 2.12). This process in which additional learning is effected seems to take place almost exclusively in sleep, a finding that has to be kept in mind in relation to the function of dreaming. The scientific debate about details notwithstanding, for early humans occupying the cognitive niche it can be assumed that the consolidation of memory would have been of special relevance already.

While the several functions of sleep seem well understood, it is much less so with dreaming.<sup>47</sup> This is partly due to the fact that no fi-

memory (autobiographical memory for events of one's past) and semantic memory (memory for general knowledge, not tied to specific events). On the other hand, nondeclarative memory guides behaviour and includes procedural memory (learning of actions, habits and skills as well as implicit learning) (Walker 2009, 230). Most learning is unconscious (Hobson 2005, 23, 112). Hobson thinks that daytime experiences are stored temporally in the hippocampus and that bits of episodic memory are transferred out of there during brain activation in REM sleep (Hobson 2005, 115).

<sup>47</sup> Coolidge and Wynn 2006, 7–10; Domhoff 2003, 157–167; Kuiken 2009, 295–300; Revonsuo 2010, 245–246. An in-depth discussion of different studies concerning dream function is given in Revonsuo 2000, 879–882. Whereas REM sleep appears to constitute the typical physiological condition for fully realised dreams to occur, neither is this always the case, nor does dreaming happen solely in REM sleep. It is therefore important to keep explanations about the function of dreaming, which is a subjective conscious experience, apart from explanations

<sup>44</sup> Gander 2003, 47–49; Lockley and Foster 2012, 49–55. For a general description of sleep in animals and the energy conservation function of “adaptive inactivity”, see Siegel 2011, 126.

<sup>45</sup> Coolidge and Wynn 2006, 10–13; Dang-Vu et al. 2009, 35; Hobson 2005, 52, 108–109, 112–115; Kuiken 2009, 297–299; Lockley and Foster 2012, 53; Walker 2009, 230–240; Wamsley and Stickgold 2009, 333–335.

<sup>46</sup> Different types of memory and learning exist. On the one hand, declarative memory comprises consciously accessible memories of fact-based information and can be further subdivided into episodic

nal agreement has been reached concerning the distinction between REM and NREM dreaming as well as regarding the difference between dreaming and sleep mentation (see chapter 2.5). It is, therefore, possible that mental activity during sleep serves several functions, and a variety of theories has been brought forward so far. Firstly, reductive materialists like Hobson consider dreaming a byproduct of the brain's self-activation in REM sleep that has no function or meaning in itself but is based solely on biological processes ("random activation theory", see chapter 2.7).<sup>48</sup> Yet, the fact that dreams form generally coherent and internally plausible narrative sequences similar to the waking world contradicts the idea that their content is purely random.<sup>49</sup> A variant of the theory has been brought forward by Domhoff, who points out the importance of consciousness. Still, he thinks of dreaming as a by-product of the combination of sleep and complex cognitive processes that has no function in itself.<sup>50</sup> Secondly, dreaming can be understood as an attempt to help with practical issues ("problem-solving theory").<sup>51</sup> While mostly anecdotal evidence exists for people coming up with new ideas in dreams, suggesting that it occurs far too rarely to work as an explanation, studies have shown that thoughts and feelings are systematically altered for about twenty minutes after awakenings from both REM and NREM sleep.<sup>52</sup> This carryover effect can be interpreted as reflecting

the nature of mental activity during the sleep stage that preceded the awakening and would thus point towards the idea that dreams can alter and sometimes enhance waking thought. For example, after awakenings from REM sleep, people exhibited greater fluidity and flexibility of thought and were more likely to consider unusual possibilities and solutions to problems presented to them. Thirdly, the idea that dreaming attenuates psychological concerns ("mental health theory") seems promising because emotions feature prominently in many dreams.<sup>53</sup> But while the observation that emotions play an important role in dreams and are connected to pre- and post-sleep mood certainly holds true, evidence that dreaming helps to regulate these emotions remains ambiguous.<sup>54</sup> According to the "progressive-sequential" model of dreaming, dream content unfolds in a series of dreams across the night and thus ameliorates mood, a theory consistent with differences in dream reports obtained at different times of the night. Furthermore, studies could show that both positive and negative emotions were attenuated during sleep, but lasting changes were in fact dependent on waking life.<sup>55</sup> Whereas it is possible that the engagement with dreams in waking life serves psychological or cultural, i.e. invented, functions, such a concept needs to be distinguished from theories about biological, adaptive, i.e. natural, functions of the dream itself.<sup>56</sup> Arguing against the mental health theory, Revonsuo points out that in nightmares and bad dreams emotionally negative memories tend to be strengthened instead of toned down.<sup>57</sup> Night-

about the function of REM sleep, which a physiologically defined stage of sleep (Hobson 2005, 109; Revonsuo 2000, 878).

<sup>48</sup> Hobson 2005, 45. For example, nightmares are considered a byproduct of the maintenance of the corresponding emotional systems of the brain (Hobson 2005, 81).

<sup>49</sup> Foulkes 1999, 8. See also Cartwright 2010, 161–162; Domhoff 2003, 31; Revonsuo 2010, 239.

<sup>50</sup> Domhoff 2003, 6, 167. Schönhammer has brought forward a similar argument aimed at the threat simulation theory (see below) (Schönhammer 2004, 231–234; Schönhammer 2012, 262–263). Still, as he is only concerned with a rather rare, even though typical, type of dreaming, this does not preclude functions for other kinds of dreams.

<sup>51</sup> Domhoff 2003, 160–162. For creativity in lucid dreaming, see LaBerge and Rheingold 1990, 132–133.

<sup>52</sup> Kuiken 2009, 295–297. However, Kuiken specifically points out the problem of distinguishing the physiological effects of sleep from the psychological effects of dreaming. In another experiment, people came up with more complex and nuanced solutions to emotional problems after a period of sleep, but

again the results are difficult to interpret (Cartwright 2010, 152–153).

<sup>53</sup> Cartwright 2010, 5, 41. A general flaw in Cartwright's argumentation is that it does not differentiate between dreaming and REM sleep. Most sources cited as evidence for the function of dreams are in fact concerned with the function of sleep and did not pay attention to dream content at all. A similar blurring of concepts occurs in Kuiken's article on dream function, although he specifically points out the problem and weighs the arguments against each other (Kuiken 2009, 295).

<sup>54</sup> Cartwright 2010, 5, 41, 130; Domhoff 2003, 159–160; Kuiken 2009, 299–300; Nielsen and Levin 2009, 327; Wamsley and Stickgold 2009, 333–334.

<sup>55</sup> Cartwright 2010, 150.

<sup>56</sup> Domhoff 2003, 159; Revonsuo 2000, 879.

<sup>57</sup> See also the study quoted by Cartwright in support of the mental health theory that in fact showed that

mares probably pose the biggest explanatory problem for the mental health theory, which can only account for them as a malfunction of the emotion regulation system, an explanation that seems unlikely with respect to their high prevalence.<sup>58</sup> In Rosalind Cartwright's opinion, the greater number of nightmares in children is due to their not yet having developed effective coping strategies in waking life, but a developmental role of the nightmare itself seems to fit better with the observations.<sup>59</sup> This aligns well with the idea that dreaming can be considered a world simulation in which threat recognition and threat avoidance can be practised in a safe setting ("threat simulation theory").<sup>60</sup> According to Revonsuo, dream consciousness constitutes a rehearsal mechanism for the perception and avoidance of threats.<sup>61</sup> By simulating dangerous situations in a safe off-line model of the world, dreaming increased the likelihood that such events would be successfully overcome in real life and therefore got gradually selected for its role as a threat simulator during evolution. In this theory, the high emotionality of dreams

can be accounted for in a different way because the threat simulation system would be prone to specifically activate memories with a high emotional charge. Studies of dream content show that they include a great number of threatening events directed at the dream-self or at people close to her such as chases, escapes, attacks, failures in risky or important tasks or repeated attempts to perform, accidents, being trapped or lost, falling or losing valuables. However, while it is certain that the number of threats, bad dreams and nightmares rises for persons that live under dangerous conditions or are subject to emotional stress, direct evidence that such dreams indeed increase coping skills during wakefulness is lacking so far.

The threat simulation theory does not contradict Cartwright's observation that negative emotions in dreams tend to fade in the course of time because this is exactly what should be expected if dreams were considered a training session about how to behave in a certain anxiety-provoking or emotionally traumatising situation: after having improved the skill in question, there would no longer be any need for the threat simulating dream to occur. Generally speaking, the observation that emotionally salient memories are more likely to appear in dreams, usually cited in support of the mental health theory, can also be explained as enhancing evolutionary fitness by singling out the most salient memories to be employed by the threat simulation system. This theory is further strengthened by the observation that memory consolidation during sleep not only serves stabilisation but enhancement of the memory in question as well (see above). But while Revonsuo's argument seems very convincing, an extension of the theory encompassing other fitness-enhancing aspects of dreams appears to be even more fruitful.<sup>62</sup> According to Michael Franklin and Michael Zyphur, dreams can be considered a more general virtual rehearsal mechanism, in which variations of scenarios from waking life are acted out, and they point out the strong influence that this probably had on the evolution of other higher-order cogni-

negative emotion-arousing pictures were more likely to be recalled after a period of sleep (Cartwright 2010, 160). Furthermore, the connection between REM sleep and depression seems inconsistent because, for example, REM restriction reduces symptoms in depressive patients (Kuiken 2009, 299–300).

<sup>58</sup> For nightmares in posttraumatic stress disorder, see for example Germain and Zadra 2009, 318–319. An alternative explanation is given in chapter 3.3.

<sup>59</sup> For example, primary-school pupils would be expected to have more effective coping skills than kindergarteners and thus to experience fewer nightmares, but while 10 to 50% of children aged 3 to 5 have disturbing dreams, nightmare frequency increases at age 6 to 10 (Nielsen and Levine 2009, 323; Schredl 2009, 140). Needless to say, if dealing with emotions in dreams is dependent on the coping strategies in waking life, the whole argument falters. Dreams could then be considered just a reflection of waking emotion regulation without any function in themselves.

<sup>60</sup> For an elaboration of the threat simulation theory's propositions and the supporting evidence, see Revonsuo 2000, 882–896. For a discussion and critique, see Domhoff 2003, 163–165; Nielsen and Levin 2009, 325–326.

<sup>61</sup> Revonsuo 2000, 882; Revonsuo 2010, 246. See also Stevens 1995, 255. While, as we will see in chapter 2.10, certain dreams with a strong sensorimotor component can be caused by exceptional neuronal activation, theories concerned with ancestral threats work well to explain the constant association between strong emotions and this type of dream.

<sup>62</sup> Franklin and Zyphur 2005, 2005, 59, 66–72. Revonsuo also explicitly states that in the absence of real threats, the threat-simulation system will produce dreams that simulate other kinds of events with high saliency, but he does not consider this to be the function of dreaming (Revonsuo 2000, 894–895).



tive capacities in humans.<sup>63</sup> Particularly the processing of social information, for example, theory of mind (TOM) and activity in the respective brain area during REM sleep, provides an example for aspects of cognition predominant in sleep as evidenced by the large number of dreams containing other people and representing various social situations.<sup>64</sup> Additionally, the existence of blissful dreams could point to the simulation of rewarded behaviours as a dream function.<sup>65</sup>

A relation with memory consolidation and the attachment of emotional relevance during sleep (see above) suggests itself because this seems to be the physical equivalent to the simulation effects of dreaming.<sup>66</sup> Dreams and episodic memories are similar insofar as both constitute simulations that are actively created instead of passively retrieved.<sup>67</sup> Like dreams, episodic memories are constructed out of material from past experiences and influenced by information acquired subsequently to the event in question. Unfortunately, there have been few studies about incorporating learning tasks into dreams so far, possibly because of the obscure nature of the dream formation process, but several interesting findings remain.<sup>68</sup> When experimental subjects played video games prior to sleep, the experience strongly influenced

dreaming at sleep onset.<sup>69</sup> Moreover, physical tasks newly learned or prevalent during the day, like skiing or sailing, tend to be replayed while falling asleep. Other studies have shown that persons incorporating a second language into their dream communications were more successful at mastering that language and that a story presented to individuals prior to sleep was more likely to be recalled in the morning if they had dreamt about it. In another experiment, subjects wearing visually distorting lenses during the day reported dreams about visual and motor difficulties at night, while one more study showed that when a mirror-tracing task was learned prior to sleep, it was incorporated into dreams in connection with an auditory cue.

Mental rehearsal in lucid dreams can also be employed as a tool for learning and practising skills (for lucid dreams, see chapter 2.11).<sup>70</sup> That dreams – especially lucid dreams – play an important role for sensory-motor learning and that they can be applied as an effective simulation in sports training was demonstrated by Paul Tholey, who started experimenting with different techniques to induce lucid dreams as early as 1959.<sup>71</sup> His findings were replicated by Tadas Stumbrys, Daniel Erlacher and Michael Schredl, who concluded that, for improving subsequent performance, lucid dream practice of motor tasks was similarly or slightly less effective than actual physical practice and similarly effective as mental practice in wakefulness.<sup>72</sup>

In sum, the parallels between the replay of learning-associated neural activity during sleep and dream content encompass several aspects, supporting the hypothesis of correspondence between subjective, conscious experience and specific patterns of brain activity.<sup>73</sup> Firstly, the neural replay of recent experiences and the incorporation of episodic memories into dream

<sup>63</sup> For a summary of different evolutionary explanations for dreaming, many of which are concerned with simulation and learning effects for a variety of human skills, see Valli 2011, 1088.

<sup>64</sup> Contrary to this, it needs to be noted that the critical feature of TOM, namely the capability to imagine mental states (beliefs, desires, intentions, emotions) of other people that differ from one's own (Mithen 2006, 128), does not apply to dreams, where, self-evidently, the opponent, being a product of the dreamer's imagination, cannot possess information that the dreamer is lacking. Admittedly, other characters in dreams can act in surprising ways or provide the dream-self with information that she had not been conscious of until that moment. This, however, does not constitute genuine TOM as the latter is concerned with information that is truly unknown and sometimes even purposefully hidden by the opponent, whereas information in dreams is simply outside the scope of consciousness at that moment. If dreams constitute a form of TOM simulation, they can only do so to a very limited degree.

<sup>65</sup> Ribeiro and Nicolelis 2009, 50.

<sup>66</sup> Cartwright 2010, 151.

<sup>67</sup> Foulkes 1999, 145.

<sup>68</sup> Hobson 2005, 113–115; Kuiken 2009, 298; Wamsley and Stickgold 2009, 330–336.

<sup>69</sup> The games in question were Tetris and Alpine Racer, both engaging video games involving a lot of movement.

<sup>70</sup> LaBerge and Rheingold 1990, 114–118.

<sup>71</sup> Tholey 1982, 68–70; Tholey 1990, 6–7.

<sup>72</sup> Stumbrys et al. 2013, 27–28, 31–33.

<sup>73</sup> Wamsley and Stickgold 2009, 335. They also point out that in humans, experimental stimulation of the visual cortex gives rise to the associated visual experience. Hobson, however, points out that it is possible to have REM sleep without remembering dreams and therefore likely that learning and memory reorganisation can occur without awareness of the process (Hobson 2005, 109).

mentation occur most commonly during NREM sleep. Secondly, within NREM sleep they both show the strongest expression early in the sleep cycle directly after learning and decrease across time. Thirdly, both do not appear in their original form but are significantly altered. Memory fragments of recent experiences become mixed with other content, and firing sequences established during wakefulness are re-expressed only intermittently, yet on a faster timescale and with lower fidelity, as experiments in rodents have shown.

The crucial question seems to lie in the relation between dreaming, sleep and the respective brain functions (see chapter 2.7), in other words, whether the processes by which dreams are formed and those by which memories are consolidated are the same. While I disagree with reductive explanations that consider dreams a byproduct of brainwaves, the fact that an isomorphism exists between the brain and the mind and that dreams and brainwaves mirror each other in some way seems indisputable. Tomoyasu Horikawa and his colleagues were able to prove that specific visual imagery experienced during the sleep-onset period (sleep stage 1 or 2) is represented by certain brain activity patterns and that it is possible to uncover subjective contents of dreaming by objective neural measurement.<sup>74</sup> To do this, they established links between brain activity patterns and visual stimuli with the assistance of lexical and image databases and then compared these patterns of brain activity obtained from waking with those obtained during sleep onset. The machine-learning models trained on stimulus-induced brain activity could then predict the contents of visual imagery during the sleep onset period based on measured brain activity. Comparison with dream reports collected after waking showed that visual content during sleep could be accurately decoded. It is therefore hardly surprising that learning effects can be observed both in sleep-dependent memory processing and brain plasticity as well as in the content of dreams. The material and the mental domain cannot be understood independently of each other but form two sides of the same coin where influences on the one will manifest themselves in the other.

<sup>74</sup> Horikawa et al. 2013, 639–642.

## 2.7 COGNITIVE NEUROSCIENCE OF SLEEP AND DREAMING

According to the activation-synthesis thesis originally formulated in 1977 by J. Allan Hobson and Robert McCarley and updated several times since then, dream images are synthesised from memory fragments which match the internally generated neural activity caused by the brain's self-activation in sleep, combining them in a novel but personally meaningful way.<sup>75</sup> Thus, the cardinal cognitive features of dreaming – heightened strength of perception and emotion on the one hand, loss of self-reflective consciousness, loss of orientational stability, loss of directed thought, reduction in logical reasoning and poor memory both within and after the dream on the other – are caused by selective activations and inactivations of certain brain circuits and chemicals in REM sleep.<sup>76</sup> A summary of the individual differences between the components of sleeping and waking consciousness together with the hypothesis of their cause is given in table 3.

Hobson argues that the phenomenological distinctions between waking, NREM and REM sleep are brought about by a combination of three factors that shape the mode of processing:

- Factor A: the level of electrical activation in the brain, which can range from low to high.

<sup>75</sup> Antrobus and Wamsley 2009, 310, 312–313; Domhoff 2003, 147–150; Hobson 2005, 4–6, 42, 64, 99–101; Hobson 2009, 302–309; Revonsuo 2010, 238–239. For reasons explained in chapter 2.8, I disagree with the implicit assumption of causality in Hobson's work. Still, although his argumentation faces several problems, this does not invalidate his observations but only requires the notion of causation between brain state and mental state to be replaced by correspondence. If this slight shift in argumentation is heeded, important information can be gained from cognitive neuroscience. Furthermore, Schönhammer points out that even the activation-synthesis thesis does not necessarily reduce mental contents to physiology: whereas “activation” consists of neurological events, “synthesis” maintains some sort of psychological process (Schönhammer 2003, 82; Schönhammer 2012, 253).

<sup>76</sup> Hobson points out the similarity to organic delirium, concerning both the brain activation process as well as the mental contents (Hobson 2005, 90). Dream consciousness is thus considered a disorganised and deficient form of consciousness (Revonsuo 2010, 239).

*Tab. 3 Differences between waking and sleeping consciousness*

<i>Function</i>	<i>Nature of difference</i>	<i>Hypothesis of cause</i>
Sensory input	Blocked	Presynaptic inhibition
Perception (external)	Diminished	Blockade of sensory input
Perception (internal)	Enhanced	Disinhibition and self-activation of multimodal areas of cortex and related subcortical brain areas storing central sensorimotor representations by decreased aminergic modulation
Attention	Lost	Seized by dream events as percepts arise spontaneously, difficult to direct as regional deactivation of frontal cortex leads to a lack of voluntary movement control that in turn limits ability to move and to think
Memory (recent)	Diminished	Because of aminergic demodulation, activated representations are not restored in memory
Memory (remote)	Enhanced	Disinhibition of networks storing mnemonic representations increases access to consciousness
Orientation	Severely deficient for time, place, and person (except self)	Impaired by disablement of aminergic systems and regional deactivation of global and local memory systems of the brain, internally inconsistent orienting signals are generated by cholinergic system
Thought	Illogical and undirected: reasoning ad hoc, logical rigour weak, processing hyperassociative	Impaired by disablement of aminergic systems and regional deactivation of global and local memory systems of the brain, loss of attention, memory, and volition leads to failure of sequencing and rule inconstancy; analogy replaces analysis
Insight	Self-reflection lost	Failures of attention, logic, and memory weaken second- (and third-) order representations
Language (internal)	Highly confabulatory	Aminergic demodulation frees narrative synthesis from logical restraints
Emotion	Episodically strong: elation, anger, and anxiety exaggerated	Cholinergic hyperstimulation of amygdala and related temporal lobe structures in the brain triggers emotional storms which are unmodulated by aminergic restraint
Instinct	Episodically strong: fighting and fleeing common	Cholinergic hyperstimulation of hypothalamus and limbic forebrain triggers fixed action motor programmes, which are experienced fictitiously but not enacted
Volition	Weak	Top-down motor control and frontal executive power cannot compete with disinhibited subcortical network activation, impaired by weakening of working memory
Output	Blocked	Postsynaptic inhibition

- Factor I: the status of gating information flow to and from the brain, which is strongly external or strongly internal depending on whether the input-output gates of the brain are open or closed.
- Factor M: the nature of the mode of information processing within the brain, which is

set by the ratio of aminergic to cholinergic modulation.

During waking, all three AIM factors are high and decrease to low A and intermediate I and M in NREM sleep. In REM sleep, however, factors I and M are at their lowest values, while factor A is as high and sometimes even high-



er than during waking. Yet, positron emission tomography (PET) could show that, when the activation patterns (factor A) of waking and REM sleep are compared, important differences become apparent.<sup>77</sup> Among the brain regions that show increased activity in REM sleep in relation to waking are the pontine tegmentum (the likely site of the REM sleep and PGO wave generator according to animal studies), the amygdala (which, according to animal studies, is involved in mediating emotion, particularly anxiety), the parietal operculum (which presumably mediates visuomotor integration of cardinal perceptual features of dreaming) as well as the parahippocampal and deep frontal cortices (which possibly process emotional data and integrate it with cognitive information). As opposed to this, the dorsolateral prefrontal cortex (DLPFC, which, according to human studies, is implicated in executive ego functions such as short-term memory, self-reflective consciousness, intentional decision making and volitional action), when compared to waking, shows the same decreased activity both in NREM and in REM sleep. Moreover, REM sleep is not only defined by sustained electrical brain activation but also by strong and discrete arousal stimuli. PGO waves activate the brain in distinct pulses, much as if by a startling stimulus during waking. In that way, they possibly mediate distinctive aspects of dream mental activity such as the intense absorption caused by the dominance of percepts, the bizarreness resulting from discontinuity and incongruity of times, places and people as well as the constant sensorimotor content. PGO waves are even sometimes termed “the physiological correlate of dreaming”.<sup>78</sup>

Hobson considers dreaming a changed mental state effected by a changed brain state.<sup>79</sup> Different kinds of information processing are connected to different kinds of brain states in sleeping as well as in waking. These differences are much more pronounced and less flexible in REM sleep than during waking because

a severe shift in neuromodulation changes the microclimate of the rest of the brain (factor M). Certain brainstem neurons located in the pons which contain the neuromodulators noradrenaline (norepinephrine) and serotonin constitute a mode-switching mechanism that brings about a global change in brain state. During sleep, these aminergic neuromodulatory neurons reduce their output by half and are shut off completely during REM sleep. As both noradrenaline and serotonin play an important role in attention, memory and reflective thought during waking, it is hardly surprising that these capabilities diminish during dreaming. Another important influence on the central brain state results from the fact that the lack of serotonin increases the excitability of neurons containing acetylcholine. The cholinergic system is active in both waking and REM sleep, although it is uninhibited and thus much stronger during REM sleep, which could contribute to the activation of the brain areas connected with hallucinosis, hyperassociation and hyperemotionality (see below). Yet, as neuromodulatory changes are a gradual procedure, different states of consciousness are not entirely separated from each other, and the transition between them forms a continuum. So far, these processes have only been observed in animals, although pharmacological evidence indicates similar workings in the human brain. Additionally, a major weakness of this model lies in the fact that it can only give a cause for mental imagery during REM sleep when the brain self-activates, leaving out other stages of sleep.<sup>80</sup> Thus, NREM dreaming has to be explained as resulting from slighter and as yet undetectable stimulation by the same regions of the brainstem as in REM, which is therefore termed “covert REM sleep”.

Opposing Hobson's theory that places emphasis on the brainstem, Mark Solms has championed the dopaminergic forebrain motivational system as controlling dreaming.<sup>81</sup> He argues that REM sleep is not necessarily part of the neural substrate of dreaming, although REM activation is the most common trigger. However, in Solms' opinion, arousal can occur in other sleep stages, and as such his theory can explain dreams occurring during NREM sleep. William

<sup>77</sup> Hobson 2005, 56; Hobson 2009, 306–307. See also Dang-Vu et al. 2009, 34; Ribeiro and Nicolelis 2009, 50.

<sup>78</sup> Steriade 2009, 28. For an in-depth discussion of the role of PGO waves for dreaming, see Hobson and Friston 2012, 85–87, 94–95.

<sup>79</sup> Hobson 2005, 20, 56–62, 101–102; Hobson 2009, 305, 309.

<sup>80</sup> Domhoff 2003, 148, 150.

<sup>81</sup> Antrobus and Wamsley 2009, 312–313; Domhoff 2003, 16–17, 149.

Domhoff agrees with this view and suggests that dreaming will occur when a certain minimal level of neural activation is reached while external stimuli are blocked and the self is relinquished.<sup>82</sup>

Generally speaking, these theories are similar insofar as they explain dreaming by brain activation and only differ in terms of where this activation occurs and how it is generated. Both groups of scientists think of mental processes as an epiphenomenon of brain activity and thus as based on physiological mechanisms. Much as theories about brain activation are helpful in understanding certain features of dreams, seeing this as the sole relevant feature seems a case of rather naive reductive materialism. Although Hobson asserts that form and content are complementary, implicitly he assumes the brain to have primacy over the mind.<sup>83</sup> It seems that Hobson fails to grasp the nature of the problem of subjective experience and that he is undecided about whether mental content forms a representation of the world or whether consciousness is somehow created by the brain.<sup>84</sup>

<sup>82</sup> Domhoff 2003, 167–168.

<sup>83</sup> “The word ‘isomorphism’ means similarity of form or shape, and brain–mind isomorphism that every form of mental activity has a similar form of brain activity. Therefore, if we detect a dream form, we can seek a corresponding brain form. In dreaming, the simplest example is activation. To explain the awakening of the mind in sleep we should expect to find a similar (but not of course identical) awakening of the brain during sleep. [...] we do find this – the brain is electrically activated in sleep and, when this happens, the mind is turned on too.” (Hobson 2005, 30). While Hobson starts with acknowledging that there simply is some kind of correspondence between brain and mind, he switches without further explanation to the assertion that the mind’s contents are caused by the brain. “Part of the change in paradigm exemplified by the shift from dream content to dream form is the adoption of the philosophical conviction that the physical world is the only world that there is, that the brain and the mind are therefore inextricably united, and that dreaming is a distinctive form of conscious awareness caused by the state of the brain in sleep.” (Hobson 2005, 17). See also Hobson 2005, 6, 45, 50, 58, 121, 125, 142.

<sup>84</sup> “I myself believe that even the hard problem, the problem of qualia, and the mind–body problem itself, are effectively solved once we know that the world is represented in the brain by two reciprocal processes: the first is the a cause-and-effect mechanism of self-organization that brings us into the world, at birth, with a high degree of self-determination. This is genetically arranged. The second is

His analysis seems accurate concerning brain processes, but Domhoff points out that other components need to be taken into account to explain how dreaming comes about.<sup>85</sup> While he agrees that the neurophysiological substrate underlies and activates the process of dreaming, he adds that it is the conceptual system of schemata and scripts that generates this cognitive process and that dream content ensues from the combination of the two. Particularly the narrative nature of dreaming and the substance of dream content are products of this conceptual system, which cannot be reduced to brain mechanisms. Although it mostly operates unconsciously, it nevertheless forms the organizational basis for all human knowledge and beliefs, consisting of both figurative and experientially based concepts. The latter arise from bodily sensations and interactions with the world and can be grouped into three types:

- Basic level categories, which result from the interaction of inherited neural structures with patterns of stimuli from the environment. They are most directly distinguished from other categories insofar as that an entire category can be represented by a single mental image. For example, they describe distinctions among types of animals (“dog”, “cat”) types of vehicles (“boat”, “car”), types of social interactions (“friendly interaction”, “aggressive interaction”) or types of actions (“walking”, “running”).
- Spatial relations categories, which are of an experiential nature (“up”, “down”, “in front of”, “in back of”).
- Sensorimotor categories, which are grounded on a variety of direct experiences such as temperature, motion or touch.

Domhoff points out that, according to content analysis, dreams are mainly composed of constructions arising from experiential categories and that plausible simulations of the

our experience of the world through which we enter symbolic representations of experience into our circuits of neurons. This is achieved behaviourally. Both of these processes, the innate and the acquired, have examples in the specific activation programmes of the brain. Viewed in this way, waking and dreaming are mirror images of one another which interact throughout our lives to create consciousness in the first place and to endow it with information for purposes of adaptation as we live out our lives.” (Hobson 2005, 123–124).

<sup>85</sup> Domhoff 2003, 9, 30–32.

real world are then generated by synthesising memory schemata, general knowledge and episodic memories. As opposed to form, which is at least partially based on the nature of neurological activation during sleep (see chapter 2.9), dream content is created through recombination or blending of memory contents (see chapter 3.3).<sup>86</sup> So far, the exact process whereby memories are selected for dream construction is poorly understood, apart from the fact that an exact repetition of waking scenes at 1.4 % is fairly uncommon.<sup>87</sup> Consider for example the temporal dimension of dream formation, in which one peak concerning the incorporation of events into dreams occurs after one day (the day residue effect), but a second peak occurs only six to seven days later (the dream lag effect). Still, 65 % of dream reports contain residues of recent waking activity, and it seems clear that emotional saliency plays an important role in singling out relevant information as emotion and reasoning continuously influence each other. This highly emotional and “hyperassociative” state corresponds to brain activation by cholinergic chemicals during REM sleep. Dream imagery processes waking events at least partially based on how recent, novel and behaviourally significant they were and as such aids memory consolidation processes and enhances evolutionary fitness (see chapter 2.6).<sup>88</sup> When complex dream narratives or world simulations are formed, elements of the experience of the preceding days are reactivated and integrated with memories of (emotionally) related older experiences and with remote and generic semantic information.<sup>89</sup> Emotional competence

is a fundamental cognitive ability as it is crucial to survival by both facilitating instinctive actions and enabling us to function socially. Therefore, the dreams of early humans can be expected to have contained a high level of emotional complexity as well. Before I turn to general features of dream content, however, a short excursus on the problem of consciousness in cognitive neuroscience is needed to avoid misunderstandings.

## 2.8 A NOTE ON CONSCIOUSNESS

Most contemporary scientific studies of dreaming employ findings from the neurosciences in some way or another. This is justified because a supervenience<sup>90</sup> relation exists between the brain

perceptions, comes close to this dream experience. Thus, we use the term ‘narration’ advisedly to signal the coherence of dream experience, which is all the more remarkable given the apparent chaos of REM sleep dreaming. When we are dreaming, even without the help of the chemical unification conferred by noradrenaline and serotonin, and even without the focus and control of thought and action conferred by the part of the brain called the dorsolateral prefrontal cortex, our experience is nevertheless convincingly integral and convincingly real. Here again, it is hard to resist the idea that the ultimate reality of consciousness includes, and is strongly based upon, our brain’s capacity to create a virtual reality, so close in all of its formal details to aspects of waking consciousness as to fool us, almost every time.” (Hobson 2005, 131). “Phenomenal consciousness is a higher biological level of organization in the brain that firstly enables the inner presence of phenomenal qualities and secondly organizes those qualities into a coherent world simulation, with a self or a body image in the centre of the virtual world. This world simulation functions as an internal navigational system in the brain, playing a decisive causal role in choosing and guiding the behavioural trajectories that our physical body, the whole organism, goes through in the physical world. Dreaming is the biologically programmed, internally generated and stimulus-independent activation of the world-simulation system during REM sleep; the contents for the internally generated simulations are synthesized on the basis of emotionally charged memories, to rehearse dangerous and challenging events that we have encountered in the past and might encounter in the future as well.” (Revonsuo 2010, 289) For the theory of dream function indicated here, see chapter 2.6.

<sup>90</sup> “A set of properties A supervenes upon another set B just in case no two things can differ with respect

<sup>86</sup> Cartwright 2010, 159, 176, 178; Dang-Vu et al. 2009, 34; Hobson 2005, 78–79; Kuiken 2009, 298–299; Revonsuo 2000, 894–895; Ribeiro and Nicolelis 2009, 50; Wamsley and Stickgold 2009, 332–334, 336.

<sup>87</sup> Wamsley and Stickgold 2009, 332. An explanation could be the impaired function of the prefrontal cortex during REM sleep that prevents the details of past events from being integrated into an identifiable life episode (Dang-Vu et al. 2009, 34).

<sup>88</sup> Hobson 2005, 119.

<sup>89</sup> “We emphasize narration because the reports we have of dreams read like stories. This is dangerous because the reports are necessarily given in waking and rely entirely on language, whereas the dreams themselves are experienced more like films. They are multimedia events, including fictitious movement of a type not yet stimulated easily, even in the most technically sophisticated film. Only virtual reality, where the subject’s own movements affect

and the mind, insofar as for every phenomenal event that takes place in consciousness there is a corresponding neural event in the brain.<sup>91</sup> This is called the “principle of covariance between consciousness and brain”. Implicit in this notion is the assumption that consciousness is ontologically dependent on the brain, meaning that the former could not exist without the latter. Still, the supervenience relation does not explain in what way brain and mind are interdependent, being consistent with several monistic theories of consciousness. While this is not the place to delve deeply into the science of consciousness, a quick description of the relevant context is in order.

Like Hobson, many researchers adhere to some form of reductive materialism.<sup>92</sup> In short, reductive materialism states that consciousness is a brain process and therefore identical with the neural activity taking place inside the brain. I agree with Hobson insofar as that dualism<sup>93</sup> faces insurmountable obstacles in explaining consciousness, among them the supervenience relation mentioned before, and that therefore a monistic theory<sup>94</sup> is much more likely. However,

er, reductive materialism seems conceptually incapable of explaining the subjective, qualitative aspect of consciousness, i.e. what it is like to be someone, and therefore unsatisfactory as an explanation.<sup>95</sup> The unintelligibility of the connection between mind and body, or between subjective experience and objective brain activity, has been termed the “explanatory gap”<sup>96</sup> or the “hard problem”.<sup>97</sup>

Contrary to Hobson, Antti Revonsuo favours weak emergent materialism<sup>98</sup> as the most likely explanation because in his opinion the novelty of subjective consciousness can be explained as a higher-level physical phenomenon that has emerged from the complex organisation of ordinary, lower-level physical phenomena, in this case the neurophysiological processes in the brain. But although emergence

to A-properties without also differing with respect to their B-properties. In slogan form, ‘there cannot be an A-difference without a B-difference’.” (<http://plato.stanford.edu/entries/supervenience/> 15 April 2017)

<sup>91</sup> Revonsuo 2010, 151–152.

<sup>92</sup> Revonsuo 2010, 17, 21–24, 238.

<sup>93</sup> Revonsuo 2010, 5–16. “All dualistic theories say that the world (the universe as a whole) consists of two categorically different types of entity or substance. One of them is physical. This substance constitutes physical matter, energy, force fields, elementary particles and forces, and all the rest of the things that the physical sciences take as the fundamental building blocks of the universe. [...] The other substance is mental by nature. ‘Mental’ is taken by definition to be something nonphysical, something entirely different from the physical rather than a part or a variety of the physical. It is less clear what the mental substance is supposed to consist of, but it seems natural to assume that, whatever it is, it must be the same sort of stuff that forms our subjective psychological reality.” (Revonsuo 2010, 4).

<sup>94</sup> Revonsuo 2010, 16–39. “[A]ll monistic theories say that the world (the universe as a whole) consists of only one type of substance. Different monistic theories, however, disagree about the ultimate nature of the fundamental substance. Some say that the universe is at bottom thoroughly physical (materialism or physicalism), whereas others say that the universe consists of nothing but mental substance across the board (idealism). Yet others claim that the

universe is, at the rock bottom level, neither ‘mental’ nor ‘physical’ (neutral monism).” (Revonsuo 2010, 5).

<sup>95</sup> Nagel 1974, 435–450; Revonsuo 2010, 39–43.

<sup>96</sup> Levine 1983, 357; Revonsuo 2010, 39.

<sup>97</sup> Chalmers 1995, 201; Revonsuo 2010, 39.

<sup>98</sup> Revonsuo 2010, 17, 26–32. “The notion of ‘emergence’ can be defined as follows: When entities of a certain type become organized in complex ways, engaging in sophisticated causal interactions and forming complex structural and functional wholes, entirely *new* types of phenomena or *new* kinds of properties, unlike those had by any of the parts of the system, may appear in the phenomenon as a whole. The new types of phenomena or properties are called *emergent*: they emerge from the lower level phenomena that did not possess them in isolation from the holistic system.” (Revonsuo 2010, 26). “[T]he sciences at large seem to be organized into a hierarchical system of theories or models that describe the world at different levels of complexity. Physics is at the bottom level, then chemistry, biochemistry, molecular biology, cell biology, physiology, and so on. The structure of science seems to reflect the structure of reality itself: Reality seems to be a layered system consisting of successive levels, and each level requires a specialized science to study and describe what is going on at that level. The relationships between levels may at first seem mysterious, but later on we discover the principles that connect different levels. Thereby we come to understand how the higher level emerges from the lower level. Weak emergent materialism says that the relationship between consciousness and the brain is just business as usual in the sciences. Consciousness just happens to be now at the frontiers of our understanding, but inevitably the problem will dissolve in a similar manner as the earlier problems have dissolved in the history of science.” (Revonsuo 2010, 28–29).



appears to be an apt description, an explanation as to how new phenomena emerge is still missing. I am reluctant to agree with Revonsuo because it seems that we still have far to go in explaining the emergence of entirely new phenomena, concerning both consciousness as well as chemical or biological properties. In short, as adherents of strong emergent materialism argue, the notion of complete novelty seems essentially inexplicable.<sup>99</sup>

A third explanation, however, may offer a way out of this dilemma. Neutral monism<sup>100</sup> can account for the material and the mental aspect of the world if both are considered properties that are included in some more fundamental substance.<sup>101</sup> Of the several varieties of neutral monism, proto-panpsychism<sup>102</sup> or mic-

ropsychism<sup>103</sup> seem to work best in explaining the emergence of consciousness. According to

certain physically embodied information spaces and certain *phenomenal* (or experiential) information spaces. [...] the differences between phenomenal states have a structure that corresponds directly to the differences embedded in physical processes; in particular, to those differences that make a difference down certain causal pathways implicated in global availability and control. That is, we can find the *same* abstract information space embedded in physical processing and in conscious experience. This leads to a natural hypothesis: that information (or at least some information) has two basic aspects, a physical aspect and a phenomenal aspect. This has the status of a basic principle that might underlie and explain the emergence of experience from the physical. Experience arises by virtue of its status as one aspect of information, when the other aspect is found embodied in physical processing.” (Chalmers 1995, 216). “*Proto-panpsychism* has been recently introduced into the philosophy of consciousness by the philosopher David Chalmers. According to this variety of panpsychism, everything physical contains not a full-blown conscious mind but only an extremely simple and elementary form of consciousness (called proto-consciousness). In ordinary physical particles and objects the conscious elements are so simple that we would not even recognize them as instances of consciousness, but in the human brain they are amplified and organized into a complex system of conscious mental states.” (Revonsuo 2010, 36). Chalmers calls his theory “naturalistic dualism” (Chalmers 1995, 210), however, I agree with Revonsuo that it is in fact a form of monism.

<sup>99</sup> “Strong emergent materialism, by contrast, is less hopeful. It says that the inexplicability of the emergence of consciousness from the brain is not just due to the early stage of cognitive neuroscience – it is due to the fact that the relationship is inexplicable in principle. [...] Supporters of strong emergent materialism point to the fundamental differences between the subjective psychological reality and the objective physical (or neural) reality. The former includes qualitative experiences that feel like something and exist only from the first-person point of view; the latter consists of physical entities and causal mechanisms that involve nothing subjective or qualitative about them and exist from the third-person point of view or objectively.” (Revonsuo 2010, 29–30).

<sup>100</sup> Revonsuo 2010, 35–37. “Neutral monism argues that [...] The universe is, at bottom, neither mental nor physical, but consists of a substance that is even more fundamental than either of those, or perhaps of a substance that somehow includes both in some primitive form. *Double-aspect theory* states that the fundamental substance includes both a mental and a physical aspect, and therefore the world contains both mental and physical phenomena. They are not categorically different from each other; they are just different kinds of manifestations of the basic substance of the universe. [...] *Panpsychism* is the view that everything (physical) in the universe – every last molecule, atom and elementary particle – also contains a conscious or mental ingredient. The mental and the physical are like two sides of a coin: one cannot be had without the other. In panpsychism, the physical and mental features coexist all the time in all physical entities.” (Revonsuo 2010, 35).

<sup>101</sup> Even Hobson’s theory, which is solidly grounded in reductive materialism, contains moments when he realises the inseparability of the physical and the mental, although then it seems that he leans towards dualism (Hobson 2005, 125).

<sup>102</sup> “The double-aspect principle stems from the observation that there is a direct isomorphism between

<sup>103</sup> “Real physicalists must accept that at least some ultimates are intrinsically experience-involving. They must at least embrace *micropsychism*. Given that everything concrete is physical, and that everything physical is constituted out of physical ultimates, and that experience is part of concrete reality, it seems the only reasonable position, more than just an ‘inference to the best explanation.’ [...] So now I can say that physicalism, i.e. real physicalism, entails panexperientialism or panpsychism. It entails panpsychism given the impossibility of ‘radical’ emergence. All physical stuff is energy, in one form or another, and all energy, I trow, is an experience-involving phenomenon.” (Strawson 2009, 52–53). See also Strawson 2009, 55. “According to this idea, microlevel physical phenomena must themselves be intrinsically experiential. If that is true, then weak emergence begins to make sense again, because it seems quite reasonable to assume that macroexperiential phenomena (our sensations and perceptions) might arise from microexperiential phenomena – the elemental experiential features in all physical matter and energy – through complex organization. As experience is involved everywhere and all along from the very lowest physical levels upwards, it need not be magi-

these theories, the mental and the physical are inseparable, and therefore every physical particle contains some extremely simple and elementary form of consciousness already. Such an explanation leaves the validity of scientific research into consciousness intact, while at the same time acknowledging that novelty is a concept impossible to explain.<sup>104</sup> The emergence of consciousness could be considered as not being novel at all but just as a higher organisation of proto-consciousness that had already existed at lower levels. In this way, the concept of emergence can be better understood because that which emerges is not something completely new but something that was present in some lower form before. This is similar to other cases of emergence where, although unpredictable, the process can be described in retrospect.<sup>105</sup> Novelty, therefore, becomes a property of the world that exists at every level and is equivalent to the potential to self-organise in a more complex way inherent in both the physical and the mental aspects of the world.

However, as consciousness is among the oldest problems of philosophy and science and is far from being understood, this chapter is not meant to offer a final explanation. The aim is simply to point out that reductive materialism is by no means the only way to account for the isomorphism, more specifically the supervenience relation, between brain and mind and that therefore the opinion that any theory which employs neurological findings denies subjective experience as a consequence is unjustified. If the idea that neural activation in the brain causes mental content is replaced with the notion that the two phenomena correspond, the problem disappears. Instead, philosophers who still adhere to dualistic or idealistic concepts of

the world need to acknowledge the increasing body of data concerning mental contents that has sprung from cognitive neuroscience. Keeping this in mind, I will now return to the discussion concerning the typical features of dreams.

## 2.9 FORMAL FEATURES OF DREAMS AND THEIR INFLUENCE ON DREAM CONTENT

All sensory modalities can be involved in dreaming, but visual experiences form the core of nearly every dream.<sup>106</sup> Also very common are auditory experiences (40 to 60%), which consist mostly of spoken language but of music and other kinds of sounds and noises as well. Bodily and tactile experiences are found occasionally (15 to 30%), yet smell and taste experiences occur only very rarely in less than 1% of dream reports. Experiments about the visual qualities of dream images (chromaticity, saturation, illumination) have offered mixed results. While some found them to closely resemble those of waking perception,<sup>107</sup> others estimate brightness and clarity of dreams at only 70% in relation to waking.<sup>108</sup> A curious observation remains concerning dreaming in black and white: only about 50 to 70% of dreams are reported to be in colour, and strong differences are evident between the interviewees, some of whom always dream in colour, while some experience a much higher degree of black and white dreams than the average. The notion of dreaming in black and white is sometimes attributed to insufficient recall,<sup>109</sup> but the high number of specific reports about dreams lacking colour renders this an unlikely interpretation. Two more promising explanations have been brought forward so far.<sup>110</sup> On the one hand, the exposure to black-and-white visual media during childhood could influence dreaming experiences, a hypothesis that fits well with the fact that the idea that all dreaming occurs in black and white was most commonly entertained around the middle of the twentieth century. On the other hand, in a medical condition called achromatopsia, colours cannot be

cally created from nonconscious physical ingredients at any particular level of organization.” (Revonsuo 2010, 36).

<sup>104</sup> Ultimately, this would mean asking for the final cause or world formula.

<sup>105</sup> Examples of self-organisation, i.e. of the emergence of intelligent behaviour without intelligent agents, can be seen in tornadoes or traffic jams, nest-building behaviour in social insects and of course in embryonic development when a fertilised egg cell evolves into a sentient being. All nonequilibrium systems possess a tendency to move toward self-organisation and collective behavior, showing that it is a fundamental process of nature (Kahn 2005, 139–144, 153–155).

<sup>106</sup> Dang-Vu et al. 2009, 34; Revonsuo 2010, 243.

<sup>107</sup> Revonsuo 2010, 182–183.

<sup>108</sup> Antrobus and Wamsley 2009, 313.

<sup>109</sup> Hobson 2005, 39.

<sup>110</sup> Revonsuo 2010, 104.

perceived because the colour areas of the visual cortex have been damaged. Dreaming in black and white could therefore constitute a case of temporary achromatopsia if the brain areas in question are not fully activated during sleep. This augments the observation that visual imagery during REM sleep, when the brain is activated, is much brighter and clearer than that of NREM periods and that auditory content is reported more often from REM sleep.<sup>111</sup>

A common feature of dreams is their bizarreness, resulting from erroneous binding processes.<sup>112</sup> This incongruity can affect feature binding (exhibiting features that do not belong to corresponding elements in waking reality), contextual binding (appearing in contexts in which the corresponding elements would not appear in waking reality) or binding across time (discontinuity of dream elements that do not always retain or update the phenomenal representations in a coherent way, leading to inexplicable changes of objects, persons and places). Bizarreness probably occurs when two different and sometimes contradictory attractor fields, which would mutually inhibit each other in waking, are simultaneously stimulated during sleep. Well-known features, objects, persons or events are represented by neural network attractors, i.e. by networks with recurrent connectivity. Attractors that have several features in common (“wet face”, “wet clothes”, “rain”, “shower”) lie in close proximity in a shared attractor valley, which in turn is located in an attractor landscape composed of a large number of attractors. Information arriving in an attractor landscape is cycled through it until it is recognised and settles into one particular attractor basin.

By referring to neural network attractors, several aspects of the brain processes associated with dreaming and other forms of sleep mentation can be better understood. Firstly, even input that contains no information but is sheer neural noise can settle into the basin of an attractor and thus generate well-learned sequences of activity. In this way, the same type of output as in the waking state can be created by an activated cortical region during sleep even in the absence of external stimulus input, and a higher level of regional activation increases the likelihood that noisy information will produce men-

tation because the attractor basins have been deepened. Secondly, precisely which attractor is chosen as the best match can be greatly influenced by prior contexts such as the preceding dream, events of the preceding day, or ongoing concerns in waking life because they will temporarily deepen the attractor basin (long-term potentiation (LTP) of the synapses that form the neural networks in question, especially in the hippocampal system). Thirdly, the difference between REM sleep, NREM sleep and waking states concerning patterns of regional cortical activation can be understood as reflected in the leveling or deepening of the basins across different regional attractor landscapes.

Still, most dreams form a coherent and reasonable simulation of the real world.<sup>113</sup> Bizarre elements (unusual activities, unusual occurrences, distorted objects, metamorphoses) appear in only 10 % of dreams, while abrupt scene changes at 34 % are more common. Yet, bizarreness does not necessarily result from erroneous binding processes but can illustrate instances of conceptual blends, in which characteristics of two sources are combined (see chapter 3.3). It is therefore not entirely clear whether bizarreness can be considered a feature or a content of the dream.

Cross-cultural comparisons could show a stable pattern of similarities and differences in dream content, for example concerning the ratio of male and female characters in dreams (half male, half female in women’s, two thirds male in men’s dreams), the prevalence of bad fortune over good fortune and the predominance of aggression over friendliness.<sup>114</sup> The vast majority of dreams (about 95 %) have a central character or a dream-self that forms a representation of the dreamer in the dream. In 80 % of reports, the dream-self is actively involved in the dream events, and in most dreams, it interacts and communicates with other human or animal characters, more often in an aggressive than in a friendly way. Nearly 50 % of dreams include an aggressive component, in which the dreamer is more likely to be the victim than to

<sup>111</sup> Antrobus and Wamsley 2009, 313.

<sup>112</sup> Antrobus and Wamsley 2009, 311, 313; Revonsuo 2010, 244–245.

<sup>113</sup> Domhoff 2003, 19, 153.

<sup>114</sup> Cartwright 2010, 25; Dang-Vu et al. 2009, 34; Domhoff 2003, 26–27, 72–73; Domhoff and Schneider 2008, 1259–1261; Nielsen and Levin 2009, 323; Revonsuo 2010, 85, 243–244; Schredl 2009, 140. For an in-depth summary of the results of studies into dream content, see Moorcroft 2003, 134–138.



be the aggressor, while the kind of aggression experienced is subject to cultural and gender variation. Generally speaking, negative emotions such as fear, anxiety and anger but also extreme sadness, disgust and confusion predominate in dreams, accounting for about 60 to 80 % of reported emotions for both men and women.<sup>115</sup> Many scientists distinguish between nightmares, which awaken the dreamer, and bad dreams, which do not wake the dreamer up, but this seems to distract from the fact that both kinds of dreams are similar concerning the intensity of negative emotion.<sup>116</sup> Typically, they feature highly frightful content such as threats to the survival, security or self-esteem of the dreamer and are usually long and vivid. 85 % of people report having had a nightmare at least once during the past year and 8 to 29 % experience at least one per month, with comparable rates from different cultures.<sup>117</sup>

Similarly, certain themes and aspects are common in cross-cultural studies.<sup>118</sup> By far the most universal is the theme of being chased or pursued, with as many as 80 % of the interviewees having experienced such a dream at one time or another.<sup>119</sup> Furthermore, this is the most likely theme in recurrent dreams as well as the most common

earliest remembered dream. Other universal subjects experienced by about half to two thirds of people include being physically attacked, being frozen with fright, trying something again and again, sexual experiences, falling or being on the verge of falling, flying, swimming, being late or lost, being locked up, sensing a presence in the room, seeing a person now alive as dead or a person now dead as alive. About a third of people have moreover experienced their own death in a dream. Common themes in bereavement are alive-again as well as dying-again dreams during the phase of numbness following the death, saying-goodbye dreams, taking-a-journey dreams and telephone-call dreams<sup>120</sup> during the phase of disorganisation, and young-well-again dreams, approval-disapproval dreams, advice-comfort-gift dreams, passionate-encounter dreams, deadly-invitation dreams and daily-activity dreams during the phase of reorganisation.<sup>121</sup>

Generally speaking, it can be said that typical dreams are not defined by their high frequency but by the fact that a significant number of people have had such a dream at least once in the past.<sup>122</sup> For example, flying dreams only account for about 0.5 % of reports, but about 50 % of people remember flying in their dreams. Often, flying dreams are of special intensity and characterised by vivid bodily sensations as well as positive feelings (see chapter 2.10). Taken to-

<sup>115</sup> It is possible that the predominance of negative emotions in dream reports is caused by the fact that unpleasant dreams are more likely to wake the sleeper and therefore more likely to be remembered. Dream reports collected after purposeful awakenings display a higher amount of positive emotion (Hobson 2005, 12, 32). Then again, dreams dreamt at home generally seem to be more emotional, not only in relation to aggression but also with respect to sexual content. This suggests that lab settings have an artificially dampening effect on both the reporting and the construction of dreams (Cartwright 2010, 26).

<sup>116</sup> Revonsuo 2010, 248; Schredl 2009, 140.

<sup>117</sup> The higher rate of nightmares in women (about 4:1) might be at least partly a product of women generally reporting more dreams than men and partly due to trauma-induced nightmares. A contrary indication is the finding that in teenagers the number of nightmares increases for girls, while it decreases for boys (Cartwright 2010, 130; Nielsen and Levin 2009, 323).

<sup>118</sup> Revonsuo 2010, 241–242; Schönhammer 2004, 293–300, 324; Schönhammer 2012, 250.

<sup>119</sup> Other studies resulted in slightly differing numbers, listing being chased (50 %), death or injury (20 %), death or injury of close persons (15 %) and falling (10 %) as typical nightmare contents (Schredl 2009, 140).

<sup>120</sup> This is interesting insofar as that products of modern technology are usually only rarely incorporated into dreams. Apparently, dreams are not particularly proficient in simulating modern cognitive activities (reading, writing, typing, calculating) or modern technological devices (elevators, telephones, cars, computers, TV) as we commonly experience difficulties with them while dreaming. A possible explanation might be that these skills are not related to the biological features or environments humans lived in during most of their evolution but are only required in the modern world (Revonsuo 2010, 244). The underrepresentation of mundane tasks like reading or writing can also be accounted for by a lack of emotional salience attached to them (Wamsley and Stickgold 2009, 333). Still, this does not explain the extreme difficulties encountered with writing in dreams, which, due to its instability and tendency to mutate, is commonly recommended for state testing in lucid dreaming tutorials (LaBerge and Rheingold 1990, 40). Moreover, anyone who has read a captivating story can testify that great emotional salience can be attached to reading.

<sup>121</sup> Garfield 1996, 188–203.

<sup>122</sup> Domhoff 2003, 33–34; Schönhammer 2004, 21; Schönhammer 2012, 250.

gether, the data indicate that concerning certain formal features of dreams there is not as much variation based on gender, cultural conventions or historic background as would be expected if learned features were concerned.<sup>123</sup> Then again, personal factors play a role for dream content as well, which is mostly continuous with waking thought and often repetitive in a specific person.<sup>124</sup> As is the case in many longstanding scientific debates, both camps appear to be right in their own way, and the debate seems at least partially due to a confusion between form and content.<sup>125</sup> While the nature of internally generated sensations is connected to brain activation during sleep and therefore constitutes the universal elements of dreams, how these sensations are interpreted is based on cultural scripts and personal experience.<sup>126</sup> The way these two influences interact can be observed if the process of REM incorporation is considered.

External sensory stimuli are incorporated into dreams occasionally but are interpreted in a way that fits with the ongoing dream episode.<sup>127</sup> When individuals were sprayed with water during REM sleep, one person reported a dream about his children spilling water over him, while another dreamt of an actress opening an umbrella because it had started to rain through the ceiling. Both sleepers recognised

the feeling of water on their skin but made sense of it in a different way. Similarly, if a buzzer was sounded while the current dream was set in a living room, the sound was interpreted as the telephone ringing. Other stimuli incorporated into dreams include variations in temperature that resulted in dreams of warm days or of getting food from a refrigerator. Interpretations like this occur when the external stimulus is circled through the brain's attractor landscape until it has found its best match in the form of an attractor basin that has been deepened by the context of the prior dream.

## 2.10 FALLING AND FLYING: DREAMS WITH A STRONG SENSORIMOTOR COMPONENT

Movement in dreams illustrates the process of dream construction quite well. Altogether, our dreams have a strong sensorimotor component, with walking, running, flying or swimming being greatly overrepresented in relation to stationary activities. Hobson attributes this high ratio of movement in dreams to the fact that brain motor pattern generators are activated in REM sleep in order to refresh movement programmes.<sup>128</sup> Rainer Schönhammer elaborates on Hobson's hypothesis and emphasises episodes of specifically high nervous arousal as the source of most dreams concerned with flying, falling and fleeing.<sup>129</sup> The relatedness of these

<sup>123</sup> Domhoff argues that the low degree of variation between US students' dreams over the past fifty years as well as the great similarity of dreams from a small native group in the Amazon jungle are caused by personal concerns remaining stable through time and in different parts of the world (Domhoff 2003, 32). However, it is hard to imagine how the similarity of certain formal features could solely be explained by personal concerns, and the idea that personal concerns are independent of a person's enculturation is doubtful at least.

<sup>124</sup> Hobson attributes recurring themes solely to the bizarreness of dreams (Hobson 2005, 110). Such an explanation, however, seems unlikely. Hobson seems prone to simply denying findings that disagree with his theory (see also above concerning dreaming in black and white).

<sup>125</sup> Schönhammer 2004, 82. Arguing that sleep neurophysiology is the only thing that matters for mental activity seems as absurd as denying any connection between mind and brain (Hobson 2005, 43).

<sup>126</sup> Schönhammer 2004, 69.

<sup>127</sup> Antrobus and Wamsley 2009, 311; Baldrige 1966, 1274. Still, while some impressions from the waking world can intrude into dreams, this is only rarely the case and cannot explain the majority of dream content (Domhoff 2003, 19; Hobson 2005, 32–33).

<sup>128</sup> Hobson 2009, 28, 306.

<sup>129</sup> Schönhammer 2004, 12, 21, 26, 43, 46, 69, 79–86, 93–95, 110–122, 127–135, 148, 165, 175, 177, 187–190, 200, 203–209, 213–216, 218–221, 223, 236–252, 292, 295–297; Schönhammer 2012, 249, 251–258, 261–264. "Some dream events occur universally; this is especially true for flying, falling, being chased and motor inhibition. The analysis of patterns and contexts of these "typical dreams" reveals that they are probably elicited through the dreamer's perception of the actual state of body and mind in the twilight of sleep and waking. Evidence stems from the occurrence of combinations of the mentioned dream events and their relation to the process of waking up." (Schönhammer 2012, 249). „Die Gegebenheiten jener Phase des Schlafs, in welcher wahrscheinlich die Mehrzahl solcher Träume stattfinden, sprechen dafür, dass die drei genannten Aspekte von Flugträumen sich aktuellen Wahrnehmungsmöglichkeiten verdanken könnten: Im REM-Schlaf ist der Körper unbeweglich, weil vom Gehirn ausgehende motorische Signale im Hirnstamm abgeblockt werden; komplementär ist der sensorische

dreams is recognisable from their tendency to morph into each other, as when flying feels like falling upward or turns into a fall or when it is discovered as an escape from pursuers. Schönhammer argues that these dreams originate not only from ordinary REM activation in the sleeping brain's sensorimotor areas because in this case, movement dreams would occur with much greater regularity than they do. Instead, boosts of particularly high, spontaneous arousal ("Weckschübe") stimulate the sense of balance and cause a kind of vertigo that is interpreted by the mind of the sleeper as strong movement in the dream.<sup>130</sup> At the same time, these periods of arousal push the mind of the sleeper closer to the threshold of waking so that sensory input concerning the sleeping body intrudes into dreaming consciousness. This state in REM sleep, in which we are selectively aware of particular aspects of our external sleeping en-

Reizfluss von der Körperperipherie zum Gehirn gehemmt, während zugleich Erregungsschübe des aufsteigenden retikulären Systems, das im Hirnstamm Knotenpunkte des Gleichgewichtssystems involviert, zu (selektiver) kortikaler Aktivierung führen [...]“ (Schönhammer 2012, 252). „Lassen sich Flugträume als Assoziationen zu Irritationen des Gleichgewichtssinnes während außergewöhnlich wacher Momente im Schlaf verstehen, so scheint mir für Fallen im Traum die Faustformel zu gelten: Sie sind die subjektive Seite eines schreckhaften Erwachens – eines allzu abrupten Arousals, das erschreckende vertiginöse Reize mit sich bringt.“ (Schönhammer 2012, 256).

<sup>130</sup> „Da vestibuläre Empfindungen (als potentielle sensorische Grundlage des geträumten Fliegens und Schwebens) u. a. eine erwartbare Begleiterscheinung der aufsteigenden neuronalen Erregungen sind, ergibt sich die Schlussfolgerung, dass die relative Stärke der kortikalen Erregung (und als Folge: der Grad der Wachheit im Schlaf) komplementär zur Deutlichkeit von Irritationen des Gleichgewichtssinnes sein sollte. Dies impliziert, dass Flugträume eine Annäherung an außergewöhnlich starkes REM-Arousal (wie es im Schlaflabor für luzide Träume nachgewiesen wurde [...]); ‚Arousal‘ steht für die aufsteigende neuronale Aktivierung) oder äquivalente Erregungsprozesse voraussetzen. Das würde zwanglos erklären, warum traumhaftes Fliegen dem Luzidwerden regelmäßig vorausgeht und umgekehrt im luziden Zustand auch leicht bewusst herbeigeführt werden kann [...]“ (Schönhammer 2012, 254). „Davon, dass REM-Physiologie auf Schaltstellen des Gleichgewichtssystems wirkt, zeugen übrigens die schnellen Augenbewegungen, das äußere Kennzeichen dieser Schlafphase, dem sie ihren Namen verdankt.“ (Schönhammer 2012, 252).

vironment but take no notice of other stimuli, is called “paradoxical awareness”.<sup>131</sup> The specifically high level of consciousness in dreams with a strong sensorimotor component is discernible from their particular vividness and high memorability.

Dreams with a strong sensorimotor component also overlap significantly with impactful dreams as determined by Don Kuiken based on empirical studies.<sup>132</sup> Impactful dreams are dreams which immediately alter post dream thoughts and feelings, probably because of amplification of REM carryover effects, and fall into the following three types:

- The nightmare, which is characterised by intense fear, the avoidance of threatening others and physical metamorphoses, results in externally directed vigilance and apprehension.
- The existential dream, which is typified by intense sadness, rejection by or separation from significant others and spontaneous feeling change, leads to sadness, autobiographical review and changed self-perception.
- The transcendent dream, which is distinguished by surprise, magical accomplishment, and shifts in visual-spatial orientation such as floating or flying, ensues in astonishment and reported spiritual change.

Additionally, the close association between lucid dreams and strong movement as well as between sleep paralysis and immobility, fear and the feeling of a threatening presence points to an experience close to the threshold of waking (for lucid dreaming and sleep paralysis see chapter 2.11). Occasionally, visual inconsistencies such as light phenomena or tunnel vision can accompany dreams with a strong sensorimotor component as well as lucid dreams, and it is useful to note that dreams in which the dreamer meets deceased people or dies herself are often reported together with a flying or floating sensation or as having been accompanied by bright light.<sup>133</sup>

<sup>131</sup> Coolidge and Wynn 2006, 10.

<sup>132</sup> Kuiken 2009, 297. Furthermore, there might be a connection between “big dreams” and heightened activation in the temporal-limbic regions of the brain (Bulkeley 2005, 234).

<sup>133</sup> Schönhammer 2004, 180, 210–213, 277, 297, 299–301, 320–321; Schönhammer 2012, 255, 257, 260. It is also interesting to note that Lakoff mentions a conceptual metaphor in which happiness is equated with light and sadness and depression with darkness (Lakoff 2001, 279). For conceptual metaphors in dreams, see below.

Schönhammer points out that many dreams concerned with flying, falling and fleeing probably occur in late-night REM or in light sleep at the beginning or the end of the night. A related experience, the feeling of stumbling or falling that is commonly connected to twitching of the limbs (the “hypnic jerk”) and often followed by a brief awakening, is experienced by many people at sleep onset, and sensorimotor experiences are also common in sleep onset dreaming (see chapter 2.5). The universality of these experiences immediately suggests a phenomenon that has its base in the human body and brain, not in culturally learned scripts.<sup>134</sup>

According to Hobson, dream movement is typically associated with impending doom

<sup>134</sup> Flying or soaring through air – USA 34 %, Japan 46 %, Canada 48 %, Germany 64 %; Swimming – USA 52 %, Japan 53 %, Canada 34 %, Germany 39 %; Falling – USA 82 %, Japan 74 %, Canada 74 %, Germany 74 %; Being on the verge of falling – USA 47 %, Japan 45 %, Canada 58 %, Germany 57 %; Being frozen with fright – USA 58 %, Japan 87 %, Canada 41 %, Germany 56 %; Being locked up – USA 56 %, Japan 44 %, Canada 24 %, Germany 39 %; Being attacked or persecuted – USA 77 %, Japan 91 %; Being chased or persecuted but not physically injured – Canada 82 %, Germany 89 %; Being physically attacked – Canada 42 %, Germany 45 %; Vividly sensing, but not necessarily seeing or hearing, a presence in the room – Canada 48 %, Germany 24 % (Schönhammer 2004, 295–297). Compare the dreams of a !Kung woman: “Another dream I have is that I walk a long distance to a well, one with an ivory palm tree nearby. I dream that I am with a group of people and that, as we’re all sitting near the well, I fall in. I try to get out by holding on to the sides, but each time I lift myself up, I fall down. I try, again and again, but I keep falling back into the water. Even this morning God struck me with a dream about falling. I dreamed I was climbing a tree, looking for some gum resin to eat, and I fell down. As I fell, a branch struck my leg and I cried out with pain, ‘Ouw! That branch went right into me!’ Because the branch pierced right into my leg and broke off. Then you, Marjorie, you came and helped me. You said, ‘Oh, Nisa ... you’re dead!’ You called to the others and you all tried to get the stick out of my leg. Finally, you were able to pull it out. You put medicine on it and made it better. Then you gave me other medicine to drink. The dream woke me up, very early this morning.” (Shostak 2000, 294–295). “I dreamt that I went alone to the well. But as I was filling my water containers, I fell in. I trembled and almost killed myself with fright. I tried to grab onto the sides of the well, but fell down. I tried again and fell down again. I was finally able to grab onto a stick and crawl out. No one else was there.” (Shostak 2000, 329–330).

because the co-activation of the limbic brain stimulates anxiety and because unfamiliar or impossible movement patterns are generated at the level of the brainstem.<sup>135</sup> Schönhammer also draws attention to the connection between movement dreams and strong emotions and considers especially the association between falling and fear to be an anthropological constant.<sup>136</sup> Dreams of pursuit are almost always accompanied by a feeling of extreme fear, which Schönhammer, in agreement with Hobson, attributes to the co-activation of neuronal circuits in the limbic brain, particularly in the amygdala. Similarly, falling dreams are usually associated with fear or fright, whereas flying dreams are mostly accompanied by pleasant feelings. For example, cosmic dreams in which the dreamer falls or soars through space alternate between feelings of terror and almost religious ecstasy. Sleep paralysis and lucid dreaming constitute another example of the sense of floating or flying being associated with blissful feelings.

Schönhammer suggests instinctive behaviour in dangerous situations as a possible origin but also doubts it because this seems to contradict the idea that movement dreams are interpretations of contradictory sensations between the vestibular system and the sleeping body.<sup>137</sup>

<sup>135</sup> Hobson 2009, 53–54. Also, in Domhoff’s categorisation of dream types based on content, anxiety dreams are characterised by their high degree of movement (Domhoff 2003, 79).

<sup>136</sup> „Der Schreck, der bei allen angesprochenen Formen bzw. Kontexten des (Aus-dem-Schlaf-)Fallens präsent ist, steht in einer bemerkenswerten Beziehung zu dem neurophysiologischen Befund, dass die Schübe aufsteigender Erregung, die für die gesteigerte kortikale Erregung im REM-Schlaf verantwortlich sind, dem Aktivierungsmuster von Orientierungs- und Schreckreaktionen analog sind [...]“ (Schönhammer 2012, 257). Schönhammer 2004, 195–196, 215, 230, 237–239, 300; Schönhammer 2012, 251, 256–258, 262, 264. Nevertheless, not every dream concerned with falling will be a bad dream, and sometimes falling turns into flying, which is most commonly associated with euphoric feelings: falling with fear – USA 68 %, Japan 59 %; falling without fear USA 33 %, Japan 40 % (Schönhammer 2004, 296). See also Revonsuo 2004, 242.

<sup>137</sup> „Das zermürbende Perpetuum Mobile gründe darin, dass – nicht unbedingt zu Trainingszwecken, sondern als Nebeneffekt der Selbststimulation des schlafenden Gehirns – ein stammesgeschichtlich ererbtes Fluchtprogramm ausgelöst und in Endlosschleife repetiert werde und erst nach Erreichen eines Maximums der Erregung mit dem Erwachen ende. [...] Es fehlt nicht an Indizien dafür, dass es



While I agree that instinctive behaviours are not the cause of movement dreams, it still seems to be a strong contender to explain the nearly compulsive connection of extreme emotions during these kinds of dreams. The sensation of running or feeling paralysed might trigger fear as the instinctively associated emotion, as in fight-or-flight responses or playing dead, whereas a generally heightened vigilance during sleep does not explain why it is particularly during such dreams that intense emotions are triggered. That bodily sensation can bring about specific emotions and dream images can be explained in the predictive processing framework, which will be covered in detail in chapter 2.12).

Moreover, the danger of falling out of trees faced by primates might have aided the association of pleasant and unpleasant feelings with upward and downward movement, even if it does not suffice as an explanation for flying and falling dreams in general.<sup>138</sup> In this context, it

sich bei den Verfolgungsträumen um eine individuelle Bebilderung instinktiver Muster handeln könnte.“ [“The gruelling perpetuum mobile is based on the fact that – not necessarily for training purposes but as a side effect of the self-stimulation of the sleeping brain – a phylogenetically inherited program of flight is triggered and repeated in an infinite loop and only ends in awakening after reaching a maximum of arousal. There is no lack of clues that dreams of pursuit could be considered an individual illustration of instinctual patterns.”] (Schönhammer 2004, 238, my translation). „Der unheimliche Besuch im Halbschlaf [= Schlafparalyse] und der Verfolgungstraum sind also vielleicht deshalb das, was sie sind, weil die jeweiligen Prozesse in den verschiedenen Momenten von Schlaf und Erwachen andere Register der angeborenen Angstreaktion ziehen, hier den Todstell-, da den Fluchtreflex.“ [“The eerie visitation in half-sleep [= sleep paralysis] and the dream of pursuit are thus what they are possibly because the respective processes in the various moments of sleep and awakening press different buttons of innate fear reactions, here the reflex of playing dead, there the reflex of flight.”] (Schönhammer 2004, 243, my translation).

<sup>138</sup> “Dreams promoting vigilance to the danger of falling may well owe their phylogenetic origins to the risks our distant ancestors were subject to whilst swinging through the branches of tropical forests. But the need for vigilance has persisted into more recent times when trees continued to afford refuge from predators and vantage points from which to survey the surrounding savannah for game, camping sites, or potentially hostile strangers. In modern times, dreams continue to warn us to be careful in high places, both realistically and symbolically.”

is interesting to note that the hypnic jerk during sleep onset, which is commonly associated with a short awakening, exists in primates too. Coolidge and Wynn consider it the result of the muscle relaxation at sleep onset being misinterpreted by the brain to be an indicator that the primate is falling out of a tree.<sup>139</sup> Because it would have minimised the risk of falling by having the sleeping primate readjust or review its sleeping position, such a reflex would have had selective value and increased evolutionary fitness. In conclusion, while the reason for the connection between pleasant feelings and upward movement as well as for the opposite is not yet fully clear, the fact that these types of experiences are regularly tied together seems evident from the data discussed, a fact to bear in mind for later chapters.

Following the theory of cognitive linguists George Lakoff and Mark Johnson, Domhoff has argued that certain types of movement in dreams are not connected to sensations caused by neurological activation but illustrate instances of the incorporation of conceptual metaphors.<sup>140</sup> They hold that the human cognitive system is essentially metaphorical in nature and that verbal metaphors are a secondary phenomenon which is generated by underlying metaphorical concepts.<sup>141</sup> When our mind employs a conceptual metaphor, elements from an experientially well-understood source domain are mapped onto the initially unrelated target domain in order to facilitate understanding of more complex or abstract matters. In other words, one kind of notion is experienced in terms of another, and in this sense, metaphorical concepts are seen as tools that unconsciously structure thought, perception and action.

The common association between flying and pleasant feelings, especially, can be seen as an example of the primary metaphor *HAPPY IS UP*.<sup>142</sup> Primary metaphors arise when two

(Stevens 1995, 264–265). See also Coolidge and Wynn 2006, 2; Schönhammer 2004, 36.

<sup>139</sup> Coolidge and Wynn 2006, 2.

<sup>140</sup> Domhoff 2003, 6, 33–34, 157; Lakoff 2001, 271–272.

<sup>141</sup> Lakoff and Johnson 2003, 3–6, 252–254.

<sup>142</sup> Lakoff and Johnson 2003, 15. In his 1997 article, Lakoff considers the conceptual metaphors at work in a flying dream to symbolise the psychological situation of the dreamer (Lakoff 2001, 279–280), while in his 2003 book, he and his co-author Johnson take a much more experientially based stance: “Spatialization metaphors are rooted in physical

dimensions of experience, i.e. sensory-motor experience and subjective judgments, become conflated because of their repeated correlation during childhood development.<sup>143</sup> Because they are directly grounded in universal embodied experience, primary metaphors are subject to cultural influences only to a limited degree. While I fully agree with these observations, in the case of flying dreams another primary metaphor fits at least as well with empirical observations. CONSCIOUS IS UP; UNCONSCIOUS IS DOWN<sup>144</sup> offers a perfect match with respect to the connection of dreams with a strong sensorimotor component and the

and cultural experience; they are not randomly assigned. A metaphor can serve as a vehicle for understanding a concept only by virtue of its experiential basis." (Lakoff and Johnson 2003, 18). "Human spatial concepts [...] include UP-DOWN, FRONT-BACK, IN-OUT, NEAR-FAR, etc. It is these that are relevant to our continual everyday bodily functioning, and this gives them priority over other possible structurings of space—for us. In other words, the structure of our spatial concepts emerges from our constant spatial experience, that is, our interaction with the physical environment. Concepts that emerge in this way are concepts that we live by in the most fundamental way." (Lakoff and Johnson 2003, 56–57).

<sup>143</sup> Lakoff and Johnson 2003, 254–257. Examples would be MORE IS UP because an increase in quantity usually corresponds to an increase in height (Lakoff and Johnson 2003, 254), or AFFECTION IS WARMTH, as when fondness is expressed through bodily contact, resulting in a frequent co-occurrence of the two sensations (Lakoff and Johnson 2003, 256). Domhoff considers conceptual metaphors the explanation for the Jungian "archetypes": "[...] Jung argued that the archetypes of the collective unconscious express themselves through a set of inherited symbols that also appear in myths, religious ceremonies, and other waking practices. [...] Jung's observation of some commonality in dream content across individuals and cultures is more parsimoniously and plausibly encompassed by the idea that metaphorical concepts are acquired through both developmental experiences shared by all human beings and gradual linguistic socialization into the huge treasure trove of conceptual metaphors that are part of a group's cultural heritage [...]. This idea is supported by findings showing similarities in conceptual metaphors in many different cultures, including China and Japan [...]." (Domhoff 2003, 144).

<sup>144</sup> "Get up. Wake up. I'm up already. He rises early in the morning. He fell asleep. He dropped off to sleep. He's under hypnosis. He sank into a coma. Physical basis: Humans and most other mammals sleep lying down and stand up when they awaken." (Lakoff and Johnson 2003, 15).

higher degree of consciousness facilitated by heightened nervous arousal. But while Lakoff and Johnson explain this primary metaphor by the fact that humans lie down to sleep, it might in fact result from universal emplaced and embodied experiences. CONSCIOUS IS UP; UNCONSCIOUS IS DOWN finds an easy explanation if, as we have seen, losing or gaining consciousness is neurologically tied to the feeling of upward or downward movement. Expressions like *falling asleep* or *waking up* turn out to be rather naturalistic descriptions of what the dozing mind perceives to be happening.<sup>145</sup> It seems that Lakoff and Johnson simply overlooked this obvious explanation because from their writings it becomes clear that they are not averse to brain-based explanations of conceptual metaphors at all.<sup>146</sup>

## 2.11 HALF AWAKE AND HALF ASLEEP: LUCID DREAMING AND SLEEP PARALYSIS

Lucid dreaming is a term coined for the realisation that one is, in fact, dreaming, which can be compared to an awakening within a dream.<sup>147</sup>

<sup>145</sup> Compare German *einschlafen* ("to sleep in") and *aufwachen* ("to wake up"), in *Schlaf sinken* ("to sink into sleep"), although Schönhammer rightly points out that one in fact falls out of sleep and not into sleep because these experiences are caused by arousals and often followed by brief awakenings (Schönhammer 2004, 200; Schönhammer 2012, 256–257). In English, it is not entirely clear whether *night fall* refers to the night falling or to one falling into the night.

<sup>146</sup> "There is neuronal activation occurring simultaneously in two separate parts of the brain: those devoted to emotions and those devoted to temperature. As the saying goes in neuroscience, 'Neurons that fire together wire together.' Appropriate neural connections between the brain regions are recruited. These connections physically constitute the Affection Is Warmth metaphor. Metaphor is a neural phenomenon. What we have referred to as metaphorical mappings appear to be realized physically as neural maps. They constitute the neural mechanism that naturally, and inevitably, recruits sensory-motor inference for use in abstract thought. Primary metaphors arise spontaneously and automatically without our being aware of them. There are hundreds of such primary conceptual metaphors, most of them learned unconsciously and automatically in childhood simply by functioning in the everyday world with a human body and brain." (Lakoff and Johnson 2003, 256–257).

The sleeper regains self-reflective consciousness and as such is able to recognise the state she is in, a capability important to waking consciousness but normally lost during sleep. When becoming lucid, a kind of dissociation occurs with part of the brain being in the waking state and part of it remaining in the dreaming state.<sup>148</sup> Particularly the higher-order neural patterns that control “core consciousness” and the “autobiographical self” might be more active during lucid dreaming. Yet, the degree of self-awareness and conscious control varies greatly between different persons and usually changes rapidly even during the dream. Typically, lucid dreaming occurs spontaneously in children aged eight years and above, whereas most adults need to rely on certain techniques to induce lucidity. Although lucidity happens only in a few dream reports out of a hundred, about 20 % of people experience lucid dreams at least once per month.<sup>149</sup>

In accordance with the observation that dreams become more vivid in the course of the night, lucid dreaming is also most commonly experienced in the final hours of morning sleep. Lucid dreaming occurs in specifically aroused REM sleep and is commonly associated with a feeling of floating or flying and occasionally with falling or paralysis, thus strengthening the hypothesis of a connection between the state of consciousness and dreams with a strong sensorimotor component.<sup>150</sup> Strong movement can furthermore be used as a technique to prolong lucidity, and in this context, Stephen LaBerge and Howard Rheingold explicitly draw atten-

tion to the connection between stimulation of the vestibular system and brain activation in REM sleep. Sexual content is common, thus affirming the role of the body in these experiences. Auditory content increases in lucid dreams, and in some cases the visual clarity and intensity of colours is heightened, while in other cases there is a dark and murky quality, possibly connected to the degree of nervous arousal and the state of consciousness of any given moment. Light phenomena in the form of static or moving lights of different sizes can occur as well. Interestingly enough, people usually attribute positive and sometimes even blissful feelings to lucidity, even if the content seems to be negative. Occasionally, lucid dreams can be accompanied by the feeling of a threatening presence, thus pointing to a relationship with sleep paralysis.

Sleep paralysis is a very common altered state of consciousness, with about 15 to 40 % of adults experiencing it one time or another.<sup>151</sup> It lasts from seconds to up to several minutes and is characterised by a carryover effect in which the muscle atonia connected to REM sleep persists while waking up or sets in early while falling asleep. Individuals in sleep paralysis are awake and conscious and able to fully recall the event later. However, they are incapable of moving their limbs, trunk and head and also unable to speak, although the eyes are exempt from paralysis. Sleep paralysis can be associated with intense anxiety as well as with hallucinations that are hypnagogic (taking place while falling asleep) or hypnopompic (taking place while waking up) in about 25 to 75 % of people. This is probably caused by dream ideation of REM sleep intruding into wakefulness. Hallucinations are usually visual (simple geometric forms, objects, faces or entire landscapes), in rarer cases auditory (loud buzzing noises, sounds, music or human voices), tactile (vibrations in the body) or kinetic. Blissful feelings can accompany sleep paralysis as well, especially when the feeling of immobility changes into

<sup>147</sup> Antrobus and Wamsley 2009, 312, 314; Domhoff 2003, 17–18; Hobson 2005, 126–127; LaBerge and Rheingold 1990, 26, 87–90, 93–95, 105–107; Revonsuo 2010, 247; Schönhammer 2004, 259–269, 275–282; Schönhammer 2012, 254–255, 259–261, 263–264; Tholey 1982, 68–70.

<sup>148</sup> During the 1980s, it could be shown in laboratory studies that lucidity occurs during continuous REM sleep and that no brief awakenings are involved in lucidity as had previously been thought (Revonsuo 2010, 248).

<sup>149</sup> Revonsuo 2010, 248. The figures in different studies vary greatly (Schönhammer 2004, 262–262), but it seems reasonable to estimate a minimum of 10 %.

<sup>150</sup> LaBerge and Rheingold list being pursued, being attacked, falling, paralysis, being unprepared for an examination or speech and being naked in public as the most common nightmares that can be overcome by lucid dreaming (LaBerge and Rheingold 1990, 149–150).

<sup>151</sup> American Academy of Sleep Medicine 2014, 254–256 (Recurrent Isolated Sleep Paralysis); 267–270 (Sleep-related Hallucinations); Cheyne 2003, 163–166, 174–177; Jalal and Ramachandran 2014, 755–756; Kuiken 2009, 296–297; LaBerge and Rheingold 1990, 143–144; Lockley and Foster 2012, 87; Revonsuo 2010, 240–241; Schönhammer 2004, 239–244; Schönhammer 2012, 258–261, 264.



a sense of floating. Sleep-related hallucinations also occur without the presence of paralysis (in 25 to 37% of people for hypnagogic and in 7 to 13% for hypnopompic hallucinations), although this has been studied far less.<sup>152</sup> Among the predisposing and precipitating factors are sleep deprivation,<sup>153</sup> irregular sleep-wake schedules as well as alcohol and drug abuse. Also, sleep paralysis occurs more often when sleeping in the supine position, and sleep-related hallucinations are slightly more common in women and younger individuals, both things to bear in mind in relation to the archaeological record.

Sometimes, people in sleep paralysis see, hear or sense a presence in the room, usually perceived as a shadowy figure that resembles the human morphology in both size and shape, although it often lacks definite characteristics like facial features. Baland Jalal and Vilayanur Ramachandran consider this the result of a hallucinated projection of the body image (compare Schönhammer's theory concerning pursuers in dreams in chapter 2.10).<sup>154</sup> During sleep paralysis, the sleeper's body image may become distorted, as witnessed in cases of autoscopia or so-called out-of-body experiences, in which the sleeper perceives that she sees herself from the outside.<sup>155</sup> Jalal and Ramachandran point out

the commonness of supernatural accounts of the hallucinated intruder across cultures, which include nocturnal incubus/succubus assaults, "old hag" attacks, ghost visitations or alien abductions.<sup>156</sup> In encounters with the shadowy figure, it may approach the sleeper's body, sit on the sleeper's chest as well as strangle or sexually assault the sleeper. As hallucinatory experiences in sleep paralysis can be intense, realistic and extremely frightening, people not familiar with altered states of consciousness are prone to consider them psychiatric or neurological disorders or even paranormal events such as daemonic possession or alien abduction. James Cheyne attributes this anxiety to endogenous activation of the amygdalar "threat activated vigilance system" (TAVS), which increases the likeliness that ambiguous stimuli are accepted as indications of danger. A distortion of the "bodily-self neuromatrix" (BSN), which depends upon coordination among kinesthetic, vestibular and motor neural systems, is seen as the cause of vestibular-motor hallucinations, for example through an erroneous match with a stationary visual or tactile experience. These two mechanisms sustain two essential domains of conscious experience: the experience of an agent-inhabited world as well as of a spatial-kinetic bodily self. Cheyne also distinguishes

<sup>152</sup> Complex nocturnal hallucinations seem to represent a different form of sleep-related hallucinations and are therefore not considered here.

<sup>153</sup> Sleep deprivation leads to brief hallucinations and after a certain time to paranoia, but these effects vanish after people are able to sleep again (Gander 2003, 65).

<sup>154</sup> They think that this body image is genetically hardwired ("homunculus") and locate it in the right parietal region (Jalal and Ramachandran 2014, 755).

<sup>155</sup> „Mir scheint, dass bei außerkörperlichen Erlebnissen die Aufmerksamkeit so oder so auf einen Mangel propriozeptiver Empfindungen gerichtet ist: Man spürt sich nicht [...]. Der halluzinierte Blick von außen macht die Trennung vom Gespür anschaulich. Die dabei vorherrschende Perspektive, also das Herabschauen, verdankt sich vermutlich dem Schwindel, den die Unterbrechung der Körperempfindung mit sich bringt.“ [“It seems to me that in out-of-body experiences, attention is directed onto a lack of proprioceptive sensations in one way or another: one does not sense oneself. The hallucinated view from the outside demonstrates the separation from sense. The perspective predominant in it, namely looking down, is likely due to the vertigo which the disruption of bodily sensations entails.”] (Schönhammer 2004, 249, my translation). The incongruity of the body image in sleep

paralysis can also be used as a method to induce lucid dreams (LaBerge and Rheingold 1990, 69–73). „Die unheimliche Gegenwart lässt sich so als Komplement zu den außerkörperlichen Erlebnissen im Syndrom der Schlafähmung verstehen. Ursächlich für die Differenz beider Spielarten der körperlichen Entfremdung ist nach meiner Vermutung [...], dass im Fall der unheimlichen Anwesenheit eigene Bewegungsimpulse mangels Rückmeldung so erfahren werden, wie unter normalen Umständen intern gespiegelte fremde Motorik präsent ist, während im Fall der visuell dominierten außerkörperlichen Erlebnisse schon das Ausbleiben des gewohnten sensorischen Input (quasi abgestorbene Afferenzen) für sich genommen – also jenseits der Diskrepanz zur gewohnten Bewegungsrückmeldung (Reafferenzen) – ein körperlos gewordenen Selbst mit dem Bild des Körpers konfrontiert.“ (Schönhammer 2012, 260). See also footnote 162.

<sup>156</sup> Compare the German words for nightmare *Alptraum*, *Alpdrücken* and *Nachtmahr* (i.e. nightmare), which combine the words for "dream", "pressure" and "night" with words denoting mythological beings (Kluge 1995, 24–25; Schredl 2009, 142). With reference to the original meaning of the term *nightmare*, Cheyne proposes to term sleep paralysis "waking-nightmare hallucinations" (Cheyne 2003, 163).

three types of hallucinatory experiences in sleep paralysis, the features of which are analogous to the three categories of impactful dreams according to Kuiken (see chapter 2.10):

- Threatening intruders: the felt presence of a spatially distant but threatening figure, which occurs with noises, humanoid apparitions and sensations of being touched, i.e. corresponding to nightmares.<sup>157</sup>
- Physical assaults: the felt presence of a spatially near and disturbing figure, which occurs with breathing difficulties, feelings of suffocation and thoughts of impending death, i.e. corresponding to existential dreams.<sup>158</sup>
- Vestibular-motor bodily sensations: sensations of linear and angular acceleration such as flying or floating, fictive motor movements and feelings of bliss, i.e. corresponding to transcendent dreams.<sup>159</sup>

As all of these experiences are marked by a strong sense of “reality”, including a distinct feeling of a “self” that is unembodied but nevertheless uniquely positioned and/or the clearly sensed but nevertheless mostly nonvisual presence of an “other”, they endorse beliefs about self-transcendence and spirit figures. This is in accord with laboratory research on REM sleep carryover effects, which can also have a direct impact on waking life.

Thus, a close kinship between sleep paralysis, lucid dreaming and dreams with a strong sensorimotor component has become apparent, concerning both their heightened degree of consciousness and strength of bodily feelings as well as the common association with strong emotions, particularly those of terror or bliss. These phenomena seem predisposed to be integrated into religious techniques and interpreted in conforming terms, and we will see in chap-

ters 4 and 5 that early historic cultures are not exceptional in this respect.

## 2.12 DREAMING AS AN EMBODIED PROCESS

Revonsuo considers the fact that we can have subjective conscious experience in dreams, when the brain is disconnected from sensorimotor feedback of the body, as proof for an internalist explanation that sees consciousness as a phenomenon located inside the brain.<sup>160</sup> Whereas his rejection of externalist, embodied, and enactive explanations of consciousness appears to be at odds with the above described phenomena, the predictive processing framework offers a way to unite these seemingly disparate observations. According to Hobson’s protoconsciousness hypothesis, REM sleep and dreaming, in which aspects of primary consciousness are elevated (sense of first-person agency, internally generated percepts such as movement in fictive space and strong emotions, remote associations), are essential for the secondary consciousness of waking (critical judgment, self-reflective awareness, awareness of awareness, orientation, memory).<sup>161</sup> When combined with Karl Friston’s theory of predictive processing that describes brain function in computational terms based on Bayesian inference, a concept of the brain emerges, in which sleep is thought to eliminate redundant parameters and thus to amend the generative virtual reality model of the world that was entrained by sensory input during wakefulness. In accordance with the free energy principle, sensory data are sampled during waking and as such augment posterior beliefs, but not during sleep when prior beliefs are ameliorated:

“The free energy principle is based upon the idea that biological systems resist a natural tendency to disorder [...] by acting on their environment to minimize something called surprise. [...] In brief, [...] surprise or free energy corresponds to the difference between bottom-up sensory inputs and top-down predictions of those inputs. This difference is known as prediction error [...]. [...] Bayesian inference of this

<sup>157</sup> Common hallucinations and related experiences: sensed presence, visual, tactile and auditory hallucinations, hallucinations that the bedding is moving or being pulled; moderately associated with fear and erotic feelings (Cheyne 2003, 168–169, 172).

<sup>158</sup> Common hallucinations and related experiences: breathing constriction, death thoughts, choking, pressure on the chest or other body part, pain; moderately associated with fear, weakly associated with erotic feelings (Cheyne 2003, 168–169, 172).

<sup>159</sup> Common hallucinations and related experiences: OBEs, floating, flying, autoscopia, falling, illusions of motor movement; significantly associated with bliss, moderately associated with erotic feelings (Cheyne 2003, 168–169, 172).

<sup>160</sup> Revonsuo 2015, 52–53, 56–58, 64–65.

<sup>161</sup> Hobson and Friston 2012, 83, 85, 88–89, 94–96.

sort can be summarized as using sensory information to update prior beliefs about the state of the world (that are held before seeing sensory inputs) to produce posterior beliefs (that emerge after seeing inputs). [...] This means that prediction error can be minimized in two ways, one can either act to ensure that sensory samples conform to predictions or one can change predictions to match sensory samples: These two processes can be regarded as action and perception, respectively. Intuitively, this process of navigating the world can be thought of as recurrent hypothesis testing [...], by confirming or disconfirming predictions from a virtual reality generator, whose predictions are continuously updated and entrained by prediction errors. [...] When we dream, we create an image of the world entirely within our own brains that is unfettered by sensory feedback.”<sup>162</sup>

The role that our expectations play in dreams becomes apparent in nightmares when the fear of a threat that is just around the corner seems to bring it about rather than the opposite. This theory also fits well with findings concerning sleep and memory (see chapter 2.6) as it assigns to sleep the role of a rehearsal of what has previously been learned as well as of an exploration of new hypotheses and possibilities that might be encountered. Yet, it ignores the role of the body that appears to be heightened rather than

diminished in certain kinds of dreams. It seems doubtful whether sleep is aptly characterised as a state in which top-down predictions are completely isolated from constraints by bottom-up sensory feedback and the virtual reality model of dreams is constructed solely from priors instead of from an interplay between prior and posterior beliefs. Instead, the vividness of dreams and the degree of consciousness one exercises therein corresponds to the involvement of the body – could the latter be the long-sought cause that distinguishes dreamless sleep from dreaming? This hypothesis agrees well with Hobson’s and Friston’s idea that visual imagery in dreams results from the necessity to account for unpredicted oculomotor input that is especially high in REM sleep. In the same vein, other sensations in dreams could be caused by imprecise or diminished rather than by absent bodily feedback (see chapter 2.10 concerning paradoxical awareness of individual aspects of our sleeping environment and the incorporation of external stimuli into dreams). Even the fact that dreams take place in different sleep stages (see chapter 2.5) finds an easy explanation because bodily feedback can occur any time during sleep.

Consciousness can thus be described as a continuum that ranges from waking (priors updated by exteroceptive prediction errors) to a total absence of consciousness (no prediction

*Tab. 4 The continuum of consciousness in the predictive processing framework*

Consciousness	Absence of consciousness	Ordinary dreams	Dreams with a strong sensorimotor component	Lucid dreaming and sleep paralysis	Waking consciousness
Cause of prediction error	No prediction errors	Interoception	Mainly interoception with some exteroception	Mixture of interoception and exteroception	Mainly exteroception with some interoception
Typical states	Coma, anaesthesia, deep sleep	Typically, in REM sleep, but possible in all sleep stages	Late-night REM sleep	Late-night REM sleep, hypnagogia and hypnopompia	Waking

<sup>162</sup> Hobson and Friston 2012, 87–88. “Crucially, prediction errors at the lowest (sensory) level are the only prediction error that can be suppressed by action. In other words, the only way that action can minimize free energy is by cancelling kinesthetic or proprioceptive prediction errors. This is exactly consistent with classical motor reflex arcs; in which top-down predictions elicit a prediction error in (alpha) motor neurons that contract extrafusal muscle fibers. This elicits reafference from (stretch recep-

tors in) intrafusal muscle spindles until reafference matches descending predictions. [...] The resulting scheme is called active inference, in which action is seen as an attempt to minimize surprise by sampling predicted kinesthetic sensations [...]. [...] Active inference provides an embodied view of perception, in which the brain actively samples the sensorium using both exteroceptive and proprioceptive predictions.” (Hobson and Friston 2012, 90). See also footnote 155.

errors) with dreaming (priors updated by either interoceptive or a mixture of exteroceptive and interoceptive prediction errors) in-between (table 4).<sup>163</sup> This minute shift in argumentation opens up the possibility to unite internalist and embodied explanations of consciousness: in

maintaining that brain and body form an inseparable unity in a dynamic system of interaction between organism and environment (see chapter 1.1), it can nevertheless account for dreams as genuine conscious experiences.<sup>164</sup>

<sup>163</sup> The table focuses on the difference between sleep and waking but could in theory include other altered states of consciousness such as daydreaming, hallucinations or hypnosis.

<sup>164</sup> See also Schönhammer 2004, 12.



### 3 THE EVOLUTION OF SLEEP AND DREAMING IN THE HISTORY OF HUMANKIND

#### 3.1 STRUCTURE OF THE CHAPTER AND DATA BASE

Having examined sleep and dreaming in modern people, it becomes possible to make inferences into the evolution of this domain of human life. Chapter 3.2 firstly investigates what we can come to know about sleep duration, sleep structure and the sleeping habits of early hominins as well as about the significance of these topics for cognition. In this context, it also describes the oldest known evidence of sleeping places. Chapter 3.3 addresses the development of dreaming by combining theories about the evolution of human cognition with empirical studies about sleep and dreaming in children and, based on these considerations, works out four possible stages in the evolution of dreaming.

#### 3.2 THE EVOLUTION OF SLEEP AND ITS ROLE FOR HUMAN COGNITION

The duration of sleep of early hominins is difficult to determine because a variety of factors influences sleeping time in mammals.<sup>1</sup> On the one hand, the duration of the sleep cycle as well as the total sleeping time is, at least in herbivorous animals, inversely correlated to body mass, related to which is basal metabolic rate. On the other hand, food patterns play an important role, with carnivorous species sleeping the longest, followed by omnivorous species, followed by herbivorous species. The latter exhibit the shortest sleeping times, which are reduced even further if there is a high risk of predation. Moreover, species with a higher relative brain weight exhibit more REM sleep, as do species who are born in a relatively immature state. Based on these general observations, we can tentatively suggest that sleeping times as well as the amount of REM sleep increased on the whole during human evolution as both

relative brain size and the amount of animal proteins in the diet increased. It is important to note, however, that the rise in body mass points in the opposite direction and that it can only be considered a very general hypothesis. For example, based on these observations we would expect chimpanzees to sleep less than humans but the contrary holds true.<sup>2</sup>

The oldest sleeping place that has come to my attention was used by a group of four to ten Neanderthals at the Abric Romaní site in Catalonia.<sup>3</sup> Here, the regular alignment of five combustion areas spaced 1.3 m from each other, with space in between mostly free of archaeological remains, suggests the interpretation that they were sleeping-and-resting activity areas. The excavators also list other regularly spaced hearths from younger periods that can be interpreted in a similar way. The sleeping area model employed here was first proposed by Lewis Binford, who, based on analogies in modern hunter-gatherers, observed that the space required for sleeping is subject to only little variation because of the size and elemental mechanics of the human body and that the basic pattern in which beds and hearths alternate can be found all over the world (figure 5).<sup>4</sup> Paul Mellars lists further Neanderthal sleeping places but, as these interpretations mostly rely on topographical features of the site and, in one case, on a quite imaginative interpretation of finds, they need to be approached with caution.<sup>5</sup>

Frederick Coolidge and Thomas Wynn have argued that first, the building of sleeping platforms<sup>6</sup> and later, the transition to ground sleep constituted major steps in the cognitive evolution of early hominins.<sup>7</sup> The greater safety offered by these transitions is thought to have

<sup>1</sup> Lesku et al. 2009, 67–68; Siegel 2011, 128.

<sup>2</sup> Lockley and Foster 2012, 49; Samson and Nunn 2015, 229.

<sup>3</sup> Vallverdú et al. 2010, 137, 142–143.

<sup>4</sup> Binford 1983, 160–163.

<sup>5</sup> Mellars 1996, 280–281 (Grotte Vaufray), 285 (Grotte du Lazaret), 290 (Les Canalettes).

<sup>6</sup> The widely used term “nest” is misleading because the sleeping platforms of the great apes differ from the nests of smaller primates in both their function and their mode of construction. Sleeping platforms are built anew each night as opposed to the fixed point nests of smaller primates that are typically located in tree-holes and used to shelter offspring and store resources for a longer period of time (Samson and Nunn 2015, 229, 231–232).

<sup>7</sup> Coolidge and Wynn 2006, 1–7, 12–15.



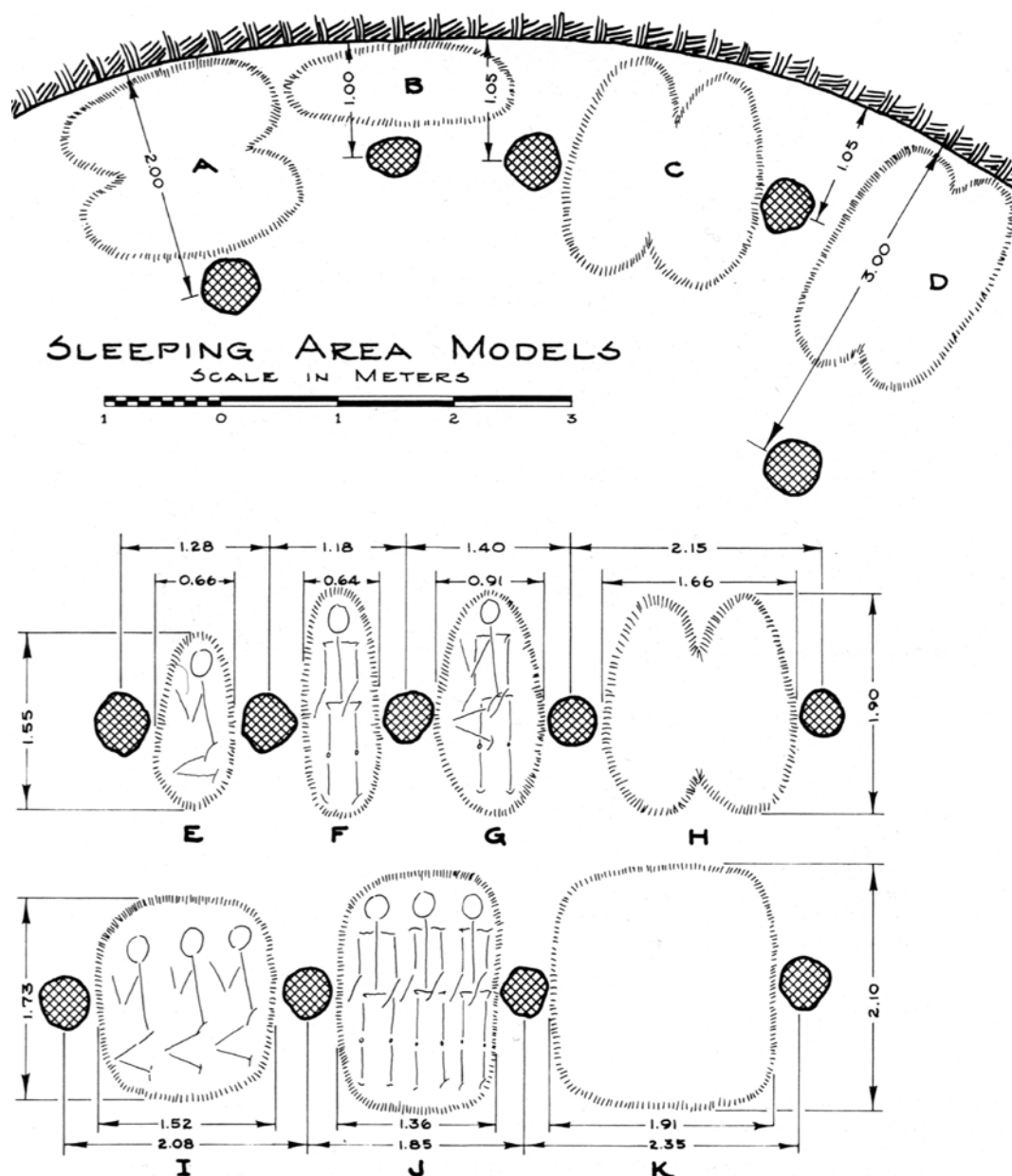


Fig. 5 Sleeping area models, a generalised diagram of the arrangement and size of sleeping areas

aided a rise in both the quality and quantity of sleep and to have led to an increase in the amount of REM and possibly slow-wave sleep in the course of human evolution. Monkeys and lesser apes do not modify their sleeping sites and are therefore at a much greater risk of falling out of trees than the great apes, who build sleeping platforms to ensure both safety from predators and to minimise the risk of falling while sleeping in a horizontal position.<sup>8</sup>

Accordingly, monkeys exhibit a predominance of early stage light sleep and only about 5 to 15 % of REM sleep, which, as we have seen, is characterised by muscle atonia. The great apes typically spend about 7 to 15 % in REM sleep, while modern humans, in whom it constitutes 25 % of their total sleep time, exhibit the highest proportion of REM sleep by far. Although these numbers need to be treated with caution because data on the sleep architecture of primates remains rare,<sup>9</sup> a similar tendency can be

<sup>8</sup> Birds keep from falling out of trees during REM muscle atonia by locking their tendons onto branches (Lockley and Foster 2012, 42).

<sup>9</sup> It is especially unfortunate that we possess no data on our closest relative, the Bonobo.



seen in a diagram published by David Samson and Charles Nunn, where an overview of the total sleep time of different primates as well as of the proportion of time spent in REM sleep is provided.<sup>10</sup>

Altogether, the construction of sleeping platforms seems to play an important role in cognitive development.<sup>11</sup> According to the “sleep quality hypothesis” on the one hand, increased cognitive function in the great apes is linked to their deeper and more continuous sleep facilitated by the use of more stable sleeping sites. The “engineering hypothesis” on the other hand, states that the building of sleeping platforms was only enabled through their improved cognitive performance. Yet, even though causality is reversed in the two hypotheses, both might hold true insofar as that both processes would have constituted a positive feedback loop, in which each one of them would have bolstered the other.

Based on analogical behaviours in the great apes and due to features of a climbing anatomy present in them, it seems likely that the Australopithecines, and possibly *Homo rudolfensis* and *Homo habilis*, also built sleeping platforms in trees and thus maintained an ape-like pattern of sleep. On the other hand, *Homo erectus*<sup>12</sup> has lost all remnants of a climbing anatomy, thus pointing to the transition to ground sleep not later than this species.<sup>13</sup> *Homo erectus*’ deliber-

ate use of bifacial tools<sup>14</sup> and the possibility of the use of fire<sup>15</sup> additionally point to an important step in cognitive evolution, whereby the use of fire would have further aided the safety of sleeping on the ground by offering protection. Coolidge and Wynn at least partially attribute this advance in waking survival skills to the increase of slow-wave and REM sleep due to the transition to ground sleep:

“[...] we have proposed that the ground sleep transition may have aided the general integrity of an extended and less fragmented sleep period, enhanced REM sleep and perhaps Stage 4 sleep, and it may have aided the integrity of the sequence of Stage 4 and REM. As a function of these sleep changes, and by means of the phenomenological contents of sleep (dreaming):  
1 early *Homo* may have been primed to escape and avoid threatening events in their waking environments, and early *Homo* may have rehearsed social scenarios thus becoming more efficient in their waking endeavours in obtaining food or mates and/or interacting with others with less confrontation  
2 REM and/or dreaming may have promoted creativity and innovation (the notion that REM and dreaming are synonymous is contentious, and our arguments do not hinge on their equivalence [...]), and

might have occurred at the transition from *Homo erectus* to *Homo sapiens* (complex lithic reduction procedures and effective hunting of large mammals) or even at the transition to anatomically modern humans (Coolidge and Wynn 2006, 14). The latter possibility, however, can be ruled out with respect to the Neanderthal sleeping sites discussed above.

<sup>10</sup> In ascending order, total sleep time is given for the following primates: *Homo sapiens*, *Macaca arcoides*, *Macaca radiata*, *Pongo sp.*, *Eulemur macaco*, *Callithrix jacchus*, *Saimiri sciureus*, *Chlorocebus aethiops*, *Papio hamadryas*, *Papio papio*, *Macaca mulatta*, *Erythrocebus patas*, *Theropithecus gelada*, *Perodicticus potto*, *Pan troglodytes*, *Phaner furcifer*, *Macaca sylvanus*, *Eulemur mongoz*, *Saguinus oedipus*, *Macaca nemestrina* and *Microcebus murinus*. In descending order, the proportion of total sleep time in REM is given for the following primates: *Homo sapiens*, *Macaca mulatta*, *Pan troglodytes*, *Saimiri sciureus*, *Callithrix jacchus*, *Macaca arcoides*, *Pongo sp.*, *Macaca radiata*, *Aotus trivirgatus*, *Papio anubis*, *Papio papio*, *Macaca sylvanus*, *Erythrocebus patas*, *Macaca nemestrina*, *Microcebus murinus*, *Eulemur mongoz* and *Chlorocebus aethiops* (Samson and Nunn 2015, 229).

<sup>11</sup> Samson and Nunn 2015, 231.

<sup>12</sup> Because their exact relation is debated, no distinction is made here between *Homo erectus* and *Homo ergaster* as this question is not of vital importance for this work.

<sup>13</sup> Coolidge and Wynn also concede that enhanced sleep and the associated rise in cognitive abilities

<sup>14</sup> “Ad hoc tools result from a motor procedure tied to an immediate task. A deliberate tool results from a motor procedure tied to the tool, and a range of potential, future tasks [...]. [...] *Homo erectus* also employed a new cognitive ability when he or she made these tools – the ability to coordinate shape recognition (in this case symmetry) with spatial cognition[...].” (Coolidge and Wynn 2006, 6).

<sup>15</sup> Burton 2009, 3–4, 14–15. These findings are not uncontested, with Wil Roebroeks and Paolo Villa even assuming that “habitual” use of fire only started 400,000 to 300,000 years ago. Accordingly, the spread of hominins into northern latitudes is seen as having taken place without fire use, an opinion that seems rather unlikely. Moreover, while they base their point of view on the absence of earlier evidence for the use of fire in Europe, the presence of such evidence in Africa and the Levant is explained away as the results of natural fires or as merely “opportunistic” rather than “habitual” fire use (Roebroeks and Villa 2011, 5209–5212). See also Geertz 2013, 25–27.

**Tab. 5** *Sleep ecology of the great apes, hunter-gatherers and post-industrial people*

	<i>Great ape</i>	<i>Hunter-gatherer</i>	<i>Post-industrial</i>
<i>Chronology</i>	18–14 mya to present	1.8 mya to present	Nineteenth century to present
<i>Sleeping platform</i>	Arboreal sleeping platforms made of foliage	Foliage, animal hide	Padded bed, profuse sleeping accoutrements
<i>Sleep group size</i>	5	26	1–2
<i>Diurnal inactivity</i>	Fluid	Fluid	Rigid
<i>Fire</i>	Absent	Present	Absent
<i>Sleep onset</i>	Rigid (sunset)	Fluid	Scheduled
<i>Wake onset</i>	Rigid (sunrise)	Rigid (sunrise)	Scheduled
<i>Lux</i>	Dark/dim (source: moonlight)	Fire, moonlight	Artificially controlled
<i>Acoustics</i>	Dynamic (fauna, conspecifics)	Fire ambient noise; dynamic (fauna, group members)	Silent, environmentally buffered
<i>Security</i>	Arboreal platforms, group size, insect repellent/odor masking properties of nests	Fire, group size, defensive structures, sentinels, males in prone position closest to potential threats, mother-infant co-sleeping	Environmentally buffered through complex domicile construction
<i>Thermoregulation</i>	Sleep platform complexity, foliage; mother-infant co-sleeping	Fire, shelter, mother-infant co-sleeping, group sleep during temperature nadir	Closed domicile, temperature regulation via blankets and modification of ambient temperature.

3 these sleep changes may have aided procedural memories, including memories for motor skills, visual-spatial discriminations, and episodic (personal)/spatial locations, without any further acquisition or practice.”<sup>16</sup>

Richard Wrangham agrees with the adoption of ground sleep and the use of fire by *Homo erectus* but considers the concurrent change to cooked food the main driver for the increase of cognitive capabilities.<sup>17</sup> Leslie Aiello and Peter Wheeler have claimed that the higher energy demand of a larger brain could have been compensated by lengthened sleeping time, although they themselves favour a decrease in gut size as

the most likely explanation.<sup>18</sup> Samson and Nunn, however, have argued to the contrary, proposing the “sleep intensity hypothesis”, according to which human sleep became more efficient at the transition to ground sleep by being shorter and consisting of a higher amount of deep and REM sleep.<sup>19</sup> The selective pressure for shorter sleeping time arose, on the one hand, because of the increased risk of predatory animals and intergroup conflict when sleeping on the ground. On the other hand, the resulting longer periods of waking would have facilitated social interaction and thus the spread of knowledge. Lastly, deeper sleep is seen as crucial for the consolidation of such new skills, resulting in overall heightened cognitive abilities in early humans. Samson and Nunn think the tree-to-ground sleep transition to have been caused by phys-

<sup>16</sup> Coolidge and Wynn 2006, 12–13. They also speculate that, due to their greater energy requirements and higher physical activity, Neanderthals might have had a higher proportion of slow-wave sleep than we currently exhibit (Wynn and Coolidge 2012, 151).

<sup>17</sup> Wrangham 2009, 97–102.

<sup>18</sup> Aiello and Wheeler 1995, 213.

<sup>19</sup> Samson and Nunn 2015, 225, 227–234.

iological necessities, first and foremost by an increase in body mass accompanied by the loss of features of a climbing anatomy, which made sleeping in trees more difficult and dangerous for early humans. Along with more efficient sleep, the transition to ground sleep led to techno-cultural adaptations (controlled use of fire, beds, shelters) to counteract the increased risks of ground sleep as well as to social changes like fluid sleep onset times or larger social groups. Differences between the sleeping environments of the great apes, hunter-gatherers and post-industrial people are provided in table 5.

Natural sentinels resulting from variations in chronotypes, i.e. people being more morning- or more evening-type, would have further increased the group survival of ground-sleeping species, thus contributing to the development of different sleeping patterns according to age. It also would have augmented the rotation of guards made possible by the polyphasic sleeping pattern that was already in place (see chapter 2.4). In this context, it is notable that the use of fire at night might have constituted a first step to the compression and consolidation of sleep, although genuine monophasic sleep probably came into existence only with the industrial revolution.<sup>20</sup> Concerning this topic, I agree

with A. Roger Ekirch and Thomas Wehr with respect to the idea that human sleep is characterised by flexible, polyphasic sleep patterns (“sleep flexibility hypothesis”). Contrary to this, Samson and Nunn have argued that a pattern of short sleep, consolidated into one major stretch, best characterises ancestral conditions (“sleep consolidation hypothesis”). The latter is backed by a study in which three traditional societies in Tanzania, Namibia and Bolivia were shown to have consolidated sleep with a duration of only 5.7 to 7.1 hours.<sup>21</sup> A difference of nearly one hour between summer and winter sleep as well as the fact that sleep usually occurred during the period of falling temperature, with awakening near the low point of daily ambient temperature, are considered evidence that the study recorded a “natural” sleeping pattern that is regulated by the daily cycle of temperature change. Still, the figures concerning sleep duration seem implausibly low even in comparison with today’s industrialised society. It is also doubtful whether a living human population can be considered an apt model for a (pre-) historic one, and Matthew Wolf-Meyer has emphasised that the so-called traditional societies are in fact widely aligned with the schedules of their industrialised neighbours.<sup>22</sup> As with many controversial findings in sleep science, the middle ground seems most plausible: human sleep is characterised by great flexibility, allowing for both polyphasic and monophasic sleep depending on the surrounding conditions. Without widespread access to artificial lighting and

<sup>20</sup> According to Frances Burton’s hypothesis, interaction with fire even predates *Homo erectus* and is considered the defining factor in human evolution: “I think that the very act of associating with fire occurred much earlier and was in fact the turning point in human evolution – the ‘moment’ when humanity became a powerful agent of its own continued creation. Thus, in thinking about the whole process of hominization and the role fire played in it, I have begun to see these earlier hominins, not the later members of the genus *Homo*, as being responsible for the first steps in the domestication of fire. The significance of these first steps lies in the subsequent influence they had on the course of human evolution itself. I suggest that the more that these hominins of approximately 6 million years ago *did* something to the environment by way of intervening with natural processes—in this case, artificially increasing the daily hours of exposure to light—the more they dampened the effect of the environment on themselves. In consequence, they took over the direction of their own evolution on many important fronts, the most significant of which may be the development of mind. The acquisition of fire is precisely the kind of intervention that could have initiated and perpetuated this chain of events.” (Burton 2009, 18). “[...] proximity to fire stretched out the period of light and irreparably altered hormonal cycles that

are dependent on light and darkness. [...] Certainly, changing the light-dark cycles had major implications for social structure in prehumans who, like other primates, were social animals. Primates tend to develop organization and structures in and around breeding rights and parental care. Social animals live by rules and tend to have developed cognitive processes: ‘mind’ and ‘thought,’ which depend on memory. In turn, these social and cognitive characteristics impact settlement patterns, food-sourcing patterns, division of labor, and on and on. Changing light-dark cycles has major implications for these, as melatonin, a hormone involved in the regulation of biological rhythms, seems to interfere with memory formation (at least in zebrafish) [...]. Extrapolating from their findings, I wonder if firelight, by inhibiting melatonin, enhanced memory formation and associative patterns in the Ancestor.” (Burton 2009, 10).

<sup>21</sup> Samson and Nunn 2015, 228; Yetish et al. 2015, 2862–2866.

<sup>22</sup> Wolf-Meyer 2016, 4–5.

without external pressures, humans will exhibit unconsolidated sleep, but if the need occurs, for example, to avoid predation or to spend more time on necessities of waking life, a change can easily take place to shorter stretches of consolidated sleep without any adverse effects.

Combining these different positions, a multicausal approach seems plausible even without definite knowledge about total sleeping times in early humans. After being required to change to ground sleep because of an increase in body mass, the new-found ability to control fire would have enabled *Homo erectus* to improve both the quality of her sleep and her food intake, each of which contributed to a rise in cognitive capacity. This again facilitated the search for even better food and sleeping places or even both at the same time, for example sleeping closer to valuable food sources. More uncertain is the influence that a changed diet had on sleep, although it is reasonable to assume that the cognitive changes were not restricted to the waking state. The co-occurrence of an increase in brain size, the transition to ground sleep and the adoption of the use of fire would have constituted a feedback loop, in which an enhancement in any of the three would have strengthened the others. Interestingly enough, Wrangham also draws attention to *Homo erectus*' vestibular system, which closely resembles that of modern humans and is quite dissimilar to the larger and characteristically shaped version of climbing species. One wonders whether this transition underlies the disruption in the sense of balance that gives rise to dreams with a strong sensorimotor component in modern humans (see chapter 2.10) and accordingly whether *Homo erectus* was the first species to experience sensations of falling or flying caused by specifically high brain activation during sleep. Wynn and Coolidge furthermore think it likely that early hominins experienced dreams of falling or fleeing.<sup>23</sup> However, because they have overlooked physiological explanations for dreams with a strong sensorimotor component, they need to make sense of these experiences solely within the context of Antti Revonsuo's threat simulation theory. As a consequence, they ascribe falling dreams to non-human primates as well, an idea that is highly doubtful if considered with respect to animals'

general ability to build dreams (see below). By contrast, as explained in chapter 2.10, I am of the opinion that threat simulation constitutes a secondary effect of a type of dream that has its basis in the workings of the human body and brain, and that it is only the compulsory linkage of the feeling of falling with fear that dates back to nonhuman primates.

### 3.3 THE EVOLUTION OF DREAMING AND ITS CONSTITUTIVE MENTAL PROCESSES

Now that we have seen that sleep and dreaming probably played an important role in the development of the cognitive abilities of early hominins, it is time to pay closer attention to the question of what it might be that sets humans cognitively apart from other animals. Gilles Fauconnier and Marc Turner answer this by referring to the idea of "conceptual blending", i. e. the integration of concepts by correspondence (identity, similarity or analogy).<sup>24</sup> In the process of conceptual blending, elements from diverse situations are employed to construct an imaginative blended scenario that displays characteristics of both sources, yet exhibits emergent structure that gives rise to new meaning. Consider the desktop interface in computers as an example:

"The Computer Desktop interface is a double-scope network. The two principal inputs have different organizing frames: the frame of office work with folders, files, and trashcans, on the one hand, and the frame of traditional computer commands, on the other. The frame in the blend draws from the frame of office work—throwing trash away, opening files—as well as from the frame of traditional computer commands—'find,' 'replace,' 'save,' 'print.' Part of the imaginative achievement here is finding frames that, however different, can both contribute to the blended activity in ways that are compatible. 'Throwing things in the trash' and 'printing' do not clash, although they do not belong to the same frame."<sup>25</sup> "Building an integration network involves setting up mental spaces, matching across spaces, projecting selectively to a blend, locating shared structures, projecting backward to inputs, recruiting new

<sup>23</sup> Wynn and Coolidge 2012, 152–153.

<sup>24</sup> Fauconnier and Turner 2002, 18–31.

<sup>25</sup> Fauconnier and Turner 2002, 131.



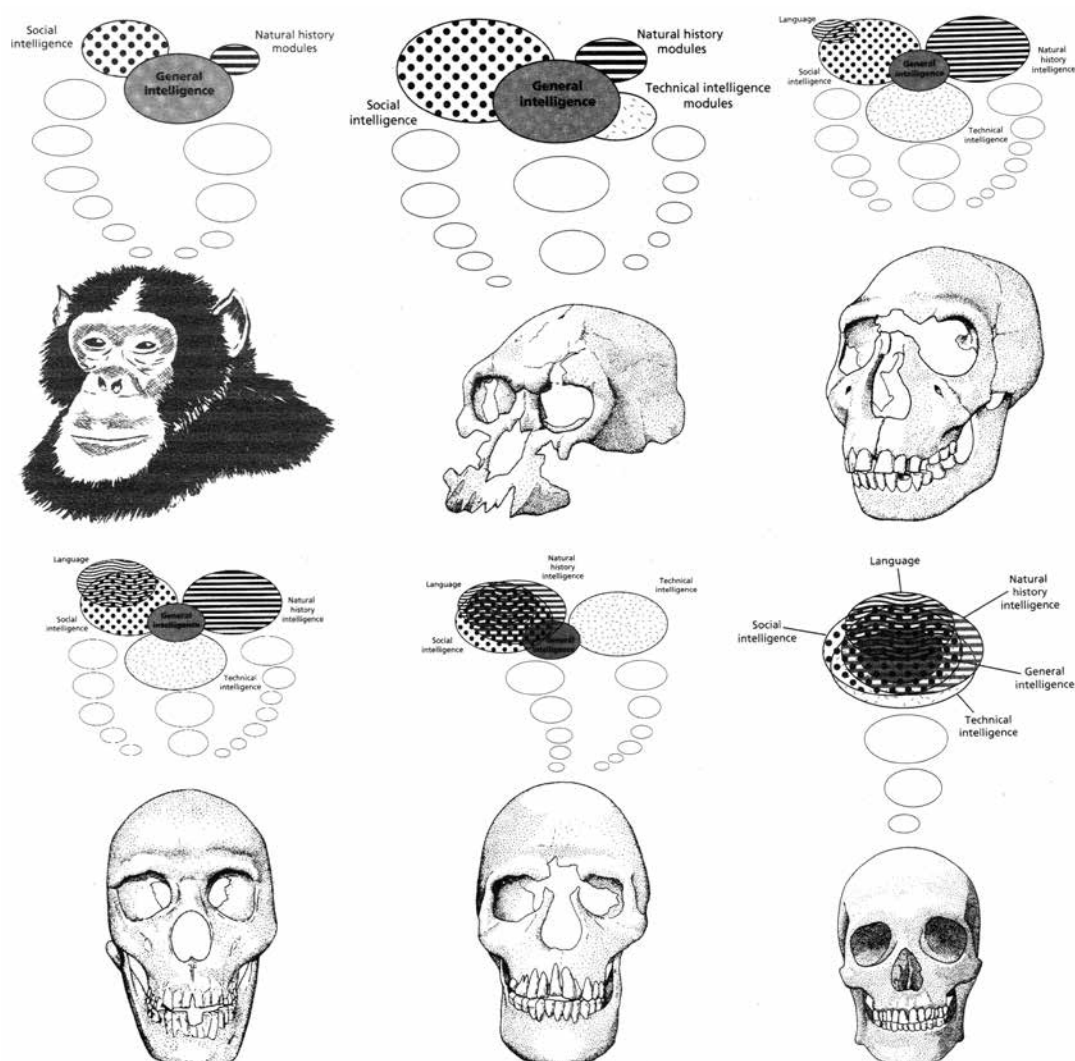


Fig. 6 The development from general to domain-specific intelligences to cognitive fluidity; chimpanzee (top left), *Homo habilis* (top middle), *Homo erectus* (top right), Neanderthal (bottom left), early modern human (bottom middle), modern human (bottom right)

structure to the inputs or the blend, and running various operations in the blend itself.<sup>26</sup>

Blending happens unconsciously but is nonetheless ubiquitous to most aspects of thought and particularly to language. Moreover, sources of blends can be blends themselves, and our conceptual structure incorporates many entrenched products of previous conceptual integration. In a nutshell, conceptual blending describes the ability to construct a new scenario from different and sometimes incompatible memory sources, an ability fundamental to distinctly human capabilities such as counterfactual reasoning, language and of course dreaming,

with its novelty and complex narrative structures. Compared to waking consciousness, dreams and hallucinations as well as normal creativity are characterised by an even further loosening of information flow between various sensory and perceptual channels and could thus contribute to the generation of new associations by integrating and consolidating information taken in during waking.<sup>27</sup>

An idea similar to conceptual blending has been brought forward from an archaeological perspective.<sup>28</sup> Steven Mithen considers “cogni-

<sup>26</sup> Fauconnier and Turner 2002, 44.

<sup>27</sup> Panksepp 2005, 142.

<sup>28</sup> Fauconnier and Turner 2002, V–VI, 27, 37–38, 174; Mithen 1996, 69, 71–77, 158–164, 217–219; Mithen 2006, 263–264. Wynn and Coolidge have argued that an enhancement in working memory capacity

tive fluidity” to lie at the heart of human mental strength by enabling the combination of elements from different domains. Cognitive fluidity is thought to have evolved together with language only in modern humans sometime after 100,000 BC and to have given rise to uniquely human feats such as art, science, religion and culture as well as the use of sophisticated tools. Other species of hominins up to the Neanderthals were equipped with “domain-specific” mentality, meaning that, in addition to general intelligence, they possessed different types of intelligence adapted to specific behavioural domains (figure 6). Three key intelligences had evolved, which enabled ways of thinking and types of knowledge suitable for dealing with topics from the following domains: social intelligence (the social world), natural history intelligence (animals, plants, the weather, the seasons) and technical intelligence (artefacts, especially stone tools). As opposed to this, *Homo sapiens* was additionally endowed with cognitive fluidity, which allowed the integration of information from previously isolated intelligences, leading to entirely new types of thoughts such as the design of tools for hunting a specific animal (natural history intelligence + technical intelligence) or the anthropomorphisation of animals as, for example, in the concept of a lion-like being with human-type thoughts (social intelligence + natural history intelligence).

Consistent with the theory of Fauconnier and Turner, language is seen as the vehicle of cognitive fluidity insofar as that spoken and imaginary utterances permitted the flow of information between individual intelligences. Nevertheless, Mithen concedes a limited linguistic intelligence to *Homo erectus*, although one that

is restricted to handling social information and consists of a finite range of sounds and meanings. By contrast, following Fauconnier and Turner, it seems that any use of language points to at least a basic ability in terms of conceptual blending, i.e. blending the sound with what it is supposed to denote, a position that is further supported by evidence of deliberate, although simple, tool use in *Homo erectus* (see above).<sup>29</sup> It seems they possessed at least a basic ability to construct a hypothetical scenario in the mind’s eye, and we have therefore found one more clue that the transition to ground sleep was indeed accompanied by a change in the structure of dreams, although the complex simulations we experience in our sleep today probably came into being only with the evolutionary appearance of *Homo sapiens*.<sup>30</sup> The achievement of

<sup>29</sup> Fauconnier and Turner 2002, 182–187. However, this is not the place to discuss the highly debated question of the evolution of language, although further advances concerning this topic would be beneficial for insights about the evolution of dreaming as well.

<sup>30</sup> The sudden increase in brain size in archaic *Homo sapiens* and the Neanderthals indicates an important step in the development of the mind (Mithen 1996, 162). However, as their mental capabilities, particularly whether they possessed language or not, are still strongly debated, no final conclusion about their abilities to build a dream can be offered here. Mithen thinks genuine cognitive fluidity evolved at the Middle/Upper Palaeolithic transition, with Early Modern Humans only achieving some limited degree of integration between their specialised intelligences (Mithen 1996, 203), an opinion very much dependent on current discussions on the earliest instances of symbolic behaviour. Wynn and Coolidge even speculate about Neanderthal dream content but fail to account for the parallel between waking cognitive abilities and dream-building skills when they assume that Neanderthals had dreams of which the content cannot be translated to the waking world: “Because *Homo sapiens sapiens* and Neandertals shared a common ancestor about 500,000 years ago, their sleep was most likely just like ours, with similar percentages of slow-wave sleep and REM sleep. Our common dream themes were probably theirs: Neandertals dreamed about being chased, being attacked, being naked (maybe) or unprepared (more likely), falling, animals, and other people. One difference may be that because Neandertals hunted more big game animals than did *Homo sapiens sapiens* they may have had more dreams of danger and threat. [...] But if Neandertals had similar percentages of REM sleep as modern *Homo sapiens sapiens*, why were they not as creative and innovative? This is a tougher question to answer. Perhaps Neandertals did have creative and

was the decisive factor in the evolution of human cognition. Working memory is defined as “[...] the amount of relevant information an individual can hold in attention and think about at the same time. Working memory is not simply the amount of information you can hold in attention. It also includes an ‘executive’ component that helps us ‘think about’ what we are attending to.” (Wynn and Coolidge 2012, 44) As working memory is an ability possessed by all mammals, human cognition is seen as a gradual improvement (Wynn and Coolidge 2012, 44, 69, 142, 198). Still, as opposed to cognitive fluidity an enhanced working memory capacity faces problems in explaining human feats that seem qualitatively different, for example, language, art or religion.



genuine dreaming in the sense defined in chapter 2.5 seems to require availability of different kinds of information for reflective consciousness, i.e. individuals becoming introspective about their own thought processes and knowledge, that can only be achieved in a cognitively fluid mind.

Basic instances of extremely simple cognitive blending can already be seen in the great apes. The construction of sleeping platforms constitutes a case of blending insofar as different materials are combined into a novel and artificial object. In this context, it is interesting to note that the weaving of branches is mirrored by the weaving of thoughts concerning that very object as its construction presupposes the ability to form a mental image of what is to be constructed. This opens up further ideas about a general connection between weaving or knotting and cognitive abilities in other species, especially in birds. Likewise, *ad hoc* tool use points to a limited ability to think ahead, again something shared by the great apes and certain species of birds.<sup>31</sup> The seeming contradiction between domain-specific intelligence and simple conceptual blending might find an explanation if we consider the possibility that in this case, general intelligence assumes the role of cognitive fluidity.<sup>32</sup> The resulting thought and behaviour at “domain-interfaces”, however, can be expected to be of a much more elementary nature than had it arisen within a single domain. Similarly, a certain intelligence might occasionally be used in an inappropriate domain of behaviour (e.g. applying social intelligence to

animals), but again, the outcome would be less sophisticated. All things considered, it appears that even though Mithen holds a modular view of the mind, he does not regard these modules as completely isolated.

The evolution from general to domain-specific intelligence to cognitive fluidity can also be observed in children.<sup>33</sup> Studies on the development of their dreaming suggest that it involves high-level thought processes and that, as the construction of dream narratives reflects cognitive status, this ability is only reached at a certain age. At birth, infants sleep sixteen to eighteen hours in multiple stretches, with active sleep (the infant equivalent of REM sleep) comprising about half of that time.<sup>34</sup> It gradually decreases while the child grows up, and the amount of sleep stabilises between the age of two and five with ten to twelve hours and 20% REM sleep. Whereas it is not uncommon for infants to enter REM sleep directly after falling asleep, the fully developed brain activity patterns of NREM sleep take several months to emerge. At thirty weeks’ gestation, the human foetus spends almost the entire day in a brain-activated state that constitutes a first level of REM sleep. The high amount of REM sleep in foetuses and infants is probably due to the fact that the brainstem develops earlier than the upper brain, which houses the thalamus and cortex, and that the cholinergic system, which is highly active in sleep, develops prior to the serotonergic, noradrenergic and andaminergic systems, all of which drive wakefulness. While J. Allan Hobson considers REM sleep to fulfil a developmental role,<sup>35</sup> others have argued that it simply constitutes a more primitive brain-state.<sup>36</sup>

innovative dreams, but upon awaking, their limited working memory capacity or limited use of language made them unable to translate these dreams into reality. Another possibility is more grim: Neandertals appear to have lived a rougher, tougher life than *Homo sapiens sapiens* living at the same time. It is possible that their dream content contained many more negative themes and had more aggressive content than *Homo sapiens sapiens*. So maybe Neandertals were either incapable of innovative and creative dreams, or their tough lives increased negative dreams and included fewer innovative and creative dreams. There is also a possibility that Neandertals had creative dreams but were unable to communicate their dreams and ideas to other Neandertals.” (Wynn and Coolidge 2012, 158).

<sup>31</sup> José Bermúdez considers tool manufacture by chimpanzees an instance of level-2 rationality (Bermúdez 2002, 255–256).

<sup>32</sup> Mithen 1996, 75.

<sup>33</sup> Mithen 1996, 59–61.

<sup>34</sup> Gander 2003, 44; Heller and Frank 2009, 165, 168; Hobson 2005, 68–70; Mednick and Drummond 2009, 254.

<sup>35</sup> Hobson 2005, 66, 78. See also Lesku et al. 2009, 63–64.

<sup>36</sup> According to M. Cristina Nicolau and her colleagues, the waking and sleeping states of poikilotherms and homeotherms are not the same. Rather, in the course of evolution, the old reptilian resting state became REM sleep, and the old reptilian waking state was preserved in what now constitutes slow-wave sleep, while the cortical waking of mammals constitutes the most recent evolutionary addition (Nicolau et al. 2000, 379, 396–399). Interestingly enough, it is the most basic survival instincts that tend to be acted out in sleepwalking which happens during slow-wave: the drive for

During REM sleep, infants show highly expressive contractions of the facial muscles, indicating a variety of emotions (pleasure, fear, surprise, disgust), which Hobson considers a reflection of their mental contents.<sup>37</sup> He points out that, while consciousness is still developing, infants have primordial perception, emotion and memory but are not yet capable of propositional or symbolic thought, which is why their subjective experience will have a different quality from that of adults. Hobson is reluctant to call this dreaming, and he concedes that brain activation is a necessary but not a sufficient prerequisite. According to him, genuine dreaming starts at about the age of three when children master language and propositional thought. By and by, their dreams increase in complexity until about the age of seven when most formal adult dream characteristics are present. Children as young as two years also attribute imaginary mental states to dolls, thus showing that they are generally able to entertain fictional mental states, and by the age of three or four have a basic understanding of what dreams are.<sup>38</sup> Yet, different conclusions have been brought for-

food, for sex, to escape from danger, to strike out against an enemy or just to explore new territory (Cartwright 2010, 89, 104, 173). Jaak Panksepp has brought forward a similar argument, but it differs insofar as he considers REM sleep the original form of waking arousal that became actively suppressed in the course of higher brain evolution. By drawing a parallel between the high affective content of most dreams and instinctive behaviour in animals, which derives from pre-programmed emotional subroutines, he argues that REM sleep originally mediated the selective arousal of emotionality and was gradually overridden and relegated to providing a background function for human consciousness by integrating emotional information with newer cognitive skills (Panksepp 2005, 128, 135). In line with these thoughts, Franklin and Zyphur point out that dreaming consciousness resembles the “situated cognition” of non-human animals (Franklin and Zyphur 2005, 68). Situated cognition is tied to the moment, restricted to satisfying directly relevant goals and characterised by an inability to extend thinking beyond the here-and-now of perception and motivation.

<sup>37</sup> Hobson 2005, 65–66. Then again, Hobson asserts that these facial contractions together with muscle twitches of the limbs and trunk occur not only in humans but in all species (Hobson 2005, 65), thus rendering them unreliable as an indicator of mental content. For the possibility of animal dreaming, see below.

<sup>38</sup> Woolley 1995, 179, 190–191, 206.

*Tab. 6 Stages of REM dream development*

Stages	1	2	3	4
Approximate ages	0–3	3–5	5–7	7–9
Dream frequency	None	Rare	Rare, but increasing	Relatively frequent
Dream form	–	Isolated event	Simple event sequence	Complex narrative
Dream imagery	–	Static	Kinematic	Kinematic
Active self-participation	–	Absent	Absent	Present

ward concerning the age dreaming starts and regarding the necessary cognitive developments that make it possible.

Based on a long-term study of children aged three to fifteen, David Foulkes proposed that dreams with complex narrative content only evolve in the course of childhood, starting with rudimentary imagery in kindergartners and progressing to fluid visualisation in school-children (table 6).<sup>39</sup> The group of children aged three to five reported dreams after only 15 % of REM awakenings and no dreams at all after NREM awakenings. If dreams were reported, they were usually very short and consisted of simple scenes or static imagery, with locomotion or generalised movement only appearing in a quarter of reports. Most reports also lacked a dream self actively participating in the events and were almost completely devoid of social interaction or emotions. Body-state references, especially references to sleeping, stood out among dream reports. These were usually reported by the older children of their group who also showed higher visual-spatial skills, which Foulkes found to be among the most consistent predictors of a child’s ability to build a dream. Body-state references seem to be the earliest instances of self-involvement in dreams, an observation that corresponds with Rainer Schönhammer’s theory concerning the intrusion of sensations from the sleeping body in episodes of particularly high brain activation (see chapter 2.10).<sup>40</sup> Foulkes describes preschoolers’ dreams

<sup>39</sup> Foulkes 1999, 15–16, 42, 56–57, 60–61, 64–65, 67, 71–72, 74, 86, 88–89, 91, 116–117, 123.

<sup>40</sup> „Träume vom Schlafen scheinen andererseits eine Art Urtraum zu sein. Jean Piaget (1975) verzeich-

as “more like a slide than a movie”<sup>41</sup>. Nevertheless, they still create new dream imagery, i.e. conceptual blends, by integrating diverse memory sources to form a coherent, comprehensible and realistic simulation, although in a much simpler form than older children or adults. At ages five to nine this capability grows more pronounced, as dream content coheres over time and static imagery is replaced by longer, kinematic storylines. Active self-participation, which we have seen to be a marker of genuine cognitive fluidity, increases gradually, while emotions and social interaction become more frequent and the general rate of dream reports rises. Critiques have argued that this is due to children’s increasing ability to verbally describe their experience rather than to a real difference in the process of dreaming,<sup>42</sup> but Foulkes found attention, memory and descriptive skills only to correlate with report length, whereas the frequency of reporting as well as both kinematic

imaging and active self-representation were paralleled by developments in visual-spatial skills, which seem to be a necessary cognitive prerequisite for dreaming:

“Viewing both the negative features and the emerging positive features of preschoolers’ REM dream reports, I am led to suggest that preschoolers *generally* (that is, not just in their dreaming alone) have difficulty in mentally imagining an active self or any kind of movement or ongoing interaction. This doesn’t mean that they can’t talk about self or action; clearly they can and do. But an inability accurately to reflect in mental imagery on such things may be part of the explanation why preschoolers think differently and less well than we do.”<sup>43</sup>

net sie unter den ersten festgehaltenen Träumen seiner Kinder. David Foulkes (1982) fand solche Träume, neben solchen von Hunger und Durst, in seinen Laboruntersuchungen von Kinderträumen besonders häufig bei der jüngsten von ihm untersuchten Gruppe, den drei- bis Fünfjährigen, die sich insgesamt durch sehr magere Traumberichte bei REM-Weckungen auszeichnen. Angesichts fehlender kognitiver Differenziertheit scheint sich das heller werdende Bewusstsein hier direkt auf solche Aspekte des körperlichen oder mentalen Zustands zu richten, die beim gegebenen Stand der Entwicklung benennbar sind.“ [“Then again, dreams about sleeping seem to be some kind of primordial dream. Jean Piaget (1975) lists them among the earliest recorded dreams of his children. In his laboratory study about children’s dreams, David Foulkes (1982) found such dreams, alongside those about hunger and thirst, to occur especially frequently in the youngest group investigated, the three to five year olds, who are distinguished by altogether very meagre dream reports after REM-awakenings. Given the lacking cognitive complexity, the dawning consciousness seems to be directed directly towards those aspects of the bodily or mental state that are nameable at the given stage of development.”] (Schönhammer 2004, 307, my translation).

<sup>41</sup> Foulkes 1999, 57.

<sup>42</sup> Gander 2003, 42. Cartwright supplies a drawing of a dream by a three-year-old girl as evidence that the child simply was not yet able to describe her REM experience verbally (Cartwright 2010, 19, 23). Yet, according to Foulkes a single image – as in a drawing – is precisely what the dream of a kindergartener is supposed to look like. Then again, I agree with Cartwright insofar as the drawing points to an underreporting of emotions in Foulkes’ study.

<sup>43</sup> Foulkes 1999, 65. “The kinds of visual-spatial skills assessed by tests such as Block Design have little to do with abilities to remember or to describe visual patterns. More plausibly, they are skills operative in mentally imagining such patterns in the first place. [...] Thus, although we obviously can’t be completely sure that young children’s failure to report dreams means that they’re just not having them, rather than merely underreporting them, the Block Design evidence strongly suggests that that is the case. Children do not dream, or do not dream very well, until they have achieved a certain level of competence in visual-spatial mental manipulation, and this competence is reflected in raw scores on such tests as Block Design.” (Foulkes 1999, 77–78). The block design test is part of many intelligence tests and requires the testee to arrange blocks with sides of different colours according to a pattern. “Mature or relatively sophisticated characteristics of me knowledge on the two other self tests also had dynamic visual-spatial correlates. Thus, not only REM dream self-representation but also relatively complex and late-appearing signs of waking self-growth seem to be mediated by the same visual-spatial skills that underlie the very act of dreaming. [...] waking self-knowledge and dreaming self-representation may find a common basis at about age 8 in the new-found ability to simulate a self-involved world in the mind’s eye. The common visual-spatial correlates of the incidence of dreaming itself, of dream self-representation, and of waking self-knowledge at age 8 surely suggest that the medium of conscious representation may be involved in the waking development as well as in the dreaming one. Another suggestive observation at age 8 was that the very best single predictor of REM recall was *not* a cognitive variable in the traditional sense, but the ‘I’ self inquiry. The act of dreaming, of being able to act in the dream, of having a relatively mature self-identity—these phenomena seem to be interrelated [...]” (Foulkes 1999, 96–97). For more information concerning Foulkes’ opinion about the connection between the development of dreaming and the de-

While the works of Foulkes and Hobson seem contradictory at first, part of their supposed incompatibility might lie in differing notions about what constitutes dreaming. With respect to the ubiquity of conceptual blending in language, it appears that Hobson is right about the co-appearance of language and simple dream imagery in kindergartners. Then again, Foulkes seems to be right about visual-spatial skills being needed to run a more complex, kinematic world simulation.<sup>44</sup> Piroska Sándor, Sára Szakadát and Róbert Bódizs have compiled evidence from different studies of children's dreaming and pointed out the differences between laboratory and home based studies as well as the great variation in the data, especially where kindergarten-aged children were concerned.<sup>45</sup> While they weaken some of Foulkes' results, a general tendency towards shorter and simpler dream narratives is still confirmed:

"Laboratory research reveals that the dreams of this age group are rare and mundane, with no emotions, no human characters or active self-representation, no kinematic imagery or narrative storyline. In contrast, qualitative observational data show that young children's dreams, in spite of being short and simple, depict a great variety of daytime experiences and have a strong connection with the child's emotional struggles. Quantitative outcomes of interview studies cohere with these latter findings suggesting that young children's dreams are kinematic, filled with various human and

non-human characters, depicting scenes of central and active self-participation. [...] There is no doubt that the dream reports of children before adolescence are shorter and simpler than those collected from older children and adults. However, the static nature of young children's dreams, as well as their lack of human characters, emotions and active self-representation was probably overestimated by the leaders of the laboratory studies."<sup>46</sup>

However, the transition from static imagery to simple kinematic event sequences to complex kinematic narratives forms a continuum that is reflected by the length and complexity of the dream. The fact that genuine dreams are reported occasionally by preschoolers does not necessarily conflict with the idea of a development of dreaming skills because both the development status of each child as well as the degree of brain activation at any given moment is subject to variation.<sup>47</sup> For example, Revonsuo has drawn attention to the fact that traumatised preschool children report fully developed nightmares, which he considers evidence that traumatic events stimulate the development of the threat simulation system, i.e. the child's ability to form a complex dream.<sup>48</sup> Interestingly enough, the "basic emotions" of happiness, sadness, anger, fear and disgust feature prominently in nightmares (see chapter 2.9). Basic emotions are universal to all members of our species and are also shared by the great apes, meaning that they came into being at least six million years ago.<sup>49</sup> Ordinary dreams, as opposed to this, are characterised by a high number of social interactions, i.e. usage of theory of mind capabilities (see chapter 2.6), which only gradually increased with the evolution of early hominins.<sup>50</sup> Michael Franklin and Michael Zyphur have taken the middle ground and suggested that the REM mentation of infants will likely consist of a reflection of their real environment.<sup>51</sup> They

development of consciousness in general, see Foulkes 1999, 14–15, 142–158.

<sup>44</sup> Further support for a connection between visual-spatial skills and dream building comes from the observation that people with damage in the motor association cortex caused by frontal lobectomies lose all dreaming experience (Panksepp 2005, 140). Interestingly, the ability to navigate a larger territory is mostly dependent on route knowledge, which also warrants kinematic imagery as in memory of vistas, the capability to combine these into the correct sequence as well as elementary topological spatial relations (Wynn and Coolidge 2012, 39). This might constitute another clue as to why dream-building skills were enhanced in *Homo erectus*, the first wholly bipedal hominin. Wynn and Coolidge even suspect enhanced route knowledge to be caused by changed sleep structure, although they lack the necessary information to explain why that might be the case (Wynn and Coolidge 2012, 159).

<sup>45</sup> Sándor et al. 2014, 439–444. For a discussion of the several problems attached to home-reported dreams collected by parents, see also Foulkes 1999, 18–25.

<sup>46</sup> Sándor et al. 2014, 443–444.

<sup>47</sup> Foulkes himself states that about a quarter of kindergartners' dream reports contain locomotion or generalised movement (Foulkes 1999, 57).

<sup>48</sup> Revonsuo 2000, 889. By implication, this means that growing up under safe conditions might hold back the dream-production system or at least preserve it in a resting state.

<sup>49</sup> Mithen 2006, 86; Schöler 2012, 124.

<sup>50</sup> Mithen considers *Homo habilis* or *Homo rudolfensis* the first hominins with an enhanced theory of mind capability (Mithen 2006, 128).



side with Revonsuo in thinking about dreaming as a virtual rehearsal mechanism that aids the development of cognitive skills but consider its earliest form a replay of significant previous experience.<sup>52</sup> Their opinion is backed by observational studies of children younger than three years, which were popular in the first half of the twentieth century.<sup>53</sup> In these, attempts were made to infer dream content from movement and words spoken during sleep, and several researchers independently reached the conclusion that a re-experiencing of emotionally intensive or demanding situations was common. This parallels the distinction between reproductive and constructive imagination, in which exact copies of past impressions are contrasted with modified memories that therefore go beyond personal experience.<sup>54</sup> Yet, due to the inherent difficulties in studying children younger than three years, data on the group that would be most significant for the hypothesis proposed here remains scarce. Moreover, at present, it does not seem possible to decide about the exact relationship between a replay of previous experiences and the creation of new, but static imagery because different cognitive processes (complex visual-spatial skills vs. cognitive blending) seem to be involved, both of which are required for genuine dreaming.<sup>55</sup> More studies are needed that specifically investigate these questions before the matter can be decided.

The question as to whether animals dream is more difficult to answer. Foulkes and William Domhoff have argued against dreaming in animals because with an absence of reflective consciousness they seem to lack the conceptual capacities to dream.<sup>56</sup> Again, the answer is dependent on the definition of dreaming employed as well as on the highly debated question concerning animal consciousness.<sup>57</sup> Be-

cause they possess perception, memory and emotion, it seems reasonable to concede some limited form of consciousness to animals, although they lack language and the capacity for propositional or symbolic thought. Accordingly, we can expect them to have some sort of perceptual, emotional and memory experience during sleep, although, like infants, they will not be able to form new dream imagery from memory sources.<sup>58</sup> This of course influences simulation theories of dreaming. While Revonsuo had proposed the rehearsal of species-specific survival skills via simulation in dreams to be at work in all mammals,<sup>59</sup> based on the data discussed above it seems that only humans (and perhaps other primates) possess the cognitive abilities to simulate novel events.<sup>60</sup> Still, this does not rule out an evolutionary explanation of mental activity during sleep as Foulkes and Domhoff have argued.<sup>61</sup> If we extend Franklin's and Zyphur's idea to animals, it seems conceivable that their mental experience during sleep consists of a replay of past experiences that are of particular significance for survival, thus strengthening the respective behaviour pattern.<sup>62</sup> For example, when the inhibition of movement during REM sleep was disabled experimentally, sleeping cats displayed exploratory, aggressive, fearful and grooming behaviours, apparently hinting at their mental contents.<sup>63</sup> It is furthermore mostly motivat-

<sup>51</sup> Franklin and Zyphur 2005, 70–72.

<sup>52</sup> Franklin and Zyphur 2005, 71.

<sup>53</sup> Sándor et al. 2014, 439.

<sup>54</sup> Sully 1898, 301.

<sup>55</sup> For example, are the visual-spatial skills in question also necessary for a re-experiencing of prior events? On the one hand, it seems strange to assume that a child should be capable of kinematic thought in one case but not in the other. On the other hand, a replay of previous experiences appears to be a prerequisite for memory in general, the consolidation of which, in turn, is tied to dreaming (see chapter 2.6).

<sup>56</sup> Domhoff 2003, 163, Foulkes 1999, 1.

<sup>57</sup> Hobson 2005, 51–52.

<sup>58</sup> Also, the physical conditions for dreaming may not be sufficient in animals. Jerome Siegel doubts dream mentation in non-human mammals because, although all but the most primitive mammals have periodic brain activation during sleep, they still lack the necessary development of certain regions in the parietal cortex (Siegel 2011, 130).

<sup>59</sup> Revonsuo 2000, 900.

<sup>60</sup> Franklin and Zyphur 2005, 67.

<sup>61</sup> Domhoff 2003, 164; Foulkes 1999, 138.

<sup>62</sup> Gorilla Michael, who had learned to use some ASL signs, allegedly once reported a nightmare in which he re-experienced the killing of his parents by poachers (<http://www.theatlantic.com/technology/archive/2015/08/koko-the-talking-gorilla-sign-language-francine-patterson/402307/> 15 April 2017). Although this is only anecdotal evidence, a replay of a traumatising situation is precisely what we would expect a primitive dreaming experience to look like. As opposed to this, the assumed dream of gorilla Koko about dinosaurs obviously reflects her caretaker's ideas about dreams and likely does not constitute an authentic report.

<sup>63</sup> Domhoff 2003, 163; Panksepp 2005, 129, 140. Domhoff objects that behaviour during sleep does

Tab. 7 Four stages of the evolution of dreaming

	Stage 1	Stage 2	Stage 3	Stage 4
Nature of dream experience	Replay of previous experience	Occasional creation of static (?) imagery of isolated events, no active self-participation (?)	Creation of simple kinematic event sequences, no active self-participation (?)	Creation of complex kinematic narratives with active self-participation
Cognitive prerequisite	General intelligence	Domain-specific intelligence, extremely simple blending resulting from general intelligence	Basic capabilities of conceptual blending	Genuine cognitive fluidity, complex visual-spatial skills (?)
Evolutionary appearance	Mammals, birds (?)	Great apes, <i>Australopithecines</i> , <i>Homo erectus</i> ' predecessors, possibly certain birds (?)	<i>Homo erectus</i> and successors	<i>Homo sapiens</i> ( <i>sapiens</i> ?)
Associated abilities	Thermoregulation	Building of sleeping platforms, <i>ad hoc</i> tool use	Tree-to-ground sleep transition, use of fire, deliberate tool use	Behaviourally modern humans
Approximate ages in humans	Ca. 0 to 3 years	Ca. 3 to 5 years	Ca. 5 to 7 years	Ca. 7 years and above

ed behaviour that is acted out, pointing to a similarity in the emotional charge of the REM state in humans and animals. Against this background, nightmares in posttraumatic stress disorder (PTSD) patients, which are characterised by hyperarousal and a repeated re-experiencing of the traumatising situation, appear in a new light.<sup>64</sup> Their dreams display varying degrees of resemblance to the actual event, but in about a quarter to half of the reported dreams, it takes the form of an exact replay. Interestingly, the dreams that are not connected to the traumatising event are also altered insofar as they, while still highly emotional, tend to be less bizarre or imaginative than dreams of non-traumatised persons but are concerned with more ordinary and realistic content. It seems possible to think of PTSD nightmares as a regression to more primitive types of dreaming triggered by the severity of the experience.

Combining the above considerations that served to investigate the evolution of dreaming from different angles, a nuanced pattern results, which is illustrated in table 7. To develop the scheme, I have integrated data about the na-

ture of the dream experience and its cognitive prerequisites with information about the likely evolutionary appearance and associated abilities as well as with studies about the approximate age at which the stage is reached in humans. Hence, we can suggest at least four stages in the evolution of dreaming, the first a replay of previous experience enabled by general intelligence and therefore shared by all mammals. This would have been followed by the occasional creation of isolated imagery by possessors of domain-specific intelligence such as the great apes and the *Australopithecines*.<sup>65</sup> Equipped

<sup>65</sup> In an experimental study, H. Freyja Ólafsdóttir and her colleagues found possible clues for a limited simulation capability in rats (Ólafsdóttir et al. 2015, 2). However, the results are difficult to interpret and depend on a clear understanding of the role of place cells. While it seems evident that they constitute the neurological equivalent of a location, the study by Ólafsdóttir and her colleagues could as well suggest that this applies to both seeing a location and being in that location. By contrast, interpreting the results as the rat imagining itself in a place and comparing it to the human capabilities of future thinking (Ólafsdóttir et al. 2015, 7) seems like stretching the evidence, so at present, the matter cannot be decided satisfactorily. Moreover, at the current stage of research, it is generally impossible to determine whether such an activation of the rat's place cells during sleep is accompanied by any experience at all rather than simply constituting a nonconscious

not necessarily indicate dreaming, as is the case in sleepwalking. However, as sleepwalking happens in the NREM stage, it seems inadequate as a model to explain cats' behaviour during REM sleep.

<sup>64</sup> Germain and Zadra 2009, 316–317.



with basic capabilities of conceptual blending, *Homo erectus* was probably able to create simple kinematic event sequences during sleep. The question as to when the creation of complex kinematic dream narratives arose in human evolution is, however, tied to the controversial issue of the appearance of genuine cognitive fluidity and therefore cannot be answered satisfactorily at present. For example, based on the discussion about the cognitive abilities of the Neanderthals and Early Modern Humans (see footnote 30), it seems conceivable that there might be an additional stage between stages 3 and 4, although its nature remains obscure at the moment.

### 3.4 SYNOPSIS

In summary, it can be stated that a remarkable amount of evidence about sleep and dreaming in early hominins exists. While it only seems possible to make tentative suggestions about a general lengthening of sleep time in the course of human evolution, and while different researchers disagree about this question, the assumption that the proportion of both REM and slow-wave sleep increased over time is supported by a range of complementary approaches. Furthermore, while the oldest sleeping places that are attested archaeologically were used by a group of Neanderthals, it appears that *Homo erectus* was the first to sleep on the ground, a change that went hand in hand with the use of fire and shifts in food patterns. This alteration in sleeping habits was likely accompanied by a rise in cognitive abilities, as had also occurred previously with the adoption of sleeping platforms similar to those constructed by the great apes today. Such platforms were probably also used by the *Australopithecines*, and possibly *Homo habilis* and *Homo rudolfensis*. Yet, although sleep underwent significant changes in the course of human evolution, what seems decisive is that these changes are not permanent, but rather, human sleep is typified by flexible, mostly polyphasic sleep patterns and by strong

variations in chronotype, both of which offer significant advantages for survival.

Inferences about the evolution of dreaming were based on theories about general cognitive developments during human evolution as well as on studies of children's dreaming. It thereby became apparent that the construction of imaginative scenarios by the integration of different memory sources, termed "conceptual blending" by Fauconnier and Turner or "cognitive fluidity" by Mithen, is vital for the ability to create novel mental imagery in dreams. The development from general to domain-specific intelligence to cognitive fluidity also becomes apparent in children, but it seems that other higher-order thought processes play a role as well. Crucial among them are visual-spatial skills, as can be deduced from the fact that dreaming begins with quite rudimentary and possibly even static imagery in kindergartners and advances to simple kinematic event sequences and, only when children reach school age, to complex kinematic narratives with fluid visualisation. Moreover, having discerned cognitive fluidity and complex visual-spatial skills as a prerequisite for genuine dreaming, the only possible type of mental imagery that remains for beings that do not possess these abilities would consist in a replay of significant previous experiences. This hypothesis is in accordance with Revonsuo's threat simulation theory and is possibly of importance for explaining PTSD nightmares, in which the traumatising situation is re-experienced. Nevertheless, the exact relation between cognitive fluidity and complex visual-spatial skills remains unclear. The chapter closed with table 7, which visualised a possible course of the evolution of dreaming in four stages by combining information about the nature of the dream experience, its cognitive prerequisites, its likely evolutionary appearance and the associated abilities as well as the approximate age at which the stage is reached in humans.

memory consolidation process. Unfortunately, the latter problem touches on general limits of knowledge and therefore also arises in experiments that are only concerned with a possible replay of previous experience during rats' REM sleep (Louie and Wilson 2001, 145).



## II ANALYSES OF ARCHAEOLOGICAL AND HISTORICAL SOURCES



## 4 THE NEAR EAST

### 4.1 STRUCTURE OF THE CHAPTER AND DATA BASE

The subsequent text examines sources from the Near East that relate to sleep and dreaming. It begins with an overview of archaeological findings in chapter 4.2, followed by written sources that mention the topic. The earliest sources, which stem from ritual and administrative contexts, are the focus of chapter 4.3. It firstly describes seals with scenes possibly connected to dreaming (Jemdet Nasr to Early Akkadian period) before turning to the oldest texts, namely an Old Sumerian incantation from Mari, two Old Sumerian administration tablets from Lagaš and the Akkadian period “song” *Nin-me-šara*. In chapter 4.4, the use that was made of dreams in political contexts between the Early Dynastic and Isin-Larsa period is illustrated based on the *Stele of the Vultures* of King Eanatum of Lagaš, cylinder A of King Gudea of Lagaš, the hymns Šulgi O & D of King Šulgi of Ur, King Iddin-Dagan of Isin’s hymn about Inana and a letter-prayer by King Šîn-iddinam of Larsa. Next, nineteen letters from the archive of King Zimri-Lim of Mari (Old Babylonian period) are discussed in chapter 4.5. These are complemented by an administration record likely from the same location and by five Old Assyrian to Old Babylonian private letters. Literary compositions form the body of sources in chapter 4.6, which is by far the longest section and addresses the following texts: *Curse of Agade*, *Lugalbanda in the Cave of the Mountains*, *Enmerkar and EnSUHkeš-da’ana*, *Sargon Legend*, *Dumuzi’s Dream*, *Song of the Plowing Oxen*, *Origin of Grain*, *Epic of Gilgameš* and *Epic of Atramhasīs*. All Sumerian literary compositions are attested from the eighteenth century BC.<sup>1</sup> For some of them, earlier fragments have been identified, but it is unclear whether these already contained the dream episodes in question. Sumerian literature will be considered first, followed by the stories about Gilgameš, for which both Sumerian and Akkadian versions will be contrasted. Lastly, I will deal with the Akkadian *Epic of Atramhasīs*, which is not preserved until the seventeenth century BC. The chapter closes with some re-

marks about ritual specialists and a view on four possible examples of dream omens from the Isin-Larsa and Old Babylonian period in chapter 4.7.

*Tab. 8 Mesopotamian chronology*

Late Uruk period	3500–3100 BC
Jemdet Nasr period	3100–2900 BC
Early Dynastic I	2900–2750 BC
Early Dynastic II	2750–2600 BC
Early Dynastic IIIa	2600–2450 BC
Early Dynastic IIIb	2450–2350 BC
Akkad Dynasty	2334–2154 BC
Third Dynasty of Ur	2112–2004 BC
First Dynasty of Isin	2017–1794 BC
Larsa Dynasty	2025–1740 BC
First Dynasty of Babylon	1894–1595 BC

### 4.2 SLEEPING HABITS AND BURIAL CUSTOMS RELATING TO SLEEP

The rise of the first Mesopotamian city states in the third millennium BC allowed for a new ability to accumulate wealth that finds expression, among other things, in the possession of furniture. Beds show up more rarely in the archaeological record than other pieces of furniture such as chairs or tables,<sup>2</sup> a fact that indicates that, as wood was an expensive material, all but the wealthier people slept on mats and straw on the ground.<sup>3</sup> Only occasionally have built-in sleeping platforms been excavated. Their scarcity is probably due to the fact that, analogous to ethnographic observations in the region, a single room was used for day work as well as for sleeping by the whole family, rendering the fireplace the only feature that indicates the living area in most excavations.<sup>4</sup> It can also be as-

<sup>2</sup> In the cases where fragments of ornamentation have been preserved, they offer little insight about what kind of furniture they belonged to, much less about constructional details (Baker 1966, 159–160).

<sup>3</sup> Salonen 1963, 107; Steinert 2010, 265.

<sup>4</sup> Krafeld-Daugherty 1994, 62–63. For a compilation of numerous platforms and benches and a discussion of their possible uses, see Krafeld-Daugherty 1994, 72–81.

<sup>1</sup> Zgoll 2006, 98.



Fig. 7 Nippur, level IV

sumed that platforms served multiple functions in buildings where space was restricted, and it seems unrewarding to distinguish between sitting and sleeping arrangements. Therefore, platforms will be termed “sleeping platforms” in the following if their size allowed for at least one person to lie comfortably on them, although most sleeping platforms can be expected to have accommodated multiple persons. While many people today are of the opinion that children sleeping separately from their parents is both natural and necessary, this habit is in fact geographically and historically quite isolated and was only brought about by a combination of ideas about morality and accumulating wealth in the western industrialised world.<sup>5</sup> Contrary to this, co-sleeping (sleeping in the same room) or bed-sharing (sleeping in the same bed) would

have been the norm in earlier times and still is in many parts of the world.

A likely sleeping platform has been excavated in a courtyard of an Early Dynastic II/III building in Khafajah (ancient Tutub, see chapter 4.4), about 15 km east of Baghdad, Iraq.<sup>6</sup> In the middle of its central court stood a dais from mud brick, which was 2.60 m long, 1.20 m wide and preserved to a height of 0.40 m. The settlement also contained mud brick platforms inside the houses, like the one in room XVIII of house D, which had a size of 1.70 × 0.90 × 0.30 m. It was built over a dis-used altar, which was thus incorporated into

<sup>5</sup> Moorcroft 2003, 71–72. Studies have shown it to be beneficial for the child and much more common even in the western world than many would believe as about a third to a half of preschoolers and a quarter of schoolchildren co-sleep with their parents.

<sup>6</sup> Frankfort et al. 1932, 103, 106; Krafeld-Daugherty 1994, 80. The interpretation as a sleeping place of a semi-circular platform in the courtyard (room VIII) of house D cannot be relied on as a cover of bitumen and a nearby channel suggest a use connected with water (Frankfort et al. 1932, 100–101). Since, apart from a photograph, no information is given about it at all, the same holds true for one more circular brick construction somewhere from the same settlement (Frankfort et al. 1932, 63).



the bench-like structure. Potential sleeping platforms were discovered in Nippur as well. Although they are not clearly distinguishable from the benches used for storage, the remains of mats on a platform in House F dating to the Ur III period supports the possibility that it was used as a sleeping place (figure 7).<sup>7</sup> This platform from unbaked brick, which was 10–15 cm high, was built against the south-western wall of room 206.

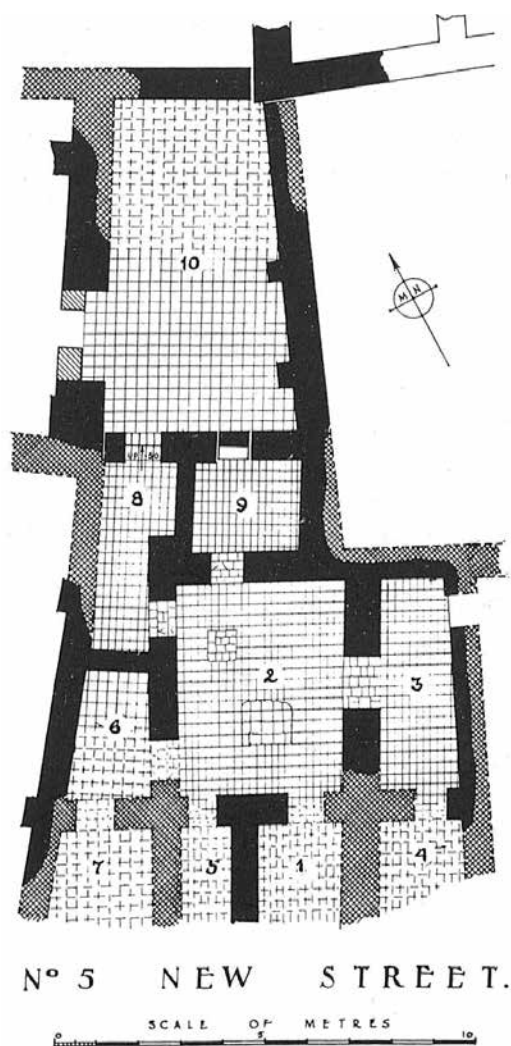


Fig. 8 Ur, No. 5 New Street

Several platforms from the Isin-Larsa period in Ur are specifically labeled bedsteads or foundations of bedsteads by the excavators, although they did not offer space for more than one person.<sup>8</sup> One example measured 1.75 × 0.65 × 0.70 m and was built against a wall in the northern corner of No. 4 Paternoster Row, Room 12. In No. 3 Straight Street, Room 4 a low bench, which was constructed of brick with a rubble and mud filling, came

to light. An area of raised brick paving was found in No. 7 Straight Street, Room 4 and another strip of brick pavement in No. 10 Straight Street, Room 4.<sup>9</sup> The most convincing find from Ur was discovered in No. 5 New Street, Room 9, where the north-eastern and south-western walls were equipped with lodgements at 0.50 m, from which the ends of palm logs projected into the room. They faced each other in pairs, so apparently, the palm logs had once stretched across the room and formed a wooden platform. Remains of reed matting that were discovered at the same level as the lodgements lend further support to the interpretation that it was a sleeping place, as does the location of Room 5 in a secluded area inside the house which was nevertheless easily accessible and aerated from the courtyard No. 2 (figure 8).

Benches outside houses dating to the Early Bronze Age I were furthermore excavated in



Fig. 9 House model from Arad

<sup>7</sup> Krafeld-Daugherty 1994, 77–78; McCown et al. 1967, 53.

<sup>8</sup> Krafeld-Daugherty 1994, 80; Woolley and Malloyan 1976, 118, 147, 160, 164–165.

<sup>9</sup> No measurements for the brick constructions are given. Nevertheless, it is unlikely that they would have been interpreted as a bed if they had been too small to be used as such (Krafeld-Daugherty 1994, 80).

<sup>10</sup> Kafafi 2001, 70–73. More difficult to interpret is a potential platform to the north-east of the benches. It is described as a circular structure from stone with a diameter of 1.75 m and a fireplace on top, while the drawing suggests a hollow structure with a fireplace in the middle, rendering the benches more likely candidates for sleeping places. Three more circular platforms from stone with a diameter of 1.7–2.7 m are mentioned for west-central Jordan but unfortunately, the names of the sites as well as any further



Fig. 10 Arad; platform in a courtyard (left), benches inside a house (right)

Abu Thawwab, central Jordan.<sup>10</sup> As they were built against the western and northern wall of the courtyard, they would have been located in the blazing sun during the day, a problem that would not have presented itself if they were mainly used at night. According to ethnographic analogies, rooftops and platforms in courtyards are most often used as a sleeping place in the warmer months to increase aeration.<sup>11</sup> Archaeological evidence that rooftops could be employed as sleeping places comes from a house model from Arad, Israel, a settlement dating to Early Bronze Age I/II (figure 9).<sup>12</sup> It shows a flat roof with slightly raised edges, which are interpreted as a device to collect rainwater.<sup>13</sup> However, as this rim is perforated several times, possibly to drain that very rainwater, the interpretation that it is a device to stop sleeping people from rolling down the roof seems more likely. In the same settlement, platforms were excavated in the courtyard as well, thus yielding a number of potential sleeping places (figure 10, left). Whether the benches inside the houses were also used for sleeping in the colder months remains doubtful because their width of 30–40 cm makes them too narrow to lie down on comfortably (figure 10, right).<sup>14</sup> Generally speaking, an overall scarcity of sleeping platforms in a settlement might be explained by people sleeping on the flat rooftops, similar

to what Horst Klengel considers likely for the houses in Ur.<sup>15</sup> All in all, Arad is a significant location for the investigation of Near Eastern sleeping habits as its diversity of potential bedsteads shows that practices need not be fixed. Rather, it indicates flexibility of people's sleeping habits, possibly depending on factors such as the weather, the wish for privacy, the number of inhabitants or their status and relations towards each other, to name but a few.

Even rarer than sleeping platforms are archaeological findings of bed frames because the variable climate of the Near East makes for worse preservation conditions than the dry Egyptian climate. Yet, occasional archaeological findings of bed frames, written sources and depictions illustrate that beds came into being at approximately the same time in both regions (see chapter 5.2). As in Egypt, the first findings of beds in the Near East are all from burials, and linguistic evidence shows an association between sleep and death, for example when verbs such as the Sumerian *nālu* can indicate both “to lie down to sleep” as well as “to be dead”.<sup>16</sup> The use of beds in burials is also attested in written sources such as in an Ur III period tablet from Lagaš that lists the expenses for the burial of the nin-diĝir priestess Ba'us.<sup>17</sup> Already in the reform texts of Uru'inimgina of Lagaš (ca. 2350 BC<sup>18</sup>), beds are among the customary payments connected to burials:

information on the structures are omitted (Papalas et al. 1997, 434).

<sup>11</sup> Krafeld-Daugherty 1994, 70–73, 173.

<sup>12</sup> Amiran and Ilan 1992, 56.

<sup>13</sup> Ben-Tor 1992, 101.

<sup>14</sup> Amiran and Ilan 1992, 60.

<sup>15</sup> Klengel 1989, 130.

<sup>16</sup> Steinert 2010, 239, 249.

<sup>17</sup> Maeda 1987, 323, 325 (drawing of the tablet without translation); Steinert 2010, 251.

<sup>18</sup> Edzard 2009, 261.

“(when someone was buried) 2 UL-measures of barley, 1 garment, 1 bed, (and) 1 chair were delivered to the ùĜ.<sup>(d)</sup>INANNA (burial official).”<sup>19</sup>

JoAnn Scurlock considers the chair that has to be provided together with the bed a soul emplacement so that the *eṭimmu/gidim*, a body spirit, could receive funerary offerings from the living.<sup>20</sup> While she suggests that, analogically, another receptacle could have been meant as temporary housing for the *zaqīqu/si-si-ig*, a dream soul (see chapter 4.6), surprisingly she does not point out the obvious connection to beds in burials. Bed and chair are also mentioned in the Sumerian myth about the death and resurrection of the god Lil that likely dates to the Isin-Larsa period.<sup>21</sup>

“Bring me the bed (where) they recite the formula: ‘its wind has been released.’ Set up a seat for the SILAĜ to sit upon. Put a cloth on the seat to cover the SIMLAĜ. Bring me funerary offering-bread to continually offer to it; (bring me) water to pour in its water pipe (and) to moisten the dust of the earth for it; (bring me) the hot broth (which) gives it its healthy glow to pour out for it.”<sup>22</sup>

The Early Dynastic<sup>23</sup> chamber of Queen Pu’abi<sup>24</sup> in the “Royal Tombs” of Ur contained a wooden bed or bier, on which the body of the queen had been placed.<sup>25</sup> She was arranged on her back with her head to the west and her hands crossed over her stomach. The “Royal Tombs” of Ur are shaft graves with a burial chapel above and chambers from brick or stone that can be accessed via a dromos.<sup>26</sup> Together with the use of funerary beds, this arrangement brings to mind a conceptualisation of the tomb as a house for the dead in which they sleep, an idea further emphasised by the fact that the ordinary tombs

of the Early Dynastic period were equipped with coffins from wood or clay (*larnaces*) instead of bedframes, whereas during the Akkadian period interment in coffins from wickerwork or in woven mats became more common. Among the abundance of grave goods in the “Royal Tombs” were also chariots and sledges, which are interpreted as a means of transport for the journey to the hereafter similar to the boat models common in Early Dynastic burials. That the deceased were conceptualised as living in their graves is backed by a passage from the Old Babylonian *Incantation to Utu* (see chapter 4.6). Bendt Alster thinks the passage indicates the practice of burying the dead in private houses,<sup>27</sup> but a broader reference to the grave, independent of its location, as the abode of the deceased fits well with the archaeological evidence. Also note the mention of sleep in the context of death and burial:

“Let the dead man eat in front of his house, let him drink water in his house. Let him sleep in the shade of his house [...]”<sup>28</sup>

The interpretation of the tomb as a house and sleeping place for the dead is strengthened by the findings from the necropolis at the eastern and southern slopes of Tell A at Halawa, Syria.<sup>29</sup> Here, shaft graves were discovered, whose chambers featured architectural elements like doors and niches, which are interpreted as false windows. Benches set within niches, which differed in length between 1.50 and 2.00 m, were found in all four graves investigated (H-21, H-58, H-35, H-2). Most interesting are the benches in graves H-21 and H-35 as they were raised at one end to form pillows from stone. The two benches in grave H-21 had a length of 1.75–1.80 m, a height of 0.40 m and their niches were 0.60–0.65 m deep, whereas the benches in grave H-35 measured 1.75 × 0.70 × 1.00 m and 1.75 × 0.60 × 0.80 m (figure 11). Unfortunately, as these graves were destroyed by illicit excavations, no objects and accordingly no information that would allow a dating more precise than the third millennium BC have survived.

<sup>19</sup> Scurlock 2002, 2 (column VI, lines 19–24). See also Steible 1982.1, 297.

<sup>20</sup> Scurlock 2002, 1–5.

<sup>21</sup> Thureau-Dangin 1922, 175.

<sup>22</sup> Scurlock 2002, 2–3 (lines 24–29). See also Thureau-Dangin 1922, 183.

<sup>23</sup> Some scholars adhere to the original dating to Early Dynastic IIIa (Baker 1966, 161), whereas others have argued for an earlier construction during Early Dynastic II (Selz 2004, 45).

<sup>24</sup> Since the 1930s, a reinterpretation of the queen’s name took place. Today it is read as “Pu’abi” (Klengel 1989, 73) rather than “Shub-ad” (Woolley 1934 I, 84).

<sup>25</sup> Woolley 1934 I, 84.

<sup>26</sup> Selz 2004, 45, 47; Woolley 1934 I, 33.

<sup>27</sup> Alster 1991, 28.

<sup>28</sup> Alster 1991, 60, 76, lines 151–152.

<sup>29</sup> Orthmann 1981, 4, 49–53. Other graves can be dated to the middle Early Bronze Age, however, their chronological relations are unclear (Orthmann 1981, 55, 57, 59).



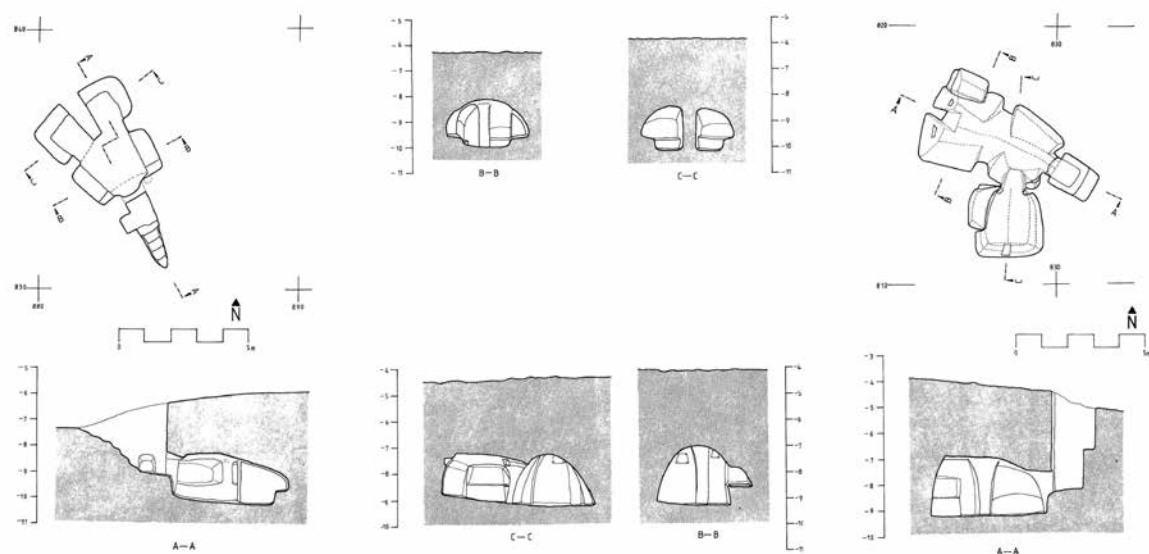


Fig. 11 *Halawa*; plan and longitudinal section of grave H-21 (left), transverse section of grave H-21 (top middle) and grave H-35 (bottom middle), plan and longitudinal section of grave H-35 (right)

Unusually well preserved are the beds in the tumuli at Baġūz in the middle Euphrates valley, close to the settlement of Mari (see chapter 4.5) and roughly contemporary with it (Middle Bronze Age IIA).<sup>30</sup> Therefore, Baġūz probably constitutes the cemetery of the inhabitants of Mari, specifically of its upper class. Here, a total of thirteen bodies (Z 19, 66, 67, 95, 121, 122, 123, 125, 141, 145, 146, 202) were discovered on wooden beds, all of them lying on the side in a contracted position in varied orientation. The beds consisted of rectangular wooden frames fit together by mortise and tenon joints and webbing in between (figure 12).<sup>31</sup> They measured about 1.50–1.74 m in length and 65–75 cm in width; in two burials of children the length was only about 1.35 m. Additionally, in tomb Z 66 a piece of fur was discovered that might have been part of either a cushion or a covering. The graves also contained food offerings, which had been placed on a table in some cases, and some of the vessels might have held an alcoholic drink mixed with herbs because they were found together with the perforated ends of drinking devices. Lastly, axes similar to the duckbill axes discovered in some of the burials in Baġūz are carried by *Aamu*, i.e. “Semites” or,

more generally, “Asiatics”, in the wall paintings of Khnumhotep II in Beni Hasan, Egypt (Middle Kingdom, ca. 1880 BC), thus illustrating cultural contact between the regions (see chapter 1.3).<sup>32</sup>

In Qatna, Syria, the rock-cut royal tombs were connected directly to the palace, from which a corridor led below ground (figure 13).<sup>33</sup> Peter Pfälzner interprets the fact that the corridor was partitioned by several doors as an allusion to the myth *Ištar's Descent into the Netherworld*, in which the goddess has to pass through several doors to reach the realm of the dead. Pfälzner, therefore, thinks that the corridor was considered a literal entrance to the netherworld in the form of the tomb. In the main burial chamber, the arrangement of pillars mimicked the layout of the hall in the palace, thus suggesting an interpretation as a house for the dead. The main chamber contained bones of men, women and children, and in four instances the remains of rectangular objects from wood, which are interpreted as funerary biers, were discovered in association with bones and burial objects. Three benches from stone probably served multiple purposes. In the north-western corner, vessels for food offerings were placed on or in front of the bench, while on the other two benches in the south-west only a few objects were discovered. Because of the similarity

<sup>30</sup> Du Mesnil du Buisson 1948, 34–39; Hrouda 1990, 103, 106, 109, 111–112.

<sup>31</sup> In the original publication, they are called “chanvre ou autre matière fibreuse” (Du Mesnil du Buisson 1948, 36), but, judging from other archaeological findings, rushes seem more likely.

<sup>32</sup> Kamrin 2013, 156.

<sup>33</sup> Pfälzner 2009, 201–203.

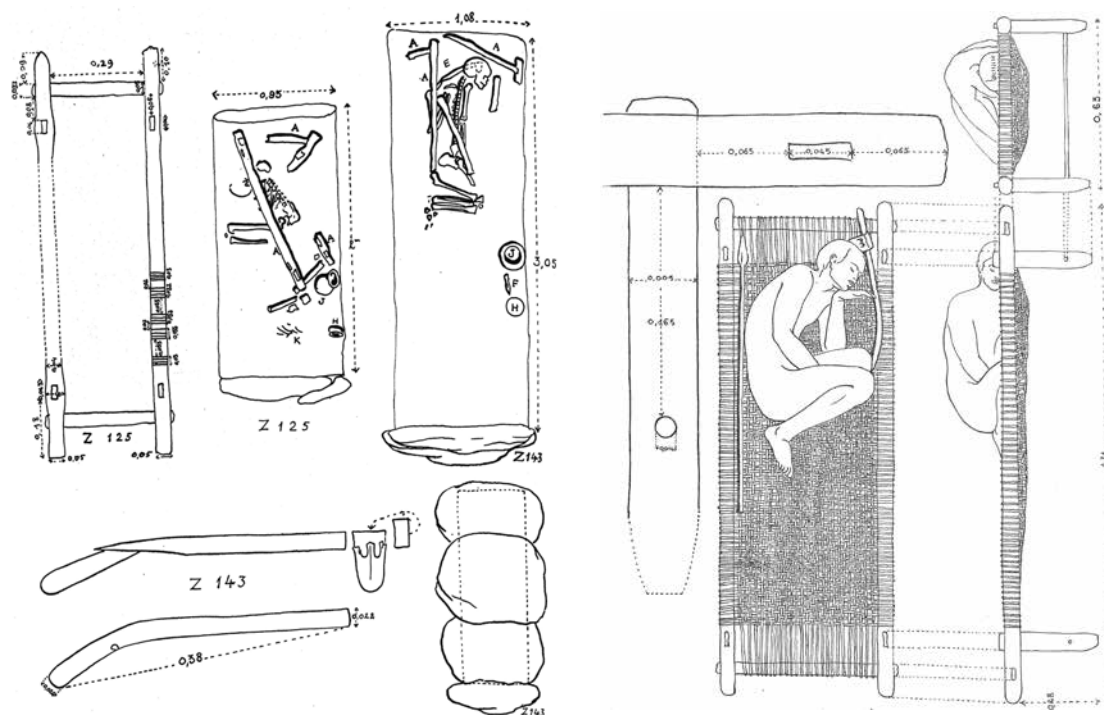


Fig. 12 Bagūz; plan of tomb Z 125 and details of bed (left), reconstruction of the bed from tomb Z 144 (right)

of the burial chamber and the hall of the palace, Pfälzner interprets the latter as a place to sit down, however, with respect to other burial chambers, for example, the ones at Halawa, a place for laying out the dead that was not in use at that time seems just as likely. Moreover, an open sarcophagus without a lid was found in the south-eastern corner of the chamber, which contained the bones of three individuals. Opposite the entrance to the main chamber lay the southern side chamber, which, in the decor of the passage framed by even more pillars, formed the equivalent of the throne room in the palace. This chamber contained no human bones or pieces of jewellery and thus seems to have been free of burials. Instead, at its southern side, another wooden object was placed, which, together with several instances of gold foil, is interpreted as the remains of a bed. Pfälzner suggests a bed for banquets because of food remains and vessels in the same room, but again, it is hard to say whether we are not dealing with a momentarily unused burial place because in the course of time several human remains must have been moved into the eastern side chamber, which formed the tomb's ossuary. Here, two wooden objects that might have been tables were discovered among a great accumulation of both human and animal bones. Lastly, the western side chamber contained another sarcophagus

with the bones of two individuals and a stone table with the remains of a wooden coffin that held the only non-disarticulated skeleton. Two Egyptian stone vessels, one inscribed with the name of Amenemhet III (1818–1773 BC, Dynasty 12, Middle Kingdom<sup>34</sup>) and another with the name of Ahmose-Nefertari, the mother of Amenhotep I (1514–1494 BC, Dynasty 18, New Kingdom<sup>35</sup>), point to contact with Egypt. Unfortunately, they are not of much help concerning the time when the tomb was constructed because it was in use for several generations, and the only certainty lies in the fact that the entrance was buried with the destruction of the palace around 1340 BC. The dating of the palace itself is much debated, however, with two schools holding diverging opinions. While one group suggests that building took place during Middle Bronze Age IIA, which would make it contemporary with Mari, the other group thinks a date towards the end of Middle Bronze Age II is more likely.<sup>36</sup>

A burial of two adults and eleven children in a rock-cut chamber in Jericho (tomb H 18, Group V, Middle Bronze Age) was furnished with a bed and a table in a similar fashion to

<sup>34</sup> Hornung et al. 2006, 491–492.

<sup>35</sup> Hornung et al. 2006, 492.

<sup>36</sup> Al-Maqdissi et al. 2009, 173.



Fig. 13 Qatna, the royal tombs

the graves in Bağüz, whereas the furniture itself seems to be a more simplified copy of Egyptian types.<sup>37</sup> The male adult had been placed on a rush mat on top of a wooden bed, lying in an extended supine position with his head to the north. The bed itself consisted of a rectangular wooden frame with five cross-pieces; no traces of legs survived.<sup>38</sup> Between the cross-pieces were strings of woven rushes, remains of which were preserved where they passed through the holes in the side-pieces (figure 14, left). The tomb also contained a table with food on a wooden platter and a basket full of toilet articles, showing that the people buried here were thought to be in need of everyday objects after death as well. Fragments of what might have

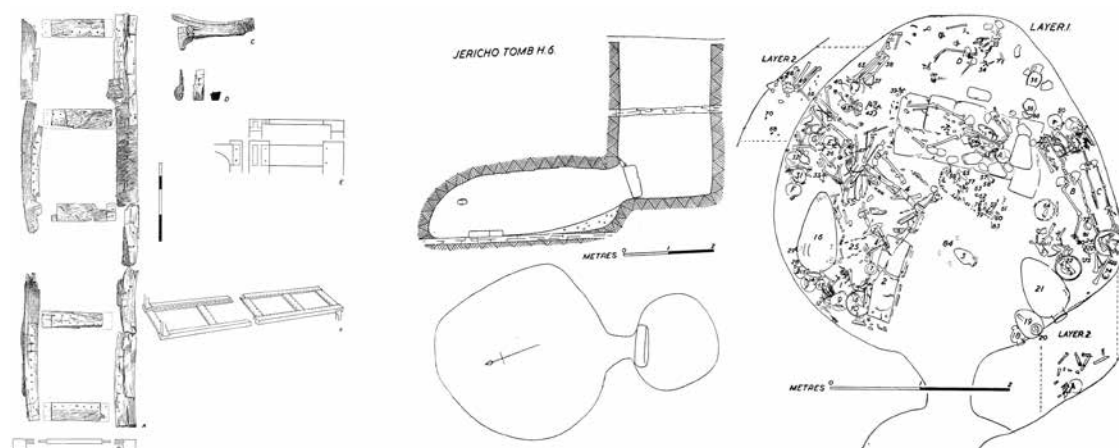
been a wooden bed of similar design were excavated in Tomb J 1 (Group IV, Middle Bronze Age) as well. The fact that only a small proportion of graves contained beds suggests that all but the wealthy people slept on the rush mats, on which several bodies were placed. Traces of matting were discovered in tomb H 6, H 18, H 22, B 3, B 35, G 1, G 46 and J 1. Tomb H 6 (Group V, Middle Bronze Age, figure 14, right) offers another clue that sleeping platforms existed. Here, a low platform of one layer of large, thick mud bricks was built in the centre of the tomb. The central burial was placed on a rush mat on top of it, again in an extended supine position with the head supported by a mud brick pillow.

Bed models from clay start to appear at the end of the Early Dynastic period, a date consistent with the first mention in written records, indicating that bed frames in the modern sense came into use at that time. The models generally range from 5 to 15 cm in length and were

<sup>37</sup> Kenyon 1960, 266, 425–427, 435, 453–454, 486–488, 494, 524–526; Kenyon 1965, 193.

<sup>38</sup> Yet, elsewhere we find contradictory information when the height of the four legs is given as varying from six to eight inches (Kenyon 1960, 532).



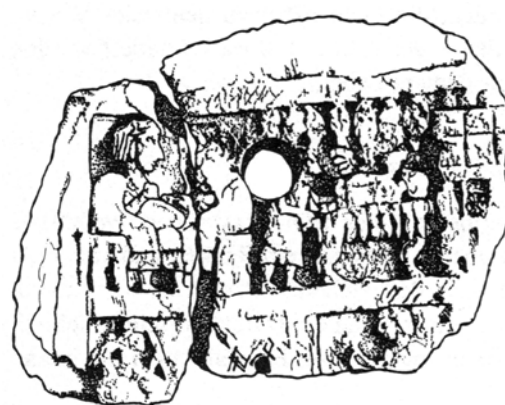


*Fig. 14 Jericho, bed from tomb H 18 (left, A: top view, B: reconstructed section of end, C: elevation of head of side rail and head of leg, D: fragment of foot, E: reconstructions of joint at head of bed and leg, F: reconstruction of top and underside of bed), section and plan of tomb H 6 (right)*

sometimes made with a mould. Eight fragments of bed models from the Early Dynastic period have been excavated, seven in Khafajah (ancient Tutub)<sup>39</sup> at the river Diyala in Iraq and another one in Tell Asmar (ancient Ešnunna),<sup>40</sup> following the river about 25 km to the east. All finds were excavated in living quarters and are similar in appearance, the mattress being indicated by a wavy, zigzag or herringbone pattern and surrounded by a ledge. Note, however, that in both cases, the dating to the Early Dynastic period remains somewhat uncertain and that the objects might in fact be younger. Nevertheless, their similarity concerning both the appearance and the location lends further support to this dating, which was obtained independently for both sites. A bed furnished with zoomorphic legs and covered with a piece of fur is furthermore depicted on an Early Dynastic votive plaque from Tell Asmar (figure 15).<sup>41</sup> Tell Asmar also yielded another eleven fragments of bed models that are tentatively dated between the Akkadian and Old Babylonian period.

The first reliably dated bed model stems from the Akkadian period and was discovered in Tepe Gawra, northern Iraq (figure 16, top left).<sup>42</sup> It is almost complete; only two legs are missing. The mattress consists of nine horizontal stripes, of which the outer ones show a herringbone pattern, while the two in the middle are made up of lozenges. As this looks similar

to the zigzag pattern that indicates the ropes which attach the ledge to the side pieces, it is possible that it in fact shows a network of ropes with reinforcement in the middle where the bed is subjected to the heaviest load, rather than a patterned mattress or cushion. A contemporary or slightly younger bed model from Susa, Iran, similarly displays either a mattress consisting of several patterned stripes or a network of ropes.<sup>43</sup>



*Fig. 15 Votive plaque from Tell Asmar*

At the start of the Neo-Sumerian/Ur III period, clay models of beds become much more numerous, while the stylistic conventions remain basically the same. The beds consist of a rectangular frame, which stands on four legs and surrounds a mattress or a network of ropes indicated by zigzag or herringbone patterns. Reliably dated models from Neo-Sumerian times have been ex-

<sup>39</sup> Cholidis 1992, 244.

<sup>40</sup> Cholidis 1992, 250–251.

<sup>41</sup> Cholidis 1992, 165–166.

<sup>42</sup> Cholidis 1992, 256.

<sup>43</sup> Cholidis 1992, 248.

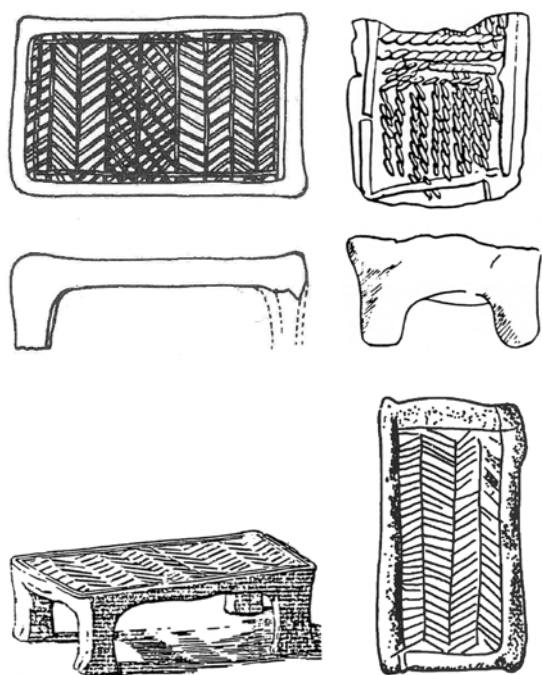


Fig. 16 Bed models from Tepe Gawra (Akkadian period, top left), Fara (Neo-Sumerian period, top right), Susa (Neo-Sumerian period, bottom left) and Gezer (Early Bronze Age II, bottom right)

cavated in Fara (ancient Šuruppak, southern Iraq) (figure 16, top right), Susa (figure 16, bottom left), Nippur and Telloh (ancient Ġirsu, southern Iraq).<sup>44</sup> Additionally, beds depicting symbols start to appear. Two models dating to the Ur III period from Nippur (figure 17, top)<sup>45</sup> show a cruciform symbol similar to a clover-leaf and a pubic triangle, the latter possibly a *pars pro toto* depiction of a woman, as in the Neo-Sumerian model from Tell Asmar (figure 17, bottom left).<sup>46</sup> Bed models portraying couples having sexual intercourse show that, then as now, beds were used not only for sleeping (figure 17, bottom right).<sup>47</sup> Thus, beds are connected to the most important events in the life cycle: sexuality and procreation as well as death.<sup>48</sup>

<sup>44</sup> Cholidis 1992, 243–244, 247–248, 253, 256.

<sup>45</sup> Cholidis 1992, 261–262.

<sup>46</sup> Cholidis 1992, 265–266. A possible parallel find comes from Egypt, where a bed model depicting a woman breastfeeding a child was found (Seipel 1989, 246). The Egyptian model, however, dates to the New Kingdom and therefore falls outside the scope of this work.

<sup>47</sup> Cholidis 1992, 272–273. The highly debated question of whether they depict a *hieros gamos* or an “ordinary” sexual act as well as the general function of the models must not concern us here as it is without connection to the subject of sleep.

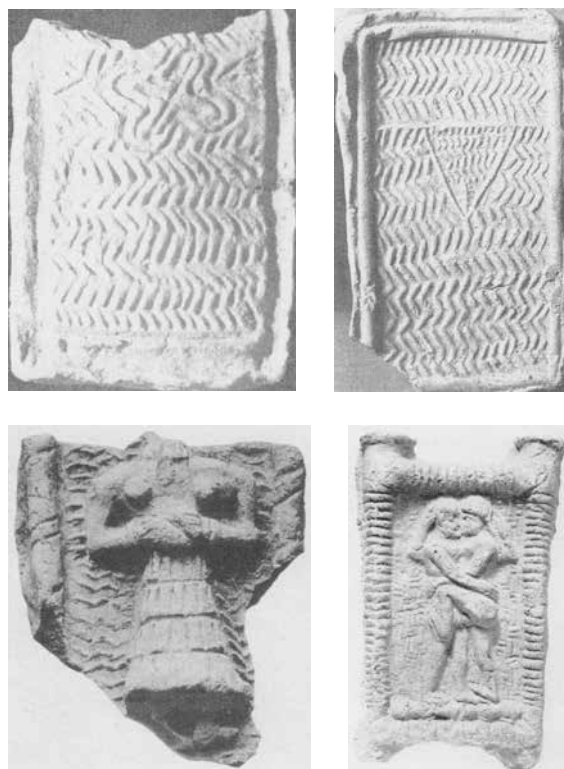


Fig. 17 Bed models from Nippur (Ur III period, top), Tell Asmar (Neo-Sumerian period, bottom left) and of unknown provenance (probably Neo-Sumerian period, bottom right)

The vast majority of bed models, however, were produced in the first half of the second millennium BC. As they do not differ significantly from their predecessors, I will omit a detailed description here. At the end of the Old Babylonian period, the custom of fabricating bed models from clay goes out of fashion, although some isolated objects appear until the third century AD. In summary, more than two hundred clay models of beds have been excavated, most of them having been located in living quarters. Also, some examples were obtained in temple complexes, predominantly associated with the cult of Ištar or a related deity.<sup>49</sup> Unfortunately, reports of Old Babylonian bed models obtained from graves cannot be relied on because the context has not been observed properly.<sup>50</sup> That bed models might have been produced not only from clay is suggested by a pendant from

<sup>48</sup> Steinert 2010, 273.

<sup>49</sup> Cholidis 1992, 172–173, 180–183. An ivory carving which shows Ištar/Astarte or a related deity under a winged sun was attached to a bed in Nimrud in the second half of the second millennium BC (Cholidis 1992, 190).

<sup>50</sup> Cholidis 1992, 138.

bronze.<sup>51</sup> Still, as neither its dating nor its place of finding is known, it can only be considered as anecdotal evidence here.

About a dozen finds from the centre and north of Israel and Palestine illustrate that bed models were not limited to Mesopotamia.<sup>52</sup> From the pattern indicating the woven lying surface, it becomes clear that these are bed models like the ones discussed above, although some examples are square rather than rectangular.<sup>53</sup> In Gezer, a specimen from limestone appears in a supposedly Early Bronze Age II context (figure 16, bottom right), while one from Tel Dalit might even be older because the settlement was abandoned during this period. The majority, however, date to Early Bronze Age III, and the custom of producing bed models completely disappears after this period.

Written sources offer additional information about the construction of beds. While opulence in terms of materials and decoration could differ considerably, most Mesopotamian beds were composed of the same parts that did not change much in the course of time.<sup>54</sup> The bottom was either made of wood or could consist of nets from ropes, rushes or metal to make it more elastic and comfortable. These nets were attached to the frame by rings and hooks. According to Sumerian written records, the pieces for the sides, head and feet as well as ledges and legs consisted of different materials.<sup>55</sup> While in the Early Dynastic period only several types of wood are mentioned, in the Neo-Sumerian/Ur III period some beds were furnished with fittings from copper, silver or gold. Feet could be zoomorphic, shaped, for example, like bovine feet or snake heads. Akkadian sources do not differ much from the Sumerian ones.<sup>56</sup> Painted beds, beds from solid silver or gold and furnishings from ivory and gemstones are also mentioned. Special forms include double beds, beds for travelling and in one case even a bunk bed. Mattresses and bedding from reed, rushes,

palm fibre, goat hair, wool, felt, hides or linen contributed to the sleeper's comfort.<sup>57</sup> Some sleeping places were complemented by bedside rugs and canopies. A single Old Babylonian reference to what is likely translatable as "headrest" (*paššūr qaqqadi*, i.e. "table of the head"<sup>58</sup>) suggests that the Egyptian custom (see chapter 5.2) had become known by that time at the latest but did not gain widespread popularity.<sup>59</sup> Altogether, there seem to be no strict conventions about how beds had to be built, but rather there simply existed a basic form that could be modified according to the owner's taste and wealth. The most luxurious beds were for kings and gods. King Gudea of Lagaš (see chapter 4.4), for example, is reported to have slept in a bed strewn with fragrant spices. Couches were made from the same materials, and therefore the difference between the two types of furniture does not become entirely clear from the written sources.<sup>60</sup> Unfortunately, there are neither clay models nor archaeological findings of couches to shed further light on this question.

### 4.3 EARLY RITUAL AND ADMINISTRATIVE SOURCES CONCERNED WITH DREAMING

The earliest pictorial representation of an activity connected to dreaming can be found on a cylinder seal from the late Early Dynastic period (figure 18).<sup>61</sup> The seal depicts a bed with bovine legs and a carved headboard, on which a woman lies supine. She is dressed in a robe usually worn by priestesses or goddesses and holds her right arm over her face. At one end of the bed there is a kneeling man, apparently touching the feet of the woman. At the other side are positioned a woman with her arms raised in what seems to be

<sup>51</sup> Nagel 1963, 31. In the original publication, it is identified as a table, but, as its interior parts seem to depict webbing, an interpretation as a bed is more likely.

<sup>52</sup> Beck 2002, 280–282.

<sup>53</sup> It is unlikely, although possible, that chairs are depicted here as chairs are indicated by different stylistic conventions concerning the decoration (Cholidis 1992, 123).

<sup>54</sup> Salonen 1963, 147–157.

<sup>55</sup> Salonen 1963, 111–123.

<sup>56</sup> Salonen 1963, 123–137.

<sup>57</sup> Salonen 1963, 157–170.

<sup>58</sup> Original translation: „Kopfstütze (Gestell) (des Bettes)“. – Eig. „Tisch des Kopfes“. (Salonen 1963, 168).

<sup>59</sup> Most later descriptions of headrests refer to Egyptian imports, for example, the one that was given as a present to Kadašmanḥarbe I by Amenhotep III (1390–1353 BC, Dynasty 18, New Kingdom (Hornung et al. 2006, 492)) together with Egyptian beds (Salonen 1963, 168–169).

<sup>60</sup> Salonen 1963, 139.

<sup>61</sup> Asher-Greve 1987, 27–32. The date is derived from stylistic clues as it is not known where the seal was found.



a praying gesture and a man with lowered arms. The woman on the bed and the kneeling man are larger than the two attendants, thus indicating that they are persons of higher rank. The scene is crowned by a crescent moon and a star, and under the bed are visible a scorpion and a vessel.



Fig. 18 Impression of a seal from the late Early Dynastic period

For reasons of stylistic convention, a depiction of a scene of healing, death or birth, or else a *hieros gamos*<sup>62</sup> can be ruled out, so the only remaining possibilities are an (induced) dream or the interpretation of a dream. Given the “wide open eyes” and the raised arm of the woman on the bed, Julia Asher-Greve thinks it unlikely that this is a dreaming scene and favours dream interpretation instead. Then again, she draws attention to the similar imagery in the letter-prayer of Sîn-iddinam, in which a demon passes closely by the feet of the sleeping king (see chapter 4.4). Annette Zgoll has shed more light on this question, pointing out that “dreaming” was philologically conceptualised as a way of “seeing”, which serves to strengthen the interpretation as an incubation scene.<sup>63</sup> In an incubation, the person performing it goes to sleep with the explicit intent of influencing dream content.<sup>64</sup> This can be achieved by focusing on the intended topic of the dream and repeating it over and over again while falling asleep.

A comparable scene might be portrayed on an Early Akkadian cylinder seal.<sup>65</sup> Here again, people are lying on a bed with another person kneeling next to it and a scorpion below. Rainer Boehmer has interpreted the scene as a *hieros gamos* because the seal shows two people lying



Fig. 19 Impressions of seals from the Jemdet Nasr period; squatting women on couches and vases (top), squatting women on couches, goat and other designs (middle), squatting women and “spider” design (bottom)

on the bed and because of its similarity to a third seal in which the kneeling person is missing. Yet, this is hardly convincing as the latter lacks the second person on the bed which caused him to argue for a *hieros gamos* in the first place. It seems more likely that all three are cases of dreaming scenes. In summary, the question that remains is whether these are scenes of dream interpretation or incubation, and it cannot be answered satisfactorily at present. Likewise, the scorpion under the bed, which is depicted in all three seals, remains enigmatic so far. Moreover, no information has survived about the owners of the seals, leaving us in the dark about the reasons why a scene of dreaming or dream interpretation would be chosen as a personal symbol. We can only speculate that the owners were somehow connected to rituals in which dreams were of importance or that they had benefitted from them in some way in the past.

Beds are also depicted on squat seals of the Jemdet Nasr period, in which a pigtailed female figure that either stands or squats on a bed or bench is among the most common subjects (figure 19).<sup>66</sup> Although in some of the seals the pigtailed figures are connected with scenes of sacrifice or other rituals, their meaning does not seem conjecturable, and neither are they

<sup>62</sup> A *hieros gamos* (“sacred marriage”) is a sexual ritual in which the marriage between mythical persons, i.e. a goddess and a god or a hero, is re-enacted.

<sup>63</sup> Zgoll 2006, 430. Also, it is not wholly clear whether the circular drillings are really meant to depict wide open eyes.

<sup>64</sup> Moorcroft 2003, 164–165.

<sup>65</sup> Asher-Greve 1987, 27; Boehmer 1965, 121, 190, pl. 58.

<sup>66</sup> Frankfort 1939, XXV, XXVIII, 35–36, 75.



Fig. 20 Impressions of seals from the Jemdet Nasr period; drinking scene and shrine (top), female figure and shrine (bottom)

of much help concerning technical details of bed construction (figure 20). As with the bed models (see chapter 4.2), Early Dynastic seals exist which depict beds in the context of sexual scenes, i.e. a *hieros gamos*. Particularly interesting is a seal from the Early Dynastic III period on which again a scorpion can be seen beneath the bed (figure 21). Henri Frankfort thinks it possible that it symbolises the goddess of love Ishara<sup>67</sup>, but with respect to the scorpion appearing in the dreaming scene described above, this seems unlikely. Rather, the scorpion seems to be connected to beds and therefore to the topic of sleep in general.<sup>68</sup>

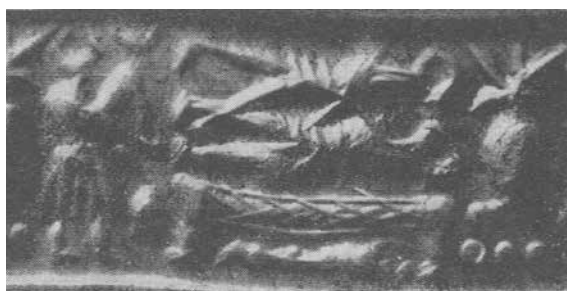


Fig. 21 Impression of a seal with a sexual scene (Early Dynastic III period)

Roughly contemporary with the cylinder seals, the oldest written record mentioning a dream dates to the twenty-fifth to twenty-fourth century BC.<sup>69</sup> Discovered close to the northern

border of the tell of Mari, Syria, only the middle part of this large Old Sumerian tablet has been preserved. Although interpretation is accordingly difficult, it seems likely that in columns II and III a dream is mentioned and followed by an incantation formula, while in column IV a person is ascending to heaven to cut a plant there:<sup>70</sup>

« Le voyant se trouve/est assis à la tête de la femme couchée.

...  
qui pour un rêve s'est couché(e) ;

... ... a expliqué (le rêve).

Incantation : Puisse Inanna, qui ...,  
chasser les maux !

...  
la deuxième année il alla au ciel ;  
Sa parole (est) un roseau-ZI :  
une hache (le) coupe(ra) ;  
Sa parole (est un) pasteur amorrite :  
Inanna (Eštar<sup>71</sup>), Utu (Šamaš<sup>72</sup>), le héros,  
et Ningirsu  
[...] »<sup>71</sup>

Marco Bonechi and Jean-Marie Durand consider this text a description of a ritual in which the woman acted as a medium, receiving divine messages in her sleep, while the person watching at her head was entrusted with the interpretation of her dream. In the translation of Zgoll, however, the specialist is not thought to be present at the time of the incubation but to solve it later in the temple of Inana.<sup>72</sup> The word in question, Sumerian *bur<sub>2</sub>* (Akkadian *pašāru*), denotes a key concept in the Mesopotamian understanding of dreams. It has a twofold meaning and can be translated as the sorting out of a dream's meaning as well as the (dis-)solving of the evil events potentially predicted by it.<sup>73</sup> Still, if the incantation is to be interpreted as such, this is the oldest evidence of an occupation connected to the solving of dreams as well as of a ritual with the same purpose.<sup>74</sup> It is unfortunate

<sup>69</sup> Bonechi and Durand 1992, 151–155.

<sup>70</sup> Bonechi and Durand interpret this as a myth that has not survived to our times (Bonechi and Durand 1992, 159).

<sup>71</sup> Bonechi and Durand 1992, 152–153 (II 4–IV 8).

<sup>72</sup> Zgoll 2006, 313. Zgoll translates: „Für den, der sich zum Traum niedergelegt hatte, löste der ... (den Traum). Im Tempel Inanas ...: „Inana, fälle die Entscheidung (in der) Sache!“ (Zgoll 2006, 465 (III 2–4)).

<sup>73</sup> Oppenheim 1956, 217–219; Zgoll 2006, 372–383, 394–396.

<sup>74</sup> Zgoll 2006, 415, 464–465.

<sup>67</sup> Frankfort 1939, 75.

<sup>68</sup> An interpretation as a nightmare (the classic “monster under the bed”) seems possible but not very likely. In this case, we could think about an apotropaic function of the seals to repel nightmares.



that the tablet is in such poor condition, making the connection between the dream and the upward movement to the heavens or sky in column IV unclear. In any case, the joint mention of these two subjects is something to bear in mind as similar topoi will become apparent in later sources.

Two Old Sumerian clay tablets from Lagaš, Iraq, which were inscribed during the reign of King Lugalanda of Lagaš (ca. 2370 BC<sup>75</sup>), were thought by Gebhard Selz to list the offerings used for burial rites.<sup>76</sup> As such, they would have constituted the earliest reference to a connection between dreams and death,<sup>77</sup> but this interpretation has become doubtful as Zgoll has argued that the accounts in question refer to the rewards for an incubated dream:<sup>78</sup>

„1 Ziegenböckchen hat man der Nin-TUR, der Schwester des Aufsehers Ĝišgal-si, die sich niedergelegt hatte (zum Traum), gebracht.“<sup>79</sup>

„1 kleines Ziegenböckchen hat man Munus-saga (und) dem Boten Addašusikil, deren jeder sich niedergelegt hatte (zum Traum), gebracht.“<sup>80</sup>

Obviously, this was part of the scope of duties of Nin-TUR, Munus-saga and Addašusikil. It is also important to note that one of the three recipients is male, whereas dream specialists mentioned in other texts are usually female.<sup>81</sup> Still, as he is identified as an envoy, it is unlikely that he was also a professional dream specialist.

The Sumerian *Nin-me-šara*, a “song” to the goddess Inana, was composed by En-hedu-Ana, the daughter of Sargon of Akkad,<sup>82</sup> near the end of the reign of Narām-Sîn of Akkad (2254–2218 BC<sup>83</sup>).<sup>84</sup> En-hedu-Ana refers to a political conflict: someone she considers a rebel has seized power in Ur and driven her out of her position as the priestess of the city god Nanna. In her “song” she petitions Inana to intervene and reverse the hostile verdict against her:

„Mein eigener Prozeß ist noch nicht abgeschlossen, da umgibt mich ein fremder Urteilsspruch als sei es mein Urteilsspruch.

Zum strahlenden Bett hat er die Hände nicht ausgestreckt.

Das Wort Ningals habe ich dem Mann nicht ‚gelöst‘.

Die strahlende en-Priesterin Nannas bin ich.“<sup>85</sup>

Although there is no explicit mention of a dream, the reference to a bed as well as to the task of solving something (*bur*<sub>2</sub>) allows us to draw conclusions about En-hedu-Ana’s duties as an *en*-priestess. Against this background, it appears that the goddess Ningal, the spouse of Nanna, has either sent a message dream to the rebel or a message dream concerning him to someone else and that En-hedu-Ana has refused to solve it.

#### 4.4 DREAMS IN SUMERIAN ROYAL INSCRIPTIONS

Because dreams were employed as an important means of political legitimation in Mesopotamia, they are already attested in the Early Dynastic III period. The *Stele of the Vultures*, erected by King Eanatum of Lagaš (ca. 2470 BC<sup>86</sup>), was discovered in Ĝirsu (modern Telloh, Iraq) and features the oldest dream whose contents have survived to this day.<sup>87</sup> Although in fragmentary condition, interesting observations can be made from the limestone stele in which the conflict concerning water sources between the city-states of Lagaš and Umma is described. In it, the god Ningirsu appears to the sleeping Eanatum and predicts his victory over Umma:

“[(1 frag. and 5 broken cases)] He followed after him. Him who lies sleeping, him who lies sleeping—he approaches his head. Eanatum who lies sleeping—[his] be[loved] master [Ningirsu approaches his head. (3 cases broken)]. ‘Kish itself must abandon? Umma, and, being angry, cannot support it. The sun-(god) will shine at your right, and a ... will be affixed to your forehead. O Eanatum, [(7 cases broken)] you will slay there. Their myriad corpses will reach the base of heaven. [In] Um[ma (5 cases broken)] the people of his own city] will rise up

<sup>75</sup> Edzard 2009, 52.

<sup>76</sup> Selz 1989, 370–371, 374–375 (Nik 149 and Nik 153).

<sup>77</sup> Selz translated *ba-ná-a*, which means “to lie down”, as a metaphor for dying.

<sup>78</sup> Zgoll 2006, 98, 107–108.

<sup>79</sup> Zgoll 2006, 108 (Nik 149).

<sup>80</sup> Zgoll 2006, 108 (Nik 153).

<sup>81</sup> Zgoll 2006, 433–434.

<sup>82</sup> Westenholz 1989, 539–540.

<sup>83</sup> Van De Mieroop 2007, 302.

<sup>84</sup> Zgoll 1997, 38; Zgoll 2006, 376–378.

<sup>85</sup> Zgoll 2006, 377 (lines 117–120).

<sup>86</sup> Edzard 2009, 261.

<sup>87</sup> Cooper 1986, 33–39.

against him and he will be killed within Umma itself. In<sup>2</sup> the ... region you will [...] (18 cases broken)].”<sup>88</sup>

Although no dream is explicitly mentioned, the phrase in which the god approaches his head as well as the shortened incubation formula clarify the meaning.<sup>89</sup> They are also used in Gudea of Lagaš’s (ca. 2100 BC<sup>90</sup>) temple hymn, which is among the longest Sumerian literary compositions altogether.<sup>91</sup> The hymn has been preserved on two enormous clay cylinders from Ġirsu, of which cylinder A commemorates the rebuilding of the city god Ningirsu’s temple complex En-innu by the king. To do so, Gudea is instructed in a dream by the god himself. Still, the dream requires interpretation by the goddess Nanše, who is proficient in the task:

“On that very day he saw his master, Gudea saw the lord Ningirsu in a night-time vision, and (Ningirsu) told him about building his House.

He let Eninnu, whose powers are the greatest, stand before his eyes.

Gudea, (although) having a far-reaching mind, tried to grasp the meaning.

‘Well, well, I will have to tell it to her, may she assist me in that matter.

Profound things have come to me, the shepherd, all of a sudden — but I did not understand what the night-time vision means.

(Therefore) I will bring my dream before my mother,

may she, the interpreter of dreams, who knows best what befits me, may my Nanše, sister in Sirara, reveal the meaning to me.”<sup>92</sup>

Gudea then travels to Nanše’s temple Sirara in Nigin and relates his dream to her in a prayer:

“Nanše, mighty queen, lustration priestess, protecting genius, cherished goddess of mine, lady making promises as firm as Enlil does, my Nanše, what you say is trustworthy, takes precedence.

You are the interpreter of dreams among the gods, you are the queen of all the lands, O mother, my matter today is a dream.

There was someone in my dream, enormous as the skies, enormous as the earth was he.

That one was a god as regards his head, he was the Thunderbird as regards his wings, and a floodstorm as regards his lower body.

There was a lion lying on both his left and right side.

He told me his house should be built, (but) I did not understand what (exactly) he intended.

Daylight rose for me on the horizon.

(Then) there was a woman — whoever she might have been —

coming forward(?) she did ... sheaves.

She held in her hand a stylus of shining metal, on her knees there was a tablet (with) heavenly stars,

and she was consulting it.

Furthermore, there was a warrior who bent (his) arm holding a lapis lazuli plate on which he was setting the ground-plan of a house.

He set before me a brand-new basket, a brand-new brick-mould was adjusted and he let the auspicious brick be in the mould for me.

In a pleasant poplar tree standing before my eyes *tigidlu* birds kept twittering.

A stallion at my master’s right side was pawing the ground for me.’

His mother, Nanše, answered the ruler:

‘My shepherd, I will interpret your dream for you from beginning to end.

The person who you said was as enormous as the skies, enormous as the earth, who was a god as regards his head, who, as you said, was the Thunderbird as regards his wings, and who, as you said, was a floodstorm as regards his lower parts,

at whose left and right a lion was lying — he was in fact my brother Ningirsu; he talked to you about the building of his shrine Eninnu. The daylight that had risen for you on the horizon — that was your (personal) god Ningišzida: like daylight he will be able to rise for you from there.

The young woman coming forward, who did something with sheaves, who was holding a stylus of shining metal, had on her knees a tablet (with) stars, which she was consulting — she was in fact my sister Nisaba;

she announced to you the bright star (auguring) the building of the House.

Furthermore, as for the warrior who bent his arm holding a lapis lazuli plate — he was Ninduba: he was engraving thereon in all details the ground-plan of the House.

The fact that a brand-new basket was placed before you, that a brand-new brick-mould was adjusted and that the auspicious brick was placed in the mould — that verily concerned the true brick of Eninnu.

<sup>88</sup> Cooper 1986, 34.

<sup>89</sup> Zgoll 2006, 17, 317, 336.

<sup>90</sup> Edzard 2009, 261.

<sup>91</sup> Edzard 1997, 68–88.

<sup>92</sup> Edzard 1997, 69–70 (I 17–II 3).

The fact that, as you said, in a pleasant poplar tree standing before you *tigidlu* birds kept twittering — (it means) that sweet sleep will not come into your eyes while you build the House. The stallion which, as you said, was pawing the ground for you at the right side of your master — that is yourself, like a steed you are (now) pawing the ground for Eninnu.”<sup>93</sup>

Nanše gives instructions for cultic preparations, which are strictly followed by Gudea. He goes to the temple, brings the offerings specified previously and prays to Ningirsu. When he lies down to sleep the next time, he has another dream:

“Thereafter, (Ningirsu) stepped up to the head of the one who was sleeping, sleeping, briefly touching him (saying):  
‘For what you will build, will build for me, ruler, for the House you will build for me, Gudea, for the House I’ll now give you the ominous sign. I will tell you the bright star(s) (which indicate) my regulations(?)’.

[...] *Ningirsu extensively describes his powers and the glory of his temple.*

When you, O true shepherd Gudea, will effectively start (to build) my House for me, the foremost house of all lands, the right arm of Lagaš, the Thunderbird roaring over the whole sky, my kingly Eninnu

then I will call up to heaven for a humid wind so that surely abundance will come to you from above and the land will immediately (or: under your reign) gain in abundance.

When the foundations of my House will be laid, abundance will surely come to you at the same time:

[...] *A depiction of the resulting favourable circumstances and of all the goods that will start to flow in follows.*

At that time your arm will be (as if) branded by fire — did you (now) understand what I intended to show you?’

Gudea rose from sleep, he was frightened by the dream.”<sup>94</sup>

The building of the temple commences exactly as foreseen, and during the process Gudea has a third dream, confirming the correctness of his actions and foreshadowing the successful completion of the temple:

“Lying down Gudea rested, and a ‘word’ came up to him:

The building of his master’s House, the separating of the Eninnu from heaven and earth — was it (not) before his eyes?

It made him extremely happy.”<sup>95</sup>

Gudea’s dream is exemplary for Sumerian ideas as the full scope of acts required in dealing with meaningful dreams is described: the dream needs to be interpreted/solved (*bur<sub>2</sub>*) by a dream specialist (*ensi*), verified by other means of divination and finally acted upon.<sup>96</sup> In the beginning, the dream is summarised in brief words and Gudea sets forth immediately to receive an interpretation by some qualified person, in this case, the goddess Nanše. In this context, a further aspect deserves mentioning as Nanše is usually conceptualised as the daughter of the god Enki, who has a special relationship to dreams and their interpretation as well (see chapter 4.6).<sup>97</sup> Although the dream images seem rather obvious insofar as they feature typical iconography concerning Sumerian gods and refer to the temple’s construction by almost unmistakable images of building tools, nevertheless the skills of a professional dream specialist are required. Thus, the more symbolic dream images, for example, the stallion as a metaphor for Gudea himself, become clear as well. Also note the light phenomena that accompany the appearance of the god Ningišzida, which are a common feature of (not only Sumerian) dreams, as will become apparent later in the stories about the hero Gilgameš (see chapter 4.6).

According to Nanše, the dream is positive, and Gudea is to build a temple for Ningirsu. Still, there are more acts of divination necessary to be sure that the construction of the temple really is the will of the gods. To set forth on such an endeavour without explicit permission by the gods would result in severe consequences, as illustrated in the *Curse of Agade* (see chapter 4.6). On the recommendation of Nanše, another dream is incubated, followed by an extispicy<sup>98</sup> and further omens. The incu-

<sup>93</sup> Edzard 1997, 81 (XX 7–XX 12).

<sup>96</sup> Zgoll 2006, 116–117, 401–403.

<sup>97</sup> Zgoll 2006, 431.

<sup>98</sup> An extispicy is a form of divination in which the entrails of sacrificed animals are inspected to explore the will of the gods.

<sup>99</sup> Zgoll 2006, 318–321.

<sup>93</sup> Edzard 1997, 71–73 (IV 8–VI 13).

<sup>94</sup> Edzard 1997, 74–76 (IX 5–IX 10, XI 1–11, XII 10–13).

bation itself proves fairly complex.<sup>99</sup> Gudea offers presents, sacrificial animals and incense to Ningirsu, followed by prayer inside the temple complex. That the next dream is a sought one is also recognisable by a fixed formula for incubations (*ma-mu<sub>2</sub>-de<sub>3</sub> ba-nu<sub>2</sub>* – “to lie down approaching a dream/to see a dream”), only recently discovered by Zgoll.<sup>100</sup> In roughly contemporary texts, *nu<sub>2</sub>/na<sub>2</sub>* (“to lie down”) can also be used with the meaning of laying bodies or things into a grave, something to keep in mind with regard to texts discussed below.<sup>101</sup>

Finally, Gudea is definitely sure about the dream’s meaning, and the building of the temple commences. A third dream is then recounted, in which his actions are confirmed again, but this time it is only briefly summarised because the necessary interpretation has taken place already. This passage is translated differently by Zgoll, who has argued that the third dream is a sought one by a professional dream specialist (*lu<sub>2</sub>-saĝ-še<sub>3</sub>-nu<sub>2</sub>-a*).<sup>102</sup> Again, we find indications of a highly developed ritual apparatus concerning dreaming. Furthermore, Gudea’s temple hymn is the oldest case where the phrase *u<sub>3</sub>-sa<sub>2</sub>.g* sleep is used, which Zgoll has discovered to be a particular sleep desired in incubations. The word has a broad spectrum of meanings and can be variously translated as “deep sleep”, “rigidity” or “sleep with revelations”. It is also often used together with the topos of fearful awakening.<sup>103</sup> Zgoll interprets this as the *tremendum* resulting from the encounter with the divine, but another explanation seems more likely, especially in connection with the mention of rigidity: sleep paralysis, in which the muscle atonia would feel like rigidity for the sleeper, is commonly associated with intense anxiety. Moreover, dream content can be experienced while the sleeper is already half awake and has regained reflective consciousness (see chapter 2.11). Sleep paralysis is also connected to dreams in which intense movement is experienced, a type of dream that is reported by the majority of people in most parts of the world and usually considered particularly vivid and memorable (see chapter

2.10). Taken together, these elements make it easy to employ sleep paralysis in a ritual context because seemingly “supernatural” events, namely dream content, intrude into the waking world and are witnessed by the sleeper, who is nevertheless fully conscious and able to reflect upon the experience.

In the long hymn Šulgi O, an encounter between King Šulgi of the Third Dynasty of Ur (2094–2047 BC<sup>104</sup>) and Gilgameš, whom he claimed to be his heroic “brother”, is described.<sup>105</sup> The part in which their meeting is depicted is fragmentary, and the content remains obscure to some extent. It seems that, after having performed certain cultic preparations, Šulgi either brings a statue of Gilgameš into a temple or enters a chamber where it is installed already. The meeting between the brothers takes place in this chamber, where they see each other and alternate in singing each other’s praise, concentrating mainly on military victories:

“On that day(?), Gilgameš, the lord of Kulaba,  
With Šulgi, the righteous shepherd of Sumer,  
Conversed at his ‘shining feet’  
That their praise be sung unto eternity,  
That it be handed down for distant days,  
That it be not forgotten for remote years.”<sup>106</sup>

Only recently did Zgoll discover that this conversation between Šulgi and Gilgameš probably takes place in a dream right before dawn (*ĝiri<sub>3</sub>-babbar-ra*), a term that is also used in *Enmerkar* and *EnSUHkešda’ana* (see chapter 4.6). She translates:

„An diesem Tag haben Gilgameš, der en von Kulaba, (und) Šulgi, der tatkräftige Hirte von Sumer, während des Morgendämmerers miteinander Worte (hervorgebracht =) gewechselt.“<sup>107</sup>

The emphasis on the fact that the dream took place in the early morning hours adds to the credibility of the reading of *u<sub>3</sub>-sa<sub>2</sub>.g* sleep as sleep paralysis. *ĝiri<sub>3</sub>-babbar-ra* seems to denote a hypnopompic state in which a dream is experienced while the mind is already in the process of waking up, i. e. a kind of lucid dream (see chapter 2.11). As a phenomenon related to and partially overlapping with sleep paralysis, hypnopompic (while waking up) as well as hypnagogic

<sup>100</sup> Zgoll 2006, 311, 317. The incubation formula is shortened in this case.

<sup>101</sup> Steinert 2010, 239.

<sup>102</sup> Zgoll 2006, 404–405. „Gudea ließ einen Traumspezialisten ‘heran’-liegen, woraufhin ihm ein Wort hervorkam.“ (Zgoll 2006, 337; XX 7–XX 8).

<sup>103</sup> Zgoll 2006, 62–64, 112–115.

<sup>104</sup> Edzard 2009, 261; Van De Mieroop 2007, 303.

<sup>105</sup> Klein 1976, 271–285.

<sup>106</sup> Klein 1976, 277 (lines 41–46).

<sup>107</sup> Zgoll 2006, 67 (lines 41–43).



(while falling asleep) lucid dreams are marked by their vividness and memorability, while the sleeper's heightened state of consciousness sets them apart from ordinary dreams by making them seem more real. Unfortunately, the passages in which Gilgameš supposedly speaks are particularly damaged. This leaves us with the unusual situation of a king who addresses a god in a dream instead of the other way around.

Even more damaged is the hymn Šulgi D, which portrays the king in the company of Anzaqar, the Mesopotamian god of dreams.<sup>108</sup> It is likely that a dream episode was introduced here, but its content is lost:

"Anzaqar, the god of dreams,  
Like their' good uduḡ-spirit, ..... [.....].  
..... in' a dream [.....]  
[.....] ..... [.....]  
Their [.....]  
(about 30 lines missing)"<sup>109</sup>

Jacob Klein speculates that the dream was described as being sent to Šulgi by Anzaqar to guarantee ongoing divine patronage in his coming military expedition. Although it is tempting to follow his reconstruction based on similarities to other dream accounts, the endeavour is risky as the Šulgi hymns seem unusual concerning several features. Probably the most striking one is the reference to Anzaqar, which is the earliest mention of a god of dreams in the Sumerian sources. It is important to note that such a deity existed at all as this is the only known personification of a type of divination or religious experience in Mesopotamia.<sup>110</sup> His role remains unclear, nonetheless. While it seems as if the message was transmitted from Anzaqar to Šulgi in the case above, most other accounts of divine messages in dreams get along without the god of dreams appearing himself.

The Neo Sumerian hymn about King Id-din-Dagan's (1974–1954 BC, First Dynasty of Isin<sup>111</sup>) sacred marriage to Inana, in which Id-din-Dagan plays the role of Inana's husband Dumuzi (see chapter 4.6),<sup>112</sup> contains portrayals

of the goddess's several aspects.<sup>113</sup> Of these, the section praising Inana in her manifestation as the evening star is of interest here:

"Having imposed sweet sleep  
on the nation's homes,  
— while all lands, the dark-headed ones,  
the nation in its entirety,  
sleep on roofs, sleep on city walls —  
eloquent dream-soul afflati step up to her,  
bring her their cases.  
Then she discerns the righteous one,  
discerns the wicked one.  
The wicked one she will hand over  
to (serve) a wicked sentence,  
the evil one she will do evil to.  
On the just one she looks truly,  
determines a good fate for him."<sup>114</sup>

Not only is this one of the rare mentions of contact between gods and ordinary people taking place in dreams but it also suggests the idea that some part of the person leaves during sleep and travels to a place where the gods are, a concept we will revisit in chapter 4.6.<sup>115</sup> The passage sheds light on sleeping conventions as well, supporting the observation that rooftops were a common sleeping place (see chapter 4.2).

A letter-prayer of King Šîn-iddinam of Larsa (1849–1843 BC<sup>116</sup>) is extant in six copies.<sup>117</sup> In it, the king addresses Nin-isina, who was not only the tutelary goddess of the rival kingdom of Isin but also a general healing goddess throughout Sumer. Šîn-iddinam describes how his past was characterised by piety and prosperous rule until, having suffered a demonical attack<sup>118</sup> in a dream at night, he is plagued by a certain illness. Of this, he wants to be cured by Nin-isina and her healer-son Damu:

<sup>114</sup> Jacobsen 1997, 556–557. Zgoll translates: „Die sich auf dem Dach niedergelegt haben, die sich auf der Mauer niedergelegt haben, [inmitten des Traumes], sind sie vor sie getreten, haben ihre Fälle vor sie gebracht.“ (Zgoll 2006, 303, lines 115–116). Original translation: “(The assembled people) lying on the roofs, lying on the walls, They come to her with ..., they bring their matters before her, Then she knows the matter, she recognizes evil, She renders an evil judgement to the evil, she destroys the wicked, She looks favorably upon the just, she determines a good fate for them.” (Reisman 1973, 189, lines 115–119).

<sup>115</sup> Zgoll 2006, 266, 270.

<sup>116</sup> Van De Mieroop 2007, 304.

<sup>117</sup> Hallo 1976, 212–221.

<sup>118</sup> Zgoll 2006, 127.

<sup>108</sup> Klein 1981, 53–54.

<sup>109</sup> Klein 1981, 83 (252–286).

<sup>110</sup> Butler 1998, 85. Similarly, no Egyptian god of dreams is mentioned during the times that fall within the scope of this work.

<sup>111</sup> Van De Mieroop 2007, 303.

<sup>112</sup> Kramer 1963, 490.

<sup>113</sup> Jacobsen 1997, 554; Reisman 1973, 185–192.



“A young man to me [sic] at night in the guise  
of a dream passed by me on his feet,<sup>119</sup>  
He stood at my head, I myself saw his terrible  
glance,  
Carrying a river-oar(?), having cast a spell most  
evilly.  
Since that day my manhood is not in order, his  
hand has seized me.  
I cannot escape from my fears by myself, an  
evil sickness has seized me.  
My sickness is an unlit darkness, not visible to  
man.”<sup>120</sup>

In his letter-prayer, *Sîn-iddinam* refers to sleep twice. While in the first case he uses sleep as a metaphor for the negligence of his royal obligations,<sup>121</sup> later on he laments that since he is ill, he cannot sleep at night any longer and therefore stresses the beneficial and healthy qualities of sleep.<sup>122</sup> All in all, *Sîn-iddinam*’s letter-prayer offers an extremely unusual account of a dream in Sumerian literature. For example, the phrase of approaching the head, usually employed for gods, is used here in connection with a demon, and the common descriptions of the dream and its interpretation are missing. This is likely due to the different genre of the text compared to other accounts of royal dreams. While these are mostly preserved in the form of inscriptions or literary compositions, produced only some time after the dream had taken place, *Sîn-iddinam*’s letter-prayer stems from a ritual context. As it is concerned with the king’s illness, i.e. a pressing concern, the temporal difference between the incident itself and its description is only very small, thus accounting for the unusualness of the text.<sup>123</sup>

#### 4.5 DREAMS IN LETTERS FROM THE ARCHIVE IN MARI

A somewhat extraordinary group of dream accounts is included in the letter archive of King *Zimri-Lim* of Mari, dating to the eighteenth

century BC (Old Babylonian period). All but one letter were found in room 115 of the palace. They are distinguished from other dream accounts treated in this work for one thing because of the location of Mari (modern Tell Harīrī, Syria) in the middle Euphrates valley and thus outside the Mesopotamian heartland and, for another, due to an “Überlieferungszufall”, i.e. the unusual abundance of letters from the same context.<sup>124</sup> As the letters form a rare corpus of non-literary dream accounts, they offer a realistic glimpse into the dream-life of people that do not solely belong to the highest social classes.<sup>125</sup> The dreamers are both female and male, mostly from the royal family or high officials in service of the king. Occasionally, dreams of people of low rank are reported as well, but contrary to the Sumerian evidence (see chapter 4.4: *Gudea*’s temple hymn) we find no indication of specialists explicitly trained for dreaming.<sup>126</sup> The time when the letters were written down is rather unstable politically, with regular fighting between the Mariotes and either armies of other city states or nomadic groups living in the surrounding grasslands. Conflict as well as other political affairs, which are conceived as inseparable from the king’s fate, thus figure prominently in the dreams preserved, fitting well together with the observation of the general predominance of negative emotions in dreams (see chapter 2.9). Personal contents are rare probably because they were not reportable to the palace.<sup>127</sup>

Letter No. 233 is an account by *Itūr-Asdu*, a high court official, about a lengthy dream experienced by the minor provincial functionary *Mālik-Dagan*. In the dream, the god *Dagan* requests a full report by *Zimri-Lim* about his troubles with the Benjaminites and promises victory in turn:

<sup>119</sup> Variants: “seized me by the feet” or “stationed himself at my feet” (Hallo 1976, 217).

<sup>120</sup> Hallo 1976, 217.

<sup>121</sup> “I do not neglect my duties, I do not sleep sweetly, [...]” (Hallo 1976, 217).

<sup>122</sup> “At midday I am not given any sustenance, by night I cannot sleep.” (Hallo 1976, 219).

<sup>123</sup> Zgoll 2006, 128.

<sup>124</sup> Zgoll 2006, 18.

<sup>125</sup> Durand remarks on the curious absence of movement in the reports, but this is likely due to their summarising and non-descriptive style (Durand 1988, 459). Similarly, the high number of political themes in relation to personal concerns is unusual (Domhoff 2003, 32), but this can be explained by the assumption that only certain dreams were reportable to the palace.

<sup>126</sup> Zgoll 2006, 199. Although suggested previously based on letter No. 240 (Sasson 1984, 284), the evidence is extremely limited and does not bear up to close scrutiny.

<sup>127</sup> Durand 1988, 455, 457; Zgoll 2006, 159, 179.

« Dis à mon Seigneur : ainsi (parle) Itûr-Asdû, ton serviteur.

Le jour où j'ai fait porter cette tablette chez mon Seigneur, Malik-Dagan, homme de Šakkâ, est venu à moi et m'a tenu ces propos :

« Dans un rêve que j'ai eu, moi-même, ainsi qu'un homme avec moi, venant du district de Saggarâtum, (et me trouvant) dans le district d'amont, je me proposais d'aller à Mari. Auparavant, étant entré à Terqa, dès mon entrée, je pénétrai dans le temple de Dagan et je fis l'adoration pour Dagan.

Alors que je faisais l'adoration, Dagan prit la parole et me parla ainsi : « Les rois des Benjaminites et leurs troupes, sont-ils en paix avec la troupe de Zimri-Lim qui est montée ? ». Je dis : « Ils ne le sont pas ».

Avant ma sortie, il me dit ces propos : « Les messagers de Zimri-Lim, pourquoi n'y en a-t-il pas constamment devant moi et pourquoi ne dépose-t-il pas devant moi, un rapport de lui complet ? N'aurais-je point, depuis longtemps, donné pleinement au pouvoir de Zimri-Lim les rois des Benjaminites ? Maintenant, vas ! Tu es mon messenger. Voici ce que tu diras à Zimri-Lim : « Envoie tes messagers chez moi et dépose devant moi ton rapport complet afin que je fasse grouiller les rois des Benjaminites dans la musette du pêcheur et que je les dépose devant toi » ».

Voilà ce que cet homme a vu dans son rêve et ce qu'il m'a dit. Maintenant donc, je viens d'envoyer l'information à mon Seigneur. Mon Seigneur doit faire enquête sur ce rêve.

D'autre part, si c'est le désir de mon Seigneur, mon Seigneur doit déposer par devant Dagan un rapport de lui complet et les messagers de mon Seigneur doivent se succéder chez Dagan. L'homme qui m'a dit ce rêve, donnera un *pa-grum* à Dagan. Aussi ne l'ai je pas envoyé et vu que cet homme représente un cas sûr, je n'ai pas pris une mèche de ses cheveux ni sa cordelette.<sup>128</sup>»

While A. Leo Oppenheim treated this letter as evidence for auditory experiences in dreams and thus as a "message dream"<sup>129</sup>, Zgoll has suggested that dream narratives containing divine speech are to be understood as interpreted versions of real dreams.<sup>130</sup> She specifically draws attention to the fact that human speech remains internal to the dream scene, whereas di-

vine speech always contains an assignment that certain missions are to be fulfilled in the waking world by external addressees. Messages from the gods consist either of orders or of predictions concerning future events. As in other portents, this prophecy is not wholly deterministic but leaves open the possibility of warding off the announced event through the combination of condition and prediction. A number of letters mention a process of oracular verification concerning their status as an omen, discernible from the specific wording employed (*šutta naṭālu* for an ominous dream, *šutta amāru* for a dream not yet verified).<sup>131</sup> In this case, together with the other indications, the wording suggests an omen that has already been verified. Appropriately, the sender has done without the items necessary for a further oracular evaluation. In letter No. 239, Zimri-Lim's daughter Šimātum relates her dream about the naming of a little girl:

« Dis à mon Seigneur : ainsi parle Šimātum, ta servante.

Depuis le jour où l'on m'a fait quitter Mari, je n'ai pas arrêté de courir en tous sens. J'ai vu toutes les villes celles qui servent de demeures à mon Seigneur, et les lieutenants de mon Seigneur m'ont vue. Maintenant, si mon Seigneur se propose de venir à Ilân-šurâ.....

(Lacune)

pour aller au devant de mon Seigneur il/je prendra(i) ..... et il/je marchera(i) en tête de mon Seigneur.

Et, au sujet de la fille de dame Tepâhum, dans un rêve que j'ai eu, un individu se tenait debout et disait :

« La petite, fille de dame Tepâhum, on doit l'appeler « Tagîd-Nawûm » ».

Voici ce qu'il m'a dit. Maintenant, mon Seigneur doit faire décider de cela par un devin. Si ce rêve est réel, mon Seigneur doit appeler la petite « Tagîd-Nawûm ». Qu'elle soit appelée ainsi et que le bien-être de mon Seigneur soit constant ! »<sup>132</sup>

This report is unusual insofar as it lacks the common introduction for dreams, offering a kind of headline "about Tepâhum's daughter" instead. It thus seems that this topic was already known to the king, possibly having provoked reflection or even tension before. The case is important as the name Taggîd-Nawê has a political connotation. It translates as "song of

<sup>128</sup> Durand 1988, 474 (A.15). For an English translation, see Oppenheim 1956, 195.

<sup>129</sup> Oppenheim 1956, 195–196.

<sup>130</sup> Zgoll 2006, 178, 187, 234, 357.

<sup>131</sup> Durand 1988, 456; Zgoll 2006, 356.

<sup>132</sup> Durand 1988, 481 (A.2858).

gladness of the steppe-lands” and as such proclaims or prophecies the subduing and pacification of nomadic groups from the grassland around Mari, who regularly were involved in violent conflicts. To be sure about its meaning, Šimātum suggests a verification of the dream by extispicy to make sure that the girl really is to be named as such. The confirmation of whether the dream “was truly seen” (*šuttum šī naṭlat*), i. e. whether it was an omen, is to be performed by a specialist called *mār bārī*. In this context, it is noticeable that Šimātum also does not state whether the person who spoke to her in her dream was human or divine but deliberately uses ambiguous formulations. The validity of the assignment for the waking world is inextricably linked with the divine identity of the subject issuing the order, and both need to be verified by a specialist.<sup>133</sup>

Several specialists (*mārūbārī*) are involved in this process and seem to be mainly entrusted with extispicy in letter No. 225.<sup>134</sup> Unfortunately, their answer has not been preserved. The letter is written by queen Dam-hurāši's escort, to whom Zimri-Lim previously communicated a threatening dream of his own. The queen is currently travelling in dangerous regions controlled by the Suteans, who might use her as a hostage to force Zimri-Lim to return their territories. He fears that the dream about the kidnapping of his wife might be of ominous importance:

« Dis à mon Seigneur : ainsi (parle) ..... , ton serviteur.

J'ai entendu la tablette que mon Seigneur m'a envoyée. Mon Seigneur m'a écrit en ces termes : « Le rêve que j'ai fait est inquiétant. J'ai peur que Dam-hurāši et toi-même, les Soutéens ne (vous) capturent et qu'ils ne disent : « Tant que tu ne rendras pas nos demeures, nous ne les libèrerons pas » ».

Voilà ce que mon Seigneur m'a écrit. Lorsque j'eus entendu la tablette de mon Seigneur, j'ai convoqué les devins, avec cette question : « Mon Seigneur m'a envoyé un message urgent ; que conseillez-vous ? » Une fois que je les eus interrogés ainsi, ils ont donné leur réponse en ces mots...

(Lacune)

<sup>133</sup> Durand 1988, 457–458; Zgoll 2006, 165–166, 183–184, 353–355.

<sup>134</sup> Zgoll 2006, 419–421.

« ..... l'épouse de mon Seigneur que les ..... l'amènent à bon port. ... tout ce qu'elle a ... aille ! ». »<sup>135</sup>

Further oracular practices are also hinted at in an Old Babylonian private letter found in Ishchali:

“I wrote to mistress Lamassani and the dreams and the (oracular) utterances which I saw and heard, I wrote to her [...].”<sup>136</sup>

More inferences about which dreams were considered of importance can be drawn from letter No. 237. It is extraordinary insofar as two matching dream episodes, which announce the impending departure of the gods from Mari, occur subsequently. The dream is experienced by Zimri-Lim's mother Addu-dūrī, who encloses bits of her hair and garment to facilitate verification of the dream's relevance by other oracular means:

« Dis à mon Seigneur : ainsi (parle) Addu-dūrī, ta servante.

Depuis la ruine de ta famille, jamais je n'avais vu un tel rêve. Les signes que j'avais auparavant étaient tels. Dans mon rêve, j'entrais au temple de Bêlet-Ekallim. Bêlet-Ekallim ne siégeait plus et les statues qui sont devant elles n'(y) étaient plus. Alors, (ce que) voyant, je me mis à pleurer. Ce rêve de moi était de la première veille.

Derechef, Dādā, le Grand-Prêtre d'Eštar Bis-réenne se tenait à la porte de Bêlet-Ekallim et une voix désagréable ne cessait de crier ainsi :

« Reviens-moi, Dagan ! reviens-moi, Dagan ! ». »<sup>137</sup>

Voilà ce qu'à plusieurs reprises elle criait. Autre chose : une extatique s'est dressée dans le temple d'Annunītum, disant :

« Ô Zimri-Lim, ne pars pas en campagne ! Reste à Mari ! Alors, moi, je ne cesserai de répondre ». Mon Seigneur ne doit pas montrer de négligence pour sa protection personnelle. Présentement, ma mèche de cheveux et ma cordelette, je les ai, personnellement, mises sous scellés et je (les) ai envoyée(s) chez mon Seigneur. »<sup>138</sup>

In the first dream, which she experiences during the first watch, Addu-dūrī enters the temple of

<sup>135</sup> Durand 1988, 466 (M.5704).

<sup>136</sup> Greengus 1979, 63 (No. 23).

<sup>137</sup> This line can be translated as “O Dagan, return (here)”, “O Dagan, reconsider”, and even as a proper name connected with a Mari king of more than a century past (Noegel 2007, 84). Zgoll translates: „Führt Dagan fort, führt Dagan fort!“ (Zgoll 2006, 176).

<sup>138</sup> Durand 1988, 478–479 (A.994). For an English translation, see Noegel 2007, 83–84.

Bēlet-ekallim, where the statues of the gods are missing. She awakens crying and eventually falls asleep again,<sup>139</sup> finding herself in the same place, where she receives a stern warning once more. The origin of the voice remains indeterminate, giving the impression of a mindful account by Addu-dūrī, who does not try to straighten out the storyline but leaves the vagueness characteristic of dreams intact. Furthermore, the letter is full of ambiguous formulations, adding to the vagueness and possibly acting as a safeguard for the diviner.<sup>140</sup> Addu-dūrī also specifically describes this process as a return<sup>141</sup> to the dream scene, equivalent to the return to a location in the waking world, and omits the formulaic introduction for dreams in the second instance, showing that she considers it a continuation of the first. As she is known from other letters to be well versed in dreaming as well as in dealing with dreams and writing about them, this surely is not coincidental.

Several important points become apparent from the exceptional case of a dream experienced by a specialist but not yet verified or interpreted. Firstly, not a change in the state of consciousness is described but a spatial change, a change in location. The dream is conceptualised as a realm of experience independent of the dreamer, into which one can enter and inside of which one can proceed to another place (see chapter 4.4: Iddin-Dagan's hymn).<sup>142</sup> Secondly, the naturalness of Addu-dūrī's experience suggests a knowledge of dream re-entry techniques such as those employed in modern dreamwork.<sup>143</sup> Thirdly, it can be inferred that the time of night at which the dream was seen was considered important by the Mariotes. The fact that Addu-dūrī experiences her dream during the first watch is only compensated for by other characteristics (for example repetition, see also letter No. 234 above), pointing to the dream's ominous character, while on its own it would have been considered without significance.<sup>144</sup>

As we have seen in chapter 2.3, the later parts of the night are marked by an increase in REM sleep, and this seems to have been known to the Mariotes. Also, her awakening in the middle of the night and the mention of a "first watch" confirms conjectures about polyphasic sleep in historic times, as discussed in chapter 2.4. Jack Sasson has additionally suggested that the high priest Dada was already deceased at the time of the dream.<sup>145</sup> If this is true, part of the dream's significance was probably based on this fact as is the case in letter No. 227, in which Addu-dūrī relates a dream experienced by another woman and predicting prosperity to the king:

« Dis à mon Seigneur : ainsi (parle) Addu-dūrī : Dame ...bi-la'u a vu un rêve ; elle a dit : « Dans mon rêve, Hadnu-El et Iddin-Kubi, les extatiques, étaient vivants. Ils entraient par devant Abba et ils disaient ceci : « Parlez aux fantômes de vos nourrissons mort-nés afin que Zimri-Lim fasse une moisson de bien-être. Zimri-Lim ...  
(Lacune) »<sup>146</sup>

Although dead in waking reality, the two ecstasies or prophets are referred to not as spirits of the dead but as having come alive. At the same time, the message they are transmitting employs figures of speech normally used for divine messages, thus pointing to the fact that the dead prophets were considered part of the same higher sphere of reality as the gods and that the dream had already been verified as an omen.<sup>147</sup> The prophets act as intermediaries between the sphere of the living and the gods via the realm of dreams, suggesting a close connection with the netherworld for the latter.

Similar inferences can be drawn from an administration record, for which an origin from Mari has been suggested.<sup>148</sup> The text lists food offerings to the dead prompted by a dream of Dagān-naḥmī:

„80 Liter Brot, 20 Liter gutes Bier, 60 Liter Mehl für zweitklassiges Bier für die Totenspeisung der Könige hat, als Dagān-naḥmī einen Traum gesehen hatte, Ḥamatil zu geben veran-

<sup>139</sup> Another possibility would be that we are dealing with a false awakening, i.e. a dream in which the experience of waking up is simulated (Revonsuo 2010, 231).

<sup>140</sup> Noegel 2007, 83–86.

<sup>141</sup> Additionally, *tāru* – “I returned, I turned back” is played upon by the expression *tūra Dagan, tūra Dagan* (Noegel 2007, 84–85).

<sup>142</sup> Zgoll 2006, 270–272.

<sup>143</sup> LaBerge and Rheingold 1990, 151–154.

<sup>144</sup> Zgoll 2006, 159, 363.

<sup>145</sup> Sasson 1980, 133.

<sup>146</sup> Durand 1988, 467 (M.9576). Zgoll translates the speech of the dead prophets as such: „Mit euren (fem.) Totgeburten spricht, auf daß Zimri-Lim (eine Ernte des Friedens/Wohlergehens mache =) Frieden/Wohlergehen ernte!“ (Zgoll 2006, 175).

<sup>147</sup> Durand 1988, 462; Zgoll 2006, 287, 357.

<sup>148</sup> Wilcke 1986, 11–13.



laßt. [Ins]gesamt: 1 Kor 20 Liter [Brot; 20 Liter Bie]r; abgebucht. Monat Malkānum; 16. Tag vergangen.“<sup>149</sup>

Unfortunately, it is unknown whether Dagān-naḥmī was a priestess of some sort and under which circumstances her dream occurred. While another document from Mari exists in which offerings for the dead are requested by necromancy, in this case, unusually, the deceased make their wish known in a dream. Claus Wilcke has argued that the message was given indirectly through some god but, as can be inferred from letter No. 227, the appearance of deceased humans was no impossibility, at least if they were considered close enough to the gods.<sup>150</sup> In this case, however, the specific wording for a verified dream is not employed but the neutral version used instead, although an ominous nature is suggested by the fact that the order was fulfilled.<sup>151</sup> Against this backdrop, letter No. 230 is of interest, although we are probably not dealing with a genuine letter but with a school text summarising a dream with a dialogue between an old man and Itūr-Mēr:

« Ainsi (parle) ...

Dans son rêve, un vieillard siégeait à l'endroit des Bétyles de Dagan, par devant Itūr-Mēr, pour faire le rite d'adoration et il (le vieillard) dit : « A qui faites-vous confiance ? Des morts ! Je te l'ai dit mais tu n'entends pas mes paroles » ! L'entendant, Itūr-Mēr lui répondit ces mots : « Ecoutez Dagan et Nin-hursagga ! Aujourd'hui, un vieillard vaudra certainement deux jeunes hommes ! Allez ! Entrez dans la ville haute ! Ecoutez la parole même des dieux ! Nous avons écouté les paroles des humains ».

Alors, le vieillard lui répondit « D'accord » ! »<sup>152</sup>

The text is highly unusual because the dialogue is initiated by the human instead of the god, and

because it lacks the common terminology for the introduction of speech in dream reports. As an ancestor cult is known from Mari, it seems that a comparison between necromancy and a prophetic enquiry with a god is portrayed here, in which the word of the god is considered superior.<sup>153</sup> It is striking that we face a kind of competitive situation between the dead and the gods in the dream. An old person is explicitly stated to be an adherent of the dead, i.e. to represent practices of his time, and thus this text suggests that the deceased played a more important role in terms of counsel in dreams only slightly earlier but had been replaced by the gods at the time of writing.

For the sake of completeness, I will now turn to the remaining Mari letters as most of them contain further hints about the beliefs surrounding dreams. The time of night at which the dream was experienced is also mentioned in letter No. 142, in which the dream of Sammētār has been absolved of its status as an omen because of its occurrence during the first watch. Again, this is confirmed by an oracular enquiry:

« Dis à mon Seigneur : Ainsi (parle) Šamaš-în(ā)-mâtīm, ton serviteur.

J'ai pris les présages pour un mois complet, en ce qui concerne la rive gauche, depuis Šarūnā, jusqu'à Hidar pour (savoir si) l'ennemi resterait immobile.

Lors de mon premier examen, la Frange était nouée et lors de ce premier examen aussi, les Entrailles étaient gonflées. Le Ventre, à gauche, était sombre.

J'ai procédé à la vérification. Lors de ma vérification, le Ventre à droite et à gauche était sombre. Je viens de les envoyer. Pour les jours qu'ils concernent, (les oracles) sont sains.

D'autre part, en ce qui concerne le rêve de Sammētār, j'ai fait l'interrogation oraculaire. Ce rêve est de la première veille de la nuit. Il n'a pas d'importance. »<sup>154</sup>

The time of night is also stated in an Old Babylonian private letter from the First Dynasty of Babylon which reads: "I myself see dreams (about) you (in the) night and early morning."<sup>155</sup>

Mari letter No. 229 is an oracular report about a dream of Ajala, in which two women talk to each other. The wording suggests that

<sup>149</sup> Wilcke 1986, 16.

<sup>150</sup> Wilcke 1986, 13–14.

<sup>151</sup> Zgoll 2006, 358.

<sup>152</sup> Durand 1988, 470 (A.1902). Zgoll translates: „Alter Mann: [...] ... – tot/Tote/Er ist gestorben/wurde getötet ... [Ich sagte es?] dir (= dem Itūr-Mēr?), aber auf meine Worte hörst du nicht!“ ITUR-MER: „Dagan und Nin-hursagga, hört! [...] ein alter Mann steht gewißlich [...] für zwei junge Männer! Geht! Betretet den/die/das obere [...]! (Auf?) den Bericht des/der [...] h]ört hin!“ DAGAN und NIN-HURSAĞA: „[...] der Menschheit haben wir wahrhaftig gelauscht.“ (Zgoll 2006, 174).

<sup>153</sup> Pongratz-Leisten 1999, 109.

<sup>154</sup> Durand 1988, 306 (A.3582).

<sup>155</sup> Butler 1998, 35; Dossin 1934 (TCL 18, No. 100).



the dream has already been verified as an omen but oddly enough, the parts of hair and garment are still mentioned:<sup>156</sup>

« Dame Ayala a vu dans son rêve, ceci :  
 < Une femme de Šehrum (et) une femme de Mari s'étaient prises de querelle à la porte d'Annunītum hors les Murs. La femme de Šehrum disait à la femme de Mari :  
 < Rends-moi mes affaires. Ou bien siège toi-même ou bien il faut que ce soit moi qui siège > ! >  
 J'ai enquêté sur elle par le moyen des oiseaux-de-trou. (Le rêve) a été (réellement) vu. Présentement, j'ai fait porter sa mèche de cheveux et sa cordelette. Mon Seigneur doit décider de ce qu'il en est à son sujet. »<sup>157</sup>

Another typical dream feature becomes apparent in this letter: although the description lacks any hints about the nativity of the two women, the dreamer just seems to know such facts.<sup>158</sup> However, as the dream very likely reflects a contemporary competitive situation between Šehrum and Mari, the difference might have been a standing topos at this time.<sup>159</sup>

In letter No. 234, an unidentified god forbids the rebuilding of a house as planned by the king, possibly a temple or the house of Sammētār, who is an important official at Terqa.<sup>160</sup> The dream is dreamt twice by some servant, who becomes ill as a result:

« Dis à mon Seigneur : ainsi (parle) Kibri-Dagan, ton serviteur.  
 Dagan et Ikrub-El vont bien. La ville de Terqa et le district vont bien.  
 Le travail à propos duquel mon Seigneur m'a donné des directives ...  
 (Lacune)  
 ... a vu ce (rêve) : voici (ce que disait) le Dieu :  
 < Ne (re)construisez pas cette maison en ruines. Si cette maison est (re)construite, je la ferai tomber dans le fleuve >.  
 Le jour même où il a vu ce rêve, il ne l'a dit à personne. Le lendemain, de nouveau, il a vu le rêve. Voici ce que (disait) le Dieu :  
 < Ne (re)faites pas cette maison ! Si vous la (re)faites, je la ferai tomber dans le fleuve >.  
 Maintenant, je viens de faire porter chez mon Seigneur la cordelette de son habit et la mèche de sa tête. Depuis ce jour, ce serviteur est malade. »<sup>161</sup>

This dream and its circumstances are unusual, very likely owing to the urgency of the situation as the construction work has already started. That building against the will of the gods could cause grave calamity is discernible for example from the *Curse of Agade* (see chapter 4.6). While the dreamer himself is someone of inferior rank and therefore low credibility, the repetition of the dream (see also letter No. 237 above) and the subsequent illness of the servant are seen as another hint from the god. Appropriately, the terminology suggests a dream which has already been verified as an omen.<sup>162</sup>

The high priest Kibrī-Dagan again acts as an intermediary and reports a dream of a person of low rank in letter No. 235, but in this case, the verification is still pending.<sup>163</sup> Here, the dream of an anonymous man about enemies capturing important places of Zimri-Lim's kingdom is described:

« Dis à mon Seigneur : ainsi (parle) Kibri-Dagan, serviteur [sic].  
 Dagan et Ikrub-El vont bien. La ville de Terqa et le district vont bien.  
 Autre chose : un homme a eu un rêve, et Ahum me l'a répété, disant :  
 < L'armée ennemie [était entrée] dans les villes fortes, Mari, Terqa et Saggarātum. Après quelque [pillage], elle s'était i[nsta]llée dans les places fortes de mon Seigneur >.  
 Ahum m'a répété ce rêve que (cet homme) a eu et il m'a transmis (toute) responsabilité, disant :  
 < Ecris au roi >.  
 Voilà pourquoi, j'ai écrit à mon Seigneur. »<sup>164</sup>

In letter No. 82, Asqudum writes about an oracular enquiry concerning a dream of Jasīm-Dagan. The dream has been verified as an omen,<sup>165</sup> and attention is to be paid to the fortresses:

« Dis à mon Seigneur : ainsi (parle) Asqudum, ton serviteur.  
 Yasīm-Dagan a eu un rêve. Ce rêve est important et mérite attention. Une fois que j'ai fait prendre les oracles concernant son rêve, (j'ai compris que) son rêve était réel. Les devins doivent venir afin de prendre l'oracle et mon Seigneur doit donner des ordres stricts concernant la garde des villes fortes. »<sup>166</sup>

<sup>156</sup> Zgoll 2006, 357.

<sup>157</sup> Durand 1988, 469 (A.222).

<sup>158</sup> Zgoll 2006, 159–160.

<sup>159</sup> Durand 1988, 458.

<sup>160</sup> Durand 1988, 458.

<sup>161</sup> Durand 1988, 476 (M.13841).

<sup>162</sup> Durand 1988, 462; Zgoll 2006, 179, 184–186, 357, 365.

<sup>163</sup> Zgoll 2006, 358, 364–365.

<sup>164</sup> Durand 1988, 477 (M.13842).

<sup>165</sup> Zgoll 2006, 357.

<sup>166</sup> Durand 1988, 221–222 (A.2678).

Letter No. 224 by Sûmû-... is concerned with a dream which prompts the king to perform various sacrifices:

« Dis à mon Seigneur : ainsi (parle) Sûmû-..., ton serviteur.

Le rêve est très bon pour mon Seigneur. Mon Seigneur doit sacrifier à Annunîtum, à Samanum, à son passage, ou bien il doit toucher un mouton mâle afin qu'on l'apporte et qu'on le sacrifie. Mon Seigneur fera comme il le jugera bon.

Et, au sujet du voyage de mon Seigneur, le jour où mon Seigneur arrivera, que le *même jour*, une tablette de mon Seigneur m'arrive. Au sujet de faire tremper dans<sup>167</sup> de la bière de bonne qualité, les ... qui sont à ma disposition pour le repas de mon Seigneur, tous les ...

(texte lacunaire)

... pour le repas ce boeuf a été pris. »<sup>167</sup>

In letter No. 226, a dream about agricultural activities is related, and a verification of the dream is suggested, for which the necessary objects are enclosed:

« Dis à mon Seigneur : ainsi (parle)....., ton serviteur.

Texte lacunaire.

« Si à ...-tum, le cultivateur, avant la nuit, n'a pas moissonné la terre irriguée, d'urgence, des chariots doivent être ajoutés pour (le transport à) l'aire à battre ».

Présentement, de l'homme qui a vu le rêve, je viens de faire porter chez mon Seigneur sa mèche de cheveux et sa cordelette afin que (mon Seigneur puisse) décide(r) sur ce rêve. »<sup>168</sup>

In letter No. 228, Iddijatum writes about a dream of Nanna-lu-til concerning the victorious return of the king:

« Dis à mon Seigneur : ainsi (parle) Iddiyatum, ton serviteur.

Nanna-lu-til, un serviteur à toi, a vu un rêve. Il a dit : « Dans mon rêve, les troupes alliées du roi ...

(Lacune)

« Zimri-Lim a triomphé de l'Elam et il s'est tenu dans la victoire ».

Derechef, il a dit ...

(Lacune) »<sup>169</sup>

In letter No. 231, Sammêtar makes arrangements for sacrifices possibly demanded in a dream:

« Dis à mon Seigneur : ainsi (parle) Sammêtar, ton serviteur.

Mon Seigneur m'a écrit au sujet du sacrifice-*buhratum* à offrir à Addu. Déjà auparavant, un songe a été fait au sujet du sacrifice-*buhratum* et j'avais écrit à mon Seigneur depuis Buzzurân, disant : « Il faut offrir le sacrifice-*buhratum* à Addu et de même à Nergal, le 20, puis, de même, il doit être offert pour le début du mois, le premier et, une troisième fois, le x ».

Voilà ce qu'à mon Seigneur, j'avais écrit, et *en conformité avec* ce que j'ai écrit précédemment, à mon Seigneur, jusqu'à la moisson, par trois fois il y aura un sacrifice-*buhratum*. Alors, de cette façon point de retard ! Mon Seigneur doit faire attention d'urgence à ces propos. »<sup>170</sup>

In letter No. 238, Addu-dûrî writes about a dream of Iddin-ilî, the high priest of Itûr-Mêr, in which Bêlet-bîrî promises King Zimri-Lim that he will reign eternally if he shows the necessary cautiousness:

« Dis à mon Seigneur : ainsi (parle) Addu-dûrî. Iddin-ilî, Grand-Prêtre d'Itûr-Mêr, a eu un rêve. Il a dit :

« Dans mon rêve, Bêlet-bîrî se tenait debout et disait ceci : Voici ses paroles :

« La royauté est son moule à brique et la dynastie sa muraille. Pourquoi ne cesse-t-il de monter au créneau ? Il lui faut se protéger ! » »

Maintenant, mon Seigneur doit mettre tout son soin à protéger sa personne. »<sup>171</sup>

Letter No. 240 is addressed to Addu-dûrî and is thereby the only example of a recipient who is not the king himself.<sup>172</sup> In it, Tîmlû remembers a past dream:

« Dis à Addu-dûrî, ma Dame, ainsi (parle) Tîmlû, ta servante.

C'est un fait avéré que lorsque Yar'ip-Abba m'a fait sortir de Kasapâ et que je suis venu chez toi, je t'ai dit :

« J'ai eu un rêve qui te concerne.<sup>173</sup> Dans mon rêve, Bêlt-Ekallim [sic] m'envoyait comme messagère pour dire.....

(Lacune)

<sup>170</sup> Durand 1988, 470–471 (A.2448).

<sup>171</sup> Durand 1988, 479–480 (A.122).

<sup>172</sup> It was also not found in the same room of the palace as the other letters (Zgoll 2006, 159).

<sup>173</sup> Sasson translates "I saw a dream on your behalf" and therefore argues that certain individuals could be commissioned to receive dreams for others. (Sasson 1984, 284). Still, as this is the only such incident reported from Mari, his translation does not seem very convincing.

<sup>167</sup> Durand 1988, 465 (A.2559).

<sup>168</sup> Durand 1988, 467 (M.9034).

<sup>169</sup> Durand 1988, 468 (M.13637).

il y a ... .. des habitants de Dûrum-labîrum qui lèvent/assument ... ces six hommes confie-(les) lui ! ... ..

Autre chose : Fais moi porter un ... et un turban de ta tête, que je hume le parfum de ma dame et que revive mon cœur mort ! »<sup>174</sup>

It is still debated as to whether two letters in fact portray dreaming scenes. Letter No. 236 describes a vision in the temple of the weather god Itûr-Mêr<sup>175</sup> and as such is the only example of a possible incubation in a temple apart from letter No. 233, in which the dream is experienced in the temple of Dagan. In letter No. 236, a woman has obtained a prediction about the glorious return of the king and his army:

« Dis à mon Seigneur : ainsi (parle) Šibtu, ta servante.

Les temples, le palais et les ergastules-*nêpârâtum* vont bien.

Autre chose : dame Kakka-lîdî, a eu une vision dans le temple d'Itûr-Mêr. Elle a dit :

« 2 barges, très grandes, barraient le fleuve. Le roi et les soldats y étaient embarqués. Ceux de droite criaient à la gauche : « La Royauté, le Sceptre, le Trône, le Règne, le Pays d'amont et d'aval c'est à Zimri-Lim qu'ils sont donnés ! » et les soldats, tous ensemble, répondaient : « C'est à Zimri-Lim qu'ils sont donnés ! ». Ces barges arrivant à la porte du palais .....

(Lacune) »<sup>176</sup>

This letter illustrates a case unlike the other examples as the common phrases are deliberately shortened, leaving out any reference to dreams. Two interpretations are possible: on the one hand, the nature of the revelation might be unclear, and the letter might intentionally leave it open whether we are dealing with an incubated dream or a daytime vision; on the other hand, the wording might be employed to specifically denote a vision as opposed to the more common dreams.<sup>177</sup>

Similarly, the transmission of the god Dagan's counsel to Zunâna in letter No. 232 is still highly debated.<sup>178</sup> Dagan instructs Zunâna to ask the king for an intervention with the aim of liberating her kidnapped servant from Sammêtar:

« Dis à mon Seigneur : ainsi (parle) Zunâna, ta servante.

Lorsque j'ai résidé à Ganibâtum, j'avais envoyé Kittum-šimhiya à Rubbân. Alors qu'elle faisait le déplacement, on l'a enlevée. Alors j'ai vu pendant mon sommeil Dagan, ton Seigneur, sans qu'on me fasse le rite du *liptum*. Dagan m'a tenu ces propos :

« Es-tu gaie ou triste ? ».

J'ai répondu : « Triste ! J'ai eu beau faire le voyage, je n'ai pas vu ma servante. Lorsque mon Seigneur est allé à Andarig, (un envoi d') échalotes de ma servante m'étant arrivé de chez Sammêtar, je suis allé le voir et il m'a répondu oui. Puis il est revenu sur son accord et il ne m'a pas donné ma servante ».

Dagan m'a ainsi dit : « Tant qu'il n'aura pas fait sortir sur intervention de Zimri-Lim ta servante, nul ne te la libèrera ».

Maintenant, selon l'ordre de Dagan, mon Seigneur ne doit pas garder ma servante. »<sup>179</sup>

Although translated somewhat differently by Durand, who considers it an incubation,<sup>180</sup> Zgoll points out that this letter does not contain any of the formulaic idioms nor any mention of dreaming. Thus, the interpretation as an incubated dream becomes less likely than a prophecy obtained through other means of divination by an *âpil(t)um* ("answerer/answeress", i.e. a kind of prophet), possibly Zunâna herself.<sup>181</sup>

An Old Babylonian private letter illustrates that divine messages were not limited to royal addressees:

„Zu Lugatum sprich:  
hier (folgt, was) Lupqidum (ausrichten läßt):  
Ištar und Zababa mögen dich für allezeit gesund halten!

In meinem Traume ..... zum *Hause/Tore* .....  
Aus dem Zababa-Tempel .....

.....  
Hier (folgt, was) er (gesagt hat):

....  
....  
werde ich *mir* nehmen und ....  
..... werde ich 'setzen'.

Ein Drittel Talent ..... *zu ihm und*  
(sieben Zeilen verloren oder unleserlich)«<sup>182</sup>

<sup>174</sup> Durand 1988, 481–482 (A.3424).

<sup>175</sup> Zgoll 2006, 321.

<sup>176</sup> Durand 1988, 478 (A.2437).

<sup>177</sup> Zgoll 2006, 164.

<sup>178</sup> Butler 1998, 219–220.

<sup>179</sup> Durand 1988, 471–472 (A.907). The translation by Zgoll differs in some respects, for example as to who is involved in what way. However, the main topic still is the vanishing of the servant (Zgoll 2006, 173–174).

<sup>180</sup> Durand 1988, 461.

<sup>181</sup> Zgoll 2006, 168–169.

<sup>182</sup> Kraus 1985, 141 (No. 158).

Unfortunately, the contents of what was probably a message by the god Zababa are too damaged to be deciphered, and most other private letters only make mention of dreams being good<sup>183</sup> or not good.<sup>184</sup> Unique is an Old Babylonian private letter where dreams are used as a threat or at least a warning against the author's sister: "whatever you do, my dreams will bring to me!"<sup>185</sup> As opposed to the abundance of dream records of middle-class individuals, the official display of royal dreams ceased and now we only encounter indirect evidence such as the naming of the twelfth year of King Ammiditana of the First Dynasty of Babylon (1683–1647 BC<sup>186</sup>): "Year in which he (the king) brought into the [temple é].nam.ti.la (as a votive offering) a statue of himself in a praying attitude which [he was ordered to do] in a dream [...]"<sup>187</sup> Whereas we have already dealt with sources that mention the dead requesting offerings in a dream, as the king makes his donation to a temple this seems to the oldest reference of a deity to do so, again pointing to greater antiquity of the role of the dead in dreams.

<sup>183</sup> In a private letter discovered in Nippur and dating to the reign of Samsuiluna of the First Dynasty of Babylon (1749–1712 BC (Van De Mieroop 2007, 306)), a businessman from abroad writes home: "Speak to ... tum: Thus say Samija and Sin... Is it good like this to you? Did we not send Sag-Enlila to you? Why did you not have (him) bring one or two shekels? Would I write for silver to appropriate (it)? Two minas of silver has [sic] been lost; have Ibbi-Enlil, the gardener, bring two shekels of silver. I know how you support Nūr-Ilabarar and Gemūtum; fear nothing. I myself am well, and the gentleman is well. Moreover, my dreams are very good. You will send ... (break) ... Write me about the ... that is necessary for the food of the temple of Ninurta and Inanna." (Oppenheim 1956, 229; Stol 1986, 11 (No. 17/CBS 4713); Ungnad 1915, 46, pl. 13 (drawing of the tablet without translation)).

<sup>184</sup> „Unsere Träu[m]e sind nicht gut! Aššur [v]erwarnt dich immer wieder!“ (BIN 6, 179, Old Assyrian; Hirsch 1961, 14).

<sup>185</sup> Oppenheim 1956, 226; Thureau-Dangin 1910, 3, pl. 29 (No. 53/4616, drawing of the tablet without translation).

<sup>186</sup> Van De Mieroop 2007, 306.

<sup>187</sup> Oppenheim 1956, 192. Original translation: „[...] sein Bildnis (das ihn) in einem Traum (darstellt) [...] brachte er ihnen für sein Leben hinein.“ (Ungnad 1938, 187).

## 4.6 DREAMS IN LITERARY COMPOSITIONS

### CURSE OF AGADE

A complete version of the popular Sumerian composition *Curse of Agade* dates back to at least the Old Babylonian period, while some fragments have been discovered which are as old as the Ur III period.<sup>188</sup> In it, the rise and fall of this first great Mesopotamian empire is described.<sup>189</sup> In the beginning under the kingship of Sargon, the gods behave benignly towards the city. Yet, during the reign of Narām-Sîn, Inana suddenly turns against her protégés. The dire consequences of her abandonment of the city and the withdrawal of the god's favour are foreseen by Narām-Sîn in a dream:

“That the kingdom of Agade would no longer occupy a good, lasting residence,  
That its future was altogether unfavorable,  
That its temples would be shaken and their stores scattered –  
This is what Naramsin saw in a dream!  
He understood it, but would not articulate it,  
nor would he talk with anyone about it.”<sup>190</sup>

Narām-Sîn then performs extispicy twice to ascertain whether Enlil grants permission to build a temple for Inana, but the omens are unfavourable. Also, rites of lament and mourning prove unsuccessful.<sup>191</sup> In an attempt to force the god to consent, he marches to Nippur and destroys Enlil's sanctuary Ekur there. Because of Narām-Sîn's sacrilege, Enlil wreaks havoc and a terrible curse is directed at Akkad. The composition ends with Akkad's destruction.

### LUGALBANDA IN THE CAVE OF THE MOUNTAINS

Of the several Sumerian narrative poems dealing with the *Matter of Aratta*, i.e. the conflict between Enmerkar of Uruk and EnSUHkeš-da'ana of Aratta, *Lugalbanda in the Cave of*

<sup>188</sup> Cooper 1983, 11. As the dream of Narām-Sîn forms a central element of the story, it is likely that it was already contained in the Ur III version, although the part in question has not been preserved.

<sup>189</sup> Cooper 1983, 5, 50–63.

<sup>190</sup> Cooper 1983, 55. Note the parallel to Sargon's silence in the *Sargon Legend* (see below) (Zgoll 2006, 110).

<sup>191</sup> Zgoll 2006, 119.



*the Mountains* currently seems to be the oldest, being extant in copies from the Ur III period.<sup>192</sup> Still, as the story has not been published in its entirety to date, it remains unclear whether the Ur III version already contained the dream episode. During the march on Aratta, Lugalbanda, who is part of Enmerkar's host, falls severely ill. His brethren abandon him in a mountain cave, although promising to pick him up on their way back, regardless of whether he is dead or alive. Even so, Lugalbanda survives his illness after praying to the great luminaries and leaves the cave, fending for himself in the mountains. Eventually, he falls asleep and has the following dream:

"Sleep then overwhelmed the king; –  
Sleep, the land of darkness,  
Is a raging flood which sweeps over the body as  
a wall washed away (by water).  
Its 'hand' is overpowering; its 'foot' carries  
away everything;  
It covers what is before it, the...  
It overtowers what is before it, the...  
It knows no lieutenant, no captain,  
Yet it strengthens the warrior! –  
With/by the wooden object/*tankard* of Nin-kasi  
Sleep finally overcame Lugalbanda.  
Amidst the soapwort, the untouched mountain  
plants, he made a bed as if it were a loaf of  
bread;  
He spread out a linen sheet, put white linen  
over it.  
There being no servant girl for his ablutions,<sup>193</sup>  
he himself readied the sleeping place.  
But the king did not merely lie down to sleep:  
he lay down for a dream.  
Dream – a door cannot hold it back, nor can  
the doorpost;  
To the liar it speaks lies; to the truthful the  
truth.  
It can make one happy or make one lament;  
It is the closed archive basket of the gods;  
It is the bridal chamber of fair-faced Ninlil;  
But it is also Inanna's counsellor.  
The bull, an animal tamed by mankind, *the  
wild bull-man which is not (really) alive*,  
Anzaqar, god of dreams,  
Roared in person to Lugalbanda as a bull.

As the heifer of the mother cow he bellowed  
(saying):

'The reddish brown bull – who [*will bind*] it  
for me?

'Who will pour me the sheep's fat?

'He must possess my own axe, whose fine metal  
is metal of the skies;

'He must possess my side-arm, made of iron!

'As an athlete he must *take on* the reddish-brown  
bull, the mountain bull, force it to its knees as does  
the wrestler.

'Its innards he must take out, and put them before  
the rising sun.

'When he has broken the heads of the reddish-brown  
goat and its kid, of both goats, as if they were grains;

'And poured out their blood in the (slaughtering)  
hole,

'So that their fat flows over the plain,

'The mountain snakes will surely sniff it.

Lugalbanda woke up; this was a dream. He  
shivered; it was sleep.

He rubbed his eyes; it was terror."<sup>194</sup>

With the mention of *u<sub>3</sub>-sa<sub>2</sub>.g* sleep, along with the incubation formula (*ma-mu<sub>2</sub>-de<sub>3</sub>/-da ba-nu<sub>2</sub>*) and the typical wording about fearful awakening, the dream is identifiable as meaningful and as really sent by Anzaqar.<sup>195</sup> His arrival, in turn, is accompanied by roaring and bellowing sounds as well as by hissing if the sniffing snakes are taken into account.<sup>196</sup> This recalls the loud buzzing noises that are the most common acoustic hallucination in sleep paralysis (see chapter 2.11). Lugalbanda promptly follows the commands given in the dream and shares food with the gods, therefore proving that he is the one mentioned in this oblique message.<sup>197</sup> In this way, he has secured for himself the benevolence of the gods and survives the subsequent attack by the forces of darkness with their help. The text breaks off near the end so that its connection to the second Lugalbanda Epic, in which he saves his companions and his city, remains unclear.

Lugalbanda's dream is a classic example of a Sumerian dream, mainly consisting of words spoken by a god, in this case by the god of

<sup>192</sup> Vanstiphout 1995, 6, 8, 397–412.

<sup>193</sup> This is the only mention of ablutions in connection with an incubation. Very likely the need for them was so self-evident to the contemporary Mesopotamian that they were only rarely mentioned. Consequently, in Lugalbanda's case, the focus is on their absence (Zgoll 2006, 330).

<sup>194</sup> Vanstiphout 1998, 406–407 (322–357).

<sup>195</sup> Zgoll 2006, 112–115, 312.

<sup>196</sup> Although the general role of the mountain snakes remains enigmatic, it is quite possible that it was not so for the contemporary Sumerian.

<sup>197</sup> It is interesting to note that Enki speaks only indirectly to Atramhasis as well (see below).



dreams in person. Its interpretation is already conflated with the dream itself, leaving no doubt about the meaning but entailing a critique of contemporary practices of dream interpretation by breaking and following the established rules at the same time. Against this background, the fact that Lugalbanda's dream (interpretation) comes true clearly indicates his personal qualities and his future development into a hero:

"[...] this dream is the first and decisive stage in Lugalbanda's development into a saviour-saint. [...] it confirms to the hero that he is selected out of common mankind for a divine purpose. This purpose is transforming him into a Holy Man, able to operate the divine plan, able to act in harmony with all natural and supernatural forces, able to mediate between the divine and human worlds. [...] Lugalbanda's sanctity-by-calling is here confirmed by his own immediate insight in the abstrusely expressed dream message, and by that token in his divine vocation. He realises that he is the one who is specially chosen for a divine purpose. For this is what the dream tells him: he is the one who is qualified. [...] This interpretation also explains the basically ambivalent attitude towards dreams as presented in the introduction to the dream proper. This dream has little in common with the generalised riddles the gods see fit to visit upon us, mere human beings. Nor does it contain a specific order to one already great human. On the contrary, it is the vocation and selection of a human to a higher state, to a position near the divine and supernatural world. The hero gradually becomes a totally unique personality. And this long *rite de passage* starts with the act of *recognition* which is the core of the dream episode."<sup>198</sup>

At the same time, the value of dreams is doubted, and they are portrayed as potentially misleading to an unvirtuous person or even as dangerous if we follow Herman Vanstiphout's interpretation that "the closed archive basket of the gods" refers to some sort of Pandora's box. Likewise, the reference to Ninkasi, the goddess of beer and the ale-house "[...] is a not so covert, and not so serious, hint at the ritual of the artificial induction of (sweet) dreams. This might reinforce the ambiguous exegesis of what stuff dreams are made off."<sup>199</sup> Then again, sleep is called a land and thus a fixed physical place.

The text also alludes to the widespread erotic quality of dreams, "[...] for it manifestly refers to two contradictory aspects of sexual dreams: the domestic and the wilder variety, or Ninlin versus Inanna."<sup>200</sup> Against the background of the universality of sexual dream content (see chapter 2.9) as well as the sexual arousal so common during sleep (see chapter 2.3), we are now better able to understand the fact that Inana is among the gods most frequently mentioned in texts concerned with dreaming.

#### ENMERKAR AND ENSUHKEŠDA'ANA

*Enmerkar and EnSUHkešda'ana*, a narrative poem from the same epic cycle, is extant in several copies from about 1900 BC.<sup>201</sup> The poem deals with a contest between the two kings to determine who will participate in the ritual marriage with the goddess Inana, thereby assuring the religious and political supremacy of his city. When EnSUHkešda'ana challenges Enmerkar for the contest, he does so with the following lines:

"[He] may dwell with Inanna in the Egar;  
(But) [I] will dwell with Inanna in the Ezagin of Aratta.  
He may lie with her on the 'splendid bed';  
(But) I will lie in sweet slumber with her on the 'adorned bed'.  
He may see Inanna at night in a dream;  
(But) I will commune with Inanna 'face to face'.<sup>202</sup>

While *giri<sub>3</sub>-babbar-ra* was previously translated as "face to face", Zgoll has shown that this term denotes a dream experienced in the early morning hours, which was imbued with special significance (see chapter 4.4: hymn Šulgi O).<sup>203</sup> The text plainly shows that EnSUHkešda'ana's experience was considered superior to that of Enmerkar, lending further credibility to an interpretation as a hypnopompic lucid dream (see chapter 2.11), which is experienced while the mind is already in the process of waking

<sup>198</sup> Vanstiphout 1998, 402.

<sup>199</sup> Vanstiphout 1998, 400.

<sup>200</sup> Vanstiphout 1998, 400.

<sup>201</sup> Berlin 1979, 1, 4.

<sup>202</sup> Berlin 1979, 41 (lines 27–32). Zgoll translates: „Er (= Enmerkar) – dank Inanas hat er (sie) im Traum wahrhaftig gesehen, ich (= EnSUHkešda'ana) – mit Inana wechsele ich während des Morgendämmers Worte mit ihr.“ (Zgoll 2006, 67; lines 31–32).

<sup>203</sup> Zgoll 2006, 66–68.

up. The sleeper's high degree of consciousness means that the dream will appear more real and as such it clearly sets these experiences apart from ordinary dreams like the one that is ascribed to Enmerkar.

## SARGON LEGEND

The Sumerian *Sargon Legend*, in which Sargon of Akkad's rise to power is described, has only been preserved from the late Old Babylonian period, although a possible Ur III origin has been suggested.<sup>204</sup> Sargon is thought to be working as a cupbearer for King Ur-Zababa when several dreams accurately predict Ur-Zababa's death and Sargon's resulting rise to kingship. Sargon's dreams are incubated in the temple of Ezinu, the god of grain:<sup>205</sup>

"One day, after evening had arrived,  
Sargon, when the offerings had been brought  
to the palace—

He (Urzababa)<sup>206</sup> having lain down in the holy  
bed-chamber, his holy residence,  
He understood, but would not articulate it, nor  
speak about it with anyone—<sup>207</sup>

Sargon, having received the offerings for the  
palace—

*He (Urzababa) had made the cupbearer responsible (for the offerings)—*he (Sargon) took  
charge of the drinking chest.

Holy Inana was unceasingly working *behind the scenes*.

After five or ten days had passed,  
King Urzababa ..., he was frightened in that  
residence,

Like a lion, he was dribbling urine, filled with  
blood and pus, down his legs,  
He struggled like a floundering salt-water fish,  
he was terrified there.

At that time, the *cupbearer*, in the *temple* of Ezinu,<sup>208</sup>

Sargon, lay down not to sleep, but lay down to  
dream.

Holy Inana, in the dream, was drowning him  
(Urzababa) in a river of blood.

Sargon, screaming, gnawed the ground.

When king Urzababa heard those screams,  
He had them bring him (Sargon) into the king's  
presence.

Sargon came into the presence of Urzababa,  
(who said:)

'Oh *cupbearer*, was a dream revealed to you in  
the night?'

Sargon replied to his king:

'Oh my king, this is my dream which I will  
have told you about:

'There was a single young woman, she was high  
as the heavens, she was broad as the earth,

'She was firmly set as the [*bas*]e of a wall.

'For me, she drowned you in a great [river], a  
river of blood.'<sup>209</sup>

The *Sargon Legend* constitutes a special case because it is not the dreamer Sargon but Ur-Zababa whose reactions to the dream are described. Nevertheless, he is not able to solve (*bur*<sub>2</sub>) the dream and as such to escape the predicted evil. Sargon, by contrast, is involved in two ways. On the one hand, he acts as a kind of dream specialist when he lies down with the explicit intent to dream, i.e. performs an incubation (*ma-mu*<sub>2</sub>-*de*<sub>3</sub> *ba-nu*<sub>2</sub>) and experiences a dream about someone else in *u*<sub>3</sub>-*sa*<sub>2</sub>.g sleep. On the other hand, he is indirectly affected by the dream himself because he will become king in Ur-Zababa's place eventually.<sup>210</sup> The narrative thus plays on the topos of impending death announced in a dream, but in this case, the prediction proves good news for the protagonist Sargon.

## DUMUZI'S DREAM

The Sumerian myth *Dumuzi's Dream* is embedded in a larger cycle of stories concerned with the relation between Dumuzi and the goddess Inana, although the texts are not consistent in every respect.<sup>211</sup> In *Inana's Descent to the Nether World*, she is put to death by Ereškigal, the goddess ruling the netherworld, after having intruded into her realm. With the help of Enki, Inana is revived and manages to escape. She has to offer a substitute to the *galla* demons to go in her stead and decides on her husband

<sup>204</sup> Cooper and Heimpel 1983, 68.

<sup>205</sup> Zgoll 2006, 321.

<sup>206</sup> This does not make sense. More likely this passage is about Sargon and his first attempt for a prognostic dream.

<sup>207</sup> Note the parallel to the silence of Narām-Sîn in the *Curse of Agade* (see above) (Zgoll 2006, 110).

<sup>208</sup> Variant translation: "in the winehouse of Ashnan" (Cooper and Heimpel 1983, 78).

<sup>209</sup> Cooper and Heimpel 1983, 76–77 (lines 1–24).

<sup>210</sup> Zgoll 2006, 100, 116–117, 312.

<sup>211</sup> Alster 1972, 13–14, 28–32, 52–83; Kramer 1963, 491–493, 510–516; Kramer 1980, 299, 306–308.

Dumuzi, thus causing his death. However, Dumuzi is later granted leave from the netherworld every half year if his sister Ġeštin-Ana replaces him for the time in question. James George Frazer suggested a connection to the “[...] yearly decay and revival of life, especially of vegetable life, which they personified as a god who annually died and rose again from the dead.”<sup>212</sup> Dumuzi’s seizing by the demons and subsequent death is described in a different manner in *Dumuzi’s Dream*, a myth preserved from the Old Babylonian period<sup>213</sup> that is set in the dangerous world of the shepherds on the plain and “[...] where the demons represent bandits attacking the shepherds, while at the same time Dumuzi’s death is associated with the seasonal ceasing of milk production.”<sup>214</sup> In the text, Dumuzi is forewarned of his impending death by a dream:

“He lay down to rest, he lay down to rest, the shepherd lay down to rest,  
When the shepherd lay down to rest, he lay down to dream.  
He woke up – a dream! He shivered – a sleep!  
He rubbed his eyes, was terrified!  
‘Bring, bring, bring my sister!  
Bring my Ġeštinanna, bring my sister!  
Bring my tablet knowing scribe, bring my sister!  
Bring my song knowing singer, bring my sister!  
Bring my skilful girl, who knows the meaning of words, bring my sister!  
Bring my wise woman, who knows the portent of dreams, bring my sister!  
Let me relate the dream to her:’  
‘A dream! My sister! A dream! In my dream:  
Rushes were torn out for me, but rushes kept growing for me,  
A single reed was shaking the head for me,  
A twin reed – one was being removed from me,  
Tall trees in the forest were uprooted by themselves for me,  
Water was poured on my pure coal for me,  
The cover of my pure churn was being removed from me,  
My pure drinking cup was torn down from the peg where it hung,  
My shepherd’s stick disappeared from me,  
An eagle took a lamb in the house of the sheep,  
A falcon caught a sparrow in the reeds of the fence,  
My male goats were dragging their lapis-lazuli beard in the dust for me,

My male sheep were scratching the earth with their thick legs for me,  
The churns were lying (on their side), no milk was poured,  
The drinking cups were lying (on their side),  
Dumuzi was dead, the fold was made into a wind.’ Ġeštinanna answered Dumuzi:  
‘My brother, your dream is not favorable, it is very clear to me!  
Dumuzi, your dream is not favorable, it is very clear to me!  
The torn out rushes which kept growing for you (are)  
Bandits rising against you from (their) ambush.  
The single reed shaking the head for you (is)  
Your mother, who bore you, shaking the head for you.  
The twin reed of which one was being removed from you (is)  
I and you – one will be removed from you.  
The tall trees in the forest being uprooted by themselves for you (are)  
The evil men catching you inside the enclosure.  
(That) water was poured on your pure coal for you (means):  
The fold will become a silenced house for you.  
(That) the cover of your pure churn was being removed from you (means):  
The evil man will take it into his hand.  
(Your) pure drinking cup being torn down from the peg where it hung (is)  
You falling down from the knees of your mother who bore you.  
(That) your shepherd’s stick disappeared from you (means):  
The [little] demon will set fire to it.  
The eagle taking a lamb in the house of the sheep (is)  
The evil man who beats your cheek.  
The falcon catching a sparrow in the reeds of the fence (is)  
The big demon climbing down from the fence against you.  
(That) the churns were lying, no milk was poured, the drinking cups were lying, Dumuzi was dead, the fold was made into a wind (means):  
Your hands will be bound in handcuffs, your arms will be bound in fetters.  
(That) your male goats were dragging their lapis-lazuli beard in the dust for you (means):  
My hair will whirl around in heaven for you.  
(That) your male sheep were scratching the earth with their thick legs for you (means):  
I shall scratch my cheeks with my finger nails like a comb for you.”<sup>215</sup>

<sup>212</sup> Frazer 1905, 5.

<sup>213</sup> Alster 1972, 123.

<sup>214</sup> Alster 1972, 14

<sup>215</sup> Alster 1972, 55–61.

As in Gudea's temple hymn, a formulaic wording is employed, consisting of the incubation formula *ma-mu<sub>2</sub>-de<sub>3</sub> ba-nu<sub>2</sub>*, accompanied by a mention of *u<sub>3</sub>-sa<sub>2</sub>.g* sleep together with fearful awakening.<sup>216</sup> Dumuzi asks Ĝeštin-Ana for help concerning the solving (*bur<sub>2</sub>*) of his dream, but she is unable to avert its evil consequences.<sup>217</sup> Her interpretation employs several kinds of associations between the dream image and its explanation. While some are based on the words' acoustic resemblance, others rely on a similarity between two actions or things, while still others use a *pars pro toto*. Persons can be substituted for plants, animals or objects, with some interpretations seeming more consistent than others,<sup>218</sup> although it is possible that these similarities would have made perfect sense to the people of the Old Babylonian period for reasons which have been forgotten today, like figures of speech, proverbs or unrecorded tales. Generally speaking, the text is highly rhythmical and involves a lot of repetition, opening up questions about the context in which it was performed.

Probably the most surprising fact is that the dream takes place in the same place and in the same surroundings where Dumuzi finds himself in waking life, totally lacking any supernatural or mythological imagery. Being a shepherd, Dumuzi's dream takes place in the sheepfold

on the plain outside Uruk, and elements of a shepherd's world constitute the symbols in his dream. Modern studies have shown that dream content is sensitive to cultural influences with people from small, traditional societies, especially hunter-gatherers, showing a higher percentage of animal characters in their dreams than people from large, industrial societies.<sup>219</sup> Also, unlike other dream accounts in which the protagonist is asked to do something and therefore brings about the events of his dream, Dumuzi's dream simply presages his death without any chance of escape. Immediately after the telling of the dream, the events described in it start to unfold with the attack of the terrible men, i. e. the demons. Although Dumuzi manages to escape them several times, they eventually catch him in the sheepfold. The composition ends with the fold's destruction and Dumuzi's inevitable death. In this respect, the dream is similar to the one dreamt by Gilgameš on his deathbed (see *Death of Gilgameš* below). Dumuzi and Gilgameš are also alike insofar as their mortality is explicitly addressed because both of them possess an intermediate status between the human and the divine:

"Dumuzi always appears to be in the tension between oppositions like man – god, death – life, desert – city. He, a man in his function as shepherd and king, but a god in his function as

<sup>216</sup> Zgoll 2006, 112–115, 312.

<sup>217</sup> Zgoll 2006, 374–376.

<sup>218</sup> "The plants of the first four entries turn out to be persons. Thus, the rushes which continue to grow after they have been torn out, are bandits rising against Dumuzi from their hiding places in the desert. The reasoning behind this interpretation is the identical sound of the Sumerian words 'to tear out' (*zi-zi*) and 'to rise' (*zi-zi*). The reed which shakes its top is Dumuzi's mother shaking her head in grief after his death. This interpretation is based on the similarity between the actions. The two reeds, of which one is removed, are Dumuzi and Ĝeštinanna being separated by his death. The high trees which are uprooted by themselves, are bandits catching Dumuzi inside the enclosure of his sheepfold. This time the interpretation is based on the similar sound of the Sumerian words 'to be uprooted' (*zi-zi*) and 'enclosure' (*i-zi*) [...]. – The interpretation of the following four entries is less consistent. That the coals are extinguished by water indicates that the entire sheepfold will be destroyed. In the case of the cover being removed from the churns, the interpretation confines itself to relating that this will be done by an evil man, thus giving a more specific subject for the action. The drinking cup falling down from

its peg turns out to be Dumuzi falling down from the knees of his mother. This explanation consists of substituting persons for dead things, while the verbal action remains the same. Finally, the disappearance of the shepherd's stick is explained by the more specific statement that a demon will set fire to it [...]. – The eagle taking a sheep from the fold, and the falcon catching a sparrow in the fence, are explained as evil demons attacking the sheepfold. Thus, the interpretation substitutes persons for animals [...]. The following line with its interpretation makes poor sense in the context [...]. – The last two entries deal with Ĝeštinanna's own reaction to Dumuzi's foreseen death. The sick male goats dragging their beard in the dust symbolize herself tearing her hairs out in despair and letting the wind carry them away. The interpretation is based on the similarity between the beard and the hair. Finally, the male sheep scratching the earth with their legs indicate that she will scratch her own ears with her finger nails in grief. The reasoning behind this explanation is the identical verbal action [...]" (Alster 1972, 29–30).

<sup>219</sup> Domhoff 2003, 26; Domhoff and Schneider 2008, 1260; Revonsuo 2000, 892.



husband of Inanna, is not immortal. Thus he stands between man and god. As the husband of Inanna in Uruk and king of Uruk and Badtibira, while at the same time producing food in the desert as a shepherd, he establishes a link between the civilization of the city and the uncultivated world of the desert. Thus, Dumuzi is the mediator between life and death, nature and culture. The shepherd Dumuzi is also king, since in real life the king was the mediator between god and man, and the contradiction that the king was deified, but remained mortal is reflected in the Dumuzi texts as well as in the Akkadian *Gilgames Epic*.<sup>220</sup>

A limestone stela possibly depicting parts of the myth was excavated in the palace in the settlement of Arad, Israel (see chapter 4.2).<sup>221</sup> The stela, which dates to Early Bronze Age II, shows two anthropomorphic figures, one lying on something rectangular, possibly a bed or a mat, while the other stands beside it (figure 22). Both figures have their arms raised, and both possess a head in the form of a twig or an ear. Ruth Amiran and Ornit Ilan interpret this as a mythological scene that shows the growing cycle of nature, similar to the Mesopotamian myth of Dumuzi, the lying figure symbolising wilting and death, the standing one growth and life. If they are correct, this is an important indication that the custom of laying out the deceased on beds or biers as described in chapter 4.2 may have already played a role in mythology and cult during the time considered here, although the mourning ritual for Dumuzi that employs a bed is only attested from the first millennium BC.<sup>222</sup>



Fig. 22 The Arad stela

<sup>220</sup> Alster 1972, 14.

<sup>221</sup> Amiran and Ilan 1992, 88.

#### SONG OF THE PLOWING OXEN AND ORIGIN OF GRAIN

The Sumerian *Song of the Plowing Oxen* is extant in three manuscripts from the Old and Middle Babylonian period respectively.<sup>223</sup> It was probably performed in connection with agricultural festivals and pictures a ploughing ox and related agricultural activities. In the beginning, the farmer (identified with King Lipit-Ištar) requests the ox to work. He then goes to the temple of Nanše to incubate a dream (*ma-mu-de<sub>3</sub> ba-nu<sub>2</sub>*)<sup>224</sup> in which a young bull speaks to him and is chosen for the plough. Unfortunately, the rhythmical text is highly damaged and can only partially be reconstructed:

“Ellu mallu!”<sup>225</sup>

(The Farmer) went to dream with Nanše in the House.

He said good night(?) to Nanše,  
He had his leather bag filled with bread,  
He had water poured into his waterskin,<sup>226</sup>  
He had her [stand]ing by (as a ‘dreamer’) [...].

The Farmer [...] had a vision:

A young bull was talking [...],  
[...] tied the feet (?).

[The Farmer] said to his Mo[ther]:<sup>227</sup>

‘[You(?)] put [bread in my leather bag],  
[You(?)] poured [water into my waterskin],  
[You(?)] st[ood] [by ...]

34–37 broken

E[ll]u mallu!

What [...?]

What [...?]

Who [...?]

Who [...?]

Who [will pick up the] clods?

Who [will chase away] the birds?

On the right [...],

On the left [...].

The choice [...]

My big hooves [...],

The stars in the sky [...]

Will make straight [...] its ... .

[The ox] let (his) thick tongue hang down,

[...] he answered [the Farmer]:

‘I am an ox, (but just) a young ox,

<sup>222</sup> Scurlock 1992, 64–65; Steinert 2010, 273.

<sup>223</sup> Civil 1976, 83–89.

<sup>224</sup> Zgoll 2006, 312.

<sup>225</sup> The onomatopoeic interjections *e-el-lu ma-al-lu* are likely meant to incite the oxen (Civil 1976, 90).

<sup>226</sup> Zgoll interprets these lines as the wish of the farmer that the goddess might appear and invite him to eat and drink (Zgoll 2006, 329).

<sup>227</sup> = Nanše.



In whose muzzle hair has not yet grown,  
 No dust has fallen on my shoulders,  
 My master, why am I so va[luable?]  
 – ‘My proud calf, I am going to speak to you  
 only once,  
 So pay attention:  
 What a plow(?), your fathers are four,  
 What a plow(?), your mothers are eight,<sup>228</sup>  
 May the Sun guide straight your beautiful  
 yoke!’<sup>229</sup>

Some lines follow, about which it is unclear  
 whether they still relate to the dream:

“Ellu mallu!  
 The early working Farmer, the Cowherd of the  
 sacred cattle pen,  
 The young man who, since his youth, had a  
 wife,  
 Had sons, he does not [...] alone”<sup>230</sup>

We then come upon another reference to sleep  
 which is at least as obscure as the previous parts:

“Ellu mallu!  
 The stars in the sky, I [...]  
 A gleam in the sky, I [...]  
 The bedding on the roof, I [...]  
 70–91 (broken)”<sup>231</sup>

According to Miguel Civil, these lines refer to  
 a dream that was dreamt during the night and  
 that ended with the coming of daylight.<sup>232</sup> Zgoll  
 suggested that ritual details might be described  
 here and that incubations could be held on roof-  
 tops.<sup>233</sup> In general, one wonders whether, to be  
 able to talk to the farmer, the ox is conceived to  
 be dreaming as well. That animals were thought  
 capable of entering into the dream world can be  
 inferred from a Sumerian proverb from the ear-  
 ly Old Babylonian period<sup>234</sup> which states: “The  
 dog mutters in its dreams.”<sup>235</sup>

From the Sumerian myth about the *Origin  
 of Grain* it also becomes clear that dreaming  
 was not restricted to humans.<sup>236</sup> It is preserved  
 on an Old Babylonian tablet from Nippur and

describes how the gods Ninazu and Ninmada  
 bring grain to Sumer only after having consult-  
 ed the god Utu in a dream. As with humans,  
 the dream is experienced in *u<sub>3</sub>-sa<sub>2</sub>.g* sleep and  
 introduced by the incubation formula:<sup>237</sup>

« Allons invoquer (?) Utu au ciel !  
 Vers celui qui, lorsqu’il se couche, lorsqu’il se  
 couche, dispense un sommeil réparateur,  
 vers le champion fils de Ningal qui, lorsqu’il se  
 couche, dispense un sommeil réparateur,  
 vers Utu (le gardien) de 70 portes, ils élevèrent  
 les mains. »<sup>238</sup>

Unfortunately, the text breaks off here.

## EPIC OF GILGAMESH

Dreams feature prominently in the various  
 narratives surrounding the mythical King Gil-  
 gamesh of Uruk. In the Standard Babylonian  
 epic, the gods create his counterpart Enkidu, a  
 wild man who grows up among animals and is  
 only civilised by a prostitute, in order to take  
 Gilgamesh’s attention away from oppressing his  
 people.<sup>239</sup> After initially fighting each other, Gil-  
 gamesh and Enkidu become close friends and set  
 out together on a series of adventures. Firstly,  
 they travel towards the Cedar Forest, but even  
 though Gilgamesh has several nightmares in the  
 course of their journey, they succeed to over-  
 come the forest’s guardian Huwawa and fell the  
 cedar as intended. In their second adventure,  
 Gilgamesh rejects the goddess Ištar’s advances  
 whereupon she sends the Bull of Heaven as a  
 retaliation. When Gilgamesh and Enkidu slay the  
 Bull of Heaven, Enkidu is sentenced to death  
 by the gods and during his sickness has a vi-  
 sion of the netherworld. Unable to cope with  
 the death of his friend and the resulting fear for  
 his own life, Gilgamesh sets out towards the end  
 of the world through regions unknown to hu-  
 mans such as along the Path of the Sun or across  
 the Waters of Death. Eventually, he reaches the  
 realm of Ūta-napišti, a man who long ago sur-  
 vived the great flood and on this account was  
 made immortal by the gods. However, with  
 him, Gilgamesh understands that no secret of ev-  
 erlasting life exists, accepts his human mortality

<sup>228</sup> The “fathers” can be interpreted as the plowman  
 and his helpers, the “mothers” as the oxen of the  
 team (Civil 1976, 93).

<sup>229</sup> Civil 1976, 87–88 (22–61).

<sup>230</sup> Civil 1976, 88 (62–65).

<sup>231</sup> Civil 1976, 88–89 (66–91).

<sup>232</sup> Civil 1976, 94.

<sup>233</sup> Zgoll 2006, 119, 321.

<sup>234</sup> Gordon 1958a, 3.

<sup>235</sup> Gordon 1958b, 54.

<sup>236</sup> Kramer 1961 10–11 (No. 5).

<sup>237</sup> Zgoll 2006, 107, 317. The incubation formula is  
 shortened in this case.

<sup>238</sup> Bruschweiler 1987, 55.

<sup>239</sup> George 2003 I, 3.

and is thus a wiser man when he returns to his homeland. While the widely known Standard Babylonian epic dates only to the first millennium BC,<sup>240</sup> the general structure of the story is already in place in several Old Babylonian tablets from about the eighteenth century BC. In the following, they will be described alongside the roughly contemporary Sumerian stories about Gilgameš.<sup>241</sup>

In the Old Babylonian version, a dream is already employed shortly after the beginning of the story to draw attention to Enkidu's imminent arrival. It is Gilgameš's dream and he tells it to his mother immediately, whereupon she interprets it:

"Gilgameš arose to reveal a dream,  
saying to his mother:  
'O mother, during the course of this night  
I was walking about lustily  
in the company of young men.  
The stars of the sky *hid* from me,  
a ...<sup>242</sup> of Anu fell down before me.  
I picked it up but it was too heavy for me,  
I pushed at it but I could not move it.  
The land of Uruk was gathered about it,  
the young men kissing its feet.  
I braced my forehead and  
they supported me,  
I picked it up and carried it off to you.'  
The mother of Gilgameš, well versed in  
everything,  
said to Gilgameš:  
'For sure, Gilgameš, one like yourself  
was born in the wild and  
the upland reared him.  
You will see him and you will rejoice,  
the young men will kiss his feet.  
You will hug him and  
bring him to me.'  
He lay down and saw another dream.  
He arose to talk to his mother:  
'O mother, I have seen another.  
[...] ... in the street  
of Uruk-Main-Street,  
an axe was lying and  
(people) were gathered around it.  
The axe itself, its appearance was strange;

I saw it and became glad.  
I loved it like a wife,  
caressing and embracing it,  
I took it up and put it  
at my side.'  
The mother of Gilgameš, well versed in  
everything,  
[said] to [Gilgameš]:  
Lacuna"<sup>243</sup>

Enkidu's arrival is foreshadowed in this dream as confirmed later in the lines: "I [have acquired a friend, a] counsellor, [the one that I kept seeing in] dreams."<sup>244</sup> Also, the recurrence adds to its credibility.<sup>245</sup> As in other Mesopotamian narratives, the main principles for interpretation are similarities of action and similarities of sound, although in this case, the dream images are much more obscure and elaborate than usual:

"[The] interpretation is connected to the dream by a series of puns. Note in particular Gilgameš's words: 'a *kišru* from *Anum* fell on top of me (*[ki]-iṣ-ru ha dAnim im-qu-ut a-na ṣi-ri-ia*). The word *kišru* is polysemous permitting a number of interpretations including 'meteorite', 'strength', and 'knot'. The cuneiform signs also can be read as *kezru*, meaning a 'curly-haired male prostitute'. His mother realizing that the dream contains a *kišru*, i.e., a 'knot' that must be interpreted, sees the dream as referring to a *meteorite*, but one that foretells the coming of a *hairy* man who will match Gilgameš's great *strength*. The reader, of course, realizes that this man is Enkidu, whom a previous tablet has just described as a wild and *hairy* man who was introduced to the ways of human sexuality by a *prostitute*. Thus all of the meanings associated with the word *kišru* are echoed in the interpretation. His mother also sees import in where the *kišru* fell. Gilgameš said that it fell 'on top of me' (*ana ṣerīya*), and so his mother says that the man whom the *kišru* represents will be *ina ṣerī iwalidma* 'one born of the steppeland'. In effect, she has heard in the preposition *ṣerī* 'upon', the homophonous noun *ṣerī* 'steppeland'. Again the reader recalls the previous mention of En-

<sup>240</sup> George 2003 I, 379–381.

<sup>241</sup> Edzard 1993, 5–6, 59; George 2003 I, 7, 161. The Sumerian name is Bilgames (George 2003 I, 7), but to avoid confusion between different translations, I will stick with the convention of calling him Gilgameš here.

<sup>242</sup> For the multiple translations of the word in question, see below.

<sup>243</sup> George 2003 I, 173–178 (Pennsylvania tablet/OB Tablet II, column I, lines 1–38).

<sup>244</sup> George 2003 I, 197 (Yale tablet/OB Tablet III, column I, lines 24–25). I.e. "[I] have acquired a friend, the counsellor [that I kept] seeing [in dreams,] Enkidu, the counsellor that I kept seeing [in dreams!]" (George 2003 I, 221 (OB Schøyen I, obv., lines 1–2).

<sup>245</sup> Zgoll 2006, 365.

kidu who ‘spread open her (the prostitute’s) garments, and lay upon her (*seriša*)’ (I iv, 20). Gilgamesh then has a second dream in which he sees a *haššinnu* ‘axe’ which he embraces as a wife. The word *haššinnu* plays upon the word *assinnu* ‘male prostitute of the goddess Ishtar’, and thus similarly suggests Enkidu. Gilgamesh further states ‘I put it (the axe) on my side’ (*aš-takanšu ana ahiya*), a line that one may also read as ‘I treated it as my friend (lit. brother)’, because of the polysemy of *ahu* meaning ‘side’ and ‘brother’. In fact, once they meet, the two are called friends, and Gilgamesh even refers to Enkidu as: ‘the axe of my side, the weapon of my hand’ (*haššin ahiya [tukul]at idiya*, VIII ii,4). Such puns (and there are many more here) lie behind the hermeneutical strategy of Gilgamesh’s mother who perceives both dreams as portending the coming of a man who turns out to be Enkidu.<sup>246</sup>

The cognitive linguist George Lakoff has drawn attention to the fact that conceptual metaphor and metonymy are not only an essential part of language but also of the ordinary thought that structures dreaming (see chapter 2.10),<sup>247</sup> and it seems that the people of ancient Mesopotamia were quite aware of this similarity between the spoken word and associations and categorisations of dream images. While the interpretation employs common strategies, the fact that it is nighttime in the dream is singular in the Mesopotamian sources. The visibility of the stars as well as the falling of a potential meteorite consti-

tutes an astral portent and thus an omen within an omen.<sup>248</sup> Yet, on another level of interpretation, it can be argued that we are dealing with a distinctive Mesopotamian interpretation (stars, astral portents) of a universal human phenomenon (glimmering points in the dark, i.e. light phenomena) that sometimes accompanies the heightened degree of consciousness characteristic of dreams with a strong sensorimotor component or else lucid dreams (see chapter 2.10 and 2.11). Furthermore, translations vary as to whether the meteorite fell in front or on top of Gilgameš. In the latter case, his subsequent failure to move might refer to a general inability to move, i.e. to sleep paralysis (see chapter 2.11), rather than to a failure to move the object in question.

The next mention of dreams “[...] may each night bring you a thing you will be glad of!”<sup>249</sup> occurs in the dialogue between Gilgameš and the elders before his departure to the Cedar Forest. They also advise him to do the following: “When you camp for the night, dig a well; in your bottle should be fresh water always.”<sup>250</sup> While in the immediate context this seems to be motivated by the need to pour libations for Šamaš, who features in the dream as the author of the message, a well also constitutes an entrance to the subterranean realm. Moreover, a well connects to the subterranean ocean of Apsû, which was conceived at least since the Old Babylonian period as the dwelling place of Enki, a god commonly connected with dreams.<sup>251</sup>

Gilgameš and Enkidu then set forth on their journey to the Cedar Forest and, as predicted by the elders, Gilgameš has two dreams as they travel, which are explained by Enkidu. Also note that for the second dream, Gilgameš climbs a mountain, thus coming into contact with the upper part of the tiered cosmos (compare chapter 4.3: Old Sumerian tablet from Mari) as opposed to the lower part, which is accessible through the well:

“Gilgameš was lying down at rest; the night brought him a dream.

<sup>246</sup> Noegel 2006, 99–100. “[...] in ancient Near Eastern ‘literary’ contexts, wordplay is hardly ‘play’ at all, but a much more serious, if not potentially dangerous device of performative power. In both divinatory and ‘literary’ contexts, it functions as an active demonstration of the theological principle of divine justice (*lex talionis*), and as such, registers a mantic insecurity with regard to the proper functioning of the world under divine aegis. In Mesopotamian and Egyptian narrative descriptions of oneiromantic activity, the punning technique is portrayed with accuracy and legitimacy, and serves, as it does in epistolary contexts, to promote the validity of dreams as a mode of divine communication. It thus also promotes the importance of, and dependency on, the professional mantic as mediator and interpreter of divine knowledge. The transmission and dissemination of such texts constitute a propagandistic legitimization of mantic esoteric ideologies.” (Noegel 2007, 277).

<sup>247</sup> Lakoff 2001, 272. Moreover, both punning as well as the recognition of similarity in imagery constitute cases of conceptual blending as explained in chapter 3.3.

<sup>248</sup> Noegel 2007, 60.

<sup>249</sup> George 2003 I, 207 (Yale tablet/OB Tablet III, column VI, line 262).

<sup>250</sup> George 2003 I, 207 (Yale tablet/OB Tablet III, column VI, line 268–269).

<sup>251</sup> Lambert 2000, 75; Lambert and Millard 1969, 8; Oppenheim 1968, 194–195.

In the middle watch of the night he awoke with a start,  
 he arose to talk to his friend:  
 'My friend, I have seen a dream! Why did you not rouse me? It was very frightening!  
 With my shoulder I was propping up a mountain;  
 the mountain collapsed on me and girt me around.  
 Terror encircled my legs,  
 a radiant brightness gave strength to my arms.  
 There was a man, clad in a *royal* [*mantle*,]  
 he was shining brightest in the land and was most [comely] in beauty.  
 He took hold of my upper arm,  
 from under the mountain itself he pulled me forth.'  
 Enkidu explained the dream, saying to Gilgameš:  
 'Now, my friend, the one to whom we go,  
 is he not the mountain? He is something very strange!  
 Now, Huwawa to whom we go, is he not the mountain? He is something very strange!  
 You and he will come face to face and you will do something unique.  
 The one of death *came forth* .....  
 His fury will be enraged against you,  
 terror of him will encircle your legs.  
 But the one you saw was King Šamaš,  
 in times of peril he will take your hand.'  
 It being favourable, Gilgameš was happy with his dream,  
 his heart became merry and his face shone bright.  
 A journey of one whole day, two, then a third,  
 they drew near to the land of Ebla.  
 Gilgameš climbed up to the top of a hill,  
 he looked around at all the mountains.  
 He rested his chin on his knees,  
 the sleep that spills over people fell on him.  
 In the middle watch of the night he awoke with a start,  
 he arose to talk to his friend:  
 'My friend, I have seen another! It was more frightening than the previous dream I saw.  
 Adad cried aloud, while the land was rumbling,  
 the day shrouded itself, darkness went forth.  
 Lightning flashed down, fire broke out,  
 flames flared up, while death was raining down.  
 From the sound of thunder I was growing weak,  
 the day went dark, I knew not where I was going.  
*At long last* the fire that flared so high died down,  
 the flames diminished little by little, they turned to embers.  
 The gloom brightened, the sun shone forth,  
 ... he led here and ...'  
 [Enkidu] explained the [dream,] saying to Gilgameš:

'[...] ... Adad ...'  
 46–8 not deciphered  
 'The bright *fire* [that was] kindled for you.  
 ... flames *and* his weapons,  
 ..... he will go up *outside*.  
 Your dreams are favourable, a god is your strength,  
 you will quickly achieve your *plans*.'"<sup>252</sup>

Unusually, as compared to Sumerian dreams, there is no dream specialist involved in the solving of the dream, but the dreamer himself has a major part in it instead.<sup>253</sup> What is more, he assumes a rather unique and uncomfortable position, which Zgoll has linked to the practice of incubation.<sup>254</sup> She points out that there is no explicit mention that Gilgameš is sitting and instead proposes a curled-up position on his side, stressing the parallel to burials. This episode also constitutes one of the rare cases of evidence that the time of night at which the dream occurred was thought to be of importance. Surprisingly, Gilgameš's prognostic dreams happen in the middle watch of the night, whereas in Mari, dreams experienced in the early parts of the night were considered without significance (see chapter 4.5: Mari letter No. 237 and 142, Old Babylonian private letter). As with these, Gilgameš's awakening in the middle of the night supports ideas about polyphasic sleep in historic times (see chapter 2.4). Noteworthy here in terms of universal dream experiences are the several occurrences of sudden changes of light: in the first dream, the "radiant brightness" and Šamaš "shining brightest" and in the second, the lightning, fire, flames, the day going dark and eventually the sun. This recalls light phenomena which are sometimes experienced during dreams with a strong sensorimotor component and lucid dreams (see chapter 2.10 and 2.11). Unfortunately, the text breaks off at the very moment when Gilgameš is about to relate the third dream:

"They pitched camp for the night, they lay down;  
 Gilgameš arose to reveal his dream to him:  
 'My friend, I have seen a third!'"<sup>255</sup>

<sup>252</sup> George 2003 I, 233–237 (OB Schøyen2, obv., lines 1–48, rev., lines 49–53).

<sup>253</sup> Zgoll 2006, 396.

<sup>254</sup> Zgoll 2006, 333–334.

<sup>255</sup> George 2003 I, 239 (OB Schøyen2, rev., lines 82–84).



The story continues on another tablet with Enkidu's interpretation and subsequently with Gilgameš's fourth dream:

"My friend, we have come close to the forest,  
(what was foretold in) dreams is near at hand,  
battle is swift (upon us).

You will see the radiant auras of the god,  
of Huwawa, whom your mind does ever fear.  
You will lock horns and batter him like a bull,  
you will force his head down with your strength.  
The old man you saw is your mighty god,  
the one who begot you, Lugalbanda.  
'My friend, I have seen a fourth,  
it surpasses my (other) three dreams!  
I watched an Anzû-bird in the sky,  
up it rose like a cloud, soaring above us.  
It was a ... , its face was very strange,  
its speech was fire, its breath was death.  
[There was a] man, strange of form,  
[he ...] and was standing there in my dream.  
[He ...] its wings, he took hold of my arm,  
[...] ... and he cast it down [before] me.  
[.....] ... upon it.'  
Lacuna  
'[You watched an Anzû-bird in the sky,]  
up [it rose like a] cloud, soaring above us.  
It was a [...], its face was very strange,  
its speech was fire, its breath was death.  
While you fear its awesome splendour,  
I shall ... its foot, I shall enable you to arise!  
The man you saw was mighty Šamaš ..."<sup>256</sup>

Again, the inscription breaks off here. Lastly, another dream and its interpretation can be found on a tablet, whereby it is not clear which point in the story is being described. The fact that no previous dreams are mentioned has Andrew George assume it to be a variant of the first dream.<sup>257</sup> Note that, again, a mountain is to be climbed before the dream occurs in some kind of divine sleep:

"Go up on to the mountain crag, look at [...] ...'  
'I have been robbed of the sleep of the gods!  
My friend, I saw a dream: how *ominous* it was,  
how ..., how confused!  
I had taken hold of (some) bulls from the wild —  
(one) was cleaving the ground with its bellowing,  
the cloud of dust it made was thrusting into the sky —  
in front of it *I leaned myself forward*.  
It was seizing ... [...] was enclosing my arms.

<sup>256</sup> George 2003 I, 243–245 (OB Nippur, obv., lines 1–19, rev., lines 0'–6').

<sup>257</sup> George 2003 I, 247.

... he pulled [me] forth [...] ... *by force* ...  
My cheek ... [...] my ..., [he gave] me water to  
drink from his waterskin.'  
'My friend, the [god] to whom we are going,  
is he not the wild bull? He is something very  
strange!  
The countenance that you saw was shining  
Šamaš,  
he will take our hand in adversity.  
The one who gave you water to drink from his  
waterskin  
was your god who honours you,  
Lugalbanda. We shall join forces and  
do a thing unique, a feat that does not (yet) exist  
in the land!'"<sup>258</sup>

All dreams presaging the encounter with Huwawa stress his otherness in relation to the human protagonists. He is never depicted as an anthropomorphic figure but always as a non-human adversary (an avalanche, a thunderstorm, a bull, an Anzû-bird and a wild bull) – things that are characterised by "[...] an awesome power and elemental ferocity that makes them fitting symbols of the Cedar Forest's terrible guardian."<sup>259</sup> Still, surprisingly it seems that Huwawa also experiences dreams and receives messages from Šamaš in them: "Before you came up my mountains ... *in* ... of my night I ...; From the mouth of mighty hero Šamaš [I] heard ... [...]."<sup>260</sup>

Contrary to the Akkadian version, in the Sumerian story *Gilgameš and Huwawa*, sleep occurs only after the felling of the cedar and seems to be induced by Huwawa's powers<sup>261</sup> in reaction to Gilgameš's iniquity.<sup>262</sup> In both versions, we find the typical description of fearful awakening from *u<sub>3</sub>-sa<sub>2</sub>.g* sleep,<sup>263</sup> but unfortunately, the dream's content is not related apart from the fact that Huwawa somehow appeared in it. The oldest version B describes the scene as follows:<sup>264</sup>

„Da, nachdem sich (nun) ein Krieger dem anderen genähert hatte,

<sup>258</sup> George 2003 I, 249–251 (OB Harmal1, obv., lines 1–9, rev., lines 10–15).

<sup>259</sup> George 2003 I, 227.

<sup>260</sup> George 2003 I, 253, 257 (OB Harmal2, left edge, column II, lines 43–44).

<sup>261</sup> Huwawa's "powers" or "weapons" are called *me-lám* ("(Schreckens)glanz", i.e. "glamour of fear") in version B and firstly *ní-te* ("Strahl", i.e. "beam") and only later *me-lám* in version A (Edzard 1993, 55).

<sup>262</sup> Edzard 1993, 8–11, 16–45.

<sup>263</sup> Zgoll 2006, 112–115.

<sup>264</sup> Edzard 1993, 7.



Kam der Gla[nz des Huwawa] wie ein Speer  
heran(gefliegen).  
[...] ..., ruht der da wohl in Frieden(?)  
[Er] sch[läft, erhebt sich nicht(?)].  
[.....]  
[.....]  
[.....]  
[.....] spricht [zu ihm(?):]  
,Der du da lie[gst], der du da lie[gst],  
Junger Herr Gilgameš, bis wann liegst [du]  
(denn noch da)?  
Die Berge haben sich verhü[llt], Schatten [ist  
über sie gefallen].  
[Das Zwielficht] der Dä[mmerung hat sich  
darüber gelegt(?)'.  
\*Gilgameš (Text: [E]nki[du])<sup>265</sup> fuhr aus dem  
Traume auf,  
Er war voller Schrecken vom Schlaf,  
Er wischte sich die Augen – Stille ringsumher.  
,(Beim) Leben meiner Mutter Ninsuna, meines  
Vaters, des hellen Lugalban[da],  
Me[in] (eigener) Gott [Enki, Nudimmud ...]  
[.....]'.  
([.....])  
,[Ich habe ihn gesehen(?),] er beun[ruhigt (mich)].  
Der Krieger, dessen Gesicht eine Löwenfratze ist,  
Dessen Brustkorb wie eine anspringende Flut ist,  
Dessen Stirn – sie ‚frisst‘ das Rörich – sich nie-  
mand nähern kann,  
Dessen Zunge wie die von einem menschen-  
fressenden Löwen nicht aufhört, die Toten (zu  
lecken(?)) –  
Verglichen mit dem Krieger ist bei dir nicht  
(genug) Kraft, wer denn könnte neben ihm  
bestehen?'  
Sein Sklave Enkidu sprach zu ihm:  
,[...] ... [...],  
... [.....]'.  
,(Beim) Leben [meiner] Mu[tter Ninsuna],  
meines Vaters, [des hellen Lugalbanda],  
Dein (eigener) Gott [Enk]i, [Nudimmud] ...  
[...].  
Krieger, man wüßte (gern), [wo du im] Berg-  
land [wohnst]!  
[Für] deine kleinen Füße hat man (dir) fürwahr  
[kleine] Schuhe gemacht,  
[Für] deine großen Füße [hat man dir fürwahr  
große] Schuhe [gemacht].  
[.....]/[.....]  
[.....]/[.....]  
[.....]/[.....]  
[.....]  
[...] ... [...] möchte ich bitte hineinbringen(?).

[(Beim) Leben \*meiner (Text: seiner) Mutter  
[Ni]nsuna, meines Vaters, des hellen Lugalbanda,  
Dein (eigener) Gott Enki, [N]udimmud [...] ...  
Krieger, man wüßte (gern), wo du im Bergland  
wohnst!  
Für deine kleinen Füße hat man (dir) [fürwahr]  
kleine Schuhe gemacht,  
Für deine großen [Füße] hat man (dir) [für-  
wahr] große [Schu]he gemacht.<sup>266</sup>

In the more recent version A, we find no infor-  
mation at all about the content of the dream,  
but here Huwawa's description is given by En-  
kidu, who has encountered him previously. As  
the wording of both stories is similar, Enkidu's  
remark that Gilgameš has not yet seen Huwawa  
seems to be no coincidence but a play upon Gil-  
gameš's speech in version B, where he states that  
he has seen Huwawa in a dream. One wonders  
whether version A contains a deliberate critique  
of Sumerian beliefs about dreams:

„Da ließ (Huwawa) seinen Schreckensstrahl ge-  
gen ihn los.  
[Gilgameš (...)] sank in Schlaf.  
[Den Enkidu aber] schwindelte es.  
Die Söhne seiner Stadt, die mit ihm gezogen  
waren,  
Kauerten sich wie junge Hunde ihm zu  
Füßen(?)  
Enkidu fuhr aus dem Traume auf, er war voller  
Schrecken vom Schlaf.  
Er wischte sich die Augen – Stille ringsumher.  
(Enkidu) rührte (Gilgameš) an; aber der erhebt  
sich ihm nicht.  
Er redet ihn an; aber der gibt ihm keine Antwort.  
Der du eingeschlafen bist, der du eingeschlafen  
bist,  
Gilgameš, Herr, Sohn von Kulaba, wie lange  
schläfst du denn noch?  
Die Berge haben sich verhüllt, ein Schatten hat  
sich darüber gelegt.  
Das Zwielficht der Dämmerung ist darüber ge-  
fallen.  
Utu geht (schon) erhobenen Hauptes zum  
Schoß seiner Mutter Ningal.  
Gilgameš, wie lange schläfst du denn noch?  
Die Söhne deiner Stadt, die mit dir gezogen sind,  
Sollen am Fuße des Gebirges nicht auf uns(?)  
warten müssen.  
Ihre Mütter sollen auf dem Platz deiner Stadt  
nicht ‚das Seil zwirnen‘ [...].  
Das rief (wörtlich: steckte) er ihm ins rechte  
Ohr hinein.

<sup>265</sup> Because of the text's fragmentary condition and the contradictions between the two versions, it remains doubtful at some points whether Gilgameš or Enkidu is meant (Edzard 1993, 55–56).

<sup>266</sup> Edzard 1993, 24–28 (Version B, 66–107).

Sein Kriegergeschrei breitete er darüber wie ein Tuch [...].  
 Er nahm dreißig Sekel Öl zur Hand [...] und rieb sie ihm auf die Brust [...].  
 Da stellte sich (Gilgameš) auf wie ein Stier, der auf einem Sockel (steht).  
 Er senkte den Nacken zur Erde und rief ihm laut zu:  
 Beim Leben meiner Mutter Ninsuna, meines Vaters, des hellen Lugalbanda.  
 Soll ich wieder (so klein) werden, daß ich auf den Knien meiner Mutter Ninsuna angestaunt werde?  
 Und abermals sprach er zu ihm:  
 Beim Leben meiner Mutter Ninsuna, meines Vaters, des hellen Lugalbanda,  
 Bis daß ich genau weiß, ob der da ein Mensch ist oder ein Gott,  
 Werde ich meinen Fuß, den ich zum Berge gelenkt habe, bestimmt nicht zur Stadt lenken.  
 Der Sklave schmeichelte, ließ das Leben süß erscheinen(?).  
 Er erwiderte seinem Herrn [...].  
 Mein Herr, du hast den da noch nicht gesehen (wörtlich: der du den da noch nicht gesehen hast), er kann (dich) nicht beunruhigen.  
 Mich aber, der ich den da schon gesehen habe, mich beunruhigt er.  
 Die Zähne des Kriegers (oder: das Maul des Kriegers) sind Drachenzähne (oder: ist ein Drachenschlund).  
 Sein Gesicht ist eine Löwenfratze.  
 Sein Brustbein ist (wie) eine anströmende Flut.  
 Seiner Stirn, die das Rohr ‚frißt‘, kann niemand nahekommen [...].“<sup>267</sup>

While in *Gilgameš and Huwawa* dreams are used to foreshadow events of ordinary life, in *Death of Gilgameš*, a story existing only in Sumerian, they relate to the netherworld.<sup>268</sup> Gilgameš has fallen sick and we encounter him on his deathbed, where he has a dream about his fate after death. He witnesses an assembly of the gods in which his deeds and merits are discussed. But although his mother is a goddess, Gilgameš is only a man and it is decided that he is not to be made immortal but shall descend to the netherworld like every other human. There, however, he is to reign and sit in judgement over the deceased, while on earth there will be feasts commemorating him. In this respect, the story is similar to *Dumuzi's Dream* (see above) because in both cases a dream is employed to

foreshadow the death of someone whose status between man and god is ambiguous and thus also his mortality.

Next, the god of dreams Sisig<sup>269</sup> explains the dream again, stressing the inescapability of death and pointing out that Gilgameš will be provided with the necessary funerary rites. What is more, in the netherworld he will be reunited with all his ancestors and deceased friends, chief among them Enkidu. There he is to be awarded the rank of the Anunna, which makes him almost divine and as important as Dumuzi or Ningišzida. Gilgameš then awakens with the usual description of dazedness and silence. It is remarked that the dream was sent by Enki in the guise of Nudimmud.<sup>270</sup> After a heavily damaged part, the dream is repeated point by point. Antoine Cavigneaux and Farouk Al-Rawi interpret this as a second dream with the same content,<sup>271</sup> but, with regard to the conventions of dreams in other stories, it seems more likely that Gilgameš tells the dream to someone, even though there is no change from third to first person.<sup>272</sup> From the following lines concerning the design of his tomb, it appears that Enki is the interpreter of the dream:

« *Premier rêve, dans la version de M*

Alors le jeune Seigneur, le Seigneur Gilgameš  
 était couché sur son lit de mort ...  
 Le roi ...  
 Dans ce rêve un dieu (?) ...  
 A l'Assemblée, le lieu solennel (où siègent) les dieux,  
 quand le Seigneur Gilgameš fut arrivé,  
 ils (les dieux) lui dirent 'Seigneur Gilgameš',  
 c'est à lui :  
 < Dans cette affaire : bien des routes parcourues,  
 le Cèdre, l'Arbre unique, descendu de sa montagne,  
 Huwawa abattu dans la forêt ;  
 tu as dressé tant de stèles pour les générations futures, qui resteront à jamais ...  
 Fondé tant de demeures pour les dieux,  
 Parvenu jusqu'au séjour de Ziusuda ;  
 Les Forces Secrètes de Sumer, qui allaient tomber dans un oubli éternel,  
 Les Commandements, les Règles, tu les as fait descendre dans le Pays ;

<sup>267</sup> Edzard 1991, 190–201 (Version A, 67–102).

<sup>268</sup> Cavigneaux and Al-Rawi 2000, 3–4.

<sup>269</sup> Enlil in the Nippur version (Cavigneaux and Al-Rawi 2000, 61).

<sup>270</sup> George 2003 I, 14–15.

<sup>271</sup> Cavigneaux and Al-Rawi 2000, 3.

<sup>272</sup> George 2003 I, 15.

Les rites de 'lavage de mains', de 'lavage de la bouche' il les fixe.

[Mais ..., quand le Déluge eut balayé tout ce qui existait dans les pays]

#### *Lacune*

C'est pour cela [que Gilgameš (?)] ne doit pas être emporté ainsi (?).

Ils (les dieux ?) donnaient l'avis d'Enlil (?) à Enki.

Enki de répliquer à An et à Enlil :

En ces jours, en ces jours lointains,  
en ces nuits, en ces nuits lointaines,  
en ces années, en ces années lointaines,  
quand l'Assemblée eut fait déferler le Déluge,  
nous étions sur le point de faire disparaître la graine de l'humanité.

(Mais) < Au milieu de nous, toi seul, uniquement, tu' vivras > (— as-tu décrété),

Zi-us-dili sauva le nom de l'humanité.

Depuis ce jour tu! m'as fait jurer par le ciel et par la terre

de ne plus désormais laisser vivre l'humanité. Je l'ai juré (?).

Voilà ce qui est montré à Gilgameš.

Son ascendance maternelle ne pourra le faire échapper.

Gilgameš, en tant qu'ombre, au fond de la terre, tout en étant mort,

qu'il fasse office de gouverneur des Enfers (kur), qu'il soit le chef des ombres !

Il rendra la justice, il prononcera les sentences.

Son verdict pèsera autant que la parole de Ningišzida et de Dumuzi.

Alors le jeune Seigneur, le Seigneur Gilgameš, (en voyant) toute l'humanité rassemblée (là), sera choqué.

Ne te meurtris pas le sein, ne t'afflige pas le cœur !

Les vivants ... aux' morts [...]

Les gars, les jeunes gens, à l'apparition de la nouvelle lune,

sans lui ne placeront pas la lumière devant eux.

Sisig, le fils d'Utu,

en éclaire les points obscurs (du rêve ?).

Ce qu'avaient apporté mes actions humaines est emporté,

Ce qu'avait apporté la coupure de mon cordon est emporté.

Les heures sombres de l'humanité t'ont atteint,

Le < lieu unique > de l'humanité t'a atteint,

La vague irrésistible t'a atteint,

La lutte inégale t'a atteint,

La bataille dont nul ne réchappe t'a atteint,

Le mal inéluctable t'a atteint.

Mais tu ne dois pas descendre dans la Grand Ville le cœur angoissé.

Qu'il/qu'on (?) dise le < devant Utu >, Il me défera (cette angoisse ?).

Qu'il/on la détorde comme les brins d'une ficelle, qu'il la disloque comme les caëux d'une tête d'ail !

(Va) en tête au *kispu*, (le repas funèbre) offert aux Anunna, en présence des grands dieux,

là où repose l'En, là où repose le Lagar,

Là où repose le Lumah, là où repose la Nin-diğir,

Là où repose le Guda, là où repose le Gada,

Là où repose la Nin-diğir, là où repose le < fidèle > ,

Là où est ton père, là où est ton grand-père,

Là où est ta mère, là où est ta sœur, ton neveu (?),

Ton ami préféré, ton copain,

Ton ami Enkidu, ton gaillard de compagnon,

Les gouverneurs que le roi a nommés dans la Grand Ville,

Là où reposent les capitaines,

Là où reposent les commandants des troupes.

Quand on cherche' quelqu'un dans la Grand-Ville, dans l'Arali, ... (??)

Ceux qui y entrent (??) ...

De la maison de la sœur, la soeur ira vers toi,

De la maison du neveu', le neveu' viendra vers toi,

Ton ami viendra vers toi, ton intime viendra vers toi,

Les anciens de ta ville viendront vers toi,

Ne te meurtris pas le sein ! Ne te frappe pas le cœur !

Maintenant il sera compté au nombre des Anunna,

Il ne le cédera qu'aux dieux,

Il sera gouverneur des Enfers,

Il rendra la justice, il prononcera les verdicts.

Ta/sa parole pèsera autant que celle de Ningišzida et de Dumuzi.

#### *Gilgameš s'éveille*

Alors le [jeune Seigneur Gilgameš]

se leva. [Un rêve ! Il s'ébroua, plein de torpeur.]

[Il se frotta] les yeux. [Un silence angoissant l'enveloppait !]

Un rêve ...

[Dans le] rêve ...

...

Le tourment ...

...

Comme le jour où ..., [où des] genoux de ma mère

[Ninsumuna] je fus pris, c'est comme si c'était (re)devenu (ainsi) ! (??)

... qui ébranle les grandes montagnes (?).

Le *Namtar* qui n'a ni mains ni pieds, mais qui ravit les hommes,

Mon ...

C'est le seigneur Nudimmud qui a fait voir ce rêve (?)

#### *Second rêve*

A l'assemblée, le lieu solennel (où siègent) les dieux, ...

*Le deuxième rêve reproduit le premier (141–216 = 50–125). Ensuite il y a une lacune jusqu'à la l. 231.*

[...] était bon. (?)

... un jour désigné<sup>273</sup> comme propice<sup>2</sup>,

... un jour désigné<sup>2</sup> comme propice<sup>2</sup>,

...

Son architecte<sup>2</sup>, comme si c'était un châtiment (??), dessina son tombeau.

Le dieu Enki, d'un simple mouvement de tête (?)

Lui avait révélé la solution du songe.

Ce rêve, (seul) le *chien* du roi l'avait interprété, nul autre n'avait su l'interpréter. »<sup>273</sup>

Zgoll translates the final lines, in which we learn about the solution of the dream and about Gilgamesh's tomb, somewhat differently.<sup>274</sup> It seems that the interpretation Gilgamesh has obtained from Enki is characterised by some abnormal feeling located in the head, translatable as a kind of vertigo. This altered state of consciousness possibly results from his approaching death and renders Gilgamesh capable of receiving the revelations of his god.<sup>275</sup> Against the backdrop of the observations made so far concerning dreams that happen during episodes of heightened consciousness, we can now narrow this down to a dream with a strong sensorimotor component as these are commonly triggered by feelings of vertigo (see chapter 2.10). Like sleep paralysis and lucid dreaming (see chapter 2.11), these types of dreams are particularly vivid and memorable and hence seem more real than ordinary dreams, meaning that it is easy to interpret them in a religious way. Also note that in ancient Mesopotamia the tomb was considered the entrance to the netherworld for the deceased and that it was thought to allow the return of the spirit to the world of the living under certain circumstances, therefore giving additional significance to this part of the story.<sup>276</sup>

Furthermore, this is the earliest mention of the god of dreams Sisig, who is conceptualised as the son of the sun god Utu.<sup>277</sup> The name Sis-

ig suggests a connection between the sphere of dreams and the realm of the dead because Zgoll has indicated that the *zaqīqu* may have also been thought to be the part of humans that went to other worlds while they dreamt:

„Die *zaqīqu* sind Geister aus Hauch oder Luft, die von einem Traumsender zum Menschen geschickt werden. Andererseits hat auch der Mensch selbst einen solchen Hauch oder Geist. Man stellte sich vor, daß dieser Hauch auch vom Menschen ausgehen und in andere Bereiche gelangen konnte. Auf diese Weise war es einem Träumer möglich, durch seinen *zaqīqu* (oder mit Hilfe seines oder in Gestalt seines *zaqīqu*?) während des Traumes an einem anderen Ort zu sein und dort nicht nur göttlichen Wesen, sondern auch anderen Menschen, d.h. deren *zaqīqu*, zu begegnen.“<sup>278</sup>

She cites Iddin-Dagan's hymn (see chapter 4.4), in which humans, or some part of them, position themselves in front of Inana after having lain down on roofs and walls. Likewise, in the Sumerian story *Gilgamesh and the Netherworld*, Enkidu can be summoned back to the world of the living as a *si-si-ig* (see below).<sup>279</sup> The concept of the *zaqīqu/si-si-ig* appears to be parallel to the idea of the *etimmu/gidim*, the spirit that survives after death, a notion encompassing both “mind” and “vital force”.<sup>280</sup> It is therefore likely that the *zaqīqu/si-si-ig*, which was thought of as a breath of air, was associated with both living and dead human beings. The *zaqīqu/si-si-ig* is also connected to the gods and can be conceptualised as both a discrete divinity as well as the divine part of humans that is able to leave the mortal body. Zgoll suggests “(dream) spirit”, “(dream) breath” or “(dream) soul” as a translation.<sup>281</sup> In this context, it is noteworthy that a tablet of the Sumerian King List from Susa, probably dating to the middle of the First Dynasty of Babylon (ca. eighteenth century BC<sup>282</sup>),<sup>283</sup> states: “[...] divine Gilgames—his

<sup>273</sup> Cavigneaux and Al-Rawi 2000, 56–58 (Meturan version lines 45–238).

<sup>274</sup> Zgoll translates: „... sein Grab ... Sein (! = Gilgamesh) Gott Enki – durch seinen (! = Gilgamesh) Kopf, der schwindlig geworden ist, zeigte er (! = Enki) ihm (= Gilgamesh) die Lösung der Träume. Hat diese / seine Träume ein königlicher Gefolgsmann (/ Ur-Lugal) gelöst? Kein Mensch hat sie gelöst!“ (Zgoll 2006, 379; lines 235–238).

<sup>275</sup> Zgoll 2006, 378–380.

<sup>276</sup> Bottéro 1980, 31–32; Krafeld-Daugherty 1994, 223.

<sup>277</sup> Its counterpart, the Akkadian *Za/iqīqu*, is not attested before the first millennium BC (Butler 1998, 80).

<sup>278</sup> Zgoll 2006, 276.

<sup>279</sup> Zgoll 2006, 302–304.

<sup>280</sup> The Sumerian *gidim* is already attested in Presargonic times (Selz 2004, 51). Selz suggests a derivation from the words /gi/ + /dim/, translatable as “effigy from reed” and therefore alluding to the representation of the dead in the form of a statue (Selz 2005, 581–582). See also Bottéro 1980, 28–29.

<sup>281</sup> Zgoll 2006, 301–305.

<sup>282</sup> Van De Mieroop 2007, 306.



father (was) a *lillû*-demon—a high priest of Kullab, reigned 126 years [...].”<sup>284</sup> One wonders whether this might be the reason for his extraordinary skills concerning dreaming as the *zaqīqu/si-si-ig* is thought to belong to the family of *lilû*-demons.<sup>285</sup> Selz draws attention to still other parts of the Mesopotamian individual:

„Nach mesopotamischer Auffassung des 3. Jt. gehören <sup>d</sup>Lamma und <sup>d</sup>Udug zu einem Individuum, sind aber gleichwohl ‚irgendwie‘ getrennt. Sie umgeben es, gehen ihm zur Seite, voraus oder hinter ihm. Dabei ist das Wort Udug höchstwahrscheinlich mit dem sumerischen Wort für Schlaf *ù-du<sub>10</sub>(-g)* zu verbinden und bezeichnet die schattenhafte, dunkle, nicht notwendigerweise negative Seite der Persönlichkeit. Der oft negative Charakter des Udugs beruht wohl auf der dichotomen, binären Struktur von Udug und Lamma: Rechts und Links, Vorne und Hinten können im Rahmen binärer Klassifikation auch mit ‚Gut‘ und ‚Schlecht‘ parallelisiert werden. Das Wort Lamma [...] enthält möglicher Weise das Wort */lam(-ma)/*, das etwa Lebenskraft bedeuten könnte.“<sup>286</sup>

In *Gilgameš and the Netherworld*, Enkidu is trapped in the netherworld after having tried to retrieve some playthings for Gilgameš which

had fallen down there through some kind of hole in the ground.<sup>287</sup> Gilgameš petitions the gods on his behalf until finally Enki can be convinced to help. Enki, in turn, instructs the sun god Utu to bring along Enkidu’s *si-si-ig* when he rises from the netherworld at dawn:

“Father Enki helped him in this matter,  
he spoke to Young Hero Utu, the son born of Ningal:

‘Now, when you make an opening in the Netherworld,  
bring his servant up to him from the Netherworld!’

Young Hero Utu, [the son born of Ningal,]  
he made an opening in the Netherworld,  
by means of his phantom [*si-si-ig*] he brought  
his servant up to him from the Netherworld.”<sup>288</sup>

The world of the dead is thus located in the same part of the world where the sun god visits at night, an invisible part of heaven below the earth that is sometimes called the “lap of heaven”.<sup>289</sup> Although, according to this notion, the sun and the heavenly bodies stay in heaven throughout their whole course and don’t enter the realm of the earth upon setting, the lap of heaven is far from being a metaphysical place but is very much this-worldly, as can be seen from the fact that objects are able to fall down there through the ground. While the exact course of this plunge remains obscure, the nature of the opening through which Enkidu’s *si-si-ig* leaves the netherworld has sparked some controversy. Usually, it is interpreted as some kind of opening in the ground,<sup>290</sup> but Josef Tropper has argued that the word *ablal* denotes a kind of small recess or hatch in brickwork. He, therefore, suggests an opening in the wall or gate of the “city of the dead”.<sup>291</sup> This would fit well with the idea that the “lap of heaven” has gates and doors, primarily used by the sun god.<sup>292</sup> In a similar vein, the *Sumerian Temple*

<sup>283</sup> Jacobsen 1939, 10.

<sup>284</sup> Jacobsen 1939, 89–91 (column III, lines 17–20). Most records state that Gilgameš’s parents are the goddess Ninsun and the deified King Lugalbanda of Uruk. (Butler 1998, 62).

<sup>285</sup> Oppenheim 1973, 190; Oppenheim 1961, 60.

<sup>286</sup> Selz 2005, 582–583. „Nun lässt sich Form und Struktur im Alten Mesopotamien nicht von der Vorstellung seiner materiellen Träger, von der Substanz trennen. Die Dichotomie von Geist und Materie ist diesem Denken noch fremd. Geistige Phänomene haben nicht nur materielle Entsprechungen, sondern die Materie ist der Träger des Geistigen. Das Maß des jeweiligen Anteils kann ganz unterschiedlich sein. Entsprechend eingeschränkt ist der Geltungsbereich des *tertium non datur*. Die Frage Mesopotamiens richtete sich demnach nicht auf das Prinzip der Göttlichkeit etwa, sondern auf das Maß an Göttlichkeit das einem Wesen zukommt. Man hat dieses Denken als additives Denken bezeichnet, und in diesem Sinne ist es sammelnd, komparativ. Offenkundige Dichotomien sind naturgemäß für dieses Denken von besonderem Interesse. Sie sind von großer Bedeutung, und offenkundig ein Ausgangspunkt für allfällige Spekulation. Das Problem des Entweder - Oder manifestiert sich denn in wohl allen frühen Kulturen als ‚das Problem des Übergangs‘. Die Frage von Leben und Tod ist demgemäß zu einem erheblichen Teil zu verstehen als eine Frage des Sterbens.“ (Selz 2005, 580).

<sup>287</sup> George 2003 I, 13; II, 771.

<sup>288</sup> George 2003 II, 758–759, 773–774, lines 238–243.

<sup>289</sup> Heimpel 1986, 132, 151. If the dimensions “above” and “below” are seen as absolute, it follows logically that the sun and the heavenly bodies are conceived as traveling through a world below at night (Heimpel 1986, 127).

<sup>290</sup> Bottéro 1980, 31.

<sup>291</sup> Tropper 1988, 64–68. See also Geller 2000, 47–48.

<sup>292</sup> Heimpel 1986, 132–133, 140. Bottéro presumes that the entry and return of the *efimmu* into and from the netherworld were believed to take place in the same locations where the sun rises and sets. He points out



*Hymns* from the Akkad period depict a connection to the netherworld as follows: “The town Enegi is first described as ‘big pipe, pipe of Ereškigal’s underworld’, where the ‘pipe’ is the clay tube down which offerings to the dead of a liquid kind were poured.”<sup>293</sup> Another pipe into which water is poured during funerary offerings is mentioned in the Sumerian myth about the death and resurrection of the god Lil from the Isin-Larsa period (see chapter 4.2).<sup>294</sup>

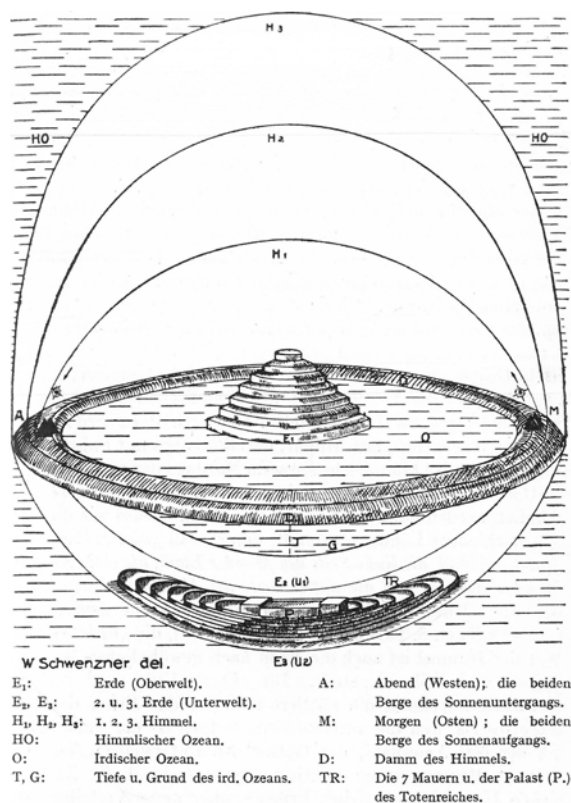


Fig. 23 Mesopotamian cosmology

that it was thought that the sun sinks into the earth in the far west of the world before crossing under it during the night and reappearing on the other side the next morning (Bottéro 1980, 31).

<sup>293</sup> Lambert 1980, 61. In Urkesh in northern Syria, a subterranean shaft has been excavated, which, in its core, dates back to the third millennium BC and continued in use throughout the second. Based on later Hurrian texts, the shaft is identified as an *ābi*, i.e. a structure for the performance of rituals to evoke the spirits of the netherworld. Giorgio Buccellati thinks that these rituals are inconsistent with Mesopotamian traditions of, still, they are similar at least with respect to the idea that a shaft connects with the subterranean realm and can therefore act as a gateway for offerings (Buccellati 2013, 87).

<sup>294</sup> Scurlock 2002, 2–3.

A diagram depicting Mesopotamian cosmology was prepared by Bruno Meissner and Walther Schwenzner as early as 1925, and although it is mostly based on younger sources, a resemblance to previous observations is beyond question (figure 23).<sup>295</sup> Jean Bottéro describes Mesopotamian cosmology as follows, pointing out the location of the netherworld below ground:

« Traditionnellement, les anciens Mésopotamiens s'étaient fait de l'Univers une conception pour ainsi dire verticale et bipolaire : ils le voyaient comme une immense globe, composé de deux hémisphères symétriques, c'est à savoir l'En-haut (AN/*šamû*), ou, si l'on veut, le Ciel, et l'En-bas (KI/*eršetu*), ou l'Enfer, séparés par un plan diamétral, au milieu duquel, entourée comme un île des « eaux amères » de la Mer (*tamtu*) et reposant sur la nappe d'eau douce de l'Apsû, se trouvait ce que nous appelons la Terre : la Terre des vivants. C'est l'hémisphère inférieur que l'on a donné pour espace et pour cadre à l'existence des Trépassés. Une telle opinion doit sans doute être mise en rapports avec le mode traditionnel, dans le pays, du traitement des cadavres : ils étaient toujours ensevelis, mis en terre, soit dans des fosses, soit dans des tombes, soit dans des caveaux ; à l'exception d'un petit nombre de témoignages archéologiques douteux, et à quoi rien ne répond dans la documentation écrite, jamais l'on n'a utilisé la sépulture sur le sol ou au dessus du sol, l'exposition à l'air libre ou la crémation, si ce n'est lorsque, délibérément, l'on voulait « maltraiter » les morts en question. Mis sous terre, le défunt se trouvait, de la sorte, et par son corps et par son « ombre », introduit en son nouveau milieu définitif. »<sup>296</sup>

His opinion resembles that of Samuel Kramer, who compiled different Sumerian texts relating to death:

“In general the Nether World was believed to be the huge cosmic space below the earth corresponding roughly to heaven, the huge cosmic space above the earth. The dead, or at least the souls of the dead descended into it presumably from the grave, but there also seemed to be special openings and gates in Erech, as well as no doubt in all the important city centres. There was a river which the dead had to cross by ferry, but it is nowhere stated where it was situated in relation to the earth or the Nether World. [...] Although in general one has the

<sup>295</sup> Meissner 1925, 102, 107–112, 143–144.

<sup>296</sup> Bottéro 1980, 29–30. See also Lambert 1975, 47–49.

feeling that the Nether World was dark and dreary this would seem to be true only of ‘day-time’; at ‘night’ the sun brought light to it, and on the last day of the month it was even joined by the moon.”<sup>297</sup>

Markham Geller has taken a different stance, arguing that the Sumerians conceived of the world of the dead as located in the distant mountainous region at the border of the alluvial plain of Sumer, whereas it was only in the Akkadian period that the netherworld acquired its status as lying below ground.<sup>298</sup>

“There is a distinction between a ‘horizontal cosmology,’ in which heaven and earth meet on a flat surface, on which gods, men, demons, and dead spirits all reside on the alluvial plain or mountains, as distinct from a ‘vertical cosmology’ (consisting of Heaven, Earth, and Underworld), in which heavenly gods are distinct from chthonic gods, and men live on earth but retire at death to a Netherworld. This distinction may reflect a significant difference between the cosmologies of Sumerian and Akkadian literature.”<sup>299</sup>

Because his hypothesis is mostly based on variant translations of certain Sumerian terms, no final conclusion can be offered here. Nevertheless, even if Geller’s conjecture proves true, climbing a mountain in order to enter the realm of the dead still contains a decidedly vertical component. The merging of two different traditions could also explain why, in later times, two different ideas of entering the world of the dead coexisted (by land and by water) and why the two traditions stayed mostly separate.<sup>300</sup>

These considerations are supported by the observation that cylinder seals display a chronological difference as to whether the sun god, recognisable by the rays of light that emerge from his shoulders and by the saw that he, as a judge, uses to “cut decisions”, is depicted in



*Fig. 24 Impressions of seals; sun god in boat (Early Dynastic III period, top), sun god in boat and war chariot (Early Dynastic III period, second from top), sun god in boat (Akkadian period, third from top and bottom)*

a boat or on a mountain.<sup>301</sup> In the typical Early Dynastic III scene, he stands in a boat and directs it on its course with a paddle (figure 24, second from top). A depiction in which the prow merges into a human body with long hair and the crown of the gods might indicate that the boat moves by itself because this figure is equipped with a punting pole. Furthermore, the stern is sometimes rendered as the head

<sup>297</sup> Kramer 1960, 65. Contrary to this, Wolfgang Heimpel has argued for a dark netherworld even while the sun passes through it at night because the sun was thought to change from flaming above the earth to glowing beneath the earth and then to flare up again in the morning. The idea of the dead living in a closed building below the earth, shutting out sunlight, seems less likely by contrast (Heimpel 1986, 142, 149–150).

<sup>298</sup> Geller 2000, 41–49.

<sup>299</sup> Geller 2000, 41.

<sup>300</sup> Bottéro 1980, 31–32; Lambert 1980, 59; Selz 2004, 53–54.

<sup>301</sup> Frankfort 1939, XXVIII–XXIX, 67–68, 92, 95, 98, 108–110.

of a serpent, and a scorpion man can go ahead of the boat (figure 24, top). Here, the incorporation of the moon and stars in the bend of the scorpion man's tail might indicate that the nightly journey of the sun across the subterranean waters is portrayed. As opposed to this, during the Dynasty of Akkad the sun god is mostly shown at the moment of his rising and therefore appears with one foot on a mountain while the gates are opened by twin attendants (figure 25). However, boating scenes can still be found (figure 24, third from top and bottom). Frankfort has additionally suggested that agricultural associations, which are to be found on both Early Dynastic and Akkadian seals, possessed meaning for human life by establishing a symbolical association with the annual renewal of vegetation and with the daily rising of the sun from the netherworld, thus offering an additional clue that it is the nightly journey of the sun that is depicted. In summary, it can be stated that both the netherworld and the "lap of heaven" were thought of as physical places that could theoretically be reached from the world of the living, although this violation of fundamental principles did not go unpunished. Both Enkidu and Inana (see above: *Dumuzi's Dream*) pay the price for going to the netherworld: they have to stay there and are only allowed to leave after negotiations with and interventions from the gods.

A similarly literal concept can be observed in the Sumerian *Incantation to Utu*, the earliest known version of which comes from the reign of King Ammi-šaduqa of the First Dynasty of Babylon (1646–1626 BC<sup>302</sup>).<sup>303</sup> In the text, Utu is invoked in his role as judge of the dead, and ritualistic procedures relating to the cult of the dead and the sun god are described. Utu is conceptualised as riding in a chariot across the sky and through the sea, each time drawn by a yoke of four lions, some of which display characteristics of a bird, a serpent and a dragon.<sup>304</sup> Furthermore, the association between the sun god, the realm of dreams and the netherworld

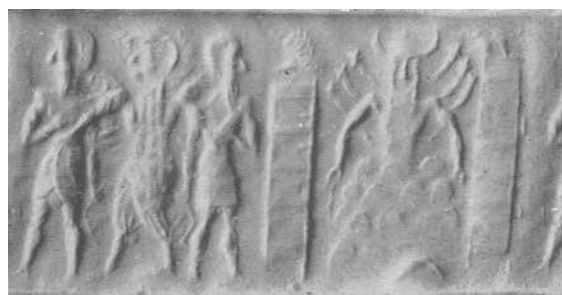


Fig. 25 Impressions of seals; sun god between mountains (Akkadian period, top), Shamash rising in lion-capped gate (Akkadian period, second from top), Shamash in gate with tree (Akkadian period, third from top), sun god setting, bird-footed monster captive (Akkadian period, bottom)

is strengthened in the text. Of special interest is the part in which the spirit (*gidim*) of a dead

your four-lion yoke riding in the middle of the sky,  
[...]

the lion with the face of a *zû*-bird, the dreadful, terrible one,

the lion with the terrible serpent's eye, devouring everything,

the lion with the face of a dragon, the murderer,  
your beast with the face of a lion, spreading awful radiance,

Your four-lion yoke riding in the midst of the sea,"  
(Alster 1991, 51–53, 74, lines 87–91, 96–100).

<sup>302</sup> Edzard 2009, 126, 262; Van De Mieroop 2007, 306.

<sup>303</sup> Alster 1991, 27, 29–30.

<sup>304</sup> "Utu, as you behold(?) your forest(?) and your lions

...

Let me speak ..., behold(?) your lions.

Noble Light of Heaven, Great Horror of Heaven,  
Terrible light of heaven [sic], Abundant Light of Heaven,



person frightens the living in their dreams as this again points to the idea of permeability of the different realms:

“The person, the son of his (personal) god,  
whose judgement has not been passed, whose  
case has not been decided,  
is a spirit frightening men [...] in dreams,  
a spirit working evil against men from the place  
of murder, [...] turning the living man into the ghost of a dead  
man.”<sup>305</sup>

The Old Babylonian *Epic of Gilgameš* describes the edge of the world, which Gilgameš reaches by following the path of the sun, as a mountainous region, very much like a part of the ordinary world. From there, the journey is supposed to continue over the “Waters of Death” with the help of the ferryman Sursunabu and the mysterious “Stone Ones”.<sup>306</sup> Selz points out that the concept of a river in the netherworld that has to be crossed with the help of a ferryman can be found as early as the middle of the third millennium BC. The text also offers interesting notions about the connection between the sun god, the netherworld and sleep when Gilgameš addresses Šamaš in the following way, likening sleep to death:

“After roaming, wandering through the wild,  
within the Netherworld will rest be scarce?  
I shall lie asleep down all the years,  
but now let my eyes look on the sun so I am  
sated with light.  
The darkness is hidden, how much light is there?  
When may a dead man see the rays of the  
sun?”<sup>307</sup>

<sup>305</sup> Alster 1991, 55–56, 75, lines 117–120.

<sup>306</sup> “Gilgameš spoke to him, to Sursunabu: ‘Gilgameš is my name, who came from Uruk-Eanna, who came around the mountains, the hidden road where the sun rises. [...] Sursunabu spoke to him, to Gilgameš: ‘The Stone Ones, Gilgameš, were what enabled me to cross, because I must not touch the Waters of Death.’” (George 2003 I, 281 (OB VA+BM, iv, lines 7–11, 21–23)). From the remaining evidence, it does not seem possible to decide whether we are dealing with the mountains of sunrise located in the ordinary world or with Twin Mountain, where the sun passes at night, as described in the Standard Babylonian epic (George 2003 I, 275; Heimpel 1986, 142–146). While we can only speculate about the meaning of the “Stone Ones”, it needs to be noted that stone is a substance that, because of its material properties, is commonly associated with the dead in many cultures (Parker Pearson and Ramilisonina 1998, 310–314).

<sup>307</sup> George 2003 I, 277 (OB VA+BM, i, lines 10’ 15’).

## EPIC OF ATRAMHASIS

The *Epic of Atramhasis* was written down in the seventeenth century BC at the latest, probably in Sippar. Its most well-preserved edition dates to the reign of King Ammi-šaduqa of the First Dynasty of Babylon (1646–1626 BC<sup>308</sup>).<sup>309</sup> The Akkadian epic tells the story of the creation of men with the purpose of taking over the gods’ hard labour and their subsequent decimation by the god Enlil, who is bothered by their noise. To this end, Enlil causes three successive catastrophes (a plague, a famine and a flood), but Atramhasis manages to conquer them and to save humanity. Each time, he petitions his personal god Enki, who is specifically mentioned as being located in the Apsû, for help. Atramhasis hopes for divine advice to be communicated in a dream, which he incubates in the morning:<sup>310</sup>

“ [...] of his god.  
[.] .. he set his foot.  
Every day he wept,<sup>311</sup>  
Bringing oblations in the morning.  
He swore by [.] .. of the god,  
Giving [attention] to dreams.  
He swore by [...] of Enki,<sup>312</sup>  
Giving [attention] to dreams.  
[...] the temple of his god  
[...] seated, he wept.  
[...] .. put  
[...] seated, he wept.  
. [.....] . was still  
In [.....] ... finished  
.. [.....] . seen  
Addressed [...] of the river,  
‘Let the river take (?) [...] and bear away,  
Let it . [.....] ..  
To .. [...] ma [...] ..  
May he see [.....] .  
May he [...  
In the night I [...’  
After he [...  
Facing the river [...  
On the bank [...  
To the Apsû he [...  
Enki heard [his words]

<sup>308</sup> Edzard 2009, 126, 262; Van De Mieroop 2007, 306.

<sup>309</sup> Lambert and Millard 1969, 8–13, 31–34, 42–105.

<sup>310</sup> Zgoll 2006, 323.

<sup>311</sup> Zgoll considers this ritual weeping as part of the preparations for the incubation (Zgoll 2006, 328).

<sup>312</sup> This line can also be understood to mean that Enki has sworn to inform Atramhasis in his dreams (Zgoll 2006, 329).

And [instructed] the water-monster [as follows],  
 ‘The man who . [...]  
 Let this being . [...]  
 Go, the order [...]  
 Ask . [...]<sup>313</sup>

Enki thus gives instructions with which Atramhasīs is to hold up the plague, and life goes on as before until the next catastrophe befalls humanity. When Enlil finally decides to bring the flood upon the humans, Enki is powerless to stop it any longer and instead instructs Atramhasīs to build a boat in which at least he can save himself. Another dream (the contents of which we, unfortunately, do not get to know) is incubated, and again Atramhasīs asks Enki to explain it:

“Atra-hasīs opened his mouth  
 And addressed his lord,  
 ‘Teach me the meaning [of the dream],  
 [...] .. that I may seek its outcome.’  
 [Enki] opened his mouth  
 And addressed his slave,  
 ‘You say, “What am I to seek?”  
 Observe the message that I will speak to you:  
 Wall, listen to me!  
 Reed wall, observe all my words!  
 Destroy your house, build a boat,  
 Spurn property and save life.”<sup>314</sup>

Although the rest of humanity is wiped out completely this time, Atramhasīs and his family survive in the boat. In the end, Enlil accepts a compromise in which the human race is organ-

ised in such a way that he is spared the noise and is therefore allowed to continue.

#### 4.7 RITUAL SPECIALISTS, DREAM OMENS AND DREAM RITUALS

Most authors have adopted Oppenheim’s division into message dreams, symbolic dreams and mantic dreams,<sup>315</sup> although these types overlap at least partially, thus rendering them useless for a systematic categorisation.<sup>316</sup> Only recently has a more consistent terminology been proposed by Zgoll, who divides Mesopotamian dreams into two groups: intrarelatational dreams, i.e. dreams in which someone in the dream is addressed, consist (mainly) of images, whereas extrarelatational dreams, i.e. dreams in which someone in the waking world is addressed, consist (mainly) of speech.<sup>317</sup> Starting from linguistic clues in the Mari letters and then expanding the argument to incorporate other dream accounts, Zgoll recognises that these two groups reflect the division between interpreted and not yet interpreted dreams. Extrarelatational dreams consisting of speech can therefore be understood as the interpreted and verified version of intrarelatational dreams consisting of images. This process is illustrated in the dreams of Gudea, in which we are successively presented with a summary of the dream from the perspective of the narrator, then with the dream as dreamt by Gudea, which consists of intrarelatational images, and lastly with the interpreted version by the *ensi* Nanše, which contains the extrarelatational messages. Accordingly, intrarelatational dreams, or dreams as dreamt, feature most prominently in letters, whereas inscriptions usually display extrarelatational and therefore interpreted dreams.<sup>318</sup>

<sup>313</sup> Lambert and Millard 1969, 77–79 (tablet II, column III, lines 2–34).

<sup>314</sup> Lambert and Millard 1969, 89 (tablet III, column I, lines 11–26). Also note that this mention of a dream can be considered a separate incident from the transmission of the message via the wall (Butler 1998, 232). It is moreover interesting to note that the about contemporary Sumerian epic with roughly the same content explicitly states that Enki’s message to Atramhasīs is *not* a dream: “At that time, the king Ziusudra, the anointed [...], He made ... [...] With humility (and) well chosen words, in reverence [...] Every day he stood constantly present at [...]. It was not a dream, coming out and speaking [...] Conjured by heaven and underworld [...] In the ki-ur (?), the gods, a wall [...] Ziusudra heard, standing by its side, He stood at the left of the side-wall [...] ‘Side-wall, I want to talk to you, [hold on] to my word, [Pay attention] to my instructions: On all dwellings (?), over the capitals the storm will [sweep].” (Lambert and Millard 1969, 14, 143, column III, lines 145–156).

<sup>315</sup> Oppenheim 1956, 185, 197, 206, 237. See for example Butler 1998, 15.

<sup>316</sup> Kasia Szpakowska has suggested subdividing dreams according to the emotional response they evoke in the dreamer. While at least this is an emic category, feelings are not always clear, and not in every culture are they made as explicit as they are in the recorded dreams of the Egyptians (Szpakowska 2003, 4).

<sup>317</sup> Zgoll 2006, 238–239. See also Zgoll 2006, 126–127 (Sumerian sources), 151–155 (Akkadian sources), 171 (Mari letters), 241 (overview table).

<sup>318</sup> Zgoll 2006, 243–248. The distinction can be further strengthened by the existence of terms for



Because the dream was considered an omen and was therefore thought to be able to both foretell future events as well as influence them,<sup>319</sup> several ritual specialists are involved in its interpretation and solution. By far the most common term is the Sumerian *ensi*, which can be translated as an interpreter and solver of dreams and which can denote both humans, especially of priestly rank, and divinities.<sup>320</sup> In some texts, we also find indications for specialists seeking dreams on behalf of someone else, like the *lu<sub>2</sub>-saĝ-še<sub>3</sub>-nu<sub>2</sub>-a* in Gudea's temple hymn.<sup>321</sup> Differing from this, Akkadian literature usually does not employ any term at all for the persons interpreting dreams.<sup>322</sup> There seems to be no specific word for a dream specialist in Akkadian, the closest parallel being *ša'iltu/ša'ilu* (a divination specialist) and *bārû* (an extispicy specialist). Although they could be consulted about dreams, this was not their sole task, which indicates that there were no exclusive dream specialists in the Akkadian sphere. In the nineteenth century BC archive of the merchant Imdilum in the *kārum*<sup>323</sup> at Kaneš (modern Kültepe, Turkey), an Old Assyrian letter was discovered which describes a consultation with both kinds of priests without any mention of a dream.<sup>324</sup> Although an en-

quiry with the spirits of the dead is mentioned, it does not become entirely clear whether the two kinds of priestesses were consulted as well as the spirits of the dead<sup>325</sup> or whether the latter was part of the priestesses' oracle.<sup>326</sup> In any case, a *ša'iltum*-priestess' task was both the enquiry with the spirits of the dead as well as the interpretation of dreams and the solving of their adverse aftereffects, which suggests a connection between the two spheres.<sup>327</sup>

In the earliest Sumerian references to the profession of a dream specialist, the person in question is always female. Correspondingly, the Akkadian female version *ša'iltu* occurs earlier than its male counterpart *ša'ilu*. While we occasionally encounter male dream interpreters in literary compositions, these seem to be exceptions and their gender role ambiguous: while Enkidu plays the role of Gilgameš's wife, Enki assumes tasks usually done by goddesses in other myths.<sup>328</sup> In this context, it is notable that sleep-related hallucinations are slightly more common in women (see chapter 2.11), which might have contributed to them being considered particularly eligible for a role as a dream specialist.

Although omen collections in the form of dream books usually play a major role in papers on sleep and dreaming in the ancient Near East and Egypt, for chronological reasons they are not considered here. While Middle Kingdom precursors have been suggested for the Egyptian hieratic dream book,<sup>329</sup> the sole extant copy was only produced during the reign of Ramesses II (1279–1213 BC, Dynasty 19, New Kingdom<sup>330</sup>), and indirect evidence remains questionable.<sup>331</sup>

the “heart/inside” or “core” of the dream in both Sumerian and Akkadian (Zgoll 2006, 256).

<sup>319</sup> Zgoll 2006, 234.

<sup>320</sup> Zgoll 2006, 401–403, 421.

<sup>321</sup> Zgoll 2006, 404–405. The Akkadian equivalent *mu-paššir šunāti* is only known from lexical lists; evidence with context is missing (Zgoll 2006, 413).

<sup>322</sup> Zgoll 2006, 405–407, 410–411.

<sup>323</sup> A *kārum* is an Assyrian trading establishment, literally a “port” (Edzard 2009, 114).

<sup>324</sup> „Zu Imdilum sage!  
„Folgendermaßen (sprechen) Tarām-kūbi  
und Šimat-Aššur:  
„Hier befragen wir die ša'iltum-,  
die bārītum-Priesterinnen und die  
Totengeister.  
Aššur warnt dich immer wieder.  
Du liebst das Geld,  
aber dein Leben  
vernachlässigst du.  
Kannst du in der Stadt (dem Gott) Aššur  
nicht willfahren?  
Bitte, sobald du den Brief  
vernommen hast, komm her  
und schau an das Auge Aššur  
und rette dein Leben!  
Warum schickst du mir den Erlös  
meiner Stoffe nicht?““  
(Tropper 1989, 70–71, TC 1,5 = TCL 4,5).

<sup>325</sup> Tropper 1989, 74–75. This suggestion is based on syntactic considerations and is therefore the more likely.

<sup>326</sup> Oppenheim 1956, 223.

<sup>327</sup> Zgoll 2006, 411.

<sup>328</sup> Zgoll 2006, 433–434.

<sup>329</sup> For example, a dating to Dynasty 12 (Gardiner 1927, 9).

<sup>330</sup> Hornung et al. 2006, 493.

<sup>331</sup> Szpakowska 2003, 69–71. Richard Parkinson has argued for the existence of dream books in the Middle Kingdom on grounds of the formulation “a marshman seeing himself in Elephantine” in the *Tale of Sinuhe* (see chapter 5.5). In his opinion, this recalls the phrase “if a man sees himself in a dream” of the hieratic dream book. Although other allusions in *Sinuhe*'s intertext seem plausible (for example the reference to the execration texts in *Sinuhe*'s fight with the hero of Retjenu (Fischer-Elfert 1996, 198–199)), an argument based solely on the fact that

This resembles the situation in Mesopotamia, where the earliest forerunners of the series *Ziqīqu*, i.e. the dream book as compiled by Oppenheim, were discovered in Kassite levels in Babylon.<sup>332</sup> The body of source material is equally scarce concerning dream rituals, which predominantly date from the Neo-Assyrian period or even later. Because the Assyrian dream book incorporates a Sumerian proverb attested from the nineteenth century BC (Isin-Larsa period), it has been suggested that collections of dream omens date back to this time.<sup>333</sup> The text in question, however, portrays a dialogue with the god of dreams Sisig, in which he is asked about a task he just completed without any reference to organised dream omens:

„Sisig,  
nach Akkade habe ich dich geschickt.  
Was hast du (dort) in Akkade gemacht?  
Falsche (Duplikate: wahre) Träume habe ich ihr  
auferlegt.  
Hast du sie einen Löser dafür bekommen lassen?  
In Akkade [...] wie [.....]  
[.....] bekommen.“<sup>334</sup>

More interesting are the dream images and their interpretation in *Dumuzi's Dream*. According to Zgoll, the structure is similar to Sumerian lexical lists and omen collections, which is why she considers the text to suggest the existence of collections of dream omens. Additionally, Ĝeš-tin-Ana is called a “tablet knowing scribe”<sup>335</sup>, which might be a further reference to Sumerian dream omen collections.<sup>336</sup>

different wordings existed, one of which was employed later on in the dream book, seems hardly convincing (Parkinson 2006, 157–158).

<sup>332</sup> Butler 1998, 97 100; Oppenheim 1956, 259–260.

<sup>333</sup> Oppenheim 1956, 296; Zgoll 2006, 440.

<sup>334</sup> Zgoll 2006, 450. Alster lists three Sumerian versions (SP 11.57, A (= CBS 4567, PBS 12, 29 + CBS 7831 + CBS 14176, PBS 13, 50 + CBS 14222); SP 18.15, B (= CBS 14188, PBS 13, 38); 3N-T 910 d (= A 33293) r. 4–6) as well as the Assyrian Dream Book (296 f.), in which dreams are varyingly described as confusing or favourable (Alster 1997 I, 190, 194, 240, 242). Alster translates the most complete version B as follows:  
“Oh whirlwind [si-si-ig],  
I dispatched you toward Akkad.  
What did you accomplish in Akkad?  
A confusing omen [maš-gi<sub>6</sub>] was given to him (i.e., Naramsin).  
He was provided with an interpreter.  
Akkad, Akkad, like ...  
(continuation missing).”  
(Alster 1997, 242).

<sup>335</sup> Alster 1972, 55.

Although there are Old Babylonian omen collections in which dreams are mentioned, they do not form part of a series of dream omens but are interposed between others of different kinds. For example, one collection contains the following description of an evil dream among an unsystematic collection of physiognomatic (deduced from bodily features) and other omens, some of which were concerned with sleep:

“If a man cannot remember the dream he saw (it means): his (personal) god is angry with him.”<sup>337</sup>  
“If a man—when he is asleep—the town falls repeatedly upon him, and he cries (for help) and one does not hear him (this means): this man will have attached to him a protective angel and a (good) spirit. If a man—when he is asleep—the town falls repeatedly upon him, and he cries (for help) and one hears him (this means): an evil spirit will be attached to him.”<sup>338</sup>

Similarly, there exists an Old Babylonian<sup>339</sup> omen text in which the following predictions are made from the behaviour and the external features of a sacrificial lamb: “the dreams of the king will be trustworthy (true)” and “his dreams will be false.”<sup>340</sup>

A Sumerian incantation against bad dreams, “to appease the night”, has survived from the Old Babylonian period. The text states: “[...] in the (sacred) stable may the blanket be laid upon the bed of the young lad in a friendly manner, as for a young boy.”<sup>341</sup> Lastly, another suggestion of rituals concerning dreams might be seen in the Old Sumerian tablet from Mari (see chapter 4.3),<sup>342</sup> but again, this does not constitute a systematic collection of rituals. In conclusion, the evidence for collections of dream omens and dream rituals before the middle of the second

<sup>336</sup> Zgoll 2006, 441–442.

<sup>337</sup> Oppenheim 1956, 232: VAT 7525, obv. I: 31–32. See also Zgoll 2006, 443–444.

<sup>338</sup> Oppenheim 1956, 229: VAT 7525, rev. III: 28–35. See also Zgoll 2006, 443–444.

<sup>339</sup> This dating is based on stylistic language features. Other suggestions are even more precise when they ascribe the tablet to the time of Hammurapi (Goetze 1966, 1–2), who is thought to have reigned 1792–1750 BC (Edzard 2009, 108, 262; Van De Mieroop 2007, 306).

<sup>340</sup> Goetze 1966, 15, pl. 105–112 (No. 51 and 52/YBC 4631 and 4637, drawing of the tablets without translation), Oppenheim 1956, 207.

<sup>341</sup> Van Dijk et al. 1985, 1–3, 13, 42, pl. 63 (No. 63/NBC 7893). Jan van Dijk and his colleagues consider this a possible allusion to the dream of Dumuzi.

<sup>342</sup> Zgoll 2006, 464–465.

millennium BC is extremely scarce and mostly unreliable. Therefore, I will not consider these types of texts any further.

#### 4.8 SYNOPSIS

An abundance of Near Eastern sources connected to sleep and dreaming has been thus presented here. We began with an overview of archaeological remains and found that, while beds are frequently attested in writing and in the form of clay models, real beds appear to have been a luxury good and have survived only rarely. Whereas sleeping platforms have occasionally been excavated in settlements between the Early Dynastic and the Isin-Larsa period, bedframes were found exclusively in graves of people of high social rank, where the body was placed on them. Although attested scantily, this custom appears again and again in different locations between the Early Dynastic and the Old Babylonian period and, in conjunction with other architectural elements, suggests a conception of the tomb as a house for the dead in which they sleep. By analogy with the habit of providing burials with chairs for the *etimmul/gidim*, it is also possible to interpret the beds as an emplacement intended for the *zaqīqu/si-si-ig*. Linguistic evidence points in a similar direction as Sumerian words for lying down to sleep, for example in the incubation formula *ma-mu<sub>2</sub>-de<sub>3</sub> ba-nu<sub>2</sub>*, can be used in connection with burials as well. Moreover, below the palace in Qatna, Syria, the construction of the tomb possibly alluded to its conceptualisation as a literal entrance to the netherworld. Seals from the Jemdet Nasr to the Early Akkadian period depict scenes with beds, often in connection with a scorpion. In some cases, these could be recognised as likely dreaming scenes, while in other cases the meaning remains unclear.

Concerning the oldest written sources, a total of four references to dreaming from the Early Dynastic and Akkadian period exist, all but one featuring women as exclusive performers and mostly set in a ritual context. It, therefore, seems that at the beginning of the historical record, people were already well versed in dealing with dreams and had long developed customs considered appropriate for this topic. They knew about techniques to incubate dreams, and the concepts of interpreting and solving dreams

were already in place. Also, a connection to the goddess Inana can be traced further back than to any other god, and a possible reference to movement between different tiers of the cosmos has been found.

The preserved dreams of Sumerian kings offer a multifaceted picture. Apart from the central theme of a god positioning himself at the head of the dreamer and prognosticating some future event, which can already be observed in the Early Dynastic period, the accounts differ in key ways. While Gudea's temple hymn poses a veritable lesson in practices of Sumerian incubation and the ritual requirements surrounding the process as well as dream interpretation and solution, the letter prayer of Sin-iddinam offers a more personal insight into Sumerian thought on dreams, according to which not only gods could appear in them but demons as well. The importance of the goddess Inana for dreaming becomes increasingly apparent, and the god of dreams Anzaqar makes his first appearance. With the allusion to a hypnopompic lucid dream in the hymn *Šulgi O*, we find indications for meticulous observation concerning properties of dreams as is the case with the reference to sleep paralysis in Gudea's temple hymn. Lastly, Iddin-Dagan's hymn allows us to tentatively suggest an idea according to which some part of the sleeper left the body and visited the realm of the gods in dreams. The evidence thus supports the impression that a highly developed system of beliefs about dreams as well as rituals concerning them was already in place in the Isin-Larsa period at the latest.

The Old Babylonian Mari letters offer manifold insights into dreams, especially with respect to the process of interpretation and verification as an omen as well as concerning the different oracular techniques and ritual specialists involved. We have also seen that the importance ascribed to a dream was dependent on several aspects, for example, the time of night when it occurred, its repetition or the status of the person experiencing the dream. Apparently, different types of dreams existed, only some of which were considered omens. With respect to previous observations, it seems reasonable that this discrimination also had to do with the difference between ordinary dreams and states in-between sleeping and waking, which are characterised by certain features that make it easy to interpret them in a religious way and are more likely to happen in the early morning hours. Possible incubations in a temple could be observed in

two cases. From the dream of Addu-dūrī, we can also reconstruct the idea of the dream world as a spatial location, which could be entered by particular techniques. Of the several dream accounts from Mari, the small group offering indications about a connection between dreams and the netherworld is of special interest here. Although far less common than the appearance of gods, the deceased could feature in dreams as well and transmit messages if their religious status was high enough. As such, they bridge the gap between the living, the dead and the gods via the realm of dreams. Lastly, it can be tentatively suggested that the idea of dream counsel by the deceased is of greater antiquity than counsel by the gods. The connection between sleep and death is strengthened by the finding that some of the bodies were placed on beds in the tumuli of Baḡūz, the likely cemetery of the inhabitants of Mari. At the transregional level, a gradual change can be observed with respect to royal dreams. Sumerian kings customarily recorded their dreams in inscriptions to showcase themselves as the recipients of messages from the gods and to prove the diligent fulfilment of the divine order. In the Old Babylonian period, habits changed. Dreams came to be recorded in royal archives not intended for public use, and therefore more realistic accounts of dreams as they were dreamt have survived. Also, dreams of persons of low rank were recorded if they concerned the king's matters.

The Old Babylonian period is furthermore considered the “classical period”<sup>343</sup> of Babylonian literature because many popular epics were first written down in this time. Dream accounts in both Sumerian and Akkadian literature are characterised by certain traits. By predicting the hero's fate, they give direction to the plot, while often they are narrated in both their uninterpreted and their interpreted version, and as such, they illustrate the process of interpretation and solution (*bur*<sub>2</sub>). The interpretation itself most commonly relies on similarities between images or on words' acoustic likeness. Moreover, they employ formulaic phrases like the incubation formula *ma-mu*<sub>2</sub>-*de*<sub>3</sub> *ba-nu*<sub>2</sub><sup>344</sup> or the *u*<sub>3</sub>-*sa*<sub>2</sub>.g sleep desired in incubations<sup>345</sup> along with the to-

pos of fearful or at least amazed awakening and sometimes rubbing of the eyes (*Lugalbanda in the Cave of the Mountains*, *Dumuzi's Dream*, *Epic of Gilgameš*).<sup>346</sup> It seems likely that the latter denoted sleep paralysis because of the features described, a hypothesis that is further strengthened by the mention of a hypnopompic lucid dream (*ḡiri*<sub>3</sub>-*babbar-ra*) in *Enmerkar and EnSUHkešda'ana* and by Gilgameš's inability to move in the dream as described at the beginning of the Epic. An altered state of consciousness characterised by vertigo is also referred to in *Death of Gilgameš*, while light phenomena in dreams are mentioned several times throughout the whole epic. Apparently, people in ancient Mesopotamia were well aware of the group of related dream phenomena which are today termed sleep paralysis, lucid dreaming and dreams with a strong sensorimotor component, phenomena in which the dreamer's heightened state of consciousness allows for a reflection on the dream images while at the same time makes them appear more real than in the case of an ordinary dream. Incubations are not restricted to temples (*Sargon Legend*, *Song of the Plowing Oxen*) but can be performed in natural surroundings (*Lugalbanda in the Cave of the Mountains*, *Dumuzi's Dream*, *Epic of Gilgameš*, *Epic of Atramhasīs*) as well.<sup>347</sup> Unusually, in the case of Gilgameš, the dream occurs in the middle watch of the night, whereas Atramhasīs performs his incubation in the morning.

As regards content, whereas the royal dreams of earlier periods were mainly concerned with divine assignments, literary dreams tend to focus on calamities or at least on fateful events. Threatening premonitions can concern whole cities, as in the *Curse of Agade*, in which the impending destruction of his kingdom is shown to Narām-Sîn in a dream, as well as the fate of individuals. Both Dumuzi (*Dumuzi's Dream*) and Gilgameš (*Death of Gilgameš*) receive information about their impending death in a dream, while in the *Sargon Legend* it is not Sargon's but Ur-Zababa's

<sup>343</sup> Lambert and Millard 1969, 24.

<sup>344</sup> Zgoll 2006, 311. A similar wording existed in Akkadian but has not been preserved in records from the first half of the second millennium BC (Zgoll 2006, 313–316).

<sup>345</sup> Zgoll 2006, 62–64. Oppenheim already thought that incubation was more common than is immediately obvious from the texts, although he does not consider every dream which contains a divine message to be an incubated dream. Rather, the pattern of many literary records was modeled on incubation dreams (Oppenheim 1956, 190).

<sup>346</sup> Zgoll 2006, 264. See also Oppenheim 1956, 190.

<sup>347</sup> Zgoll 2006, 321–322.



death that is announced. By contrast, *Lugalbanda in the Cave of the Mountains* maintains the convention of announcing positive occurrences in a dream, in this case, Lugalbanda becoming a saviour-saint, while at the same time playing upon the conventions of dream interpretation. In the *Epic of Gilgameš*, dreams are additionally used as a stylistic device to indicate important narrative turns, for example, Enkidu's arrival or the encounter with Huwawa.

We also found hints as to why the gods Enki and Inana are the ones who appear most commonly in stories about dreams. In the case of Inana (*Lugalbanda in the Cave of the Mountains*, *Enmerkar and EnSUHkešda'ana*, *Sargon Legend* and indirectly in the *Curse of Agade and Dumuzi's Dream*), her association with sexuality corresponded with the widespread erotic qualities of dreams. This is made explicit when she is contrasted with Ninlil's bridal chamber in *Lugalbanda in the Cave of the Mountains*. With the reference to Ninkasi in the same narrative, we also find a clue concerning artificially inducing dreams through drugs, in this case, alcohol. The god of dreams Sisig is moreover mentioned in *Death of Gilgameš*, whereas Anzakar appears again in *Lugalbanda in the Cave of the Mountains* along with noises that resemble those experienced in sleep paralysis. The case of Enki (*Gilgameš and Huwawa*, *Death of Gilgameš*, *Epic of Atramhasis*) is more complicated, but from the *Epic of Gilgameš* it seems that the well he has to dig to conjure dreams might be connected to Enki's dwelling place in the subterranean ocean of Apsû. In this context, it needs to be stressed that the Apsû was thought to intervene between the world of the living and the world of the dead and, in the course of time, became conflated with the netherworld.<sup>348</sup> Also, two mountains have to be climbed, hinting at a connection between dreaming and movement in the three-tiered cosmos.

Most likely it was the dreamer's *zaqīqu/si-si-ig* that was conceived as entering into other realms of the world and that enabled communication with the gods and the deceased. Furthermore, a dead person's *eṭimmu/gidim* was thought to be able to appear in the dreams of the living. As both the netherworld, into which things – and possibly people – are able to fall,

and the dream world were considered spatial and not metaphysical places, movement between the different realms was thought possible. In that sense, the attention devoted to Gilgameš's grave in *Death of Gilgameš* is also notable, as is the mention of possible incubations on rooftops in the *Song of the Plowing Oxen*. Concerning the location of the netherworld itself, which is paralleled by ideas about the journey of the sun at night, two different traditions became apparent. Like the deceased, who are thought to enter the netherworld either by land or by water, the sun god, on the one hand, is imagined as traveling in a boat through the sea (or, in the *Incantation to Utu*, by chariot), whereas, on the other, he can appear between mountains. Both traditions converge in the *Epic of Gilgameš*, when the journey to the world of the dead leads first through a mountainous region and then over the "Waters of Death". Lastly, we found evidence that dreaming is not restricted to humans but is also ascribed to animals (*Song of the Plowing Oxen*, Sumerian proverb) as well as to gods (*Origin of Grain*) and the enigmatic creature Huwawa (*Epic of Gilgameš*).

The chapter finished with some remarks about the process of dealing with dreams and the ritual specialists involved in it. Whereas the Sumerian language possesses special terms for the – usually female – interpreter and solver of dreams (*ensi*) and for specialists seeking dreams on behalf of someone else (*lu<sub>2</sub>-saĝ-še<sub>3</sub>-nu<sub>2</sub>-a*), the Akkadian language uses the more general terms for divination specialist (*šā'iltu/ šā'īlu*) and extispicy specialist (*bārû*) instead. Following Zgoll, it became apparent that extrarelatational dreams consisting (mainly) of speech constitute the interpreted and verified version of intrarelatational dreams consisting (mainly) of images. Lastly, the dreams mentioned in three cases in the context of Old Babylonian omen texts might indicate the earliest forerunners of the collections of dream omens popular in later times. The Sumerian proverb from the Isin-Larsa period, however, seems less convincing in this respect.

In summary, a sophisticated picture about Mesopotamian concepts of dreams emerges based on a multitude of sources from a variety of chronological (see chronology table in table 8), regional (see map of sites in figure 2) and social contexts. Most interestingly, although the conventions for recording dreams in writing change fundamentally over time, certain themes prevail independently of circumstances.

<sup>348</sup> Bottéro 1980, 30; Lambert 1980, 59; Oppenheim 1968, 196.





## 5 EGYPT

### 5.1 STRUCTURE OF THE CHAPTER AND DATA BASE

In the following, Egyptian sources connected to sleep and dreaming are presented. The chapter starts with an overview of archaeological findings in chapter 5.2 and then goes on to discuss written sources that pertain to the topic. Chapter 5.3 is concerned with texts about dreams and the netherworld and encompasses two letters to the dead from the First Intermediate Period as well as passages from the *Pyramid Texts* (Old Kingdom) and *Coffin Texts* (Middle Kingdom). Next, the role of dreams in rituals and teachings is covered in chapter 5.4 based on passages from the *Exeeration Texts* and the *Teaching of Ptahhotep* (both Middle Kingdom) as well as on a papyrus with prophylactic spells against bad dreams from the Second Intermediate Period. The chapter closes with a look into two Middle Kingdom literary compositions in

**Tab. 9** *Egyptian chronology*

Early Dynastic Period	ca. 2900–2545 <sup>+25</sup> BC
Dynasty 1	ca. 2900–2730 <sup>+25</sup> BC
Dynasty 2	ca. 2730–2590 <sup>+25</sup> BC
Dynasty 3	ca. 2592–2544 <sup>+25</sup> BC
Old Kingdom	ca. 2543–2120 <sup>+25</sup> BC
Dynasty 4	ca. 2543–2436 <sup>+25</sup> BC
Dynasty 5	ca. 2435–2306 <sup>+25</sup> BC
Dynasty 6	ca. 2305–2118 <sup>+25</sup> BC
Dynasty 8	ca. 2150–2118 <sup>+25</sup> BC
First Intermediate Period	ca. 2118–1980 <sup>+25</sup> BC
(Herakleopolitan) Dynasty 9 & 10	ca. 2118–1980 <sup>+25</sup> BC
Middle Kingdom	ca. 1980 <sup>+16</sup> –1760 BC
(Theban) Dynasty 11	ca. 2080–1940 <sup>+16</sup> BC
Dynasty 12	1939 <sup>+16</sup> –1760 BC
Second Intermediate Period	1759–ca. 1539 BC
Dynasty 13	1759–ca. 1630 BC
Dynasty 14	?
Dynasty 15 (Hyksos)	?–ca. 1530 BC
Dynasty 16 & 17	?–1540 BC

chapter 5.5, namely the *Tale of the Eloquent Peasant* and the *Tale of Sinuhe*, in which dreams are employed as stylistic devices.

### 5.2 FUNERARY ARCHITECTURE AND GRAVE GOODS CONNECTED TO SLEEP

A strong association between sleep and death becomes clear immediately from a variety of ancient Egyptian sources. Firstly, linguistic evidence points to a close connection between sleep and death on the one hand and awakening and resurrection on the other.<sup>1</sup> Jan Zandee remarks:

“Death is compared with sleep; they resemble each other in that both put motion and consciousness aside.”<sup>2</sup> “One of the phenomena of death is that the body does not move any more, has become a thing. In this respect death tallies with sleep. Words for sleeping may be used as analogous terms for death [...]. The rigidity of the stiffened body makes death to be considered as being bound [...]. Resurrection from death is like awakening from sleep, like rising after lying down [...]. [...] Also verbs for being tired [...] are used as equivalents of being dead.”<sup>3</sup>

Related ideas are also observable in the archaeological record as the grave is considered the place where the dead lives and sometimes likened to a house.<sup>4</sup> John Taylor also thinks that the practice of providing the dead with food, clothing, tools and weapons, which is attested in Predynastic times already, points to the idea that he dwells in the grave in physical form. This notion is reflected with particular clarity in the architecture of large tombs of the Early Dynastic Period.<sup>5</sup> Early tombs can be equipped with a “palace façade” design, thus borrowing from residential architecture and pointing to an idea of the grave as a dwelling place for the

<sup>1</sup> Szpakowska 2003, 21–22.

<sup>2</sup> Zandee 1960, 3.

<sup>3</sup> Zandee 1960, 11. See also Perraud 1997, 32; Zandee 1960, 81–85. „Im ägyptischen Opferritual wird der Tote mitunter ausdrücklich als einer ‚der groß an Schlaf ist‘ angeredet und aus dem Schlaf zum Genuß des Opfers aufgerufen: ‚Es schlief jener Große (Osiris), nachdem er entschlummert war; wache auf, erhebe Dich!‘“ (Kees 1956, 15–16).

<sup>4</sup> Kees 1956, 33, 271; Zandee 1960, 103–104.

<sup>5</sup> Taylor 2001, 148.

dead. The concept was perpetuated in a number of *mastaba* tombs of the 2<sup>nd</sup> and 3<sup>rd</sup> Dynasties at Saqqara, Giza and Helwan, of which the substructures consist of a complex of chambers that resembles houses of the living as attested from New Kingdom Amarna. Interestingly, whereas some chambers represent storerooms, servants' quarters as well as bathrooms and lavatories, the burial chamber takes the place of the main bedroom. It is thus the place where the dead sleeps, indicating an association between the concepts of death and sleep in accord with linguistic observations. Therefore, a short overview of ancient Egyptian funerary architecture is provided in the following.<sup>6</sup>

Orientation of the deceased's body with the head to the north or south, facing either east or west, was already common in prehistoric times.<sup>7</sup> In the Dynastic period, an alignment with the head to the north and the face towards the east became established, and the tombs' superstructures and burial chambers followed this orientation. Coffins were oriented northwards with the mummy inside lying on its left side, its head supported by a headrest (see below). As most cemeteries were located on the west bank of the Nile, the mummy thereby looked from the realm of the dead and the place of the sunset towards the world of the living and the rising sun, which was considered a symbol of rebirth.<sup>8</sup>

Correspondingly, Old Kingdom pyramids, which had evolved from late Predynastic brick mounds, were images of the cosmos and the medium via which the dead king would be re-

born.<sup>9</sup> Their earliest form, the step pyramid of King Djoser (2592–2566<sup>+25</sup> BC, Dynasty 3, Early Dynastic Period<sup>10</sup>) in Saqqara, can be seen as a “symbolic ‘stairway to heaven’ for the king's spirit”<sup>11</sup> from the subterranean burial apartments. During Dynasty 4 in the Old Kingdom they changed into the classic pyramids with smooth, angled sides, incorporating a multi-layered symbolism. Whereas the pyramid was both a model for the primeval mound and the *benben* (a sacred stone of conical form, which stood in the temple of Ra at Heliopolis), its sides were seen as a ramp that the king could ascend to reach the sky. Additionally, sacred boats, in which the king could rise with the sun god at dawn, were placed in the ground next to the pyramid. On the one hand, these pyramids were equipped with an entrance to the north so that the dead king could move up to the circumpolar stars in the northern sky. On the other hand, the cult structures were aligned east-west in accordance with solar symbolism, and we will see in chapter 5.3 when we discuss cosmological concepts that this overlap of differing ideas was a defining feature of ancient Egyptian religion.

During Dynasties 1 and 2, individuals of high rank were buried in the subterranean burial chamber of tombs featuring superstructures made from mudbrick that housed storage magazines for funerary equipment. In Dynasty 3, *mastabas* made from stone or brick became common. With these, the idea of living quarters was abandoned. Instead, they contained only a single, large burial chamber below ground, while the superstructure incorporated the mortuary chapel for the offering cult, with the number of rooms increasing over time. Taylor points out that the food and ritual equipment stored in these chambers was no longer intended for the deceased but for the priests to use in the offering cult. Still, this does not seem to imply a change in the idea that the deceased lived in the tomb, only the interposition of a caste of priests in a process of bureaucratisation. Also, in Dynasty 4 and 5, rock-cut tombs came into increased use, mostly in areas where the cliffs along the Nile valley precluded the construction of *mastabas*. As with the latter, rock-cut

<sup>6</sup> Taylor 2001, 148–151.

<sup>7</sup> Taylor 2001, 138, 140, 219. If the alignment differs from these conventions, this is usually due to the fact that the river Nile, which was commonly used as a landmark, does not exactly run south-north in this area (Taylor 2001, 138–139).

<sup>8</sup> The Egyptian language possesses two different words with the meaning “lasting as long as the cosmic order endures”, which are often used in combination. The term *nḥh* denotes an entity's continuation through a cyclical repetition of death and rebirth, by which vital forces were thought to pass from one manifestation to the next (the setting and rising of the sun, the fall and rise of the Nile, death and birth of successive generations of plants, animals and humans). As opposes to this, the word *dt* designates an entity's endurance by always staying the same (a mummified body in the tomb). Both concepts were considered necessary for the lasting survival of the different vital forces that were believed to form a living human being (Trigger 2003, 64).

<sup>9</sup> Taylor 2001, 141–143; Trigger 2003, 468.

<sup>10</sup> Hornung et al. 2006, 490.

<sup>11</sup> Taylor 2001, 142.

tombs included an offering chapel, although with fewer rooms, and a subterranean burial chamber. During the First Intermediate Period and the Middle Kingdom, the types of tombs stayed mostly the same, but rock-cut tombs predominated in relation to *mastabas* and their construction was sometimes of inferior quality.

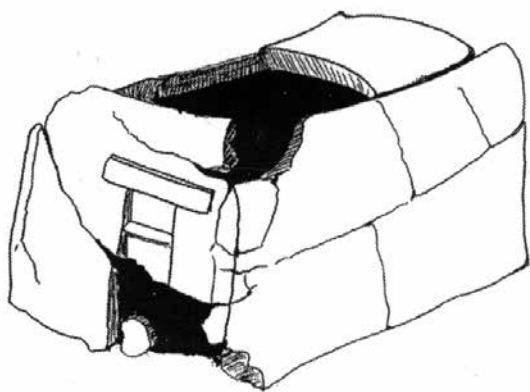


Fig. 26 House model from El Amrah (Naqada IIb)

That the tomb was still likened to a house can be observed in Middle Kingdom graves of poorer individuals who could not afford their own cult place and who were supplied with a pottery model house above the simple burial shaft instead.<sup>12</sup> With these, a combined substitute for the mortuary chapel and the offering table was provided so that the necessary ritual provisioning for the dead could still be performed. The so-called “soul-houses”<sup>13</sup> usually have the raised edges of offering plates, a small spout to carry away water offerings and display clay models of food in the courtyard. They furthermore allow inferences about houses for the living, with some of them consisting of simple domed huts,

whereas others are equipped with trees, columned porticos or rooftop terraces accessible by stairways and surrounded by parapets. This suggests that sleeping places may have been located outside on rooftops, particularly in small annexes as visible in an undated pottery house model from a grave at Rifeh. A house model from terracotta dating back to Naqada IIb also illustrates the great ancestry of the custom (figure 26).<sup>14</sup> It measures about 45 × 27.5 × 20 cm and was discovered in tomb a-4 in the cemetery to the west of El Amrah, about 9 km to the south of Abydos. If the depiction of the roof is to be taken at face value and reconstructed as in the drawing, this would render the roof a likely sleeping place because the balustrade is too low for anyone but a reclining person.

Inside the tomb, coffins and sarcophagi replicated its functions on a smaller scale by reproducing the concept of a house or sleeping place.<sup>15</sup> Whereas most bodies were wrapped in linen or placed in baskets, primitive coffins from wood, clay or pottery appeared in the late Predynastic period. This habit became more common in the Early Dynastic period, but still many people of lower rank were buried in containers made of bundles of reeds, in large storage jars or simple trays. The earliest wooden coffins were only about one metre in length and accommodated the body in a contracted position. At the same time, some of them imitate architectural forms from the more elaborate contemporary tombs, showing that the coffin was already thought of as a house for the deceased. Full-length coffins can first be observed in Dynasty 3, the time when stone sarcophagi came into use as well, and for a while, both types existed parallel to each other until short coffins were eventually replaced by the long version. Of these, the earlier examples were equipped with a vaulted lid and panelled decoration on the sides, whereas in Dynasty 6, coffins with flat lids and smooth sides appeared and stayed in use until the Middle Kingdom. Spells as well as images and lists of offerings for the provisioning of the dead were depicted on both the inside and outside of wooden coffins, thereby forming a miniaturised reproduction of the tomb. Later on, the decorations became increasingly complex and in the Middle Kingdom incorporated the “frieze

<sup>12</sup> Hayes 1978 I, 255–256; Seipel 1989, 98; Taylor 2001, 106–107.

<sup>13</sup> At the end of the nineteenth century, it was believed that these were intended as homes for the spirit (Seipel 1989, 98; Taylor 2001, 107).

<sup>14</sup> Tristant 2004, 124–125.

<sup>15</sup> Taylor 2001, 214–223.

of objects”, which depicted commodities for the afterlife, as well as the *Coffin Texts* and the *Book of Two Ways* (see chapter 5.3) on the inside. Additionally, during the Middle Kingdom anthropoid or mummiform cases from wood or cartonnage, which were seen as a substitute body for the deceased, were placed inside the rectangular coffins. Thus, the coffin replicated the architectural form and the conceptual role of the tomb, while on a larger scale it represented the cosmos, with its lid symbolising the sky, its base the earth or the underworld and its sides either the underworld or the eastern and western horizon, which were thought of as the physical boundaries of the world.

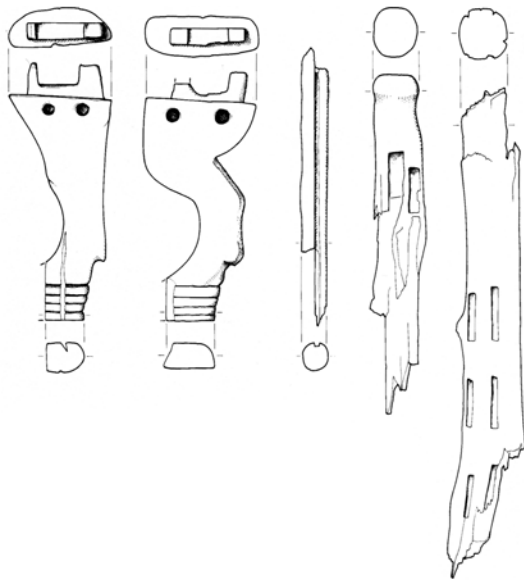


Fig. 27 Hierakonpolis, Locality 6 cemetery, bed from tomb 11 (Naqada III)

The Egyptians’ belief in an afterlife that paralleled this world led to tombs furnished with worldly goods appropriate to the status of its owner.<sup>16</sup> Beds and headrests are among the items frequently found in graves and, as is the case in the Near East (see chapter 4.2), all known examples of bed frames have been excavated in funerary contexts.<sup>17</sup> Beds came into existence as early as Naqada III as attested by an example from tomb 11 at the Locality 6 cemetery at Hierakonpolis (figure 27).<sup>18</sup> The wooden bed was in fragmentary condition but its general features were still visible. Bull’s legs were tenoned and mortised into the round section side pole, which in turn was tenoned onto the end pole, with additional adhesive securing the construction. Over the side poles, a rod framework was laid. The webbing was likely made of leather

and was lashed through the rectangular holes on the side pole.

Beds from the cemetery of Tarkhan show that considerable differences in construction existed as early as Dynasty 1.<sup>19</sup> Here, numerous people were buried on beds instead of in coffins, while in some rare cases the graves were furnished with both, the bed laid over the coffin. Concerning modes of construction, the beds can be grouped into roughly five different categories. With the simplest of them, each side is made of an angular knee-piece of a tree, thus forming the side and the leg. The four similar pieces fit together by way of holes into which the end of the next part is inserted; the webbing was simply woven around the frame (figure 28, left). Contrary to this, the second type does not utilise natural forms but consists of cut pieces of wood, in which the legs are part of the head- and foot-rail. These are attached to the straight side-rails by mortise and tenon joints, while the rails themselves are furnished with strap-holes to attach the webbing. The other types are somewhat similar insofar as the rails and feet consist of separate pieces, and only differ in terms of how the elements are fit together (figure 28, middle). The legs are carved into the form of bovine legs, which could also be made from ivory as the finds from Abydos, dating to the beginning of Dynasty 1, suggest. Straps of leather or rushes and palm fibre woven in different patterns were employed as webbing between the rails (figure 28, right). These beds usually did not exceed 30 cm in height and 175 cm in length. Two wooden beds constructed in a similar fashion were found in

<sup>16</sup> Baker 1966, 19; Taylor 2001, 107–108.

<sup>17</sup> The only clue concerning sleeping places of the living that has come to my attention stems from two tents of the A-group (ca. 3000 BC) in the Wadi Shaw, Sudan (Richter 2006, 524–525). Jürgen Richter interprets spaces without finds as evidence for areas of rest. Although the remains of two consecutive tents could be excavated, it is unfortunately precisely the presumed areas of rest that were destroyed in the earlier tent due to overlap with the later one. A similar arrangement can therefore only be assumed indirectly because the layout of the other areas is the same in both cases.

<sup>18</sup> Adams 2000, 21, 26–27, 109–111.

<sup>19</sup> Baker 1966, 21–23; Petrie et al. 1913, 23–24. See also <http://www.khm.at/objektdb/detail/324393/?offset=15&pid=2275&back=275&lv=listpackages-5377/> 15 April 2017.



tomb No. 3471 in Saqqara, possibly dating to the reign of King Djer (2870–2823<sup>+25</sup> BC, Dynasty 1, Early Dynastic Period<sup>20</sup>).<sup>21</sup> Both were furnished with bovine legs and decorated with copper-encased knobs at the butts of the side rods. In the third example of similar construction, parts of the leather throngs had survived, but, as no measurements could be ascertained, it is unclear whether we are dealing with the remains of a small bed or a chair. The same tomb also rendered a canopy with four posts, the capitals of which were encased with sheet copper as well.

The rock-cut tomb of Queen Hetepheres I in Giza, the wife of King Snofru (2543–2510<sup>+25</sup> BC, Dynasty 4, Old Kingdom<sup>24</sup>), contained a bed with a canopy similar to the pictures in the tomb of Hesy-Re, although much more elaborate (figure 30, left).<sup>25</sup> In Hetepheres' bed, the lion's legs as well as the side bars with papyrus ends were covered with a heavy sheathing of gold. Floral rosettes alternating with a feather pattern from blue and black faience are inlaid in the footboard, which by now seems to have become a standard feature in Egyptian beds. The webbing has been exchanged for

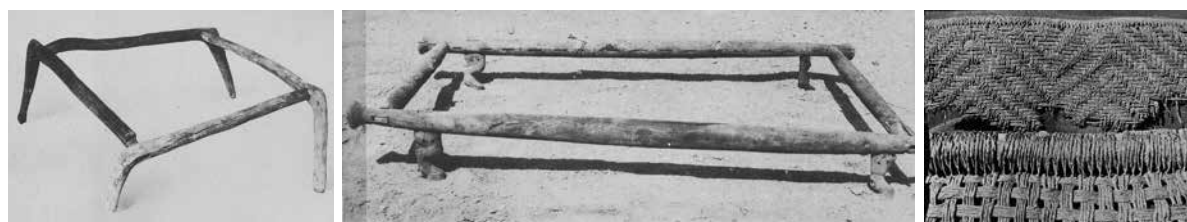


Fig. 28 Beds and parts of the webbing from Tarkhan

It becomes clear that the tradition of producing beds went on uninterrupted from the wall paintings in the brick mastaba of Hesy-Re in Saqqara, a high official during the reign of King Djoser (2592–2566<sup>+25</sup> BC, Dynasty 3, Early Dynastic Period ) (figure 29).<sup>23</sup> Here, at least nine beds are portrayed (No. 37, 44–45, 47–52), some in top view, others in profile. Of these, some are equipped with four of the usual animal legs (No. 49–52), whereas others possess only two and therefore slope considerably from head to foot (No. 44–45, 47–48). Apart from this, two beds show the lashing by which the mattress was either attached to the rails or which passed between the rails and was covered by the mattress in the middle (No. 37, 44), while a third seems to be equipped with a lying surface of wooden planks (No. 47). Lastly, some depictions show that footboards came into use at about this time (No. 49–52). It also displays four shafts with finials, which possibly indicate a bed canopy (No. 26). Another painting shows three headrests, two of which are probably made of ebony and one of white wood. Two headrests that are not depicted in the drawings seem to have been painted with eye motifs.

wooden planks with a pronounced slope on which a mattress could be placed. The bed was 177.8 × 97 × 35.5 cm in size and was accompanied by a headrest stored in a gold-covered box with an inlaid lid. This wooden headrest measured 17.2 cm at the base and 20.5 cm in height and was covered with sheets of gold and silver (figure 30, right). A canopy measuring 3.20 × 2.50 m and 2.20 m in height was also found, with hooks fastened around the top for attaching curtains and a roofing cloth inside. It was carved with a matting pattern and hieroglyphic inscriptions giving the titles of King Snofru and beaten over with a heavy casing of gold.

A headrest and a bed being prepared by two servants under a comparable canopy are pictured in the rock-cut *mastaba* of Queen Mersankh III in Giza (Dynasty 4, Old Kingdom) (figure 31),<sup>26</sup> and a similar depiction can be seen at the same location in the rock-cut *mastaba*

<sup>20</sup> Hornung et al. 2006, 490.

<sup>21</sup> Baker 1966, 25–26; Emery 1949, 13, 57–59.

<sup>22</sup> Hornung et al. 2006, 490.

<sup>23</sup> Baker 1966, 33, 37; Quibell 1913, 3, 7–8, 17.

<sup>24</sup> Hornung et al. 2006, 490.

<sup>25</sup> Reisner and Smith 1955, 17–18, 23–25, 32, 42–43. The debate whether the tomb of Hetepheres I is in fact not a tomb but a funerary deposit is ongoing. However, as funerary deposits contain objects of the same types as tombs, the controversy is of little import for the present discussion (Münch 2000, 898, 907).

<sup>26</sup> Baker 1966, 43; Reisner 1942, 350–351. Hollis Baker gives a drawing of the scene (Baker 1966, 43), but the source is unclear as the original publication by Reisner does not contain any such depiction.

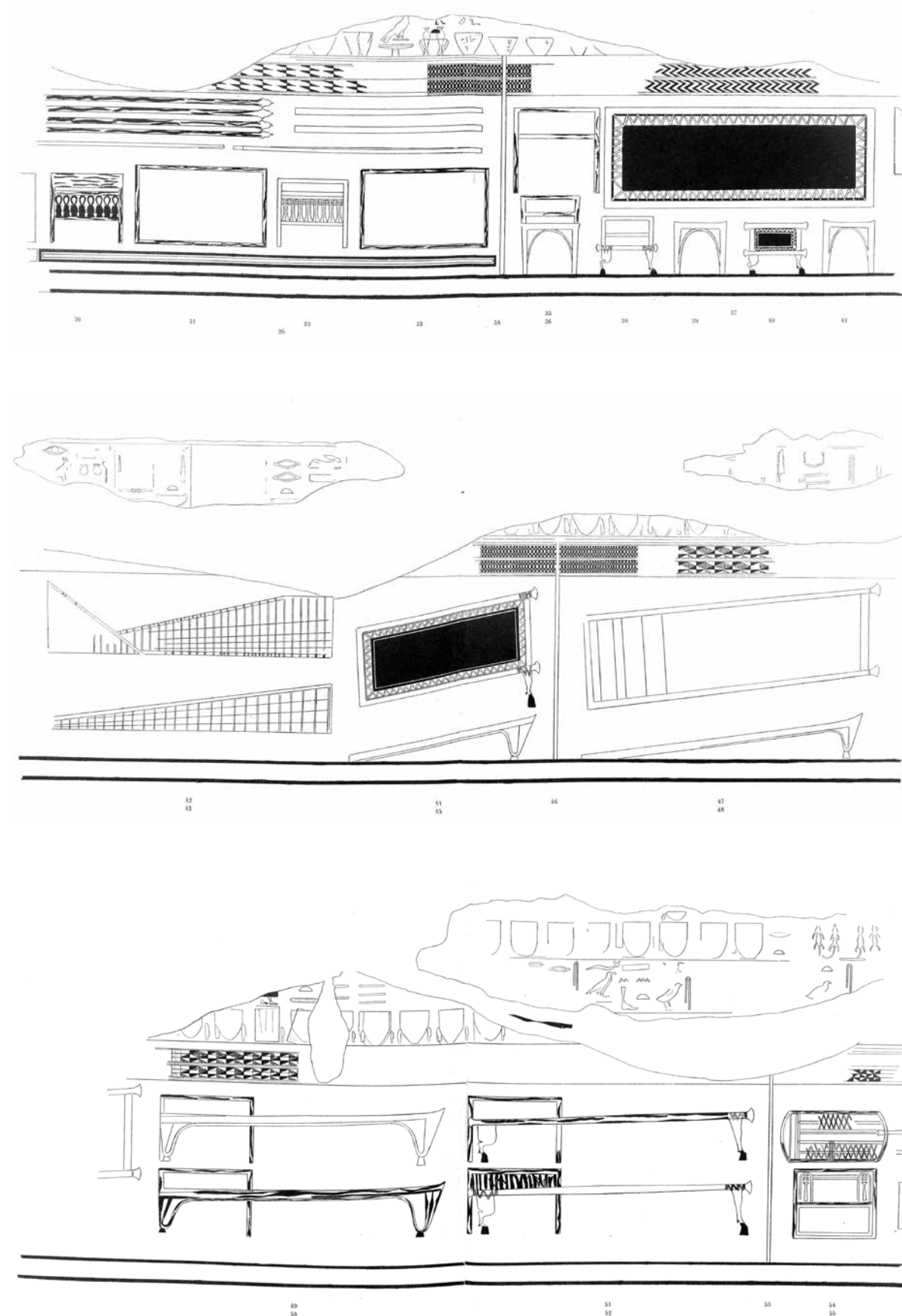


Fig. 29 Wall paintings in the mastaba of Hesy-Re in Saqqara (Dynasty 3, Early Dynastic Period)

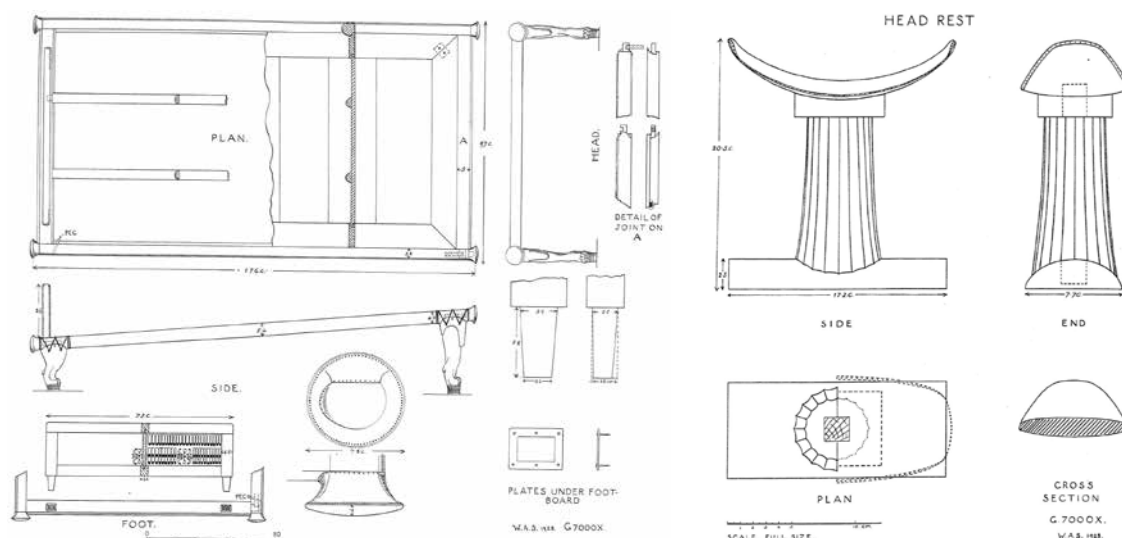


Fig. 30 Bed (left) and headrest (right) from the rock-cut tomb of Queen Hetepheres I in Giza (Dynasty 4, Old Kingdom)

of Ankh-ma-ra (Dynasty 5, Old Kingdom).<sup>27</sup> Generally speaking, placing a headrest on a bed and other bed-making scenes are a common scene at the beginning of the Old Kingdom.<sup>28</sup> George Reisner interprets the scene in Meresankh's tomb as the preparation of furniture in the burial chamber, whereas another scene with craftsmen at work depicts the making of the funerary equipment.

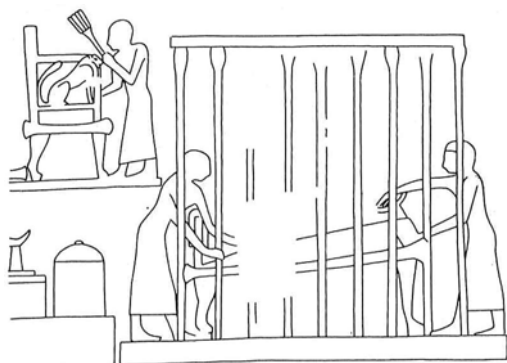


Fig. 31 Depiction of a bed with canopy in the rock-cut tomb of Queen Meresankh III in Giza (Dynasty 4, Old Kingdom)

A bed that closely resembles that of Hetepheres is represented in two painted reliefs in the stone-built *mastaba* (Room A10, west wall) of Mereruka in Saqqara, a vizier under King Teti (2305–2279<sup>+25</sup> BC, Dynasty 6, Old Kingdom<sup>29</sup>).<sup>30</sup> The bed slopes slightly towards the high footboard and is again furnished with li-

on's claws (figure 32, top left). A mattress can also be seen, but it does not become clear from the depiction whether the object behind Mereruka is a kind of cushion or something else.<sup>31</sup> The fact that his wife is pictured playing the harp indicates that beds were not restricted to sleep but were used in a variety of recreational activities. The second relief probably shows the same bed with mattress, headrest and supports for a canopy while it is being prepared by attendants (figure 32, top right). In another painted relief (Room A13, west wall), we see a comparable bed<sup>32</sup> with a headrest being prepared by an attendant on a boat (figure 32, bottom).

Another scene with the depiction of beds can be found on a short and squat seal which, unfortunately, stems from an unknown context but is likely of Old Kingdom date (figure 33).<sup>33</sup> The seal shows a long-haired figure seated on a bed, who reaches out its hand to a table replete with loaves of bread. Henri Frankfort considers this a depiction of a ritual described in a number

<sup>30</sup> Baker 1966, 55; Duell 1938 I, 1, pl. 92–95; Kanawati et al. 2010, 32–33; Kanawati et al. 2011, 25.

<sup>31</sup> Baker interprets this object as the footboard, but in that case, the slope would be in the wrong direction (Baker 1966, 55).

<sup>32</sup> Strangely, its drawing shows lion's claws at the foot but bovine feet at the head of the bed (Kanawati et al. 2011, pl. 66, 68). Unfortunately, the accompanying photograph is too small to determine whether this is a mistake in the drawing (Kanawati et al. 2011, pl. 8).

<sup>33</sup> Frankfort 1939, XL, 293–294. It needs to be conceded that the piece of furniture could also be interpreted as a chair.

<sup>27</sup> Baker 1966, 43; Smith 1949, 189.

<sup>28</sup> Perraud 1997, 31.

<sup>29</sup> Hornung et al. 2006, 491.

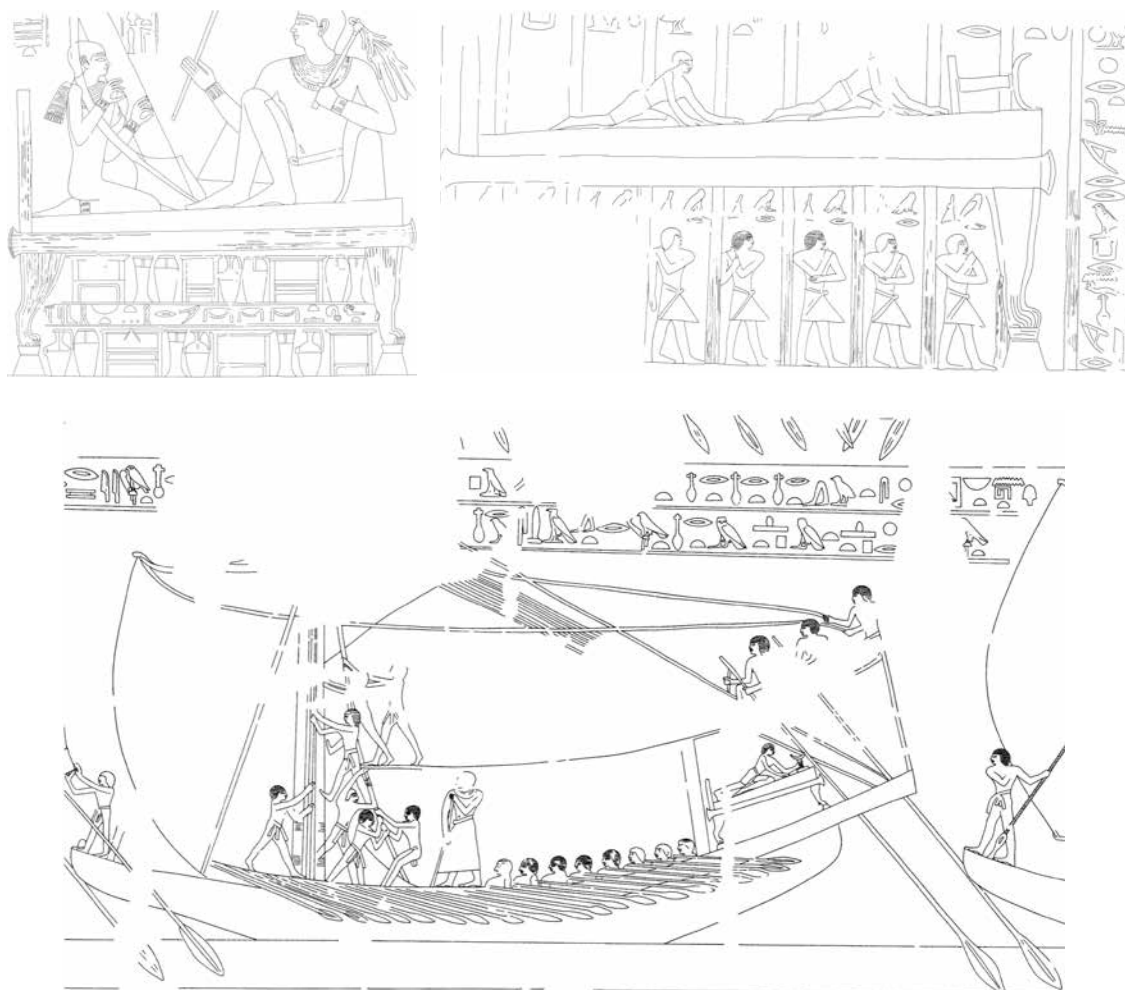


Fig. 32 Painted reliefs in the mastaba of Mereruka in Saqqara (Dynasty 6, Old Kingdom)

of variations of the *Pyramid Texts* in which the deceased is regarded as a sleeper who is summoned to the table.



Fig. 33 Impression of a seal with a long-haired figure

During the Middle Kingdom, beds were commonly incorporated into the frieze of objects painted onto the inside of coffins (figure 34).<sup>34</sup>

Apart from the frequent portrayal of animal feet, some were furnished with lion heads so that the profile of the bed looks like the animal itself. The depiction of several accessories like headrests, pillows, mattresses, sheets and covers on these beds offers clues about funerary goods that have not been preserved in the older tombs.

Occasional excavations of real beds were brought to light such as two wooden bed frames in the Middle Kingdom necropolis of Beni Hasan.<sup>35</sup> In tomb No. 541, the body of a child had been placed on the bed after it was



Fig. 34 Beds as depicted in the Middle Kingdom frieze of objects

<sup>34</sup> Jéquier 1921, 241–243; Perraud 1997, 31.

<sup>35</sup> Garstang 1907, 119–120, 122–123, 174–176, 182–183, 222, 228–229.



wrapped in a mat of fine cane (figure 35). The wooden construction had a length of 1.35 m and was strengthened by cross-pieces. Traces of leather cross-thongs forming the mattress had also been preserved. Tomb No. 287 yielded a low bed, 1.75 m in length, along with two plain wooden headrests and a wooden folding headrest with a metal rivet (figure 36). As in the previous example, traces of thongs of leather, which crossed from side to side to support the mattress, were still attached to the wood. However, for the latter, a Middle Kingdom date is unreliable and an early New Kingdom construction is just as likely.

skull, the pressure is spread equally and there is no sense of hardness. Because it is most comfortable the closer it is put to the ear, the edge of the top curve is usually thin and cushioning can rarely be found. Contrary to widespread assumptions, headrests are not meant to protect the hairdo but have the purpose of allowing the air to freely circulate around the neck in areas of warm climate. According to ethnographic analogies, headrests could also be used in a supine position or placed below the ear,<sup>37</sup> although such use is not attested from ancient Egypt.

Headrests start to appear as early as Dynasty 1 (Tarkhan 2051) or even just before it (Tarkhan

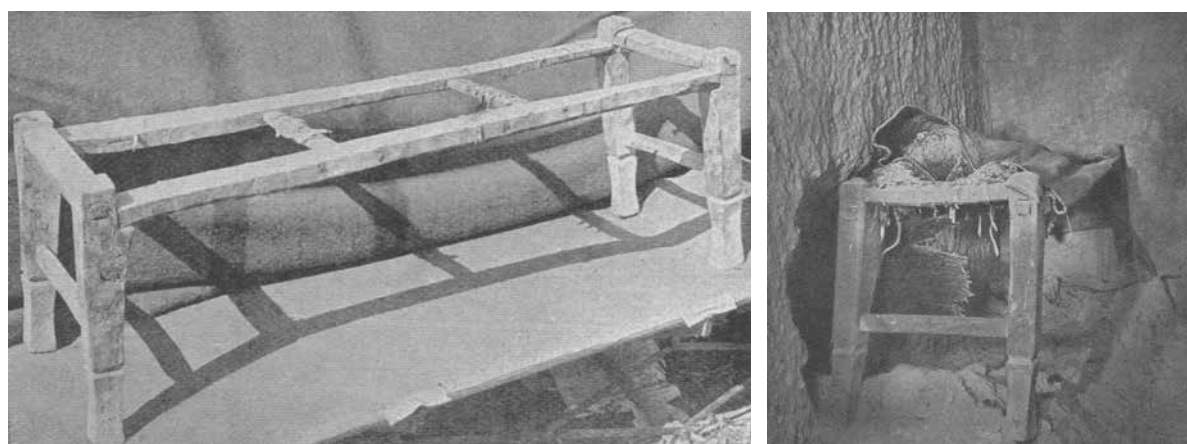


Fig. 35 Beni Hasan, bed (left) with interment of a child upon it (right) from tomb No. 541 (Middle Kingdom)

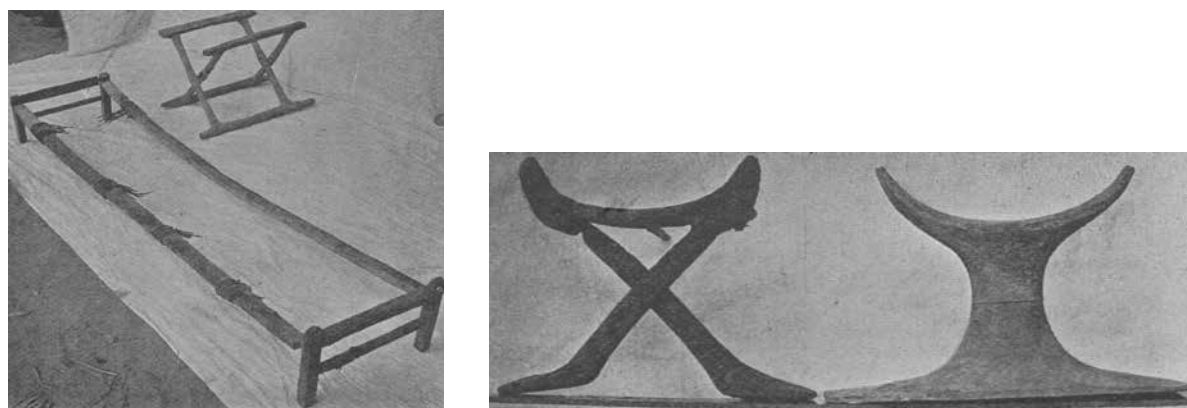


Fig. 36 Beni Hasan, bed (left) and headrests (right) from tomb No. 287 (Middle Kingdom)

Headrests are a much more common grave good than bed frames and can be found in tombs of all times regardless of the deceased persons' social rank. When sleeping on a headrest, the head is placed upon it right above the ear, so that the head's centre of gravity is supported.<sup>36</sup> If the curve of the headrest fits the curve of the

1608) and employ a variety of forms and materials.<sup>38</sup> They can be made of wood or pottery

<sup>37</sup> Nettleton 2008, 357.

<sup>38</sup> Perraud 1997, 14, 24–25; Petrie 1927, 33–35. The Dynasty 1 examples given by Petrie are, however, surrounded by controversy. For example, the Fitzwilliam Museum lists the earliest known headrests as coming from Dynasty 3 burials (<http://www.fitzmuseum.cam.ac.uk/gallery/headrests/> 15 April 2017).

<sup>36</sup> Petrie 1927, 33.



but also of more durable materials like calcite or limestone. Some are elaborately carved, featuring one or two columns (figure 37, top left) or something in-between (figure 37, top middle). In general, headrests can be variously decorated, painted, carrying inscriptions or incorporating plant-elements like lotus buds.<sup>39</sup> Then again, some simply consist of blocks of wood cut into a concave form (figure 37, bottom left), which are occasionally embellished with columns (figure 37, bottom middle). Some wooden headrests are cut into the shape of two legs with a concavity on top to rest the head upon (figure 37, bottom right), while still others are made from pottery and of a different form altogether (figure 37, top right). It is important to heed this variation because catalogues and modern exhibitions tend to show only the “classic” shape with one column and a curved top.

constitutes a burial place for the most common stratum of the population, allowing inferences about the ideas of death held by ordinary people. Ideals of elite culture persisted even here, although in a slightly attenuated form. Although the conception of the tomb as a house does not become apparent in Elephantine and despite an absence of large furniture, the utilisation of headrests is nevertheless attested, used in life and most heavily worn, equipping the grave of their owner in death (figure 38).<sup>41</sup> In accordance with general conventions, most burials lie with their face to the east, i.e. towards the cult place and the rising sun, while a smaller number were orientated with their face to the south, i.e. to the settlement of the living.

Three variants of burial arrangements reflect a chronological and sociological development: the bodies are either contracted (early burials



Fig. 37 Headrests; Kafr Ammar (Dynasty 2, Early Dynastic Period, top left), Giza (Dynasty 5, Old Kingdom, top middle), Qau (probably Old Kingdom, top right), Meidum (Dynasty 4, Old Kingdom, bottom left), Sedment (Dynasty 9–10, First Intermediate Period, bottom middle), Tarkhan and Rifeh (both Dynasty 5/6, Old Kingdom, bottom right)

Drawing on information from the Elephantine cemetery, Stephan Seidlmayer has developed ideas about the iconography of death and its semantic relation to sleep, pointing out that such notions applied to lower-ranking people as well.<sup>40</sup> The graves discovered here date to Dynasty 5 to 13 and were principally used between Dynasty 6 and 11. What sets Elephantine apart from many other cemeteries is that it

of the lowest social class), loosely extended and lying on the side (late Old Kingdom and First Intermediate Period) or rigidly extended and lying in a supine position (Middle Kingdom).

<sup>39</sup> Seipel 1989, 88.

<sup>40</sup> Seidlmayer 2001, 210–211, 223–230, 233, 239, 245.

<sup>41</sup> That headrests predominate in the graves of older men, while the use of bricks shows no significant distribution, can be explained in a similar vein: These men owned headrests during their lives, indicating that they had a fixed sleeping place and possibly even a bed, whereas the other members of the family slept in rooms that were used for different purposes during the day (Seidlmayer 2001, 226–227).

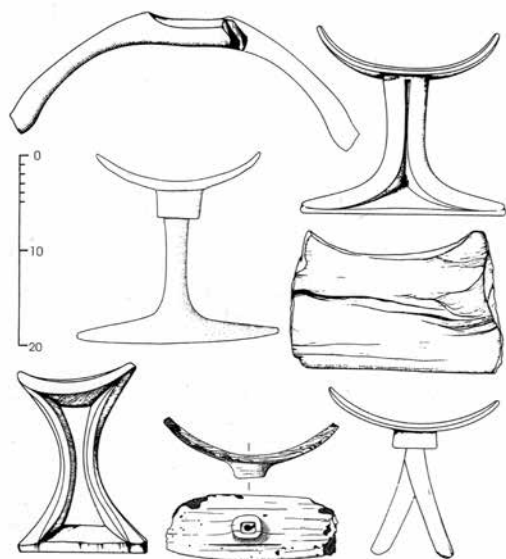


Fig. 38 Headrests from the Elephantine cemetery

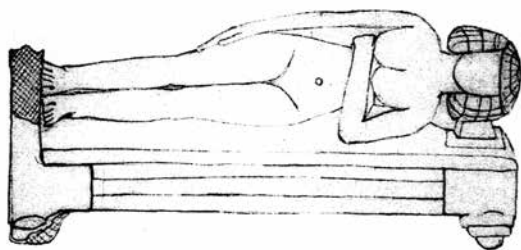


Fig. 39 Statuette of a sleeping woman (Dynasty 18, New Kingdom)

Seidlmayer is reluctant to discuss the contracted burials because their semantics are not explicit enough. To contract the body in minimum space can be considered a posture of seclusion towards the outside, a fetal position, an indication of the need for protection of the deceased or a huddled sleeping position.<sup>42</sup> With respect to the burials that place the body loosely extended on one side, the material is more conclusive (figure 40, left). The body is placed on the left side, the back slightly curved, the knees somewhat bent. In the ideal-typical example, the left arm lies parallel to the body, while the right one is angled in front of it. The head of the deceased is sometimes placed on a headrest; sometimes a brick can be utilised with the same function. That this posture portrays a sleeping person can be inferred from similar depictions in small sculptures (figure 39).<sup>43</sup> Seidlmayer points out

<sup>42</sup> Emma Brunner-Traut lists the following reasons for burials in a contracted position: limitation of the size of the grave pit, bondage of the dead body and imitation of a fetal or of a sleeping position.

the metaphorical equation of sleep with death, explicitly referring to George Lakoff's and Mark Johnson's conceptual metaphor theory (see chapter 2.10):

„Entscheidend ist, daß durch die Anordnung der Bestattung ein Arrangement geschaffen wird, das sich keineswegs aus der Natur der Sache ergibt, nämlich den Eigenschaften des toten Körpers. Vielmehr legt das Arrangement ein optisches Schema über die Situation, durch das die Situation gedeutet wird. Der Schlaf wird hier zur Metapher des Todes, und deshalb läßt sich hier im unmittelbarsten Sinne von einer Ikonographie des Todes sprechen. Passivität, Verletzlichkeit und Bewußtseinsentrückung des Schlafenden stellen den Bezug zum Zustand des Toten her. Natürlich hat diese Metapher nicht nur deskriptiven sondern interpretierenden Charakter. Den Toten *sub specie somni* zu denken, heißt auch zu sagen, daß der Tote lebt und daß er sich in einem Zustand befindet, der in vergleichbarer Form jedem Lebenden bekannt ist. Es ist eine Situation der ontologischen Kontinuität.“<sup>44</sup>

During the First Intermediate Period towards the Middle Kingdom, a fundamental change occurs. Now, the burials are rigidly extended, the arms parallel to the body, the hands positioned over the pubis or in front of the chest (figure 40, right). The deceased are arranged on the left side or, more and more frequently, in a supine position. Thus, they are no longer interred in a pose that replicates a situation of everyday life, but in a specific, idol-like preparation as a mummy. Seidlmayer additionally stresses contemporary burials where, unlike those at Elephantine, mummies are placed on their left side with their heads on headrests:

„Das Motiv des Schlafs ist also nicht verloren, es tritt jedoch semantisch in eine tiefere Schicht zurück. [...] Der Tod ist als Schlaf nicht mehr ausreichend gedeutet; er wird Transformation in eine andere Seinsweise; die ontologische Kontinuität zwischen Lebenden und Toten wird dadurch negiert.“<sup>45</sup>

Of these, she considers the last two the most likely (Brunner-Traut 1975, 42, 45–46).

<sup>43</sup> The example he cites, however, stems from Dynasty 18 (Hornemann 1966, 1077).

<sup>44</sup> Seidlmayer 2001, 227–230.

<sup>45</sup> Seidlmayer 2001, 230.

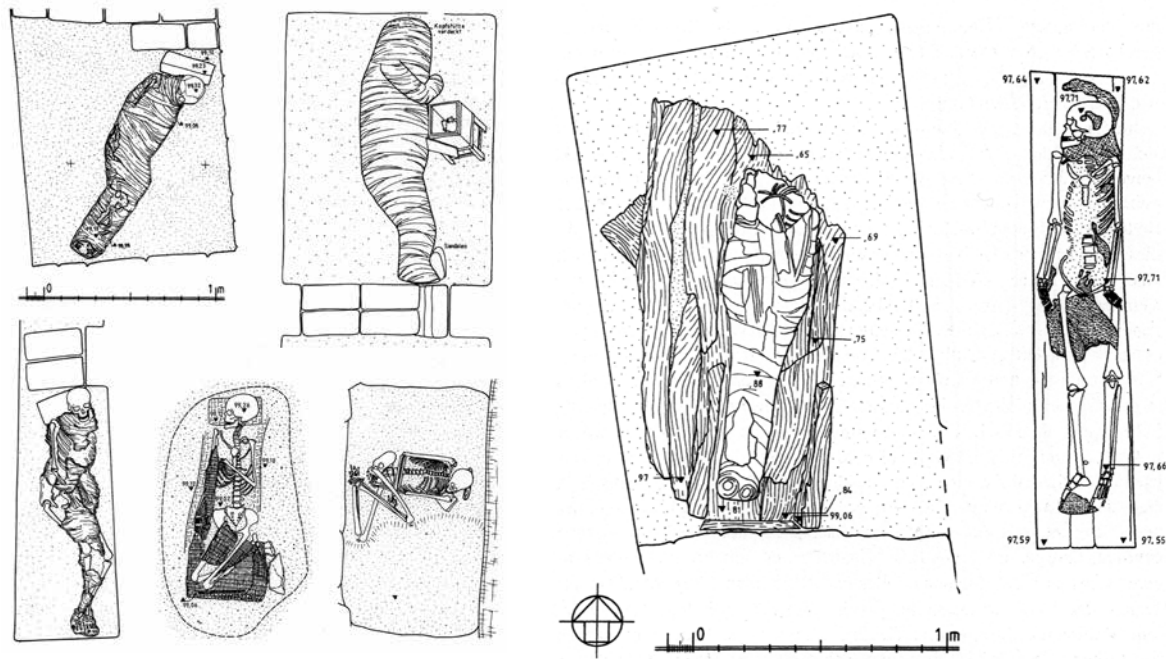


Fig. 40 Elephantine, burials in contracted position (left) and extended position (right)

All in all, the reference to sleep constitutes the prevailing element in the Elephantine cemetery, even though the way it is articulated changes over time. Seidlmayer has moreover convincingly argued that visual art in tombs parallels archaeological findings because they both constitute deliberately selected imagery.<sup>46</sup> Yet, despite the headrest being an article of daily use that was needed in the afterlife, its prominent role in burials indicates greater ritual significance.<sup>47</sup> In order to look towards the east, Old and Middle Kingdom mummies commonly lay

on their left sides instead of on their backs in the coffins, with a headrest placed under the mummy's head.<sup>48</sup> Additionally, the wall of the coffin that aligned with its face was equipped with painted or inlaid eyes, stressing the act of seeing and thus sharing this emphasis with the concept of dreams.

In the Egyptian language, no verb "to dream" exists. Instead, this is expressed by the term "to see (in) a dream", with "dream" always being a substantive.<sup>49</sup> It seems that a dream is not conceptualised as something the dreamer produces or actively discovers but as having an objec-

<sup>46</sup> „Die Äquivalenz zwischen den Bildern des archäologischen Befundes und denen der bildenden Kunst ergibt sich [...] nicht daraus, daß sie sich auf dieselbe Realität beziehen (obwohl das fraglos der Fall ist), sondern daraus, daß sie sich auf *dieselbe Weise* auf dieselbe Realität beziehen, nämlich in derselben Selektivität und derselben Typisierung und Stilisierung, und genau dies wird durch die Parallelisierung zwischen Grabbefunden und Gräberbildern bewiesen.“ (Seidlmayer 2001, 246).

<sup>47</sup> « L'appui-tête, accessoire du sommeil et médiateur pour les rêves, objet magique autant que fonctionnel [...]. Pourquoi l'homme a-t-il tant pris soin de préserver sa tête durant le sommeil, et a-t-il jugé bon de placer des protections de tête auprès des mots dans leur tombe, c'est-à-dire, comment en est-on venu à formuler le sommeil comme métaphore de la mort ? Quelles sont les fonctions d'un accessoire du sommeil, qui est aussi objet rituel et funéraire ? » (Perraud 1997, 14). « Il semble, que dès l'aube de l'humanité, grâce à la mémoire et à la parole conju-

guées, qui différencient l'homme des autres vertébrés homéothermes, l'être humain a senti que ce que l'on peut appeler esprit ou âme ou encore inconscient travaille pendant le sommeil, même si d'apparence c'est la mort. Cet esprit ou cette âme doit raconter quelque chose de sensé et c'est ainsi que s'est imposé à l'homme d'interpréter les rêves (c'est en fait un comportement religieux) et l'idée en a découlée que, si cet esprit existe et vit pendant le sommeil, si semblable à la mort, pourquoi n'existerait-il pas toujours ainsi lors de la mort véritable. Par conséquent, il faut prêter beaucoup d'attention à la sépulture du défunt pour l'aider à conserver cette âme. La préoccupation concernant les accessoires du sommeil, lit, chevet et coussins et particulièrement leur relation avec la tête sont tout autant valables chez les dormeurs que chez les défunts. » (Perraud 1997, 30).

<sup>48</sup> Taylor 2001, 108, 138, 219.

<sup>49</sup> Szpakowska 2003, 15–16, 18–19, 21, 134.

tive existence with which the passive dreamer is confronted. This idea is strengthened by the etymological connection between the words for “to awaken” (*rs*) and “dream” (*rswt*), which is most commonly used with the determinative of the open eye with make-up. Therefore, it seems that the dream state was conceived as an awakening during sleep in an alternate reality between this world and the farworld (see chapter 5.3), emphasising the dreamer’s state of consciousness. Anti Revonsuo points out that lucid dreaming (see chapter 2.11) can be considered an awakening within a dream.<sup>50</sup> Furthermore, the word “headrest” (*wrs*) derives from the same root as “dream” and “to awaken”, hinting at the role that it played for awakening in a (lucid) dream or generally for achieving a heightened state of consciousness:

« [...] le sommeil avec perte de conscience dans l’obscurité est un état proche de la mort, plus exactement, c’est un retour à l’état chaotique et indifférencié du monde avant la création. La création elle-même consiste en une sorte d’éveil, avec apparition de la lumière et prise de conscience du monde. Chaque nouveau lever du soleil la répète journallement. Il existe donc une équivalence sommeil-mort-chaos obscur. Comme lors de la mort, les âmes des dormeurs peuvent quitter le corps pendant le sommeil, ce qui n’est pas sans danger.

Dans cette situation, le rêve porte un nom révélateur, c’est un « éveil », en égyptien *rswt* substantif dérivé de la racine verbale *rs*, être éveillé. Le rêve est un éveil, un moment de conscience (relativement) claire au milieu de l’inconscience du sommeil. Mais à ce moment, l’esprit de l’individu qui dort est retourné vivre dans l’univers chaotique d’avant la création. Cela lui permet donc de jeter de manière exceptionnelle un coup d’œil dans cet univers. Étant donné que dans la conception égyptienne ce monde chaotique d’avant la création contient en puissance tout ce qui doit se manifester par la suite dans le monde créé, dans le monde de l’éveil, il est *logique* de tenter d’utiliser le rêve pour connaître l’avenir. Prendre conscience de ce monde chaotique n’est évidemment pas sans risques, les rêves, les éveils peuvent déboucher sur des visions de cauchemar, provoquées par des êtres malfaisants. [...]

Le nom égyptien du chevet nous ramène à la racine verbale *rs* dont nous avons parlé plus haut. Ce nom, *wrs*, semble signifier « ce qui main-

tient éveillé », ce qui semble paradoxal pour un oreiller. Il faut sans doute comprendre « ce qui maintient en état d’éveil pendant le sommeil », autrement dit, ce qui permet de bien rêver, utilement, clairement, pour que l’interprétation soit possible. [...] Si cette interprétation est exacte, le rôle du chevet est, de ce point de vue, de profiter au mieux ces éveils permettant de prévoir l’avenir que sont les rêves. »<sup>51</sup>

The view of Jacques Parlebas is also shared by Milena Perraud:

« Le rêve *rswt* est une dérivation nominale, à partir de la racine verbale *rs*, s’éveiller, être éveillé [...], par suffixation on obtient le mot *rswt*, littéralement l’éveil. [...] Par l’adjonction du préfixe intensif *w-*, à partir de la même racine verbale, *rs*, le mot créé est *wrs* qui signifie appui-tête, littéralement ce qui maintient éveillé, ce qui permet de s’éveiller ou pourquoi pas, ce qui permet de rêver. Sommeil, rêve, éveil et appui-tête sont intimement liés par les textes et les mots. »<sup>52</sup>

Initially, Gustave Jéquier had offered a similar but more complex etymology:

« Le mot désignant le chevet est toujours, dans les sarcophages comme ailleurs, *oures* [...]. [...] ce nom est apparenté à la racine *res* [...], qui est considérée comme signifiant ‘veiller, garder’ ; étant donné ce rapprochement, il se pourrait cependant que le sens primitif de ce verbe fût plutôt ‘élever, soulever’ [...] : un chevet est un objet destiné en effet à soulever la tête. »<sup>53</sup>

Nevertheless, even if he would have been right that the original meaning of the verb was “to raise, to lift” and therefore the word “headrest” simply denoted “something that elevates the head”, still the interrelation of meaning concerning raising of the head, awakening and dreaming would have been telling. Another, although less likely, explanation for the same etymology was proposed by Charles Boreux, who considered the “headrest” to be “something that watches over/protects the sleep” but failed to offer an explanation as to why the headrest would have acquired its protective role:

« [...] le chevet, qui « veille » en quelque sorte sur le sommeil, en le protégeant, mérite bien son nom de [...] *wrs* [...] ce nom, comme l’ob-

<sup>50</sup> Revonsuo 2010, 247.

<sup>51</sup> Parlebas 1982, 20–21. See also Hellinckx 2001, 93; Szpakowska 2003, 179.

<sup>52</sup> Perraud 1997, 34–35.

<sup>53</sup> Jéquier 1921, 237–238.



serve Jéquier [...], est apparenté à la racine [...], qui signifie précisément « veiller, garder ». »<sup>54</sup>

Although no Egyptian records survive that mention the purpose of headrests, inferences can be drawn from modern sleep studies. On the one hand, sleeping on a headrest would result in short arousal when the person rolls over and would therefore increase the amount of sleep that is spent close to the threshold of waking. On the other hand, the slightly tilted position of someone sleeping on a headrest would presumably affect the sense of balance, thus increasing the likeliness of dreams with a strong sensorimotor component, which, as we have seen in chapter 2.10 and 2.11, overlap with lucid dreaming and sleep paralysis. This idea is supported by a sleep study in which the upper part of a hospital type bed was both raised and lowered and that resulted in dreams of falling and flying as well as in dreams that were generally characterised by their high number of movement activities as well as their liveliness.<sup>55</sup> Combined with the pronounced slope observable in some of the Egyptian beds,<sup>56</sup> the use of a headrest would have resulted in a decidedly tilted sleeping position.

One depiction is singular: that on the outside of the coffin of Henui from Gebelein from the First Intermediate Period to early Middle

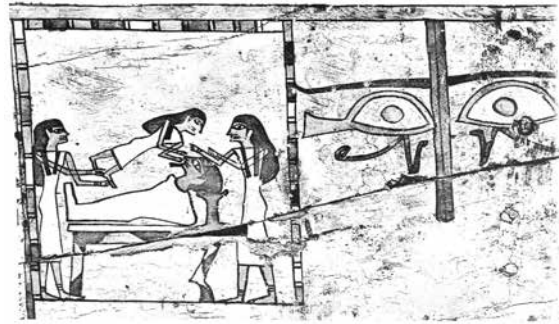


Fig. 41 Painted decoration on the coffin of Henui from Gebelein (First Intermediate Period / early Middle Kingdom)

Kingdom. It shows the deceased on his funerary bed, his head supported by a headrest (figure 41).<sup>57</sup> Again, the image is placed on the head end of the coffin next to a pair of eyes, suggesting a connection between the headrest and the act of seeing. Three women surround the deceased, and with respect to the smaller figure hovering above him, it appears that a sexual act is being depicted.<sup>58</sup> It is, however, controversial whether she can be interpreted as a “concubine du mort”, i.e. as accompanying him in his grave, or whether the scene depicts a ritual that alludes to the myth of Osiris, in which he is reanimated by Isis to beget Horus.<sup>59</sup> Notwithstanding the debate, the association between the headrest and sexuality is noteworthy if one considers the commonness of sexual content in dreams (see chapter 2.9 and 2.11). Another headrest is shown among other funerary goods on the head end of the inside of the coffin. Because the objects stem from the antiquities trade, we, unfortunately, cannot be sure that the wooden headrest supposedly found inside the coffin was really part of Henui’s burial equipment. In any case, the description given by the trader is detailed enough to appear

<sup>54</sup> Boreux 1935, 98.

<sup>55</sup> Baldridge 1966, 1274; Schönhammer 2004, 182. Unfortunately, detailed information about the study is lacking, for example, whether the upper part of the bed was either raised or lowered or both in alternation and at what moment that change was made. Felicitas Goodman describes a bodily posture with an angle of 37 degrees as a means to induce religious trances, i.e. altered states of consciousness (Goodman 1990, 20–23), although this New Age work needs to be handled with care due to the obvious involvement of its author’s religious worldview (Schönhammer 2004, 149–150).

<sup>56</sup> From Old Kingdom sources, the term *š.t-n-ht* for a strongly inclined bed is known. If the pair of legs at the foot is missing, the word *gšš* is used, which is derived from the verb *gšš* “to tilt” (Westendorf 1966, 57; see also Erman and Grapow 1953a, 6, 21; Erman and Grapow 1953b, 206, 1). Wolfhart Westendorf thinks that there was the idea that the sun moved on an inclined celestial path and that the slope observable in funerary beds is connected to this idea. Yet, as he concedes himself, the slope would have put the deceased in a tilted position and raised the head, which he also connects to resurrection (Westendorf 1966, 56–57).

<sup>57</sup> Steindorff 1901, 11–14, 26–28; Willems 1996, 291.

<sup>58</sup> Interpreting them as his wives and his daughter, who bid him farewell (Steindorff 1901, 12), seems unlikely because of the stylistic conventions of such scenes.

<sup>59</sup> Desroches Noblecourt 1953, 19–23; Jéquier 1915, 121–123; Wiedemann 1914/15, 167–168. The question whether the unusual depiction of the deceased’s arms and shoulders is supposed to emphasise the sexual connotation of the scene by resembling the god Min in his role as a god of fertility (Wiedemann 1914/15, 168–169) or whether it simply refers to the deceased lying on his side (Jéquier 1915, 122–123) remains to be answered as well.



credible. The same holds true for the two model boats, one of them a funerary boat with the coffin under a canopy (see chapter 5.3), bought alongside it.

Anitra Nettleton has argued, based on African societies that used headrests in historical times and sometimes still do today,<sup>60</sup> that the headrest can be considered “[...] an extension of the individual: a detached and thus distributable part of the body – a body that is fractal because it extends its essence to those things with which it makes contact.”<sup>61</sup> Such an interpretation of the role of the headrest is supported by the fact that headrests literally contain parts of the body, namely skin fragments, sweat and hair grease. The headrest moreover constitutes a direct link to the ground on which it stands and as such connects the head of the sleeper to the subterranean domain: “In many of these societies, dreams are considered to be sent by ancestors, and because dreams are dreamt on headrests, the headrest is a kind of antenna to the ancestors, and the strength of the signal is increased if the headrest is inherited from a senior relative.”<sup>62</sup> Therefore, headrests could be used in divination procedures or in ancestral veneration and could be buried instead of an absent body. Although a direct connection between ancient Egypt and contemporary African societies cannot be proven,<sup>63</sup> the interpre-

tation of a headrest as both an extension of the body and as a link to the subterranean, ancestral realm is based on the object’s physical properties and therefore not completely dependent on culturally specific interpretation, even though modified by it.

Other headrests were simply painted on the coffin as part of the frieze of objects characteristic of Middle Kingdom coffin decoration as can be seen in the Dynasty 12 grave of Sa-Uazet from Riqqeh (figure 42).<sup>64</sup> These were normally painted close to the head, occasionally multiple times. Sometimes it recurs again at the bottom of the head section independent of the frieze of objects.<sup>65</sup> Over time, the headrest turned into an amulet to hold the body together and to magically protect the head, which was considered the seat of life.<sup>66</sup> While life-sized headrests can also be regarded as amulets because they yielded their protective power through physical contact,<sup>67</sup> genuine amulets in the shape of headrests came into use only in the New Kingdom.<sup>68</sup> Likewise, headrests decorated with spells for a peaceful sleep are of New Kingdom date, yet none of them include inscriptions concerning dreams.<sup>69</sup> Chief among helpful deities depicted on New Kingdom<sup>70</sup> headrests was the god Bes owing to his apotropaic nature, and in some cases, he can be seen wielding knives or snakes to defend the sleeper from nightmare-causing spirits.<sup>71</sup> By the Greek period, he was consid-

<sup>60</sup> Nettleton 2008, 357–359. See also Arnoldi 1995, 62.

<sup>61</sup> Nettleton 2008, 357.

<sup>62</sup> Nettleton 2008, 359. With the Shona, headrests were sometimes used by spirit mediums and chiefs to obtain knowledge through induced dreams about the ancestors (Arnoldi 1995, 62). The frequent association between headrests and dreaming can be seen, for example, in Chokwe divination, where miniature headrests are named “pillows of dreams” (<http://www.fitzmuseum.cam.ac.uk/gallery/headrests/> 15 April 2017).

<sup>63</sup> Whereas recent studies show that the widely held opinion that oral cultures are incapable of spanning several millennia is unjustified (Graça da Silva and Tehrani 2016, 1–10, Nunn and Reid 2015, 1–33), teasing apart the manifold cultural influences and shifts between ancient Egypt and contemporary cultures seems impossible at the present time. However, certain similarities concerning form and function seem indisputable, as headrests in central and east Africa often show a reminiscence of ancient Egyptian forms such as the block, the pierced block, the branching and the stem headrest forms. Furthermore, they were also used in burials (<http://www.fitzmuseum.cam.ac.uk/gallery/headrests/gallery/2/> 15 April 2017).

<sup>64</sup> Engelbach et al. 1915, 24; Petrie 1927, 36; Taylor 2001, 195, 222.

<sup>65</sup> Jéquier 1921, 236–237.

<sup>66</sup> Kees 1956, 17–18; Taylor 2001, 108.

<sup>67</sup> Pinch 1994, 105.

<sup>68</sup> Andrews 1994, 12, 94–96.

<sup>69</sup> Perraud 1997, 186–191; Szpakowska 2003, 173.

<sup>70</sup> Eggebrecht 1987, 278–280; Petrie 1927, 36; Pinch 1994, 43; Seipel 1989, 242–243; Szpakowska 2003, 173. There exists one headrest with a depiction of Bes that could be of Middle Kingdom date, but, as the reference is faulty, that claim cannot be proven (Michaelidis 1963/1964, 71, pl. 17).

<sup>71</sup> “[...] similar spells and demon-fighting genies appear on headrests apparently designed for use in the farworld, such as the limestone headrest of Qenherkhepshef (the owner of P. Chester Beatty III). This reflects the concept of sleep as a state of alternative consciousness similar to that of death; in both states people are vulnerable to dangers from the farworld. The appearance of spells for good sleep and nightmare-fighting deities on headrests designed for use in the farworld, implies that bad dreams could also affect the sleeper in the afterlife.” (Szpakowska 2003, 174).

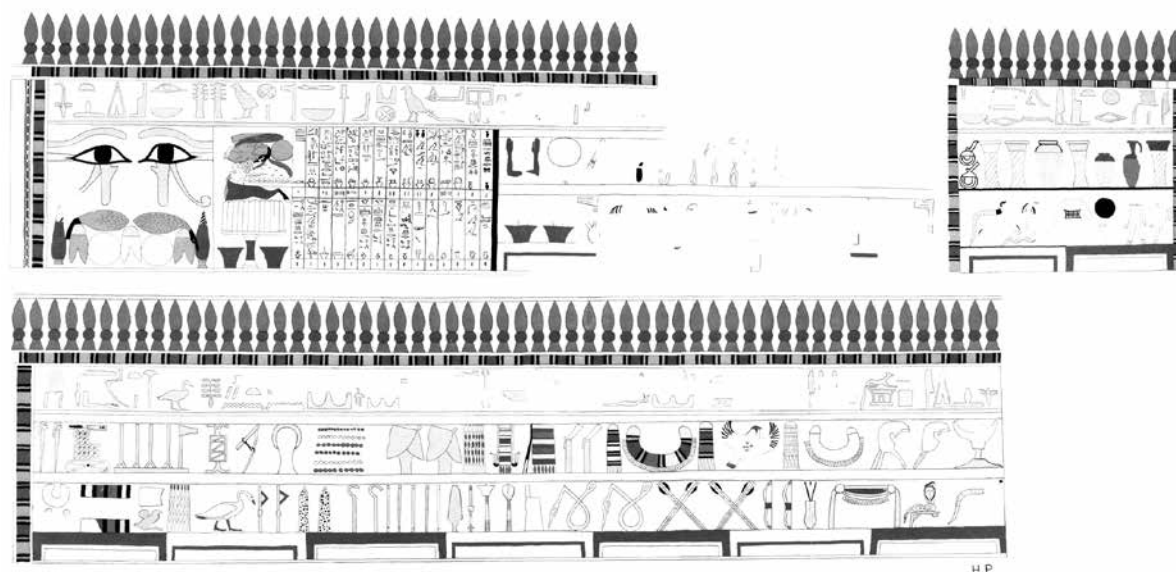


Fig. 42 Frieze of objects on the coffin of Sa-Uazet from Riqqeh (Dynasty 12, Middle Kingdom)

ered a deity helpful for enticing dreams, but before that time the Egyptians do not seem to have known a god of dreams.<sup>72</sup>

A connection between raising the head with a headrest and awakening, i.e. resurrection was already proposed before the middle of the twentieth century by Adriaan de Buck:

“One of the objects which was frequently given to the dead or represented in the tomb is the headrest, the *weres*. Sometimes the head of the mummy rests on it; he sleeps. To my mind this is also the most probable explanation of the position of the body in contracted burials. The *weres* is of the utmost importance for the resurrection of the dead, which it effects by raising their head. To raise oneself is of course a sign of life; the sleeper who awakes and he who rises from the dead raise themselves. Awake, raise thyself! is the constant call of the son to his dead father. The head is exceptionally important, it being the seat of life *par excellence*. The head of the dead king is raised by Re in a number of pyramidtexts: he awakes, he rises from the dead in the morning at sunrise. This raising is so outstanding a feature of the renewal of life that the spells of the Book of the Dead may be called raisers (*štsw*). All this accounts for the importance attached to the *weres*. The Book of the Dead and the earlier spells of the Coffin Texts know a spell of the *weres*. Its text is significant; it runs: your head is raised, your forehead is made to live and you are a god.”<sup>73</sup>

He then goes on to discuss the symbolic equation of the head that is raised by a headrest with the rising sun:

“So indispensable is the head for life in the hereafter that from the earliest times onward especial precautions were taken against its loss. The mummy-mask is one of them, it replaces the head. It is, moreover, a divine head; its eyes are the boats of the sun, etc. Even this head, however, is dead and ineffective, unless it is raised. The text declares that Shu has given raising (*štsw*) to it. Now it is well-known what this raising of Shu means. He raised the sky in the beginning and he lifts up the sun in the East. Thus his function and that of Nun are near akin. It is often difficult to decide which of the two is meant in representations of the raising of the sun by an anonymous god. [...] Both Nun and Shu lift up the sun; the sleeper was reborn from Nun and Shu raises the head and thus gives life to the dead. The decoration of a *weres* found in the tomb of Tutankhamen is ingenious; it has been shaped as Shu, who lifts up the part of the *weres* on which the head must rest. He has been placed between the two lions, variants of the two mountains of *akhet* where the sun rises.”<sup>74</sup>

These ideas have been developed further by Bart Hellinckx, who argues that the headrest assimilated the head with the sun that is raised out of the netherworld by symbolically identifying the former with the *akhet*, the sky or with both of them.<sup>75</sup> Starting from younger exam-

<sup>72</sup> Szpakowska 2003, 175.

<sup>73</sup> De Buck 1939, 29.

<sup>74</sup> De Buck 1939, 29.

<sup>75</sup> Hellinckx 2001, 61–62, 64–65, 68–70, 77–82, 85–86, 89–91. See also Parlebas 1982, 20–21. Surprisingly,

ples such as the above-mentioned ivory headrest from Tutankhamun's tomb (?–1324 BC, Dynasty 18, New Kingdom<sup>76</sup>) in the Valley of the Kings at Thebes, Hellinckx is able to trace the symbolism to the time considered in this work.<sup>77</sup> He identifies more than thirty “chiro-morphic” (hand-shaped) or “brachiomorphic” (arm-shaped) headrests, on which the underside of the curved top is embellished with a pair of painted or carved hands (figure 43, top). The majority date to the late Old Kingdom or First Intermediate Period. However, the headrests from the Middle Kingdom are the most interesting examples because some of them depict a sun disc on the top's upper side, which appears between a pair of hands (figure 43, bottom). This recalls New Kingdom or Third Intermediate Period images in which a pair of arms raises the sun out of the netherworld, and analogous textual formulations can already be found in the *Pyramid and Coffin Texts*.<sup>78</sup>

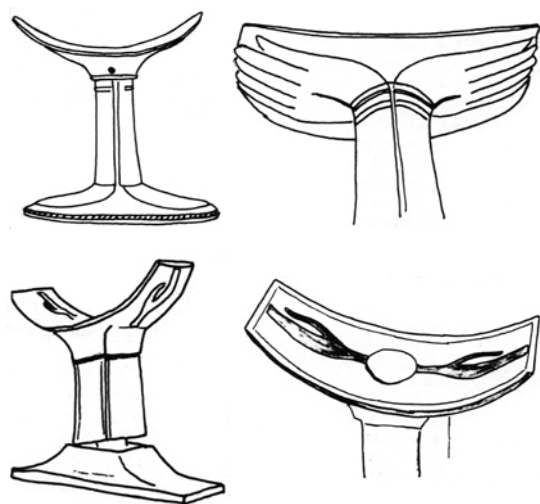



Fig. 43 Old Kingdom headrest with a pair of arms (top) and Middle Kingdom headrest with two pairs of hands and the sun disc (bottom)

although de Buck worked out very well the equation of the head on the headrest with the rising sun and also refers to the idea of sunrise between two mountains and to the respective hieroglyphic sign, he does not mention the obvious linkage between the two mountains and the headrest, both in their iconography as well as in their conceptualisation (De Buck 1939, 16–17).

<sup>76</sup> Hornung et al. 2006, 493.

<sup>77</sup> “The raising of the deceased’s head by Shu is mentioned in *Coffin Text* spell 366: ‘My brow is raised up (*ts*) by Shu...’. Several scholars have called attention to the headrest determinative of the verb *ts* [...]. The occurrence of the headrest-determinative in the

Apart from its decoration, the shape of a headrest occupied by a head resembles the *akhbet*- or horizon-hieroglyph  (Gardiner N27).<sup>79</sup> This applies to both the formal similarity, in which the two ends of the headrest’s curved top flank the head in the same way as two mountain peaks bordering the sun, and to a “behavioral analogy”<sup>80</sup>, in which the human head and the sun ascend and descend at the same time. In the evening, when the sun sets between the mountains of the western horizon, the head is placed on the top curve of the headrest, and in the morning, when the sun rises from the eastern horizon, the head is raised from the curved top of the headrest. Although Hellinckx doubts that this parallel was primarily intentional, he draws attention to the fact that formal resemblance played an important role in Egyptian religion, and similarity in shape was thought to be significant. Both the identification of the headrest with the *dw*-mountain and with the divine “sun-raiser” fit well together because the latter is commonly either placed at or in the horizon, as in the case of Shu, or even identified with it, as in the case of Osiris. Additionally, the custom of gilding headrests or of painting them yellow or red, as is attested from several Old Kingdom and First Intermediate Period

present context indeed seems to suggest that the mythological conception of the raising of the head by Shu was associated with a headrest as early as the Middle Kingdom.” (Hellinckx 2001, 67–68).

<sup>78</sup> “PT § 1425 [565] and CT II, 37h [80]. In the former instance, the deceased king says: ‘I have leant on your arm, O Shu, just as Re has leant on your arm’. According to the second example, Shu says with regard to the sun god: ‘my arms are under him’.” (Hellinckx 2001, 70). The assimilation of the head and the face with Ra (or the sun disc) is also mentioned in *Coffin Texts* VI 39li [761], VII 159a–c [945] (Hellinckx 2001, 91). Then again, in the *Coffin Texts* 232, 823 and 934, which contain spells linked to the headrest, there appears to be no indication of an association between the headrest and the sky or between the head’s rising and sunrise (Hellinckx 2001, 88).

<sup>79</sup> According to Perraud, this sign was not used during the Old Kingdom and therefore cannot explain the appearance of headrests of this form (Perraud 1997, 37), however, according to Hellinckx, there is at least one Dynasty 5 instance of the sign in question (Hellinckx 2001, 78). Also, the influence might have worked the other way around, with the use of headrests enabling the adoption of the new hieroglyphic sign.

<sup>80</sup> Hellinckx 2001, 77.

examples, might point to a solar symbolism. Hellinckx summarises:

“The horizon symbolism of the headrest seems to be related to the Egyptian conception of sleep. From the dreams one had, it was deduced that the sleeper found himself in another, somewhat strange world. [...] sleep was also seen as a state very near to death because the sleeper was in a condition of inertness. [...] The two foremost objects connected with the sleep of men were the bed and the headrest. Because of the formal similarity that existed between the head and the sun on the one side, and the headrest and the horizon mountains on the other side, the headrest was the natural candidate to carry the solar symbolism. [...] The sleeper whose head was on such a headrest would in the morning magically awaken because his head would rise on analogy with the sun.”<sup>81</sup>

Furthermore, he considers the horizon and sun symbolism at play in headrests to be of importance for the afterlife as well:

“According to the Egyptians there existed a very close relationship between sleep and death. It was not only said about the living that, when asleep, it was as if they were dead, the dead too were compared with sleepers. Therefore, headrests in which the horizon-symbolism had been stressed in some way [...] could after their use in this world also awaken the deceased from the ‘death-sleep’. This explains why the horizon symbolism, in all likelihood originally connected with the conception of sleep, was also directly adopted for funerary headrests [...].”<sup>82</sup>

These mountains can also be supplemented or replaced by two lions that guard the horizon in some imagery (e.g. Tutankhamun’s headrest), an idea that probably dates back to the Middle Kingdom. Given the fact that the symbolism of the headrest and the bed run parallel, the observation that lions are the most common decorative element in beds also suggests a reference to sunrise symbolism. This becomes especially striking in examples in which the side-sections can take the shape of a lion so that the bed as a whole resembles the animal (see above). Less reliable is an early identification of the “horizon lions” with the god Aker, who is usually represented as a double lion, because the only instance of a headrest that might take the form

of a double lion is badly damaged and of uncertain date (figure 44).<sup>83</sup> Generally speaking, it can be inferred from numerous amulets found on mummies that the form of the double lion was popular during the First Intermediate Period and the Middle Kingdom.



Fig. 44 Fragmentary wooden headrest from El Mahasna

Apart from lions, bovine feet play an important role in the decoration of beds (see above). In this context, it is interesting to note that one of Tutankhamun’s beds takes the shape of the heavenly cow, offering a possible explanation for the role of the animal in the decoration of earlier beds.<sup>84</sup> The bed features the sun disc between the cow’s horns as a decorative item, opening up additional questions about a general iconic connection between the shape of headrests and horns. In this line of thinking, the curved top of the headrest could either symbolise the horns of the primeval cow by which the sun is raised out of the netherworld and/or the horns of the heavenly cow between which the sun is placed. The headrest’s top section could also represent the solar bark, which is raised out of the neth-

<sup>83</sup> The wooden headrest from El Mahasna was depicted among objects from Dynasty 6 to 11, but information about its circumstances of discovery is lacking (Garstang 1903, pl. 33; Hellinckx 2001, 81). „Die Gleichung Himmel = Bett ist ferner in dem Wort *mm.t* [...] zu erkennen, das ‚Bett‘ bedeutet und in den Pyramidentexten den ‚Himmel‘ bezeichnet. Sicher nicht ohne Absicht ist dabei die Schreibung mit dem Geier *mw.t* (‚Mutter‘). Das Determinativ zeigt ein Löwenbett mit Köpfen am Kopf- und Fußende. Diese auch sonst häufig anzutreffende Form des Löwenbettes dürfte sich ebenfalls am kosmischen Vorbild orientiert haben, und zwar am Aker-Löwen [...], der in dieser dualistischen Form auftritt [...]“ (Westendorf 1966, 55; see also Erman and Grapow 1940, 80, 13–14).

<sup>84</sup> Hellinckx 2001, 90; Westendorf 1966, 53–57; Willem 1996, 291. “That the funerary bier can symbolize the sky is clearly expressed in some texts. In *Pyramid Text* spell 417 it is said: ‘The Great One (i.e. Osiris, the deceased king) sleeps upon his mother Nut’.” (Hellinckx 2001, 90).

<sup>81</sup> Hellinckx 2001, 92–93.

<sup>82</sup> Hellinckx 2001, 94.



erworld and/or the solar bark, which journeys along the sky.<sup>85</sup> I will return to the role of the sun god Ra in ideas about sleep, dreams and death as well as to the primeval ocean of Nun in the following chapter.

### 5.3 DREAMS AND THE NETHERWORLD

Fourteen letters addressed to the dead have been discovered so far, which date between the end of the Old Kingdom and the Late Period, with most of them dating from prior to the New Kingdom.<sup>86</sup> Since the ancient Egyptians believed that direct communication with deceased relatives or acquaintances was possible, they addressed letters to the dead, whose ordinary life they thought to continue in the next world. Most of the time, the dead are not consulted to gain information about the future but are asked to intervene in current matters concerning either the world of the living or the farworld. It was assumed that the dead were able to directly contact the gods in the farworld, while the living were restricted to contact with the dead and therefore employed them as messengers for their concerns. Two letters are particularly interesting because they refer to sleepers contacting the dead in their dreams.

Found close to Abydos, the Old Egyptian Papyrus Nag ed-Deir 3737 dates to the First Intermediate Period, probably to Dynasty 9<sup>87</sup> or 10<sup>88, 89</sup>. The fact that the letter was excavated in a subsidiary burial in the courtyard of the tomb of its addressee Meru suggests the idea that this more recently buried relative would deliver it to the farworld. Furthermore, both Meru's son Heni and possibly his deceased servant Seni, the protagonists of the letter, are depicted on the

tomb's walls along with Meru.<sup>90</sup> In the letter, Heni asks his father for help concerning Seni, who appears in his dreams:

"A servant speaks before his lord – his son, Heni, speaks:

'Pay close attention!

It is useful to pay attention to the one who provides for you, on account of these things which your servant Seni does: for causing me, your servant, to see him in a dream in the one Sole City with you.

Indeed, it is his own character that drives him away. Indeed, that which happened against him, did not happen by the hand of me, your servant. (Nor) was it an end of all that would happen. Indeed, it is not I who first caused wounds against him. Others acted before I, your servant, (did). Please, may his lord be protective, and do not allow him to do harm. May he be guarded in order that he may be done with looking at me, your servant, forever."<sup>91</sup>

Heni reminds Meru that his well-being in the beyond is dependent on Heni providing the offerings, thus trying to negotiate his father's support. It seems that Heni feels guilty about beating his servant Seni and wants him to stop watching him in his dreams because this may cause further harm. Seni is thus described as wilfully staring at Heni, an act that is usually named "the evil eye". The letter closes with a plea to Meru that he should stop Seni from watching Heni once and for all.

Another letter to a dead person appeared only briefly in the antiquities trade in 1958 and has been missing ever since.<sup>92</sup> The letter was inscribed with ink on the reverse side of a limestone stela or tablet with a height of about 30 cm, which contained a painting of a man making an offering on its front. Because of the dubious provenience, the hieratic text can only be tentatively dated to the First Intermediate Period, possibly to Dynasty 11, while its findspot remains unknown.<sup>93</sup> The letter was written to a dead woman by her husband and her brother, containing a reference to dreaming made by her husband:

<sup>85</sup> Hellinckx 2001, 82–83, 89–90. Harco Willems has also suggested that the deceased on his bier could be understood as a representation of the sun god in his barque, however, this hypothesis is based on younger sources (Willems 1996, 117, 168, 291, 342).

<sup>86</sup> Szpakowska 2003, 22–23; Taylor 2001, 42–43; Verhoeven 2003, 31. In the case of about five more texts, it is disputed whether they really are letters addressed to dead persons.

<sup>87</sup> Simpson 1966, 47; Szpakowska 2003, 185; Verhoeven 2003, 49.

<sup>88</sup> Szpakowska 2003, 24.

<sup>89</sup> Simpson 1966, 40–41, 47–48; Szpakowska 2003, 19–20, 24–27.

<sup>90</sup> Peck 1958, 122. Gianluca Miniaci, however, does not list the letter among those for which the archaeological context is known (Miniaci 2016, 91).

<sup>91</sup> Szpakowska 2003, 185, lines 1–6.

<sup>92</sup> Szpakowska 2003, 23–24; Wente 1975/1976, 595, 599.

<sup>93</sup> Ursula Verhoeven suggests an origin in Nag ed-Deir (Verhoeven 2003, 49).



“A saying by Merirtifi to Nebetotef:  
 ‘How are you?  
 Has she, the West, been taking care of you according to your desire?  
 See, I am your beloved upon earth,  
 Fight on my behalf and guard my name!  
 I did not muddle a spell before you,  
 while I was perpetuating your name upon earth.  
 Expel the pain of my body!  
 Please be beneficial to me in my presence,<sup>94</sup>  
 while I see you fighting on my behalf in a dream.  
 I will lay down gifts before you  
 ...when the sun rises I will set up offerings for you.”<sup>95</sup>

The text starts with standard phrases and pleasantries, but Merirtifi soon gets to the real reason for writing the letter: he is asking his deceased wife for help concerning his physical condition. To persuade Nebetotef he reminds her of their close relationship and of the fact that he has immaculately performed her funerary rituals. It seems that he is not completely sure that she will help him because he requests visual proof in the form of her appearing to him in a dream and fighting on his behalf. In return, he promises to bring offerings to her tomb first thing in the morning. While this is the earliest Egyptian evidence of a purposeful pursuit of dreams, there is no indication that the letter’s author waited at the tomb for it as previously suggested.<sup>96</sup> Kasia Szpakowska has therefore argued that it cannot be called a formal incubation because the latter involves sleeping in specific locations and usually some preceding rituals.<sup>97</sup> In contrast to this perspective, it must be reminded that in the Mesopotamian sources (see chapter 4), incubations only rarely take place in temples but are mostly performed in natural or sometimes domestic settings. Nevertheless, following William Simpson’s proposal that the letter was composed in reaction to a dream or a series of dreams in which the author had experienced a view of the afterlife, we gain the impression of a complex interplay between dreams and the waking world.<sup>98</sup> Although short, both letters to the dead also al-

low far-reaching conclusions based on linguistic evidence (see chapter 5.2), first and foremost that the dream was considered an alternate state or dimension:<sup>99</sup>

“The ancient Egyptian dream is not an event arising from within the dreamer or an activity performed by an individual, but rather has an objective existence outside of the sleeper’s will. The use of the phrase ‘seeing in a dream’ also indicates that the dream is an alternate state or dimension in which the waking barriers to perception are temporarily withdrawn. In ancient Egypt the dream refers not to the act of perceiving, but sometimes to an alternate state of reality.”<sup>100</sup> “Merirtifi does not ask to ‘dream of’ Nebetotef, but desires to ‘see her *in* a dream’. An Egyptian such as Merirtifi could hope to wake up in the night *in* this peculiar zone or state, where he could contact or at least view an individual who was living in the farworld, as if through the window of a waiting room.”<sup>101</sup>

Yet, the transparency of the dream state applies to both the world of the living and the world of the dead:

“It appears that not only can Seni force the sleeper to see him, but worse yet, the dead man can watch the sleeper. The dream is not merely a window through which the dreamer can see a loved one in the beyond, but it is also a place where the dreamer himself is susceptible to being watched. [...] The dream may be compared to a liminal zone, a transparent area between the walls of two worlds which allowed beings in separate spheres to see each other.”<sup>102</sup>

Lastly, the alternate dimension of dreams was considered a physical location:

“The use of another common phrase, *m33m rsw.t*, in the earliest known documentary evidence for a dream in ancient Egypt suggests that it was also perceived as a state or zone. The dream was an autonomous phenomenon, external to the dreamer, which existed as a spatial dimension. This is indicated by the use of locational prepositions as well as other linguistic devices. It was not unusual for the Egyptians to treat ‘states’ as physical locations complete with topographical features. This is most evident in their illustrations and representations of the farworld, early maps of which appear on

<sup>94</sup> Taylor translates: “May you appear for me as a blessed one (*akh*) before me [...]” (Taylor 2001, 42).

<sup>95</sup> Szpakowska 2003, 185–186, lines 1–4.

<sup>96</sup> Wente 1975/1976, 599–600.

<sup>97</sup> Szpakowska 2003, 143–144.

<sup>98</sup> Simpson 1966, 45.

<sup>99</sup> Szpakowska 2003, 21, 24–28.

<sup>100</sup> Szpakowska 2003, 21.

<sup>101</sup> Szpakowska 2003, 24.

<sup>102</sup> Szpakowska 2003, 25–26.

Middle Kingdom coffins, and textual descriptions in the mortuary texts.”<sup>103</sup>

A connection between sleep and death was already suggested by de Buck based on passages from a sun-hymn in papyrus Chester Beatty IV.<sup>104</sup> According to him, the bridge between the gods, the dead and sleepers lies in the chaotic primeval ocean of Nun, into which one returns in sleep as well as in death. When the sleeper “awakens” in a dream, he is located temporarily in Nun, i.e. in the farworld, and therefore able to interact with the deceased. Because life is renewed in Nun, one leaves invigorated, a cyclical concept of creation that pertains to both the dead and sleepers as well as to the sun, which was created from Nun and passes through it on a daily basis.<sup>105</sup> Although

the theory is based on sources from the New Kingdom, it is likely that it also holds true for earlier periods because Nun is already mentioned in the Old Kingdom *Pyramid Texts* as a state prior to creation into which the dead king descends. However, Nun and the chaos it represents subsist in the world, permeating and enclosing it. While Nun is considered a physical place, there is no fixed location for it in Egyptian cosmology because chaos and its categories exist outside space and time and, accordingly, are everywhere and nowhere to be found. This also applies to the dreamworld, which is probably the reason why Szpakowska seems undecided about its location. On the one hand, she points out that it was not part of the physical geography of this world or the netherworld and characterises it as an immaterial state with fuzzy transparent boundaries but, on the other hand, states that it was assigned a particular space inside the netherworld.<sup>106</sup>

Similarly, the Duat, i.e. the realm of the dead, represents another aspect of the same chaos, and the dead are sometimes said to dwell in Nun.<sup>107</sup> This idea becomes manifest in the chaotic and threatening imagery of the guides to the hereafter as well. Because of this, the Egyptians paid close attention to equipping the dead with the necessary knowledge and funerary rites so that they could defy the chaos and retain the order achieved in this world even after death. Accordingly, abundant information about the Duat as well as spells to ensure a safe bypassing of the dangers and demons encountered there can be found in inscriptions in private graves, in the *Pyramid Texts* (Dynasty 5 to 8) and in their derivative successors, the *Coffin Texts* (First Intermediate Period and Middle Kingdom, earliest examples from Dynasty 6). These were meant as instructions to reach the transfigured state of

<sup>103</sup> Szpakowska 2003, 21.

<sup>104</sup> De Buck 1939, 6–13, 28–30. „Wie schön bist du [...] wenn du aufgehst im Lichtland, wir leben wieder von neuem, nachdem wir eingegangen waren in das Urwasser und es uns verjüngt hat zu einem, der zum erstenmal jung ist. Der alte Mensch wird abgestreift, ein neuer angelegt.“ (Assmann 2001, 244; pChester Beatty IV rto. XI, 8–9). The argument was taken up again and elaborated by Erik Hornung some twenty years later (Hornung 1956, 28–32). “In our dreams, then, we can meet the Gods and the dead because sleepers spend their time in Nun, in the primeval ocean from which every morning the sun rises [...]. In water and darkness, the ‘secret’ deep part of the world is concretely and externally experienced, but in the analogy of dream and death we have, in the human unconscious, an opening into that deep part of the other world. In this truly ‘secret’ abyss, the walls between this world and the other are transparent because the speech of images removes this separation.” (Hornung 1986, 19). Jan Assmann legitimately criticises Hornung’s attempt to identify an Egyptian discovery of the “unconscious” and “depths of the soul” in their concepts of the netherworld (Assmann 2001, 283). Both scholars, however, failed to recognise that dreams are conscious, universal human phenomena which therefore apply for the ancient Egyptians without a necessity to assume knowledge comparable to modern psychology. See also Kees 1956, 85; Szpakowska 2003, 22, 38–39.

<sup>105</sup> “Along hidden roads the dead approaches a gate, which is probably thought of as lying in the East, in order to rise there with Re: ‘To speak words by the western souls. The late Osiris N.N. has come along secret roads. He has reached the gates of Nun. He has approached the gate of ascending to heaven with knowledge of pulling, instructed in rowing. His sceptre is given to him, that he may strike with it. He announces Re, in the front of the boat.’ [...] the gates of Nun are the place where Re rises from

the primeval ocean [...]” (Zandee, 1960, 163–164, *Coffin Text* spell 780).

<sup>106</sup> Szpakowska 2003, 29, 39.

<sup>107</sup> “Nun, the primeval ocean, is thought of as realm of the dead. This conception is very close to that of a netherworld, as the primeval ocean extends under the disk of the earth. First the king comes to the deceased, but he does not remain in the subterranean realm of the dead, he sails to heaven: ‘Those who are in Nun, fear you’ [Pyr. 871. c.]. The gods welcome the king, who has left Nun, in heaven: ‘Come, resident of Nun, Atum says. Come to us, they say viz. the gods with regard to Osiris’ [Pyr. 1525.].” (Zandee 1960, 94).

*akh* and thus to attain the afterlife.<sup>108</sup> It is a distinctive feature of Egyptian culture that new religious concepts did not displace those already in existence but were simply added, which led to the coexistence of seemingly contradictory ideas in the different sources.<sup>109</sup>

In the Old Kingdom<sup>110</sup> *Pyramid Texts*, the earliest attested idea is that the deceased king's Ba rose up to the northern sky and united with the circumpolar stars. Still, the western necropolises are mentioned even earlier as the desired destination in private graves.<sup>111</sup> Presumably, caves and grave shafts were considered entrances to a netherworld below the bottom of the flat disk of the earth swimming on Nun, in the same way that the Nile was thought to rise from the depth of the earth or wind to originate from caves. The necropolis Rosetjau ("The Entrance of Subterranean Passages") is already mentioned in the *Pyramid Texts*, although it gained its central importance only during the Middle Kingdom in connection to the increased influence of Osiris.<sup>112</sup> From the beginning of Dynasty 5, beliefs about the dead that sleep in their grave<sup>113</sup> became intertwined with those connected to the sun god Ra, resulting in the

idea of a gloomy netherworld below the western horizon, into which the sun was thought to sink every day.<sup>114</sup> In many of the *Pyramid Texts*, the king is described as travelling with Ra in his two barques, one for the day and one for the night, and thus to take part in the daily rebirth of the sun god from Nun.<sup>115</sup> The sun was thought to descend into the netherworld through gates at the horizon, where the dead were resurrected by the life-giving sunlight, and to rise again in the morning, pointing to a connection between the course of the sun, the

<sup>108</sup> Taylor 2001, 193. A person that has become *akh* can reach eternal life and is able to influence other beings. The person is thus an effective spirit, equipped with qualities and prerogatives of gods (Taylor 2001, 32).

<sup>109</sup> Taylor 2001, 25.

<sup>110</sup> De Buck 1939, 28; Hornung 1986, 16; Kees 1956, 24–25, 27–29; 59–65, 68–70, 73–74, 84–85, 132, 143, 154, 159; Taylor 2001, 25, 29–31, 141, 193–194; Zandee 1960, 8–9, 30, 88–89, 91–97, 257.

<sup>111</sup> „Auch die ältesten Totengebete stellen den Westen als Endziel des Weges hin. Es handelt sich um Zeugnisse aus Privatgräbern, die mit der 4. Dynastie vereinzelt beginnen, reichhaltiger allerdings erst mit der 5. Dynastie einsetzen. Da wünscht der Tote zuerst einfach, 'daß er zum Westen gehe', dann in der 5. Dynastie, 'daß er begraben werde in der Nekropole, der westlichen Bergwand (oder 'im Westen')', als Herr der Ehrung beim großen Gott, sehr schön alt' und 'daß er (zum Westen) wandere auf den schönen Wegen, auf denen die beim großen Gott geehrten wandern'. [...] Die Toten werden im ägyptischen Sprachgebrauch häufig als 'die Westlichen' bezeichnet, und der alte Totengott von Abydos heißt 'der an der Spitze der Westlichen' (Chontamenti).“ (Kees 1956, 24–25).

<sup>112</sup> In the New Kingdom, the word "Rosetjau" could designate any opening in the ground such as tomb shafts and sometimes naturally occurring holes, and these were thought to be an entrance to the netherworld (Taylor 2001, 133).

<sup>113</sup> „Ein Großer soll wachen bei seinem Ka, es schläft aber dieser Große bei seinem Ka; dieser NN hier soll wachen bei seinem Ka, es schläft aber dieser NN hier bei seinem Ka. Erwache, dieser Große hier, erwache, NN hier!“ (Assmann 2001, 158; *Pyramid Text* 468 §894).

<sup>114</sup> „Stellen wir uns noch einmal die Anknüpfungspunkte des Sonnenglaubens an die Totenwelt vor Augen. Beide begegnen sich im Westland, wo die Sonne in die Unterwelt sinkt, um bei Morgenanfang wiederzukehren. Dies tägliche Ereignis ist der am stärksten empfundene Eindruck, denn wie es den Menschen von seiner abergläubischen Furcht vor der Nacht befreit, so siegt der Sonnengott im Osten über die Mächte der Finsternis und erkämpft sich im Morgenrot den Weg zum Himmel. Dieses Leitmotiv des Sonnenglaubens ist im Alten Reich auch zum beherrschenden Gedanken des Totenwesens geworden. Die Parallellinie liegt klar: Wie der Sonnengott sich aus den Schauern der Unterwelt löst, so wird es dem Seligen gelingen, aus dem Dunkel des Totenlandes, wo er im Grabe ruht, sich zu befreien. Dabei wirkt die Schilderung der Schicksale des Sonnengottes als Sympathiezauber; die große Beliebtheit der Sprüche vom Sonnenaufgang, vom Öffnen der Horizonttore am Morgen, die oft auch mit der Schilderung vom Erscheinen des Schöpfergottes am Urbeginn und seines Herrschaftsantrittes zusammenfließt, wird damit verständlich. Diese uns aus der Gedankenwelt der Pyramidentexte vertrauten Gedanken sind bemerkenswert lebendig geblieben, erfahren sogar auf der Höhe des Mittleren Reiches neue Kraft, bis sie in den inbrünstigen Klängen der Sonnenlieder des Neuen Reiches verlauschen.“ (Kees 1956, 183).

<sup>115</sup> Generally speaking, it is not unusual for early civilisations to metaphorically identify the king with the sun (Trigger 2001, 86). In this case, however, we are facing a more complex symbolism, as illustrated by the fact that the Egyptian word *h'i* can denote both the sun rising upon the horizon and the king appearing upon his throne. In this way, the daily cycle of the sun, the annual cycle of the Nile flood and the generational cycle of royal succession were tied together: the latter was considered vital for the other two because it restored the power that preserved the gods and the cosmic order (Trigger 2001, 103).

night, sleep and the netherworld. Osiris, on the other hand, is also already mentioned in the *Pyramid Texts*, and the belief in him as a ruler of the underworld corresponded well with the idea about the western subterranean kingdom of the dead. By association with Ra, or sometimes Osiris, the dead were integrated into the world's cyclical organisation and could hope to take part in their rebirth time after time in the form of a "reawakening in the afterlife".<sup>116</sup> To achieve this, the king was equipped in the *Pyramid Texts* with the right spells to get past numerous dangers. Several means of upward movement are described, for example changing into a bird, rising with the smoke of incense or climbing a ladder. Also mentioned is a winding canal or lake that a deceased person needed to cross with the help of a ferryman before he could begin with the ascension. We thus see a multifaceted interrelationship between the Duat, Nun, water and the sun even in the earliest extant texts. The hereafter is furthermore divided into a gloomy and dismal place beneath the earth<sup>117</sup> and its counterpart, a pleasant and bright area in the sky that is the sphere of the sun god and the stars. A physical passage in the form of descent and ascension with the tomb as a starting point is characteristic for the farworld at the very beginning of written history.<sup>118</sup> While most scholars have considered this the result of a standoff between different but intermingled traditions, it rather seems to be a defining feature of Egyptian cosmology.

In the First Intermediate Period and Middle Kingdom,<sup>119</sup> a strong interest was given to achieving knowledge about the underworld and

to recording it in the guides to the hereafter. In the *Coffin Texts*, spells that contained information about the Duat were collected, and we find detailed descriptions of individual regions of the netherworld. This is also illustrated in the *Book of Two Ways*, a map commonly drawn on the floor of the coffins during this period, which represented the terrestrial underworld. A blue waterway (the uppermost) and a black pathway by land (the lowermost), between which the dead must choose, are illustrated as a guide for passing safely several dangerous places and demons. In the written spells, however, it is the other way around, with the "way by water of Rosetjau" being below and the "way by land of Rosetjau" above. By this time, the necropolis Rosetjau had acquired the status of being the entrance to the subterranean realm of Osiris. Generally speaking, the two roads form only part of the complex, which can encompass a whole labyrinth of walls, channels and islands the deceased needed to pass. After his journey through the realm of the dead, he can expect to either reach the western earth-bound kingdom of Osiris or to be with Ra in the sun barque in the eastern sky as in the earlier texts. Additionally, other Middle Kingdom texts suggest a connection between the myth of Osiris and awakening, i. e. resurrection, from the sleep of death with the rising of the sun at dawn.<sup>120</sup>

<sup>119</sup> Hornung 1986, 16–19; Kees 1956, 60–62, 75, 143, 179–182, 188–190, 193–194, 199, 201–202, 259, 265–266, 287–289, 292–293, 295, 300; Taylor 2001, 32–33, 194–196, 222; Zandee 1960, 4, 9, 26–27, 30–31, 61, 73–78, 88–89, 91–97, 161–162, 165, 171–173, 257.

<sup>120</sup> „Andere Texte dieser Zeit machen die ebenfalls schon in den Pyramidentexten angedeutete Verbindung der Wiedererweckung des Toten aus dem Todesschlaf mit dem Sonnenaufgang noch klarer: ‚Du erwachst zum Leben, siehe die Erde ist hell. Dich preist Nephthys immer neu‘, so redet man mit den typischen Worten des alten Morgenliedes Osiris an, und ähnlich heißt es in einem anderen Text dieser Zeit: ‚Die Erde wird hell, erwache du, der in Ermatung in Nedit schläft, sogleich!‘ So gewann die Osirisreligion den Beweis ihrer Ewigkeitslehre an dem lebendigsten Bilde des Sonnenglaubens, ähnlich wie sie Wiedergeburtsercheinungen aus der Natur als Gleichnisse heranzog. Der alte primitive Gedanke der Aufweckung des Toten aus seiner schlafartigen Grabruhe zum Empfang des Opfers am Grab hat durch die Sonnen- und Osirisreligion eine Vertiefung erhalten. Beherrschend steht auch darüber der menschliche Drang nach dem Licht des Tages, das der Theologe den Verklärten durch das Herausgehen an den Tag und die Sonnenfahrt durch das

<sup>116</sup> Szpakowska 2003, 22.

<sup>117</sup> Szpakowska's remark that placing the farworld under the world or below the earth is inappropriate for Egyptian beliefs appears too strict (Szpakowska 2003, 11). She seems to underestimate that a description as "over there" or "far away" does not contradict the idea of accessibility through the ground in the mind of the Egyptians, but that the Duat's chaotic nature and it being outside creation allowed for a simultaneous localisation in disparate places. Hornung points out that localisation of the farworld in the sky remains rare in the Old and Middle Kingdom, while a placing below the earth is most common and has become standardised by the New Kingdom (Hornung 1956, 30–31). Pyr 166.c. speaks of the netherworld as "counter-heaven" (Zandee 1960, 237), whereas in Pyr. 323. a. the deceased is described as "going upside down" (Zandee 1960, 75).

<sup>118</sup> Taylor 2001, 32.



The tiered structure with a gloomy and scary place below and a pleasant one above was still in place and is sometimes explicitly called the lower and upper Duat.<sup>121</sup> We also find clues for the idea of several heavens on top of each other, and the notion that the dead walk upside down and eat excrements in the Duat suggests the idea of an inversed world.<sup>122</sup> Yet, this is not only characteristic of the relation between the Duat and the world of the living: the netherworld in itself features an upward-downward distinction as well. Again, the lower parts are pictured as the more dangerous and frightening places, as when one falls into a trap or a net in a valley or passes dangerous pools, ponds and caves, some elements of which had already appeared in the *Pyramid Texts*. As in these, ascension on a staircase or ladder was thought possible, contrasting the dangerous depths to the positive connotation of upward movement. Pictures of boats can be interpreted as the sun boat or the ship of the ferryman who takes the deceased across a river or canal to the place desired. Quite interesting is the fact that in order to be ferried not only must the deceased have passage money at his disposal, but he must be able to count on his fingers,

unterirdische Jenseits jederzeit zu sichern strebte.“ (Kees 1956, 271). „Es erwache der Schläfer, Es erwache Osiris Chontamenti hier, mit seinem Ka, er, der auf seiner linken Seite schläft, der Schläfer!“ (Assmann 2001, 158; *Coffin Text* spell 517).

<sup>121</sup> „Da finden wir dem Toten in einem Spruch für das ‚Hervorgehen am Tag‘ die Worte in den Mund gelegt: ‚Mir öffnet sich die *untere* Dat, denn ich bin der Rê (die Sonne) dieses Tages, ich bin Horus im Innern seines Auges.‘ Da wird also eine besondere untere Dat unterschieden, aus der die Sonne am Morgen durch das Horizonttor emporsteigt zur oberen Dat, dem Himmel. Wir verstehen, wie man sagen kann: ‚Mein Sitz ist vorn im Schiff des Rê inmitten der unteren Dat‘, man dachte an die Nachtfahrt der Sonne wie später im Amduat. Diese Anschauung, die auch im Zweiwegbuch nebenherläuft, ist zweifellos alt. Sie geht auf ein schematisches Weltbild zurück, das den Himmel in zwei Hälften, eine obere und eine untere, zerlegt, die sich an den Horizontbergen treffen.“ (Kees 1956, 61, *Coffin Text* spell 107).

<sup>122</sup> According to Seidlmayer, to eat and drink normally is a characteristic that the deceased stays on the manageable and predictable side of being dead rather than slipping off into the horrors of the inverted world where even honey tastes bitter (Seidlmayer 2001, 244). Concerning Mesopotamia, a similar argument has been brought forward by Gebhard Selz based on the idea of water being poisonous and unpalatable in the netherworld as opposed to the usual life-giving qualities of water (Selz 2004, 49).

a practice resembling modern techniques to attain consciousness during lucid dreaming.<sup>123</sup> It seems that one's own body, in accordance with its importance for dreams characterised by a heightened degree of consciousness (see chapter 2.10 and 2.11), is a particularly suitable focal point, which in turn helps maintain or even enhance consciousness.

Another connection between sleep, death and passage by boat is visible in the wooden boat models that were regularly employed as grave goods and on which the mummy is often lying on a bier under a canopy, i.e. a bedroom suite like the ones described in chapter 5.2.<sup>124</sup> The models are thought to either represent the journey to Osiris' holy city Abydos or a period of the funeral in which the body is ferried to the tomb on the west bank of the Nile. That the association between boats and death dates back to at least the Early Dynastic Period, possibly even to Naqada I, can be inferred from two pottery boat models that are to be dated stylistically because they both come from unknown contexts.<sup>125</sup> In both cases, the deceased lies naked and in a crouched position inside the boat. While in the one example the bow takes the shape of a horned animal, possibly a gazelle (figure 45, left), in the other it is decorated with a toad (figure 45, right).<sup>126</sup>

In graves such as the one of the physician Gua at Deir El Bersha from Dynasty 12, headrests appear alongside the *Book of Two Ways*, supporting a connection between dreaming and the guides to the hereafter.<sup>127</sup> These observations correspond well with observations around sexuality. As we saw in chapter 2, sexuality is a common feature of sleep both physically (for sexual arousal during sleep, see chapter 2.3) and mentally (for sexual dream content, see chapter 2.8 and 2.11), and in both the *Coffin* and the *Pyramid Texts* sexuality was granted special attention. Geraldine Pinch has suggested a root in altered states of consciousness for some of the *Pyramid Texts*, and, although the most striking

<sup>123</sup> Castaneda 1993, 20–26; LaBerge and Rheingold 1990, 87.

<sup>124</sup> Taylor 2001, 104–105.

<sup>125</sup> Brunner-Traut 1975, 41–42, 46; [www.globalegyptianmuseum.org/detail.aspx?id=14406](http://www.globalegyptianmuseum.org/detail.aspx?id=14406) 15 April 2017.

<sup>126</sup> Wilfried Seipel, however, doubts the interpretation of the latter as a model boat with broken stem and stern and suggests the body of an animal and a connection to beliefs about rebirth (Seipel 1989, 43).

<sup>127</sup> Taylor 2001, 107–108.



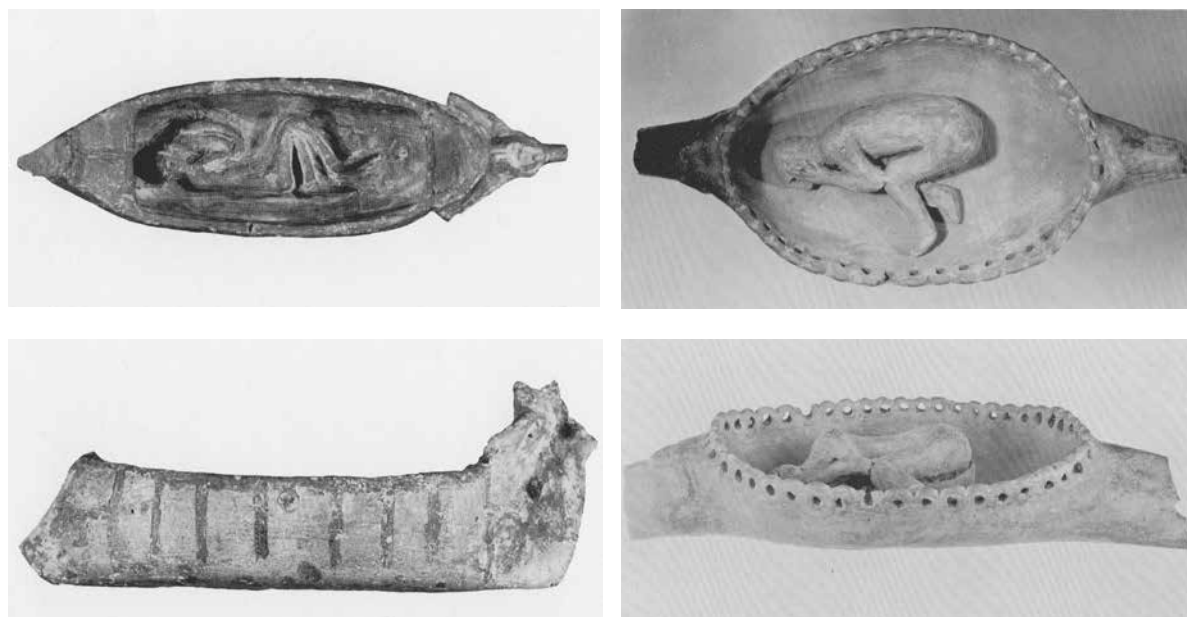


Fig. 45 Pottery boat models (Naqada I / Early Dynastic Period)

connection to incubations in death rituals date only to the New Kingdom,<sup>128</sup> her observations resemble those we have made for Mesopotamia in several respects, for example concerning spatial organisation, repetitiveness and light phenomena (see chapter 4):

“Some of The Pyramid Texts do have a visionary and ecstatic quality, giving the impression that they are records of journeys into a spirit world. They describe a complex realm of deities, using striking visual images such as the sky goddess strewing green stones to create the stars. When spoken or, more likely, chanted aloud, the many repetitious passages would have had an almost hypnotic effect.”<sup>129</sup>

<sup>128</sup> Wolfgang Helck considers the incubation described in a New Kingdom version of the “Opening of the Mouth” ceremony (Szpakowska 2003, 147) a trance similar to one of shamans, supported by the fact that the *Sem* priest performing it wears a leopard skin. That the appellation *sm* as well as depictions of the leopard skin are already attested from the Old Kingdom is seen as an indicator that so-called shamanic practices date back at least to the third millennium BC in Egypt. Furthermore, in Old Kingdom depictions, dead persons regularly wear leopard skins. Still, it needs to be conceded that several other persons who are neither deceased nor holding the position of a *Sem* are also depicted in this attire (Helck 1984, 103–108).

<sup>129</sup> Pinch 1994, 51.

#### 5.4 DREAMS IN RITUALS AND TEACHINGS

In the Middle Kingdom, probably in late Dynasty 11 or early Dynasty 12,<sup>130</sup> we come upon the first evidence about dreams in ritual contexts.<sup>131</sup> The hieratic *Execration Texts* were standardised cursing formulae, which were written on bowls or human figurines and usually found in the surroundings of military fortresses or in secular cemeteries. By performing the execration rite (“inscription of the sinister entities and forces, sometimes in potent red ink, followed by possibly binding, breaking, or burying the inscribed item”<sup>132</sup>) the bad forces listed were prevented from executing their power. Among these are foreign rulers hostile to Egypt or specific dead individuals, but at the end of the list we also find a catalogue of other menacing forces:

“all bad speech, all bad projects,  
all bad conjurations, all bad plots,  
all bad conspiring, all bad fighting,  
all bad disturbances, all bad plans,  
all bad things,  
all bad dreams in all bad sleep.”<sup>133</sup>

<sup>130</sup> Sethe 1926, 18, 21. There are *Execration Texts* from the Old Kingdom as well, but they lack the part concerning dreams (Ritner 1993, 137).

<sup>131</sup> Ritner 1993, 136–153; Sethe 1926, 69–72; Szpakowska 2003, 161–162.

<sup>132</sup> Szpakowska 2003, 162.

<sup>133</sup> Szpakowska 2003, 186 (P 1–11).

Bad dreams are grouped together with incorporeal and intangible forces, obviously understood to be potentially as damaging as a physical foe. It is not entirely clear whether bad dreams were generally understood as maleficent powers without a specific source or as directed magical assaults by other people.<sup>134</sup> If the latter is the case, this would hint at the idea that a living individual could cause others to see bad dreams as we have seen for the dead in Papyrus Nag ed-Deir 3737 (see chapter 5.3). It is also important to note that the line concerning sleep and dreams is listed after the summarising “all bad things”, possibly suggesting a merging of two previously separated traditions. If we follow Kurt Sethe in his opinion that the pluralic construction employed here echoes older writing habits, this might indicate that the passage was added to the execration texts after it was gleaned from another source that has not been preserved and therefore that the idea of dreams as menacing forces to be warded off is of an older age.<sup>135</sup>

Contrary to the *Execration Texts* or the letters to the dead, in which the dream is treated as a dimension of reality, the *Teaching of Ptahhotep* portrays dreams as something illusory and deceptive that can result in negative effects.<sup>136</sup> While the earliest manuscripts extant today stem from Dynasty 11 (Middle Kingdom), its composition is usually ascribed to Ptahhotep, a vizier under King Izezi (2365–2322<sup>+25</sup> BC, Dynasty 5, Old Kingdom<sup>137</sup>).<sup>138</sup> Maxim 18 contains a warning not to approach the women of a friend’s household with sexual intentions because this would result in severe consequences:

“If you desire to make endure friendship within a house which you enter as a lord, or as a brother, or as a friend or any place in which you enter –  
Beware of approaching the women!  
The place where it is done is not good; the one who reveals it is not clever.

A thousand men are turned away from what is good for them – one is fooled by a body of faience, but then she transforms into carnelian. A split second, the likeness of a dream, and death is reached on account of knowing her.”<sup>139</sup>

The notion of a dream is used to refer to the temporal dimension, signifying the very shortness of the lapse. Obviously, the ancient Egyptians were aware of the distorted sense of time so characteristic of dreams, “wherein a person may seem to go through a myriad of sensations and emotions, only to find upon awakening that a surprisingly short time has elapsed”<sup>140</sup> (see also chapter 5.5: the suddenness of the marsh-man’s dislocation in the *Tale of Sinuhe*). The term used to describe the “little moment” moreover has a double meaning of “moment/ instant of maximum force/power” and thus also stresses the potency of dreams. Maxim 23 makes an even stronger case in presenting dreams as untrustworthy by comparing them to gossip. It alludes to the unstable nature of dreams, which “by their very nature self-destruct – they either mutate into different scenarios, or else the sleeper awakens, and his experiences rapidly fade away; whatever is experienced in the dream will not last, and one is never sure how it will end”<sup>141</sup>:

“Do not allow the repeating of gossip that you didn’t hear (first-hand)!  
It is the going forth of the hot-tempered to repeat a matter that was seen, and not heard.  
You should not repeat gossip about something you did not hear direct!  
Set it aside, do not tell it at all!  
Look, before you is one by whom excellence is known.  
(When) a theft is commanded and it is done, it transforms against the thief, into something that is hateful according to the law.  
Look, gossip is like the occurrence of a dream – it is its own destruction and the face should be covered on account of it.”<sup>142</sup>

Another example of spells to ward off bad dreams was discovered in tomb No. 5 beneath the magazines of the Ramesseum at Thebes.<sup>143</sup>

<sup>134</sup> Ritner 1993, 140.

<sup>135</sup> While all the other bad forces are written in the singular, “dream” and “sleep” are written in plural, reading “dreams” and “sleeps” (Sethe 1926, 70, 72).

<sup>136</sup> Szpakowska 2003, 41–43. Parkinson even speaks of “nightmares” (Parkinson 2012, 205), although that seems inappropriate because the content of the dream is in fact a pleasant one.

<sup>137</sup> Hornung et al. 2006, 491.

<sup>138</sup> Žába 1956, 7.

<sup>139</sup> Szpakowska 2003, 187, Maxim 18, lines 277–297.

<sup>140</sup> Szpakowska 2003, 42.

<sup>141</sup> Szpakowska 2003, 43.

<sup>142</sup> Szpakowska 2003, 187, Maxim 23, lines 350–361.

<sup>143</sup> Quibell 1898, 3; Ritner 2006, 206–207. See also Ritner 1993, 231–232.

The tomb dates to Dynasty 13 (Second Intermediate Period)<sup>144</sup> and, because of its contents, has usually been understood as belonging to some kind of magician. It contained an assemblage of religious, historical, medico-magical and literary papyri, among them the *Tale of Sinuhe* and the *Tale of the Eloquent Peasant* (see chapter 5.5), as well as an onomasticon. Besides the texts, various materials for ritual and magical practice were found such as a serpent wand of bronze, a bronze statuette of the goddess Beset holding two similar serpent wands (figure 46), amuletic knives that portray Bes and Beset again with snakes in their hands, animal figurines, dolls and human hair as well as an ivory herdsman that might have been used in herding spells.

Unfortunately, the Papyrus Ramesseum XVI, written in the hieratic typical of the Hyksos period, is badly preserved, and only short passages can still be deciphered.<sup>145</sup> From the context, it becomes clear that it contained practical spells meant to protect the invoker against harmful things. In two cases, they can be interpreted as prophylactic spells against bad dreams seen in the night,<sup>146</sup> while another passage probably reads “every little dream”<sup>147</sup>. Altogether, the tomb contained the majority of texts concerned with dreams extant from this period, suggesting that dealing with (bad) dreams was among the owner’s competences. Accordingly, one wonders whether the depictions of Bes and Beset point in the same direction because the image of the snake-wielding Bes was popularly employed for this purpose on New Kingdom headrests (see chapter 5.2).<sup>148</sup> Pinch has suggested that the statuette does not necessarily depict the lioness-demon Beset but can also be interpreted as a female *sau* magician (from the verb *sa* “to protect”) who plays her role in a magical rite and is therefore clad with a lion-demon



Fig. 46 Thebes, wooden figurine with moveable arms holding metal serpents from a tomb under the Ramesseum (Dynasty 13, First Intermediate Period)

<sup>144</sup> Parkinson 2012, 3; Ritner 2006, 206–207. A Dynasty 12 date has also been suggested (Quibell 1898, 3).

<sup>145</sup> Gardiner 1955, 15–16; Szpakowska 2003, 162–163.

<sup>146</sup> Szpakowska 2003, 163.

“...  
brighten [.....] him  
see[.....] all dreams  
small [.....]”  
(Szpakowska 2003, 188, pl. LVI, page 18, lines 4–6).  
“all bad dreams which are seen in the night”  
(Szpakowska 2003, 188, pl. LVII, page 21, line 1).

<sup>147</sup> Szpakowska 2003, 163.

<sup>148</sup> Ritner 2006, 212.

mask and holds snake wands. In the context of the previous observations, the statuette could thus be interpreted as a representation of its owner's role in warding off bad dreams. Then again, it needs to be conceded that the high degree of learning evidenced by the assemblage of papyri rather points to a male person with connections to the temple sphere. Generally speaking, in the mind of the ancient Egyptians, magic would have constituted a good match for dealing with dreams as both share a similar kind of associative thinking (see chapter 2.9).<sup>149</sup>

## 5.5 DREAMS IN LITERARY COMPOSITIONS

Two Egyptian literary compositions that employ dreams have survived from the Middle Kingdom, and in two of four existing manuscripts, the *Tale of the Eloquent Peasant* is preserved alongside the roughly contemporary *Tale of Sinuhe*. In manuscript R (Papyrus Ramesseum A = Papyrus Berlin 10499; Dynasty 13) they are even written on the two sides of the same papyrus roll, whereas the oldest manuscript B1 (Papyrus Berlin P 3023; reign of King Amenemhet III, 1818–1773 BC, Dynasty 12, Middle Kingdom<sup>150</sup>) of the *Tale of the Eloquent Peasant* was done by the same scribe as the *Tale of Sinuhe* manuscript from the same tomb.<sup>151</sup> Richard Parkinson suggests that they might have been written by the same author and that they were regarded as compatible or companion poems.

In the *Tale of the Eloquent Peasant*, the protagonist is robbed of his goods on his way to the capital of Egypt, where he wants to trade them.<sup>152</sup> The tale mainly consists of the peasant's nine eloquent petitions against the wrong he suffered until he is finally successful. Of his several

speeches, the fourth petition is of particular interest here because of its reference to dreaming:

“Only the eater tastes;  
so the accused replies.  
Only the sleeper sees the dream;  
so the punishable judge,  
he is an archetype for the evildoer.”<sup>153</sup>

The way in which “dream” is used here as a figure of speech remains slightly enigmatic. Szpakowska suggests that it is to be understood in such a way as that it is not possible to see a dream without sleeping (as it is not possible to taste without eating or to answer without being spoken to) and therefore has a positive or at least neutral connotation.<sup>154</sup> Yet, Parkinson states the exact opposite: he thinks the passage to imply that every action has its necessary and sometimes unpleasant consequence.<sup>155</sup> Thus, sleep is depicted with a negative connotation and seen as a sign of carelessness. In identifying the sleeper with the unresponsive person who stole the peasant's goods, Parkinson proposes that his injustice towards the eloquent peasant prevents him from sleeping peacefully until dawn. In other passages of the *Tale of the Eloquent Peasant*, we find further indications of a twofold concept of sleep. While, on the one hand, peaceful, undisturbed sleep is desired, on

<sup>153</sup> Parkinson 2012, 205–206 (B1 246–249). Szpakowska's translation sheds more light on the meaning: “It is the eater who tastes, the one who is addressed answers./It is the sleeper who sees the dream./As for the judge who should be punished; he is a model for the (evil) doer.” (Szpakowska 2003, 187).

<sup>154</sup> Szpakowska 2003, 172.

<sup>155</sup> Parkinson 2012, 204–205. “Sleep [...] often implies negligence: the official Khnumhotep was ‘someone who did not sleep about what was commanded to him’; in the Semna stela Senwosret III ‘does not sleep with a matter in his heart’; similarly, officials claim in their self-presentations to be ‘vigilantly wakeful [...]’ about their duties. In *Sasobek* god has the power to wake people: ‘the counsels of god are hidden ... [...] riches of] god's giving, which come without giving attention to them! He shall wake the sleeper [...]’. In Coffin Text spell 397 the deceased claims ‘I am he who wakes his sleeping father [...]’ [...]” (Parkinson 2012, 255). Contrary to this, the formulation “to sleep till dawn” is normally used in positive or eulogistic contexts. By default, it denotes well-being, security and absence of care (Parkinson 2012, 194). However, this is not the place to consider in depth the Egyptian concept of sleep. For further information on this topic, see Gerhards 2020; Schutz forthcoming.

<sup>149</sup> In Egyptian magic (*heka*), connections between the true natures of beings and objects, as discernible from joint characteristics such as their colour or the sound of their name, were believed to be of central importance. In such pairings, a transmission of qualities from one to the other, or a result on the one by deeds carried out on the other, was considered possible. Through the force of *heka*, a sort of power network originated from these connections (Pinch 1994, 16).

<sup>150</sup> Hornung et al. 2006, 491.

<sup>151</sup> Parkinson 2012, 1–3.

<sup>152</sup> Parkinson 2012, 1–3, 23–315; Szpakowska 2003, 186.



the other hand, sleep is conceptualised as a state deficient of consciousness and abilities:

“So who now can sleep till dawn?  
For destroyed is going by night  
and travelling by day,  
and making a man attend his good true right.”<sup>156</sup>  
“There is no one silent whom you made speak,  
no one sleeping whom you have made to wake,  
[...].”<sup>157</sup>

Nevertheless, even if Parkinson is right and “only the sleeper sees the dream” refers to a loss of peaceful sleep, this stresses that sleep and the resulting dreams are something desirable. Under these circumstances, it seems more likely that Szpakowska is right to interpret the phrase as the reflection of the idea of a dream as something worthwhile that can only be achieved under the right circumstances. Lastly, the story frequently alludes to funerary texts or scenes, employing imagery that is of importance for the afterlife as well, but, as this is one of its general features, the exact relevance for ideas about dreaming cannot be determined.<sup>158</sup>

In the popular *Tale of Sinuhe*, the simile of the dream is used to offer an excuse for the protagonist’s deeds by assigning an unreal status to them.<sup>159</sup> While on an expedition in Libya, Sinuhe learns about the death of King Amenemhet I, which causes him to flee Egypt in panic. He settles in Palestine, where he befriends a prince, raises a family and, all in all, leads a fulfilled life. As he grows old, he eventually returns to his homeland, which he has missed all along. In most of the extant copies, there are two instances (stanzas 9 and 31) where Sinuhe tries to justify his rash flight by likening it to a dream, signalling the lack of control one usually exercises therein.<sup>160</sup> The oldest version Papyrus Berlin

3022, however, employs the dream simile only in the second case. In its earlier part (stanza 9), Sinuhe had likened his flight to a “plan of God” instead of to a “manner of a dream”, while later (stanza 31) the dreamlike quality of his flight is still considered property of the divine plan:

“I have come from the expedition land (emend to: [...] to) the Libyan land:  
it was reported to me, and my heart was aggressive (emend to: [...] failed).  
My heart, it was not in my body  
and carried me off on the ways of flight.  
I had not been talked of, and my [face had] not been spat [upon];  
(I) had heard no reproach; my name had not been heard in the herald’s mouth.  
I do not know what brought me to this country – it was like a plan of God.”<sup>161</sup>  
“This flight which <your humble> servant made –  
(I) had not planned it. It was not in my heart.  
I had not thought of it. I know not what parted me from (my) place.  
It was like the manner of a dream,  
like A MARSH-MAN seeing himself IN ELEPHANTINE,  
a man of the lagoon in Bow Land.  
(I) had no cause to be afraid; no one had run after me.  
I had heard no reproach; my name had not been heard in the herald’s mouth.  
Only – that shuddering of my limbs...”<sup>162</sup>

er examples, it is likely that the dream-simile also occurred in R’s version of stanza 31. The R version of the poem probably also existed in the Twelfth Dynasty (as attested in the H manuscript [...]). [...] The Berlin papyrus (B) is the earliest manuscript and comes from a personal literary archive from a Twelfth Dynasty Theban burial. It was deposited with its owner in a now unlocated tomb. Several roughly contemporaneous manuscripts of *Sinuhe* survive, showing that several distinct versions were also current in the late Twelfth Dynasty.” (Parkinson 2006, 153). See also Parkinson 2006, 156.

<sup>161</sup> Parkinson 2006, 149 (B 38–43, stanza 9). See also Blumenthal 1995, 891–892.

<sup>162</sup> Parkinson 2006, 150–151 (B 223–228, stanza 31), caps indicate writing in red ink. See also Blumenthal 1995, 904–905. Szpakowska translates as follows: “Lo, this flight which your humble servant did, without planning it.  
It was not in my heart; I didn’t think about it.  
I don’t know what separated me from my place.  
It was like the unfolding of a dream;  
like a man from the Delta seeing himself in Elephantine  
a man from the marshlands in Nubia.”

<sup>156</sup> Parkinson 2012, 194–195 (B1 232–234).

<sup>157</sup> Parkinson 2012, 254–255 (B1 316).

<sup>158</sup> Parkinson 2012, 5.

<sup>159</sup> Szpakowska 2003, 46–47. The *Tale of Sinuhe* is preserved in about 30 manuscripts (Szpakowska 2003, 58).

<sup>160</sup> “There is a difference between the surviving versions of the relevant passages where Sinuhe explains his flight. In B the two parallel passages of explanation in stanzas 9 and 31 differ, while in the β manuscripts the passages are closer to being repetitions; this version of the poem probably already existed in the Twelfth Dynasty. In the Thirteenth Dynasty R, the substance of the dream is introduced in stanza 9, and although the introduction differs from the lat-



By contrasting the phrases “manner of a dream” and “plan of God” within an almost identical context, the writer suggests their similarity and perhaps even interchangeability. The former is additionally expressed through the image of the displaced marshman, who suddenly finds himself hundreds of miles away from his homeland, thus alluding to the distorted sense of time and abrupt changes of scene that are typical of dreams (see also chapter 5.4: *Teaching of Ptah-hotep*).<sup>163</sup> Parkinson stresses the nightmarish qualities of the dream image and the feeling of panic it evokes, causing Sinuhe to flee Egypt.<sup>164</sup> Nevertheless, it seems that Szpakowska is justified in ascribing its force not solely to negative emotions but to an encounter with the divine, in other words to *tremendum* and awe:

“[...] Sinuhe (B 43) says his flight was ‘like the plan of a god’ [...], while eventually he contends that it was ‘the god who determined this flight’ who was in control of his very limbs, literally ‘dragging’ him along (B 229–30). Not only is Sinuhe not responsible for his flight, but indeed he represents himself as a victim of some numinous force beyond his control, set within a separate chaotic frame of reality.”<sup>165</sup> “[...] Sinuhe’s entire narrative is dreamlike – filled with contradictions, ambiguities, and a sense of individuality which likely endeared the story and its hero to the ancient reader.”<sup>166</sup>

Although gods did not appear in dreams before the New Kingdom<sup>167</sup> and, as incubation usually

involves a deity, convincing evidence for fixed techniques is lacking during the time considered here,<sup>168</sup> this does not preclude the idea that the contents of a dream could be of divine origin or that a dream could have been caused by the gods.<sup>169</sup> Another passage in stanza 34 strengthens the thematic relationship with the divine by repeating the phrase about the heart:

“Then I was stretched out prostrate,  
unconscious of myself in front of him,  
while this God was addressing me cheerfully.  
I was like a man seized in the dusk,  
my soul had perished, my limbs were aggressive (emend to: [...] failed),  
my heart, it was not in my body.  
I did <not> know life from death.”<sup>170</sup>

The divine message is received while lying down in an unconscious state. Although, in this case, Sinuhe prostrates himself before his god, i.e. the king, in the waking world, on another level of meaning the comparison to nightfall and death suggests a connection to sleep and dreaming. Parkinson remarks:

“The exact sense of the simile here is slightly ambiguous: is the ‘man’ [...] surprised by robbers and ‘seized’ by them ‘in the dusk’, or is he simply ‘caught by the dusk’ [...]? The dusk is a liminal time, but here god is directly present, in comparison to the first passage where an uncertain ‘plan of god’ seized Sinuhe, when he heard of the death of the ‘god’ Amenemhat. The the-

I was not afraid; no one hastened after me,  
I didn’t hear a reproach,  
My name was not heard in the mouth of a bailiff.  
Yet my body jumped, my feet hastened, my heart led me;  
the god who determined this flight pulling me.”  
(Szpakowska 2003, 188 (B 223–236 [sic], stanza 31)).

<sup>163</sup> Parkinson 2006, 158.

<sup>164</sup> Parkinson 2006, 145; Parkinson 2012, 205.

<sup>165</sup> Szpakowska 2003, 47.

<sup>166</sup> Szpakowska 2003, 46.

<sup>167</sup> Szpakowska 2003, 124. During the New Kingdom, a period of innovation that included significant changes in religious expression among many other features of Egyptian society, the concept of the relationship between gods and humans shifted towards increasing interaction. Whereas previously the god had only played the role of a passive observer, in the New Kingdom notions about a direct and systematic intervention of the divine gained importance, and it was believed that humans were to a certain extent able to influence the behaviour of the gods. In this context, divine dreams came to be recorded in tomb biographies to assert the intimate relationship be-

tween the deceased and his god (Szpakowska 2003, 134, 142). The inscription of Senwosret I (1920–1875+6 BC, Dynasty 12, Middle Kingdom (Hornung et al. 2006, 491)) on Elephantine, which has usually been considered the earliest recorded royal message dream, has by now become doubtful as the lexeme in question likely reads “enemy hordes” (*rs.tjw*) rather than “dream” (*rs.w.t*) (Szpakowska 2003, 58–59).

<sup>168</sup> The earliest proof for incubation is a version of the “Opening of the Mouth” ceremony that is documented from the New Kingdom for the first time. Evidence for laymen performing an incubation does not appear before the Late Period (Szpakowska 2003, 147). Alan Lloyd lists a dream in the Setna-Cycle from the time of Ramesses II (1279–1213 BC, Dynasty 19, New Kingdom (Hornung et al. 2006, 493)) as the earliest example (Lloyd 2006, 88).

<sup>169</sup> Parkinson considers the appearance of the dead in dreams to suggest the opposite (Parkinson 2006, 149). Szpakowska, however, states that the Egyptians treated dreams as omens without ascribing any role in their creation to the gods (Szpakowska 2003, 145).

<sup>170</sup> Parkinson 2006, 163 (B 252–256). See also Blumen-thal 1995, 907

matic relationship between this passage and the earlier ones is brought out by the B-scribe, who provides the doublet of ‘my heart was not in my body’ [...].”<sup>171</sup>

Lastly, as is the case with the *Tale of the Eloquent Peasant*, the *Tale of Sinuhe* makes mention of ideas about death and the netherworld when, in the context of the king’s death in stanza 34, he is said to ascend to heaven and merge with the sun.<sup>172</sup>

## 5.6 SYNOPSIS

We have thus come upon a variety of Egyptian sources connected to sleep and dreaming, both textual and archaeological. Presenting an overview of material sources, we considered tomb architecture and the role of the tomb as a house and sleeping place for the deceased and then turned to coffins, funerary beds and headrests and their symbolic as well as practical roles. In conjunction with burial customs, we discussed linguistic evidence and noted that, in the Egyptian language, words for sleep can be used to describe death and that resurrection is likened to awakening. As in Mesopotamia, findings of beds were limited to burial contexts. They appeared as early as Dynasty 1 and could either be placed in the tomb as part of the assortment of grave goods or could replace the coffin in holding the dead body. Additionally, they could be painted on tomb walls and on coffins together with other burial equipment. Headrests were similarly employed as grave goods from the earliest times or painted on the coffin. As opposed to beds, however, they have been excavated from the graves of people of the lowest social rank as well. Headrests were frequently placed underneath the deceased’s head to raise it and, by doing so, to aid him in awakening, i.e. resurrection. The deceased commonly faces east, i.e. to the world of the living and the rising sun, thus strengthening the equation of sleep and death. In this context, we discovered that the word for “headrest” (*wrs*) derives from the same root as the words for “dream” (*rs.w.t*) and “to awaken” (*rs*), which, together with the fact

that there existed no verb “to dream” but solely the expression “to see (in) a dream”, points to an idea of the dream state as an alternate reality in which one awakens during sleep, and to the role of the headrest in achieving this state. These concepts are particularly interesting if one considers the fact that, together with the pronounced slope common in beds, the headrest would have significantly elevated the head and therefore likely affected the sense of balance, which plays a central role in dreams characterised by a heightened state of consciousness. There might also have been a connection between the use of a headrest, a tilted body and sexuality, which is commonly connected to these dream states. Lastly, lionine and bovine decorative elements in beds possibly constitute a reference to the “horizon lions”, the god Aker or the heavenly cow, whereas headrests display a complex symbolism that equates the head on the headrest with the sun that rises and sets between the mountains at the horizon.

The earliest written records of dreams, which we discussed next, already make a connection to death and the netherworld. In two instances from the First Intermediate Period, the deceased are asked for help in letters from the living, once because of an unwanted appearance in dreams, and another time because an appearance in a dream is requested as proof of help. Yet, while the letter on the stela considers a dream of Meritifi’s deceased wife Nebetotef as desirable and beneficial, Papyrus Nag ed-Deir 3737 implies that Seni is causing Heni to see him against his will, possibly with further evil consequences. Apparently, a dream was considered to constitute a transparent border area between the world of the living and the world of the dead, through which both parties could gain glimpses into the other realm. This happened when the sleeper “awakened” in a dream, stressing the heightened state of consciousness characteristic of lucid dreams, a state that might also be hinted at with the sexual imagery common in funerary texts. Repetitive passages in the guides to the hereafter would have aided altered states of consciousness, as would the finger counting exercise. Contact between the dead and sleepers was deemed possible because both were located in the chaotic primeval ocean of Nun, where life is renewed. The Duat was considered another aspect of the same chaos. These beliefs were tied to myths about the sun god Ra, who was thought to pass through Nun, i.e. through the

<sup>171</sup> Parkinson 2006, 163–164.

<sup>172</sup> Blumenthal 1995, 888. See also Taylor 2001, 141.

Duat, on a daily basis. The *Pyramid Texts* (Old Kingdom), and later the *Coffin Texts* (Middle Kingdom), present the netherworld as a dangerous place that the deceased can only navigate if equipped with the necessary knowledge. Here, the journey through the netherworld is portrayed as a physical passage from the grave, either as descent into a gloomy subterranean realm located in the west or as ascent to the sky with the sun and stars, realms that are also called the lower and upper Duat. The subterranean realm of the dead could be accessed either through graves, which were considered entrances to the netherworld, or through gates at the western horizon where the sun sets. In many texts, the dead king is thought to join in on this journey in the sun barque so as to be resurrected in the morning and to reawaken in the afterlife. Generally speaking, to enter the afterlife, one must move between different levels of the three-tiered cosmos, and vertical movement within the individual realms is commonly mentioned in funerary texts.

Egyptian ritual and magical activities concerned with dreaming tend to focus on bad dreams, which were regarded as evil forces of considerable power. To ward off their negative effects, standardised cursing formulae – the *Execration Texts* (Middle Kingdom) – were employed, while in the Second Intermediate Period a magician used spells, possibly in combination with other techniques, of which only the paraphernalia have been preserved. The necessity of protecting oneself from bad dreams can also explain why the earliest account of specific dream content in Papyrus Nag ed-Deir 3737 is negative, although the fear of bringing it to permanent life would have normally precluded a detailed description in writing.<sup>173</sup> It is furthermore possible that some bad dreams were thought of as magical assaults by living people, who caused the victim to see a dream against her will. Even the *Teaching of Ptahhotep* (Middle Kingdom), in which dreams are simply used as a figure of speech to draw attention to their finite and illusory nature, acknowledges their potency and betrays a certain knowledge in alluding to both the suddenness of events as well as the tendency to dissolve into each other or to fade away so characteristic for dream imagery.

Middle Kingdom literary compositions complement our observations. Both the eloquent

peasant and Sinuhe are liminal figures – one exiled, the other deprived of his property – and are therefore able to view their culture partly from the outside.<sup>174</sup> Unlike other Egyptian tales, both stories are set in a realistic world without divine interventions or fantastic events.<sup>175</sup> Against this background, it is astounding and probably quite telling in terms of the Egyptians' opinion on dreams that these stories constitute the sole cases in which dreams are mentioned in literary compositions before the New Kingdom. It seems that dreams were considered something very realistic and not at all fantastic as our contemporary ideas would suggest. This is in accordance with the interpretation that the *Tale of the Eloquent Peasant* presents dreams as something desirable, perhaps also possessing relevance for the afterlife. Still, dreams are depicted as slightly ambiguous, for example with the *Tale of Sinuhe*, which, on the one hand, refers to their unpredictable nature but, on the other, points out their possibly divine origin. Communication with the gods seems to be additionally connected to lying down, unconsciousness, death and nightfall.

Thus, with only seven texts mentioning dreams before the New Kingdom, the scope of written sources is by no means as comprehensive as in Mesopotamia. Moreover, the type, dating and origin of the texts are unevenly distributed, allowing only tentative generalisations (for the temporal and geographic distribution of sources, see the chronology table in table 9 and the map of sites in figure ). In the letters to the dead alone do we possess information about their authors, who in this case stem from the middle class. This corresponds with the temporal distribution of funerary texts, whereby the earlier *Pyramid Texts* were reserved for the highest social classes, while with the emergence of the *Coffin Texts*, funerary texts became available to lower-ranking people. Likewise, grave goods connected to sleep are predominant in richer tombs but can also be observed in poorer burials in a scaled-down version. Nevertheless, it has become apparent that, when looking uniquely at the Egyptian sources and when comparing them with sources from Mesopotamia, certain themes reappear regardless of circumstances.

<sup>174</sup> Parkinson 2012, 11.

<sup>175</sup> Parkinson 2012, 5–6.

<sup>173</sup> Szpakowska 2003, 159.

## 6 PREHISTORIC EUROPE

### 6.1 STRUCTURE OF THE CHAPTER AND DATA BASE

Whereas dreaming is a mental phenomenon unlikely to leave traces in the archaeological record, sleep is a physical activity, which therefore leaves behind evidence in material culture. In the following, evidence from the prehistoric regions that relates to sleep, both in daily life as well as in burials is discussed. With the aim of a comprehensive description, findings are included that predate the sources considered in the previous chapters. Nevertheless, the data situation is by no means as favourable as in the Near East or Egypt, and accordingly, only short excursive chapters treating the individual regions are possible.

### 6.2 ANATOLIA

Prior to the appearance of beds, clay platforms were a common sleeping place, and a large number were excavated in the Neolithic settlement of Çatalhöyük in central Anatolia (7400–6000 BC).<sup>1</sup> Here, the clustering mud brick buildings are thought to have housed between 3500 and 8000 people. The dwellings were entered through openings in the flat roofs, which were made from bundles of reeds with a mud cover and occasionally equipped with plastered floors. Thus, they served as additional living – and sleeping – areas if the weather allowed for it. Some buildings had second storeys as well. Inside, houses featured a largely standardised plan, consisting of a main and a side room, and were equipped with built-in furniture (figure 47). Raised platforms, which are thought to have been covered by mats from reeds or rushes such as the ones in figure 48 (left), were usually set in an arc along the western, northern and eastern walls. In these “clean” parts of the rooms, the plastered floors were often of a lighter colour than in the remaining parts of the buildings, and they are additionally characterised by art and installations on the walls, which are frequently divided into horizontal panels.

As opposed to this, the southern side was associated with “dirty” activities such as food or craft production, and ovens and hearths were located there. Paintings and installations also occurred in other parts of the buildings, even though less frequently.

It becomes apparent that interest was taken in sleep when we consider a schist plaque which was carved with a scene of rest (figure 49). The carving shows two people embracing on the left and a mother and a child on the right, thus strengthening the assumption that bed-sharing was a common practice (see chapter 4.2). As this is the oldest depiction of sleeping persons that has come to my attention, it points to the importance that was assigned to this state at Çatalhöyük. Interestingly, the dead were mostly buried below the platforms, often in a contracted position on their left side (figure 48, right) and sometimes wrapped in cloth or mats, thus suggesting a connection between sleep and death.<sup>2</sup> Peter Pels combines observations concerning the structure of dwellings with concepts about the human life cycle by dividing the houses according to the cardinal directions.<sup>3</sup> According to him, the southern part was mainly

<sup>2</sup> As opposed to this, burials of infants and neonates were frequently found in the south-west of the main rooms and in the side rooms, which were used for storage (Hodder and Farid 2014, 21–22).

<sup>3</sup> Pels 2010, 259. “As one enters the house, one moves down the ladder on the south wall. This is always orientated so that one enters the house moving eastward. At the bottom of the ladder, one often stands on a small platform in the southeast corner of the main room [...]. It is difficult to move north from here, as there is often a bench, sometimes with cattle horns inset, barring movement northward. One is thus encouraged to move westward past the oven and into the south part of the main room. This area receives the most light (from the roof entry and from the oven and hearth) and is also where food is prepared as well as where neonates and children may be buried. Sharon Moses (pers. comm.) argues that there may have been a conception that clockwise movement around the house mimicked the path of a person through life from birth to death. Thus, starting from the southeastern entry and from the southern area of production and birth, one could move past the bucrania (which may be associated with initiation and coming of age [...]) on the west walls to the burial platforms on the north walls. Continuing in a clockwise manner, one ends up at the central east platform, unable to move farther south because of the bench separating the central east platform from the southeastern entry area.” (Wason 2010, 285).

<sup>1</sup> Hodder and Farid 2014, 1, 4–5, 15, 21–27; Mellaart 1967, 55–56, 58, 60, 77–78, 188, 198–199, 204–205.

Tab. 10 Comparative chronology for the prehistoric regions

v.Chr.		LIPARISCHE INSELN	SIZILIEN	MALTESISCHE INSELN	KRETA	WESTKLEINASIEN u. INSELN d. OSTÄGÄIS	
						nach Efe	
2000	MHI - Zeit	↑	↑ NARO - CASTELLUCCIO PARTANNA	↑ TARXIEN - GRÄBERFELD KULTUR	MM I A	FB 3b	TROIA V
	FH III - Zeit	↑ älteres CAPO GRAZIANO	↑	↑	FM III		TROIA IV
	Zeit d. Übergangsphase FH II/FH III	?	↑ GLOCKENBECHER	?			HERAION IV
	späte FH II - Zeit	↑ ?	↑ MALPASSO - CHIUSAZZA	?	FM II B	FB 3a	III A I N I gelb
2500	entwickelte FH II - Zeit	↑ PIANO QUARTARA	↑	↑	FM II A	FB 2	I I C H N II spät -rot
	ältere FH II - Zeit	↑ ?	↑	↑			O I O C H N II früh grün
	FH I - Zeit	↑ PIANO CONTE	↑ SERRA FERLICCHIO	↑	FM I	FB 1	R O L I O C H N I früh blau
3000			↑ CONCA D'ORO	↑			
	Zeit des jüngeren mittel- und südgrischen CHALKOLITHI- KUMS	↓	↓ SAN CONO - PIANO NOTARO - CONZO	↓	CHALKOLITHIKUM	CHALKOLITHIKUM	↓ KUMTEPE IB
3500			↓	↓			↓

v.Chr.		SW - DEUTSCHLAND	KARPATENBECKEN	WESTBALKAN	ZENTRALBALKAN	SÜDITALIEN
2000	MHI - Zeit	↑	↑ NAGYÉV	↑	↑	↑ PALMA CAMPANIA
	FH III - Zeit	↑ ältere FRÜHBRONZEZEIT (Reinecke BZ A1)	↑ NITRA MAROS HATVAN	↑ CETINA	↑ BELOTIC - BELA CRKVA	↑ jünger
	Zeit d. Übergangsph. FH II/FH III	↑	↑ post - VUČEDOL KULTURGRUPPEN (z.B. GLOCKENBECHER - CSEPEL, fortgeschr. SOMOGYVÁR - VINKOVCI, älteres NAGYÉV, PITVAROS, NYÍRSÉG)	↑ PROTOCETINA	↑	↑
2500	späte FH II - Zeit	↑ GLOCKENBECHER	↑	↑ LJUBLJANA	↑	↑
	entwickelte FH II - Zeit	↑	↑ älteres SOMOGYVÁR - VINKOVCI - SPÄT → MAKÓ	↑ BOSNISCHES VUČEDOL	↑	↑ älter ("Phase ANDRIA")
	ältere FH II - Zeit	↑ SCHNURKERAMIK	↑	↑	↑ BUBANJ II	↑
	FH I - Zeit	↑	↑ KLASISCH	↑	↑	↑
3000		↑ HORGEN	↑ KOSTOLAC	↑ KOSTOLAC	↑ BUBANJ Ib	↑
	Zeit des jüngeren mittel- und südgrischen CHALKOLITHI- KUMS	↓	↓ KLAS. BADEN	↓	↓	↓
3500		↓ ALTHEIM	↓ BOLERÁZ	↓	↓	↓



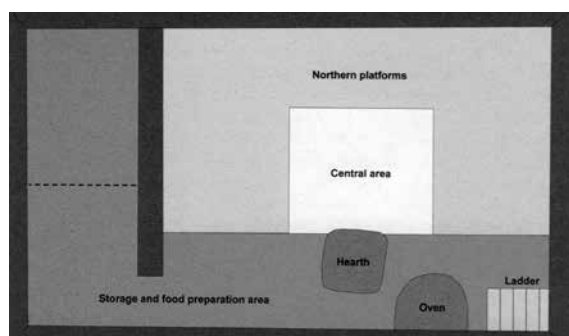


Fig. 47 Typical floor layout in a Çatalhöyük house

decorations to be shrines that were inhabited by a class of priests, recent excavations under Ian Hodder show no indication of social stratification, with the houses only varying slightly in size and elaboration. Nevertheless, some “history houses”<sup>4</sup> are distinct concerning their architectural elaboration, their endurance over multiple rebuilding phases and generations as well as their content of numerous burials. Then again, multiple burials also occur in houses that are not part of a long sequence, and elaborate



Fig. 48 Çatalhöyük, carbonised matting, white decayed reeds (left), burials below a platform in house VI.B.34 (right)

used for work and storage, and, as both the fire installations and the higher amount of sunlight were found there, was connected with birth, light and warmth. As opposed to this, the northern and eastern parts were more elaborate with respect to aesthetic and ritual features. They were linked with death, as becomes apparent by human burials and animal bone installations as well as vultures and more abstract painting. Lastly, agricultural products were stored in the western and northern parts.

Yet, the dead were not simply buried in the houses they inhabited, as becomes apparent from the evidence of secondary burials, particularly concerning the retrieval of skulls, and from the fact that some houses have more than sixty burials, while others have none. Whereas James Mellaart considered houses with especially rich

houses do not necessarily encompass many burials and rebuildings.

Wall paintings were frequently associated with concentrations of burials. The murals could be repainted over and over again in multiple layers, mostly with different designs but occasionally repeating the previous pattern. Generally speaking, wall paintings at Çatalhöyük consist of geometric, zoomorphic and anthropomorphic motifs as well as imprints of hands. David Lewis-Williams and David Pearce have suggested that geometric imagery was the result of entoptic phenomena experienced in altered states of consciousness (see chapter 7.2).<sup>5</sup> Bu-

<sup>4</sup> Hodder and Farid 2014, 5.

<sup>5</sup> Czeszewska 2014, 185, 188, 195–196; Lewis-Williams and Pearce 2009, 110, 119–121.



Fig. 49 Çatalhöyük, schist plaque from “shrine” VI.A.30

crania as well as other parts of animals, for example, skulls, jaws or teeth, were incorporated into installations by plastering them over, and wild animals such as bulls, boar, deer, leopards and vultures are shown in the paintings, pointing to the central importance of hunters.

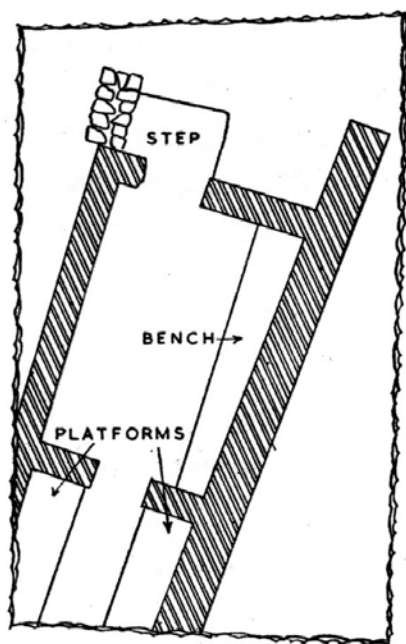


Fig. 50 Beycesultan, level XXIV

Lewis-Williams and Pearce consider the structure of the village an image of a tiered cosmos derived from altered states of consciousness, and they thus see it as ultimately neurological in origin (see chapter 1.1).<sup>6</sup> At Çatalhöyük, movement through spaces was set within a social context and therefore imbued with meaning.

From the roofs, which replicated the cosmological level of daily life, people descended into the complex of rooms below,<sup>7</sup> of which the ones that lay deeper inside the structure could only be reached by crawling or at least by bending low. Inside the houses, the floors were structured by platforms of different heights, whereas columns and ladders emphasised the connection between floor and roof, leading Lewis-Williams and Pearce to suggest two modes of verticality. Both columns and edges of platforms were sometimes decorated with bucrania, which is why they also propose a link between aurochs heads and transitions between levels. Pels agrees with the importance of vertical movement and ties it to notions of temporality but doubts the interpretation of the interior of a house as part of the subterranean realm:

“Apart from the points of the compass, the daily cycle is also experienced by going up and down, and especially by the upward movement through the house occasioned by the rising of the sun and the downward movement that accompanies its setting. ‘Up’ and ‘down’ in the Çatalhöyük house have been interpreted as fitting into the three-tiered cosmos that is said to characterize shamanistic societies, so as to link a subterranean level to an intermediate level (in Çatalhöyük, the roof) and to an upper level, the sky [...]. I find this difficult to reconcile with a society that so manifestly articulates up and down by means of its architecture and that invests so much energy in whitewashing and thus lightening its interiors, but the possible association between the inside, the dark, the downward and the foundation of the house, on the one hand, and the upward, the sun and the core work areas for domestic production cannot be lightly dismissed.”<sup>8</sup>

While I agree with Pels that the symbolic role of a building’s living space is difficult to determine, the connection between sleep and death by a vertical arrangement in which burials lie beneath the sleeping places of the living is striking. Thus, in the earliest example considered here, a strong association already exists between sleep and a subterranean realm of the dead in a

<sup>6</sup> Lewis-Williams and Pearce 2009, 103, 105, 107–110.

<sup>7</sup> Lewis-Williams and Pearce stress that they were dimly lit (Lewis-Williams and Pearce 2009, 105); however, experimental reconstruction of the buildings showed that they were quite light inside (Hodder 2014, 201).

<sup>8</sup> Pels 2010, 259–260.

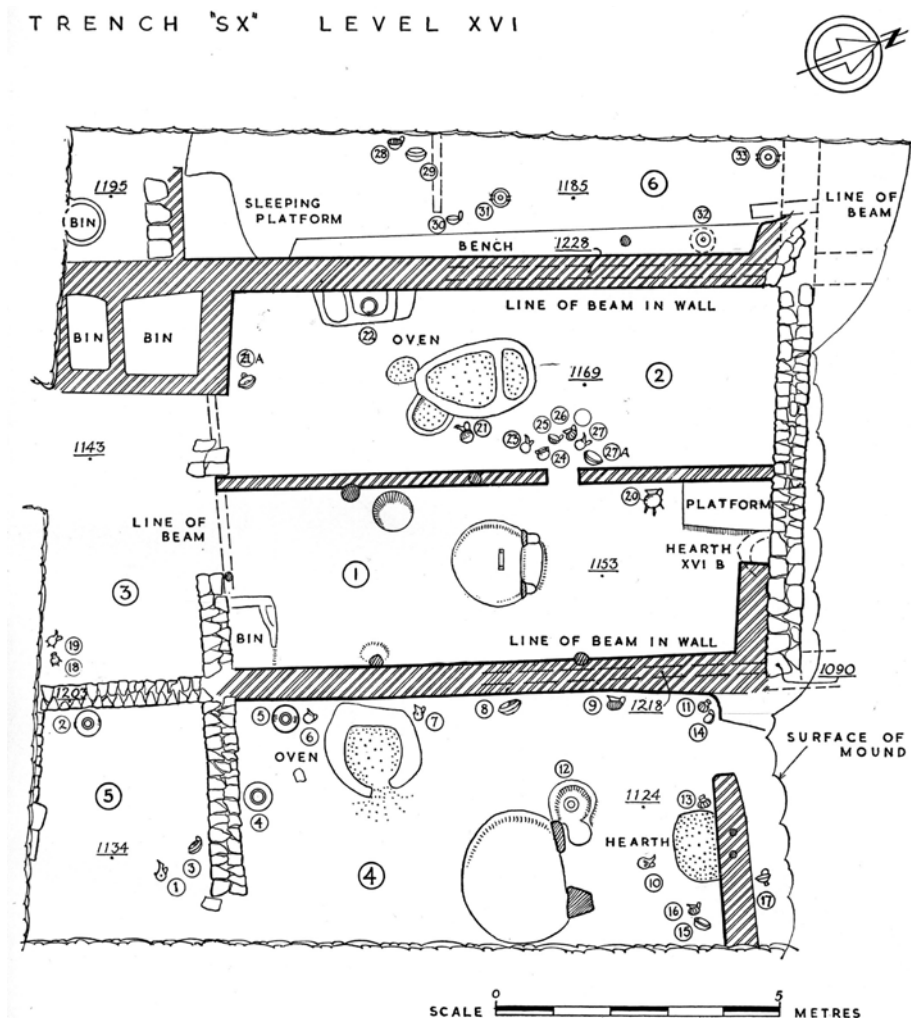


Fig. 51 Beycesultan, level XVI

society that was probably familiar with altered states of consciousness and that considered sleep a state important enough to be depicted in pieces of art.

Several examples of sleeping platforms have also been excavated in the settlement of Beycesultan in western Anatolia. The oldest examples from the Late Chalcolithic<sup>9</sup> level XXIV were excavated in a small dwelling that, with its projecting walls at the west end, was of similar form as later *megara*<sup>10</sup> (figure 50).<sup>11</sup> From the

open porch, the entrance led over a raised step into the main chamber, which was equipped with a circular hearth (not raised) in the centre and a bench from bricks along the north side. A second room or porch, which could only partially be excavated, was accessible through another doorway in the centre of the east wall. Here, “sleeping-platforms” were found both on the north and south sides. A furnishing of woven reed matting or pieces of felt similar to the ones discovered on the floor in room 1 of level XV (Early Bronze Age) is assumed to have covered such platforms.<sup>12</sup> It remains unclear, however, why the brick bench is not considered a sleeping place because, with a width of about 60 cm at the broader end, it is not much narrower than the platforms with a width of about 70 cm and could have accommodated a slender

<sup>9</sup> Korfmann 1983, 209–210; Schoop 2005, 149.

<sup>10</sup> „Der Begriff ‚Megaron‘ und seine Definition gehen auf Schliemann und Dörpfeld zurück. Seine Rechteckform zeichnet sich durch einen offenen, von Anten begrenzten Vorraum (Antenraum) und einen Hauptraum aus, in dem sich ein zentraler Herd befinden kann.“ (Aram-Stern 2004, 235). „Nicht freistehende Häuser mit Vorhalle und Herdraum oder Häuser, welche die räumlichen Voraussetzungen für das Megaron nur teilweise erfüllen, werden häufig als ‚megaroid‘ bezeichnet.“ (Aram-Stern 2004, 237).

<sup>11</sup> Lloyd and Mellaart 1962, 25–26.

<sup>12</sup> Lloyd and Mellaart 1962, 43, 45.



person without difficulty.<sup>13</sup> Generally speaking, Seton Lloyd's and Mellaart's use of the term "sleeping-platform" is inconsistent. For example, a short structure of about  $1.5 \times 1$  m in the southern<sup>14</sup> corner of room 6, level XVI (Early Bronze Age II) is considered a "sleeping-platform", whereas a structure of roughly the same size in the north-western corner of room 1 of the adjoining "sanctuary" is termed a "clay bench" (or "platform" in the drawing) (figure 51).<sup>15</sup> Common sense would consider both of them too short to be suitable as comfortable sleeping places. We are facing a similar problem concerning the platforms in the megara A and B of level X–VIII (Early Bronze Age III) (figure 52).<sup>16</sup> While we can easily accept the interpretation as sleeping places for the platforms in the main room and in the portico of megaron B, the structure in the main room of megaron A measuring  $1.25 \text{ m}^2$  could have been the bed of a

child at best. Likewise, the long benches discovered at the western walls of both megara as well as in the houses of level XXXIa<sup>17</sup> and XVI<sup>18</sup> are only 30–50 cm wide and therefore would have been too narrow to accommodate a sleeper of average size.

Two low, rectangular platforms were also discovered in the megaron 102 in Troy Ib in western Anatolia (figure 53).<sup>19</sup> The first one, which measured  $2 \times 0.90 \times 0.30$  m and was built from several irregular courses of stone packed with earth, was set against the walls in the great hall's north-eastern corner. The second one, which was of comparable construction, measured  $2.35 \times 1.70 \times 0.50$  m, and lay in the north-western quarter of the room, close beside the exterior wall. According to Carl Blegen and his colleagues, these served as couches and beds, and similar platform-beds of wood and stone were still in use in rural north-western Anatolia

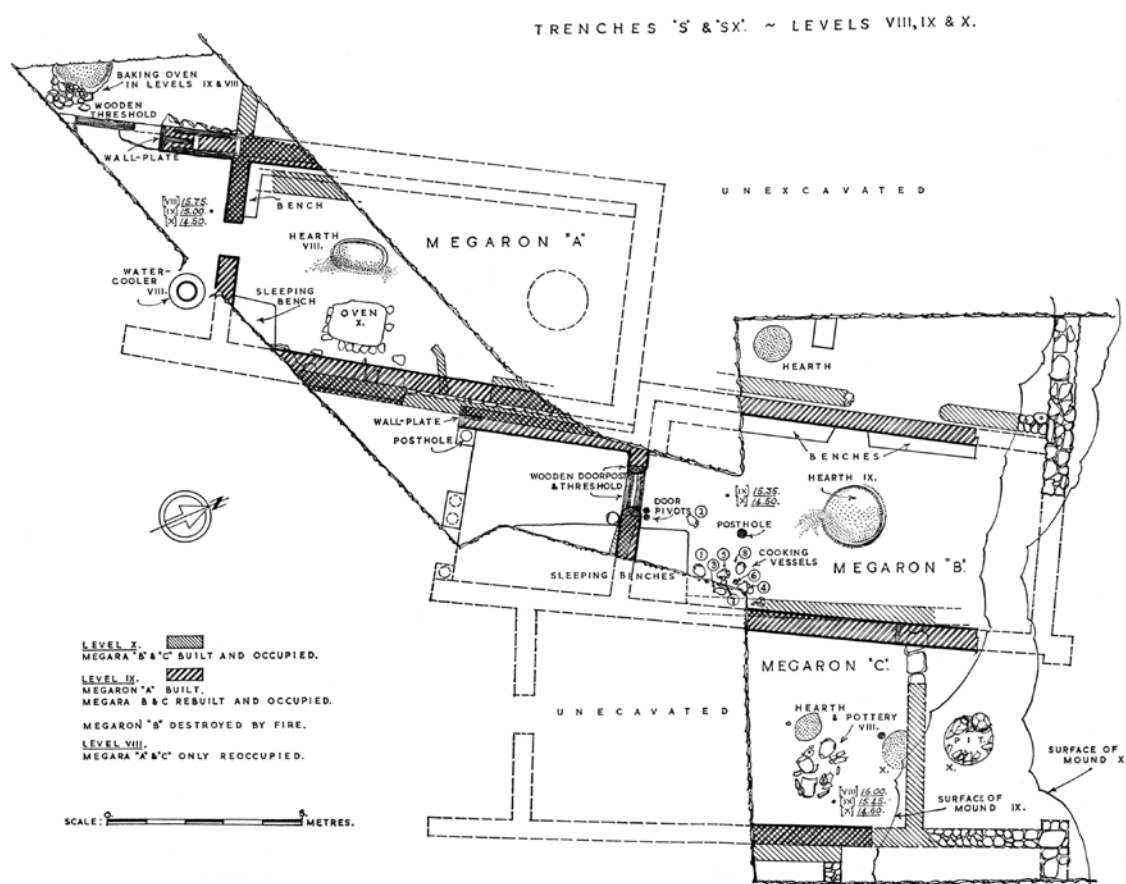


Fig. 52 Beycesultan, level X–VIII

<sup>13</sup> Most measurements are inferred from the drawings as exact figures are lacking in all but a few cases.

<sup>14</sup> In cases where information about cardinal directions is contradictory between text and drawings, I consider the drawings more reliable.

<sup>15</sup> Lloyd and Mellaart 1962, 36–38.

<sup>16</sup> Lloyd and Mellaart 1962, 59–61.

<sup>17</sup> Lloyd and Mellaart 1962, 22–23.

<sup>18</sup> Lloyd and Mellaart 1962, 38.

<sup>19</sup> Blegen et al. 1950, 89–95; Korfmann 1983, 209–210.

in the middle of the twentieth century, the time of their writing. They also suggest a flat roof for the Trojan megaron, thus offering another possible sleeping place for the warmer months, while in the colder season the two hearths in the building would have kept sleepers on the platforms warm.<sup>20</sup> Traces of matting were found in the floor deposits, possibly belonging to the sleeping places. In the northern part of the porch, one more platform with measurements of  $2 \times 2 \times 0.50$  m was set against the lateral wall. Yet, they are reluctant to call this a sleeping place, probably because of its location, but later written sources suggest this not to be uncommon.<sup>21</sup> It is also important to note the similar, although mirror-inverted, arrangement in the Beycesultan megaron.

At Demircihüyük in western Anatolia, the sleeping platforms were always located in the room to the front, close to the entrance (figure 54). Here, platforms were constructed from fist-sized stones or wooden beams, which served as insulation material, and then covered with kerpiç.<sup>22</sup> They usually had a length of about 4 m and a width of 1.5–1.6 m while being very low, sometimes not raised above floor level at all. Platforms like this are a common feature in phases G–M (Early Bronze Age I/II),<sup>23</sup> the most solid ones being discovered in a prominent building to the east of the northern gate, thereby suggesting that they fulfilled representational purposes. Mats from straw or reed were furthermore found on the floor of a room of phase G, although not from parts

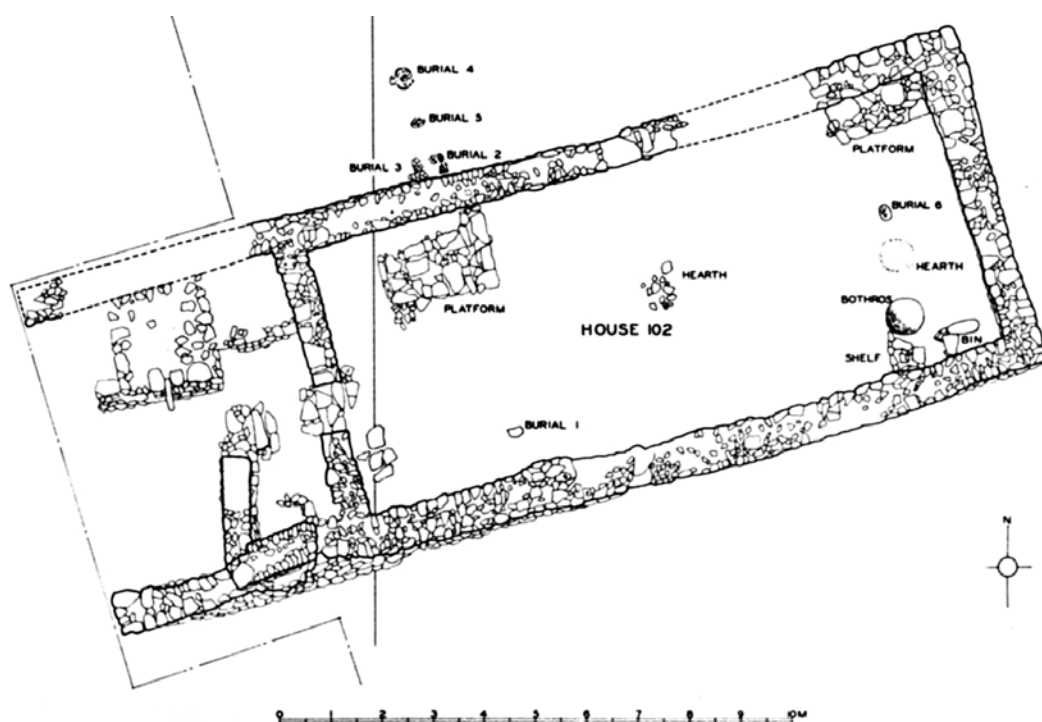


Fig. 53 Troy Ib, megaron 102

<sup>20</sup> Remains of a flat roof constructed from wooden beams and covered with reeds and earth were also discovered in layer Troy II (Dörpfeld 1902, 40–42). Generally speaking, flat roofs could have been used as sleeping places in many settlements, although proof concerning the modes of construction has only rarely survived. However, Early Bronze Age roofs are usually reconstructed as flat, mostly borne by a wooden construction and only rarely supported by wooden beams. The ceiling of the houses commonly consisted of reeds embedded in clay (Alram-Stern 2004, 232).

<sup>21</sup> The text in question is Homer's *Odyssey* which, although considerably younger than Troy I, sheds an

interesting light on the subject of sleeping in a portico: "But when they had made libations, and drank as much as their mind desired, some of them went to sleep, each to their own home; but the Gerenian knight Nestor made Telemachus, the dear son of divine Ulysses, sleep there in wrought beds under the echoing portico: and near him Pisistratus, skilled in the spear, chieftain of men, who of his sons was still unmarried in his palace: but himself again slept in the recess of his lofty house: and for him his wife the queen prepared a couch and bed." (Buckley 1896, 61, book 3, lines 395–403).

<sup>22</sup> Korfmann 1983, 209.

<sup>23</sup> Korfmann 1983, 189; Schoop 2005, 274.



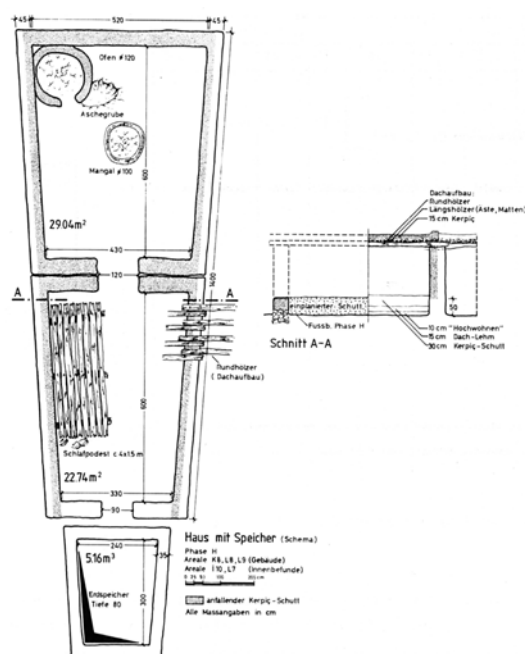


Fig. 54 Typical house at Demircihöyük



Fig. 55 Pulur/Sakylol; Room No. 78, level X (left), detail of platform with geometric application (right)

of the room likely to have served as places of rest.<sup>24</sup>

In Pulur/Sakylol (Late Uruk period/Late Chalcolithic–Early Bronze Age II), a settlement in the area of lake Keban, central Anatolia, the trapezoid buildings consisted of a main room accessible through a smaller anteroom.<sup>25</sup> These houses were equipped with multiple clay platforms that served as seats, beds or shelves; the back rooms commonly contained a platform that ran around the walls. However, as Hâmit Koşay only mentions that they were large or small and 20–30 cm high but omits any information about their expanse, it is not possible to estimate how many could be used as sleep-

ing places. This is particularly unfortunate in the case of the platform beside the west wall of room No. 78, level X (Early Bronze Age I) that was decorated with a geometric application on its side (figure 55). While it seems quite small in the photograph, no data is available to ascertain whether it was preserved in its original size or whether the picture shows only part of the structure.

Early Bronze Age I platforms and benches are also reported from Zeytinlibahçe Höyük, close to Şanlıurfa in southern Anatolia, but again, the excavators did not provide information about their size.<sup>26</sup> As opposed to this, with measurements of approximately  $2.8 \times 2$  m and  $2.8 \times 1.5$  m, the plastered areas excavated in each of the Early Bronze Age (“ältere[...] Frühbronzezeit”<sup>27</sup>) layers 7M and 8M on the citadel mound of Alişar Höyük in central Anatolia were of a suitable size to have served as substructures of sleeping places (figure 56).<sup>28</sup> Final-

ly, one more low platform was excavated in the north-eastern corner of the house next to the surrounding fence in level I (Early Bronze Age) Karataş in western Anatolia (figure 57).<sup>29</sup>

Benches could be excavated in phase 3 (Early Bronze Age IA) Taşkun Mevkii, Keban region (figure 58).<sup>30</sup> Structure 1, a building from wattle-and-daub, was equipped with a long mud bench along the back wall, which had a niche

<sup>26</sup> Becker and Hauptmann 2007, 203; Frangipane and Bucak 2000, 112, 114–115; Frangipane et al. 2001, 84–86.

<sup>27</sup> Schoop 2005, 34. Von der Osten considered layer 7M to be contemporary with Troy II (von der Osten 1937, 111).

<sup>28</sup> Korfmann 1983, 209–210; von der Osten 1937, 114.

<sup>29</sup> Korfmann 1983, 209–210; Mellink 1973, 295; Schoop 2005, 176.

<sup>30</sup> Becker and Hauptmann 2007, 201; Sagona 1994, 5–6.

<sup>24</sup> Korfmann 1983, 85.

<sup>25</sup> Becker and Hauptmann 2007, 202–203; Korfmann 1983, 209–210; Koşay 1976, 118, 123, 133.

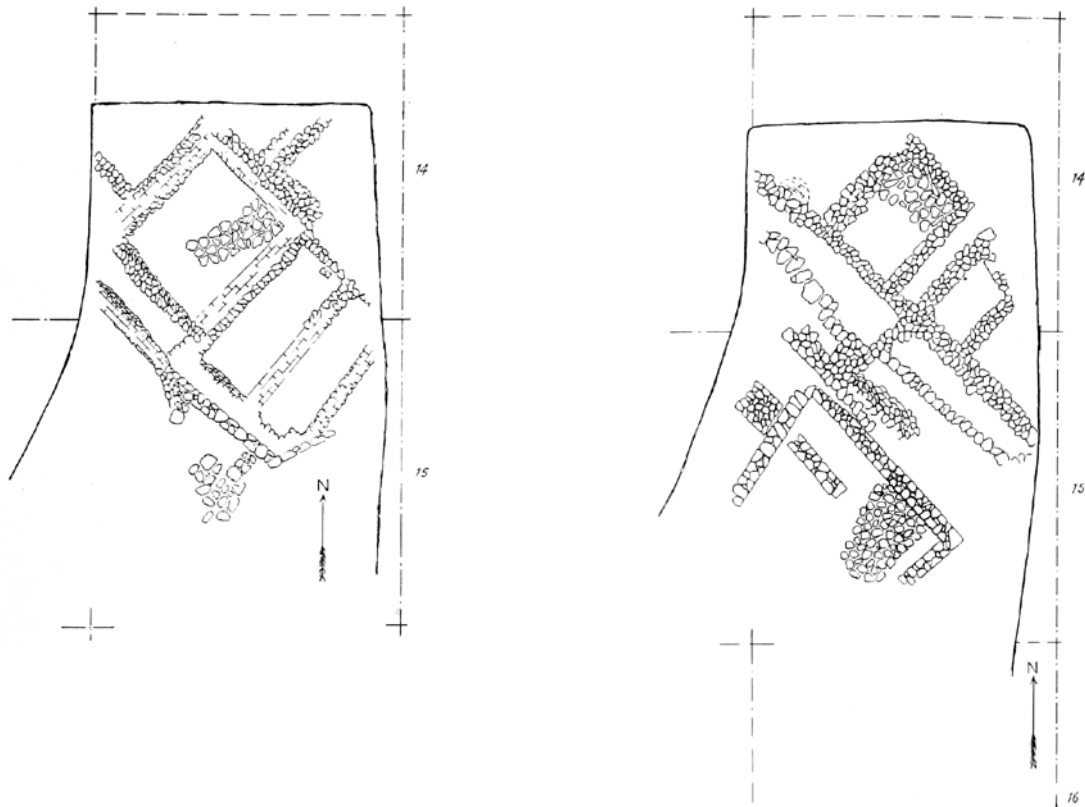


Fig. 56 Alışar Höyük, layers 7M (left) and 8M (right)

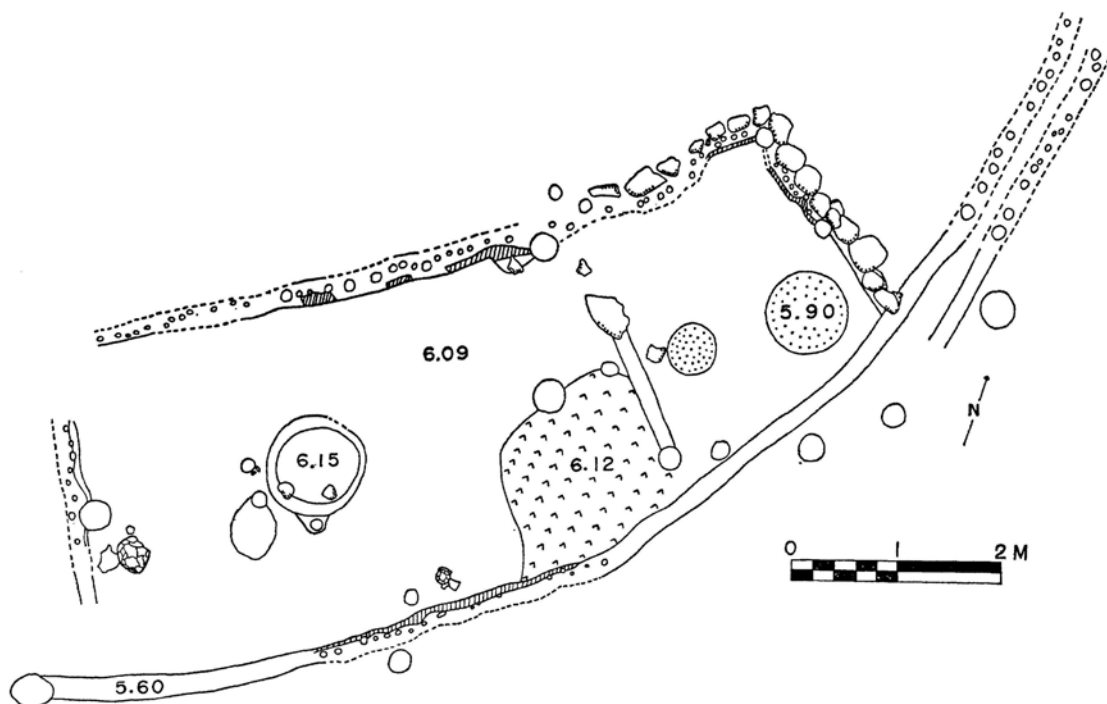


Fig. 57 Karataş, level I

at either end. Another bench abutted the outside of structure 3, which was built from mud bricks, in the north and east. What is difficult to interpret is the large, raised platform measuring  $5.50 \times 3.75$  m in Structure 4. Both the platform

as well as the encasing wall consisted of mud brick on a stone base. While it has been interpreted as a device to dry grains or wool, the fact that the structure is the most solid of all those excavated points to a more protected function,

and an interpretation as a communal sleeping platform seems conceivable as well. Nevertheless, this is only a tentative suggestion as we do not possess any information about the village's social structure.

renders this interpretation improbable. The same applies for the bench with raised edges along the eastern wall of the same room, whereas for a bench in room A122 we do not possess any information about size. In Building I,

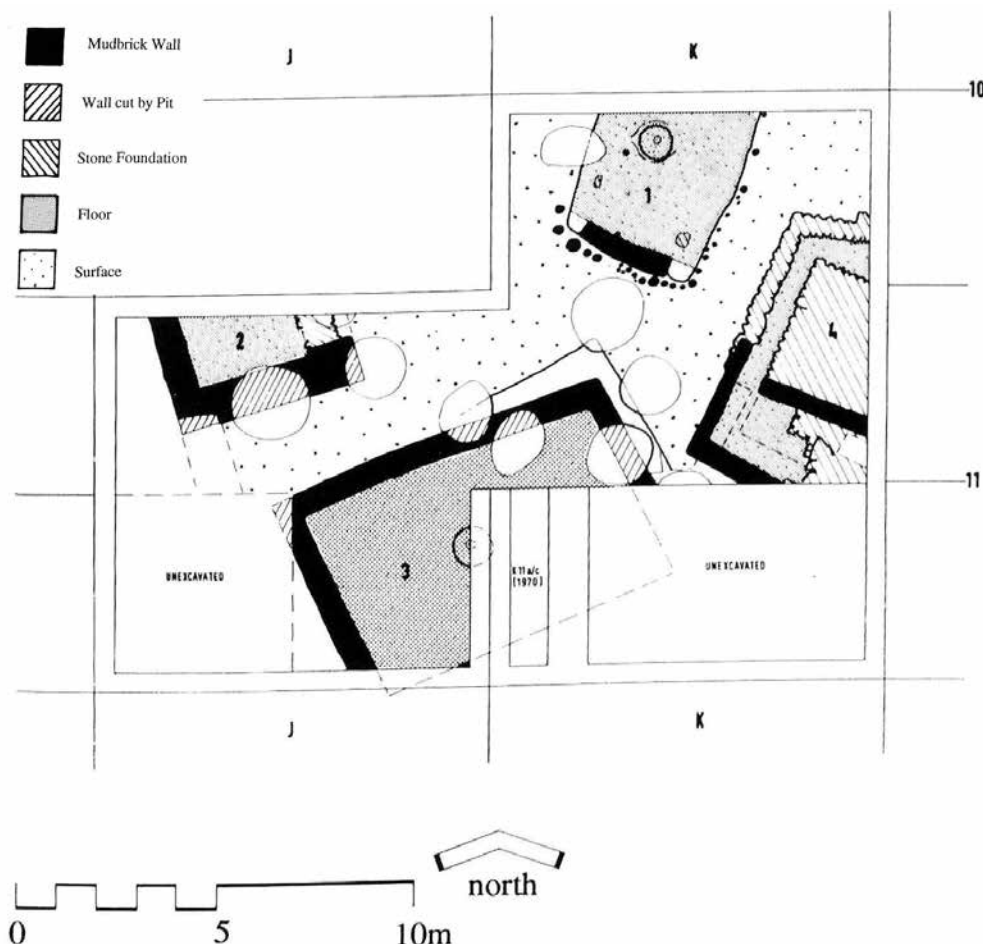


Fig. 58 *Taşkun Mevkii*, phase 3

Also uncertain is the identification of sleeping places at Arslantepe, Malatya region, central Anatolia because the platforms and benches discovered there came to light in what are likely public buildings (figure 59).<sup>31</sup> In period VIA, which dates to the Late Chalcolithic/Late Uruk period,<sup>32</sup> the remains of three large structures (Building I, III and IV) could be excavated. Whereas the platform outside the entrance A198 of Building IV would have been of the right size to sleep on, its location makes such a purpose fairly unlikely. More conveniently located is the platform in the west of room A181, but again the public character of the building

which has architectural characteristics that suggest that it was a temple, benches were found in rooms A42 and A46, but they are either too small to be a sleeping place and/ or big pithoi were found on them, attesting to their function. Benches could also be observed in room A127 of Building III. Even though an interpretation as sleeping places is unlikely in these cases, the buildings are interesting insofar as they show the connection to Mesopotamia during period VIA at Arslantepe.

Remains of actual beds remain scarce in Anatolia and can only be deduced indirectly, although the custom of equipping graves with furniture, so common in the Near East and Egypt, can be observed here as well. Stuart Piggott has suggested interpreting the copper “standards” (figure 60, left), which were dis-

<sup>31</sup> Becker and Hauptmann 2007, 199; Frangipane and Palmieri 1983, 295–296, 300, 302, 313, 315, 321.

<sup>32</sup> Becker and Hauptmann 2007, 200.



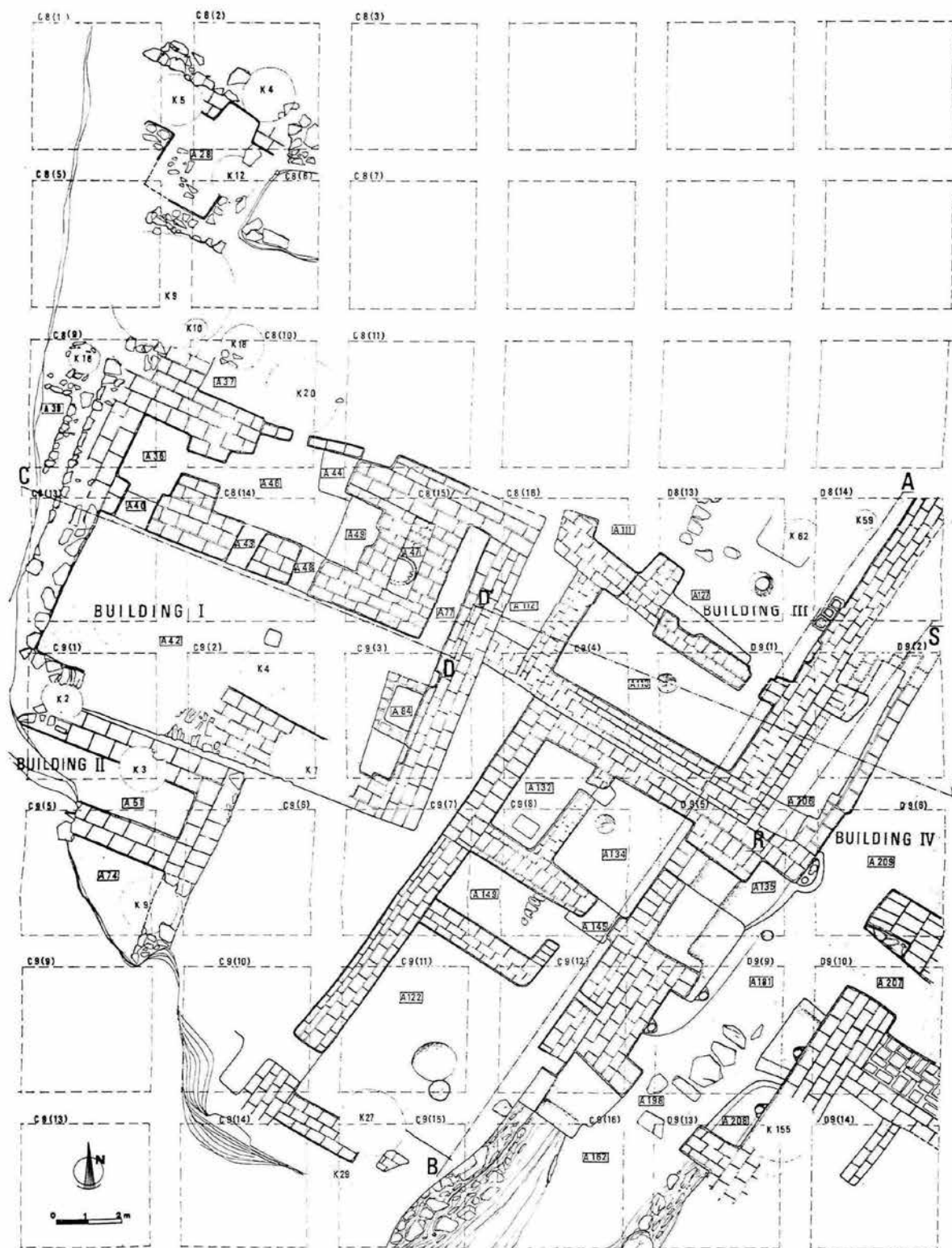


Fig. 59 Arslantepe, period VI A

covered in an Early Bronze Age (“ältere[...] Frühbronzezeit”<sup>33</sup>) grave in Alaca Höyük in north-central Anatolia, as parts of a canopy.<sup>34</sup> While no remains of a bed were found in the grave in question, this explanation is augmented by findings from Chalcolithic layers at the

same site.<sup>35</sup> Here, in two cases the dead were placed in a contracted position on biers or beds

<sup>33</sup> Schoop 2005, 38.

<sup>34</sup> Piggott, 1961, 164–165.

<sup>35</sup> Schoop 2005, 41.

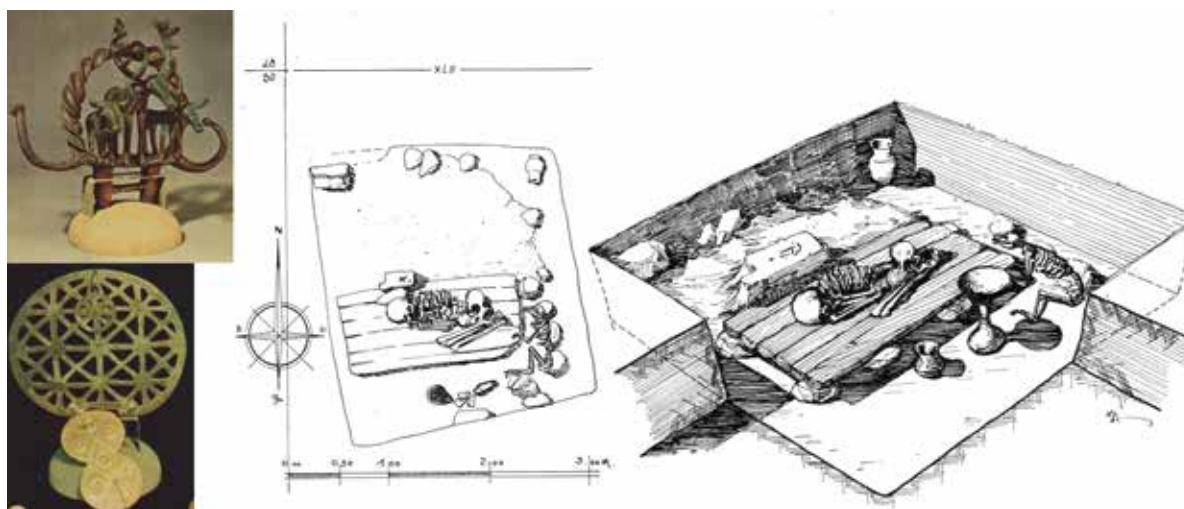


Fig. 60 Alaca Höyük; Early Bronze Age standard depicting a stag and two bulls (top left), circular standard (bottom left), Chalcolithic grave 1 (right)



Fig. 61 Horoztepe; Early Bronze Age rattle and bull figure (left), attachments of wooden furniture (right)

made from wooden boards (figure 60, right). Gary Beckman has, somewhat anachronistically, interpreted the circular standards as “solar standards” and connected them with the sun goddess Eštan (Hattic)/Ištanu (Hittite), who was associated with the netherworld as well.<sup>36</sup> Because in the later Hittite texts she is designated by the sumerogram <sup>d</sup>UTU, some adoption of Mesopotamian or Syrian beliefs seems likely, and Beckman thinks that, similar to Utu/Šamaš, Eštan was imagined as passing beneath the earth at night.<sup>37</sup> However, although his thoughts complement the existing evidence quite nicely,

because of the considerable temporal gap their significance is limited.

Lastly, a bronze rattle and a bull figure that could have been mounted on poles were found at Early Bronze Age Horoztepe in northern Anatolia (figure 61, left).<sup>38</sup> Another tomb discovered at the same site was richly furnished with a great many grave goods, including two tables, metal mountings of wooden furniture and attachments of one more possible canopy (figure 61, right).<sup>39</sup> Tahsin Özgüç and Mahmut Akok state that some of the attachments could have been part of a bed, an interpretation that increases in credibility because of the association with the canopy.<sup>40</sup>

<sup>36</sup> Beckman 2013, 292–293.

<sup>37</sup> Beckman cites Heimpel 1986 as evidence, but the text in question does not mention any sources concerned with the Hattic or Hittite goddess.

<sup>38</sup> Piggott 1961, 166.

<sup>39</sup> Özgüç 1958, 40–42.



## 6.3 THE AEGEAN AND GREECE

Sleeping platforms from clay, beaten earth or stone have a long tradition in the north-eastern Mediterranean. The oldest evidence of sleeping places in this area has come to light in the Neolithic settlements of Khirokitia and Vrysi, both of which lie on the southern coast of Cyprus. The village of Khirokitia (sixth and seventh millennium BC)<sup>41</sup> consists of beehive-shaped tholoi with vaulted roofs, of which the largest can reach a diameter of 10 m.<sup>42</sup> The tholoi were built from stone, mud brick and pisé. Some contained “bed-like platforms”, for example, tholos III, floor VI d, where one substantial stone

platform was created by raising and merging the two smaller ones in the north-west and north.

Another likely sleeping platform from pisé lay in the north-western part of tholos XVII, adjacent to the wall. The low, rectangular platform measured 3.20 × 1.60 m and was, on its south-east side, linked with a second platform that was even lower and measured 1.60 × 1 m. Both parts were covered with dark-coloured pisé of fine quality, whereas the larger one was surrounded by a broad raised rim on three sides, suggesting use as a bedstead. At a later stage (floor II), two graves were dug into the platform (figure 62). In grave III, an adult person was interred in a loosely contracted

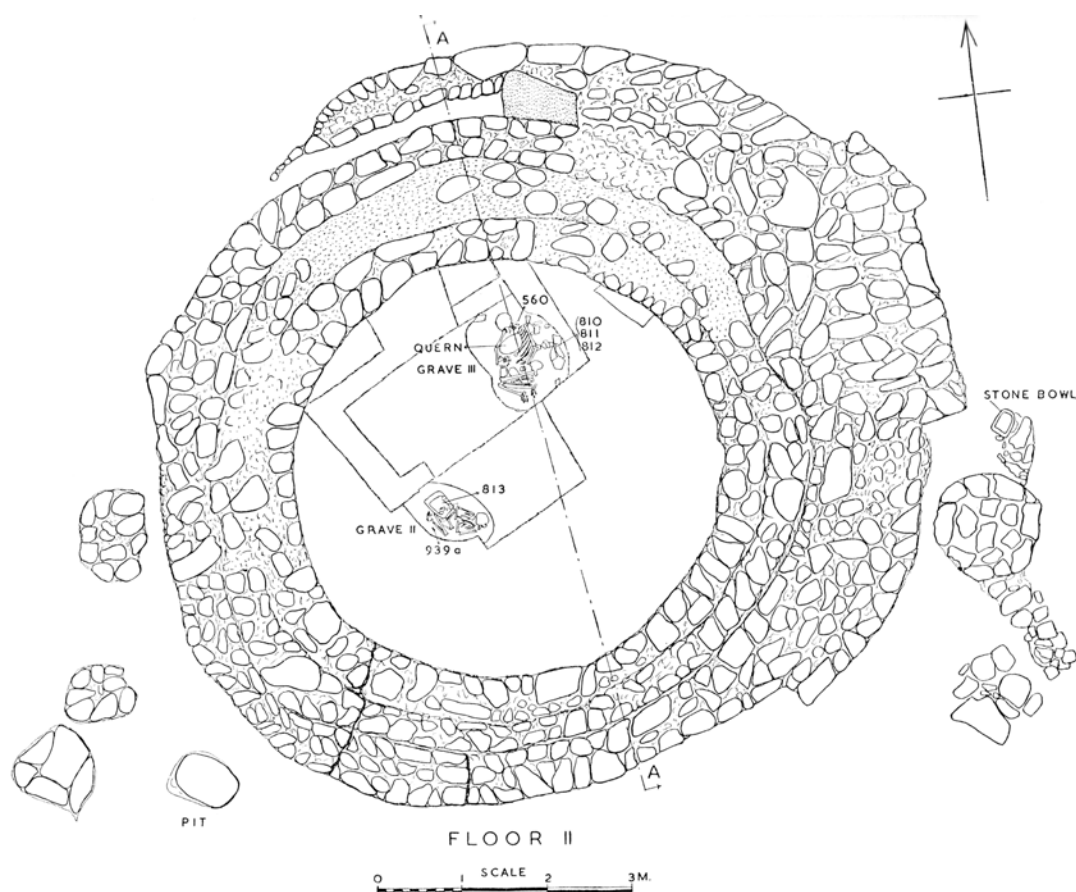


Fig. 62 Khirokitia, tholos XVII, floor II

<sup>40</sup> Özgüç 1958, 50.

<sup>41</sup> Le Brun lists eight <sup>14</sup>C samples, of which Ly 3716 and Ly 3718 were taken from building S.117 mentioned below (Le Brun 1989, 17). These gave the following dates after calibration (OxCal 4.3, Curve IntCal 13, <http://c14.arch.ox.ac.uk/oxcal/OxCal.html> 15 April 2017): Ly 4307 = 7173–6500 calBC (95.4 % probability); Ly 3718 = 7597–6211 calBC (95.2 % probability), 6134–6122 calBC (0.2 % probability); Ly 3717 = 7029–6876 calBC (8.4 % probability), 6864–6333 calBC (83.5 % probability), 6316–6254

calBC (3.5 % probability); Ly 3719 6822–6019 calBC (95.4 % probability); Ly 4308 = 6592–6062 calBC (95.4 % probability); Ly 3716 = 6208–6139 calBC (3.4 % probability), 6113–5613 calBC (92.0 % probability); Ly 4306 = 5613–5589 calBC (1.0 % probability), 5566–4882 calBC (93.6 % probability), 4870–4849 calBC (0.9 % probability); Ly 4309 = 5485–4795 calBC (95.4 % probability).

<sup>42</sup> Dikaios 1953, 50, 104–106, 166, 168, 170, 196, 202, 211–212, 217, 225, 228–229.

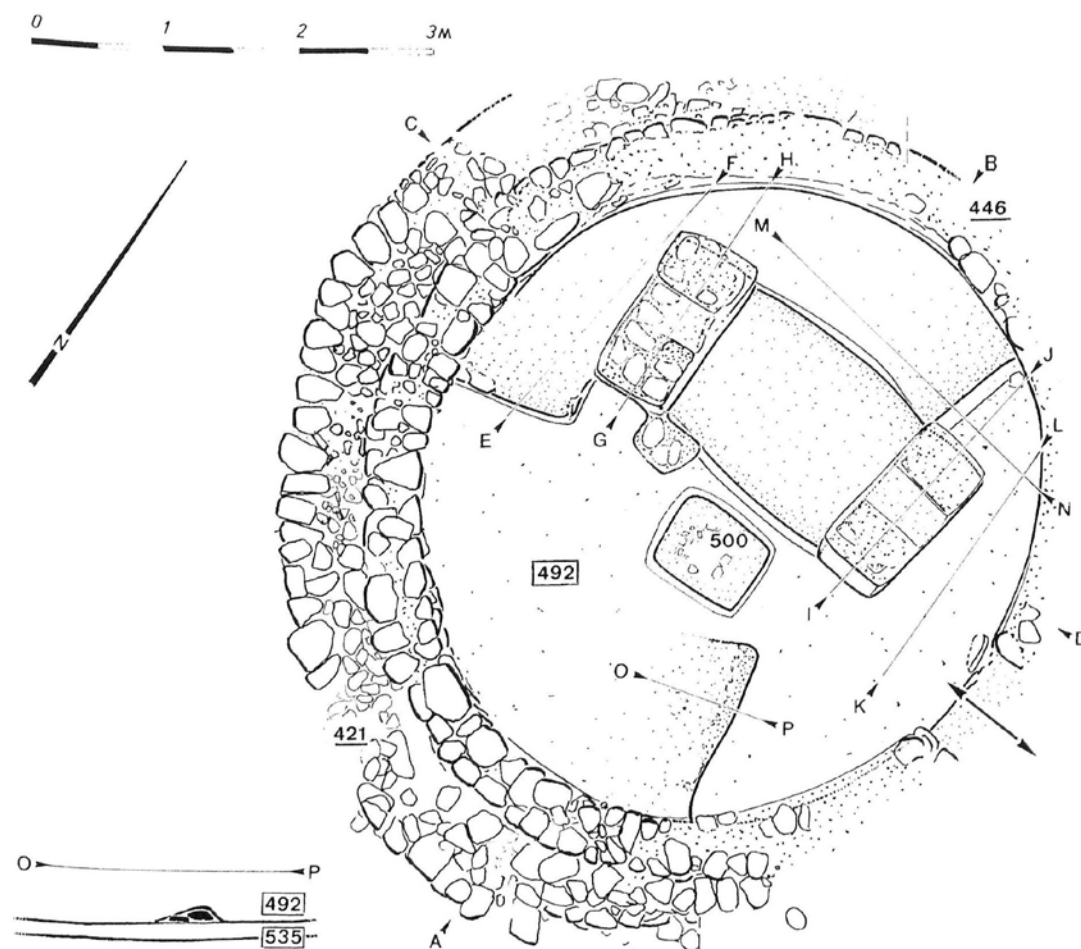


Fig. 63 *Khirakitia, building S.117, floor 492*

position on its right side with the head in the north. A quern had been placed on the chest, and round the neck was a necklace consisting of twenty-one carnelian beads alternating with dentalium shells. Fragments of three stone bowls (two large, one small) that had been intentionally broken were arranged under and around the body. Mixed in with these was a fragmentary object of alabaster that is interpreted as the possible lower part of an idol. Grave II was that of an eight-year-old child, which lay on its front also in a contracted position with the head in the south-east. Its lower arms were on its back, suggesting that they were bound. A stone bowl, again intentionally broken, lay surrounding the pelvis and under the legs. Furthermore, a bone needle was found close to the right leg.

According to Porphyrios Dikaïos, some tholoi were probably equipped with intermediary floors, so the sleeping place might have been located in the upper storey. This hypothesis is supported by the observation that in tholos XLV, the two rectangular pillars that

supported the loft in floors III and II were replaced by an earthen platform, which was edged by a retaining stone wall at the front, in floor I. This platform covered a substantial part of the tholos' floor space, and at the time it was abandoned, a young woman was buried under it in grave I. She was interred in a contracted position on the right side with the head in the north; a quern had been laid on the lower part of the head and a couple of boulders around the body. Additionally, graves II, III, IV and VII from floors II and III were covered by the newly raised platform, thus incorporating the dead in a structure associated with sleeping.

Succeeding excavations discovered a multitude of platforms of different shapes and sizes, suggesting that they served different functions.<sup>43</sup> While several would have been suitable for sleeping purposes given their dimensions, the rectangular platform in building S.117 is of most

<sup>43</sup> Le Brun 1984 I, 47–49; Le Brun 1989, 47–49.

*Tab. 11 Benches at Vrysi*

Feature No.	Context	Type <sup>44</sup>	Length (m)	Width (m)	Height (m)	Comment
136a–c	H1 Floors 2–3	III	max. 1.10		c. 0.20	3 prongs attached to hearth 135
148	H1 Floors 4a–b	I	1.70	0.60	0.30	2 main seats, others adjacent, set in alcove 0.25 m from hearth
159	H5 Floor 1	IIa	3.40	0.60	0.20	0.40 m from hearth
170	H6 Floor 2	I	3.00	0.65	0.30	0.15 m from hearth, partly destroyed in So
182	H12 Floor 1	I	2.25	0.75	–	Clay capped rubble footing of wall 178, 0.65 m from hearth
193	H7.1	I				Partly eroded
200	H2B Floors 4a–b	IIb	1.00	1.40	0.10–0.15	Triangular platform 2 m from hearth
201	H2B Floor 5	IIb	2.00	0.34	–	1 m from hearth
228	H2A Floor 4a	IIb	2.26	0.30	0.10	0.50 m from hearth
247	H3 Floor 1	III	1.00	0.70	0.10	Stone capped
248	H3 Floor 3	IIb	1.40	0.50	0.10	Stone-fronted ledge with quern on it
249	H3 Floor 4	I	–	–	–	Individual blocks placed beside slabs 255
259	H4A Floor 1b	IIa	3.00	0.60	0.20	Max. 0.60 m from hearth
278	H5 Floor 2	IIb	3.40	0.60	0.20	0.40 m from hearth
283	H9 Floor 1					Disturbed, stones against So wall
379	H3 Floors 3–4	I			0.45	Flat stone on pile, 0.20 m from hearth (oven)

interest here because its location between the pillars resembles that of tholos XLV (figure 63). The platform measured 1.56–1.70 × 1.40 m and had a carefully smoothed surface that showed imprints of vegetable matter, suggesting the presence of bedding.

<sup>44</sup> “Three types may be distinguished: I, a stone pile with flat slab on top, against house walls and arranged as a single seat or a bench divided into single seats by the individual spacing of flat stones in a pisé matrix; IIa, a continuous low bench comprised of flat stones against the house wall; IIb, a continu-

The second Cyprian settlement, Vrysi, dates to the period between the Khirokitia and Sotira horizons, partially overlapping with the latter.<sup>45</sup> Here, clusters of single-room houses

ous low bench of soil, marl, some stones and whitish clay coating against the house wall; III, irregular flat extensions radiating from platform hearths and made in the same manner as IIb.” (Peltenburg 1982, 245).

<sup>45</sup> Peltenburg 1972, 1, 3, 5; Peltenburg 1982, 24–25, 28–29, 31, 35, 50, 96–98, 108, 245–246, 256–257, 275, 280–282. Seventeen <sup>14</sup>C samples exist from the orig-

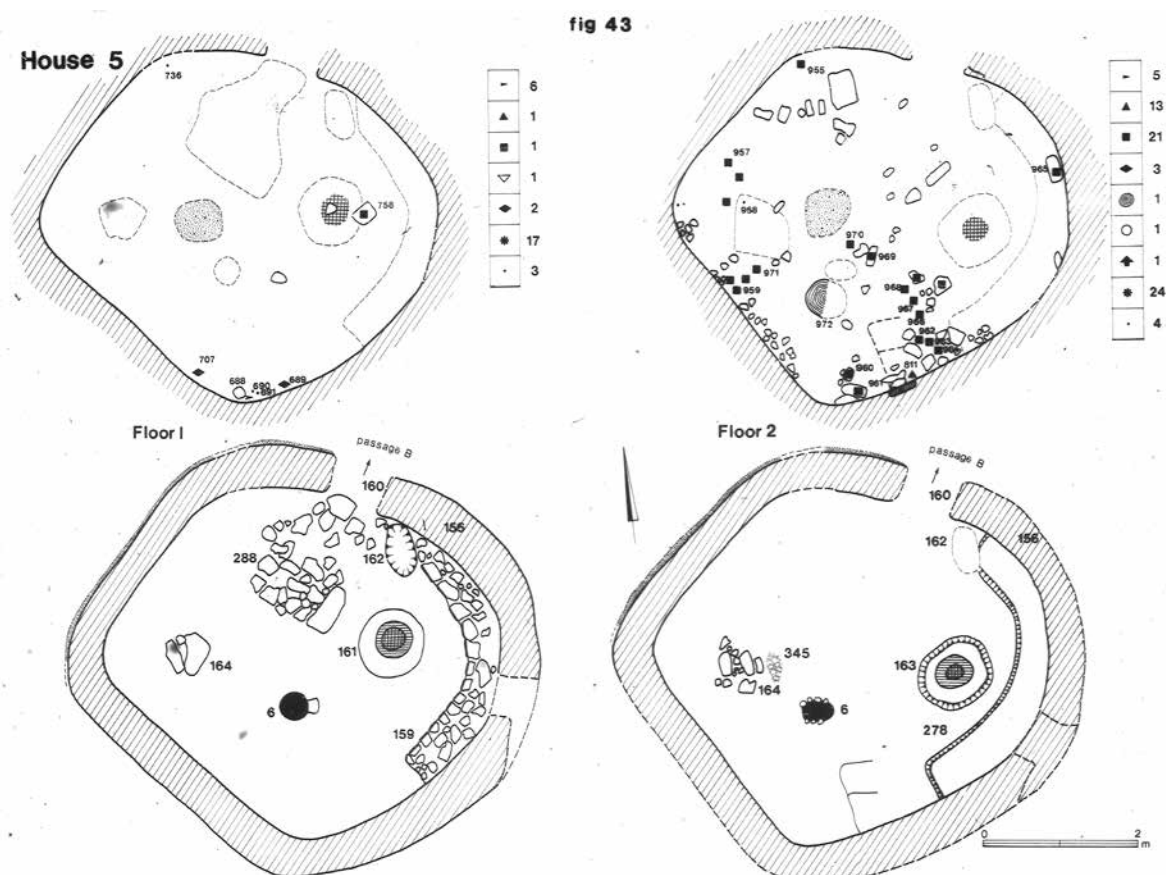


Fig. 64 Vrysi, House 5, Floor 1 and 2

were discovered that were built into depressions in the marl, thus forming a village that mostly lay below ground. The buildings were constructed from stone, pisé and mud plaster and furnished with benches and platforms. A list of benches excavated in the buildings is provided in table 11, most of which are considered seats by Edgar Peltenburg, whereby only their dimensions distinguish them from possi-

ble sleeping arrangements. For example, features No. 148 (House 1, Floor 4a–b), 159 and 278 (House 5, Floor 1 and 2) (figure 64), 170 (House 6, Floor 2), 182 (House 12, Floor 1) as well as 259 (House 4A, Floor 1b) are of a size that could have comfortably accommodated reclining persons. They are furthermore located in close proximity to hearths, around which they form semicircles, and would therefore

inal excavation (Peltenburg 1982, 460); however, after calibration they gave dates that appear much too young (OxCal 4.3, Curve IntCal 13, <http://c14.arch.ox.ac.uk/oxcal/OxCal.html> 15 April 2017): BM-1906 = 1516–1111 calBC (95.4 % probability); BM-1907 = 1594–1589 calBC (0.4 % probability), 1531–1374 calBC (87.1 % probability), 1352–1303 calBC (8.0 % probability); BM-849 = 1746–1406 calBC (95.4 % probability); GU-521 = 647–1059 calAD (89.7 % probability), 1065–1154 calAD (5.7 % probability); BM-1908 = 1658–1651 calBC (0.4 % probability), 1645–1395 calBC (95.0 % probability); GU-1459 = 1747–1385 calBC (93.8 % probability), 1340–1311 calBC (1.6 % probability); GU-524 = 1914–1368 calBC (92.1 % probability), 1362–1296 calBC (3.3 % probability); BM-844 = 1738–1715 calBC (3.7 % probability), 1696–1502 calBC (91.7 % probability); BM-848 = 1876–1841 calBC (4.4 %

probability), 1821–1797 calBC (2.3 % probability), 1782–1527 calBC (88.7 % probability); GU-523 = 1929–1495 calBC (94.3 % probability), 1477–1458 calBC (1.1 % probability); BM-843 = 1886–1596 calBC (88.4 % probability), 1589–1532 calBC (7.0 % probability); GU-522 = 2022–1991 calBC (1.8 % probability), 1984–1611 calBC (93.6 % probability); Birm-337 = 2621–1876 calBC (94.5 % probability), 1842–1820 calBC (0.5 % probability), 1797–1781 calBC (0.4 % probability); Birm-182 = 2861–2808 calBC (2.4 % probability), 2756–2720 calBC (1.3 % probability), 2704–1948 calBC (91.7 % probability); BM-845 = 1885–1607 calBC (93.1 % probability), 1583–1559 calBC (2.1 % probability), 1552–1549 calBC (0.3 % probability); BM-846 = 1953–1505 calBC (95.4 % probability); BM-847 = 1886–1626 calBC (95.4 % probability).



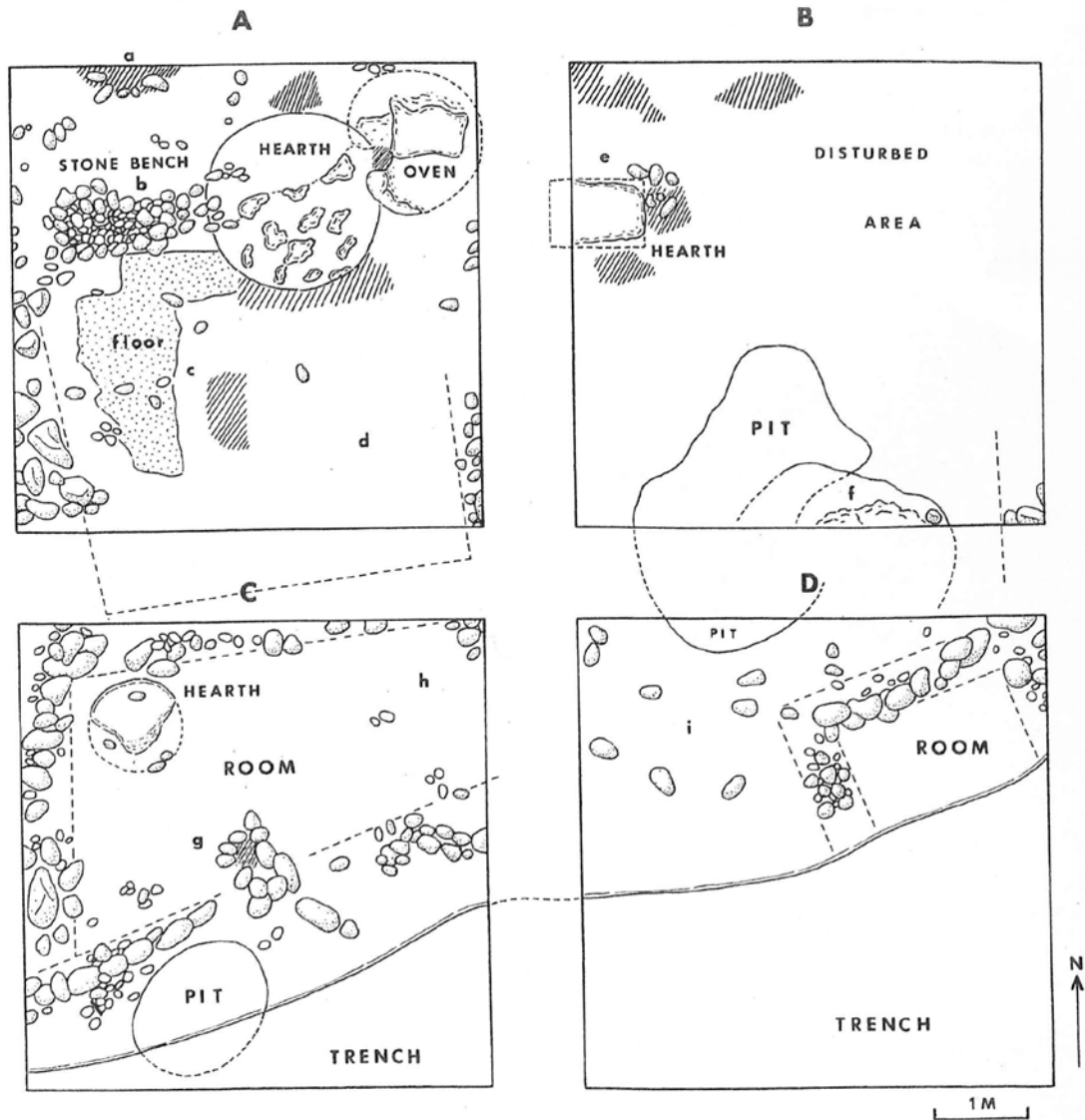


Fig. 65 Achilleion, Phase IVa

have kept sleepers warm. Feature No. 148 is the most elaborate arrangement and was equipped with backrests, thus suggesting a multipurpose function in which the benches could be used as a seat during the day and as a sleeping place during the night. Remains of reeds and smaller grasses were also excavated, which formed deliberate floor coverings and thus could have served as sleeping areas in at least some cases. On Floor 1 of House 6 the reeds were woven for matting, whereas on Floors 3 and 4a of House 2A the finer grass or straw formed a relatively thick carpet, particularly around hearths. Vegetable matter was additionally found in House 1, Floors 2 and 4b, House 5, Floor 2 and House 7, Floor 1 – possibly fine grass or leaves strewn on floors. Because access must have been through the roof in some buildings, these are reconstructed as having been flat

and therefore would have offered another possible sleeping place during the warmer months. Also, posts that may have supported internal wooden lofts were discovered, which, according to Peltenburg, could have been used for sleeping purposes as well.

Benches dating to Classical Sesklo<sup>46</sup> were discovered in the Achilleion in Thessaly.<sup>47</sup> A house from Phase IVa Early consisted of two rectangular rooms, of which the larger one was equipped with a bench along its eastern wall, while the smaller one featured a hearth. The

<sup>46</sup> Several <sup>14</sup>C samples were taken that gave a date of 6100–5600 cal BC for Phases III and IV, which are considered to be parallel to Classical Sesklo (Alram-Stern 1996, 368; Gimbutas et al. 1989, 28).

<sup>47</sup> Alram-Stern 1996, 111; Gimbutas et al. 1989, 54, 57–58, 60–62.

excavators term the structure a “house-shrine”, possibly because figurine fragments were found among the objects scattered around the bench and because both rooms lacked food preparation equipment. In Phase IVa Middle another two-room building came to light, which contained the remains of a stone bench in one room and a hearth in the other one (figure 65). Because a cluster of figurines and painted pottery was found on the bench and, again, food preparation equipment is missing, it is labelled a “shrine” as in the previous example. In buildings of the Phases IIIb and IVa, the remains of reed mats were found close to hearths, but they seem to indicate working rather than sleeping areas because in some cases food processing items were associated with them.

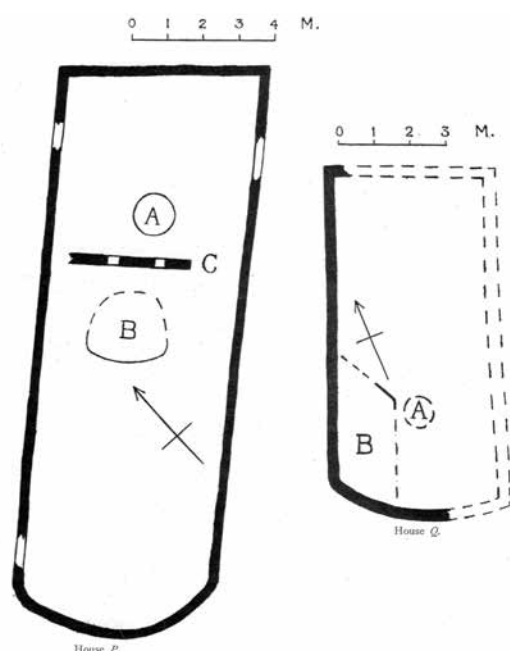


Fig. 66 *Rachmani, houses P and Q*

Sleeping platforms appear next in the Rachmani Culture in the eponymous settlement of Rachmani in Thessaly, where two houses with platforms were found (figure 66).<sup>48</sup> While the one in the older house Q was rectangular, measuring about  $3 \times 1.5 \times 0.15$  m and built in a corner, the one in house P seems to have been rounded in shape with a diameter of about 2 m and lay in the middle of the house close to a partition wall.<sup>49</sup> Both platforms consisted of beaten earth edged

with stones; the one in house Q had a hearth nearby. Remains of a structure similar to the one in house Q were excavated in the contemporary houses 704 and possibly 702 at the Pevkakia-Magula, Thessaly.<sup>50</sup> The same settlement yielded a figurine of what might be a person lying in a curled-up position, but unfortunately, the object is badly damaged (figure 67). Much better preserved is the Neolithic figurine from Magula Karamourlar in Thessaly, which was carved into a flat pebble, but again it is unclear whether we are dealing with a sitting person or with someone lying curled up (figure 68).<sup>51</sup> A Late Neolithic bench is also attested from Dikili Tash II, a tell in eastern Macedonia.<sup>52</sup>

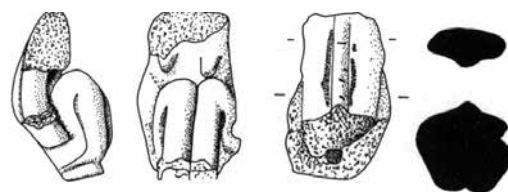


Fig. 67 *Figurine from the Pevkakia-Magula*

Possible sleeping places of a unique type were discovered in the first three phases of the settlement of Thermi in Lesbos, which are contemporary with Troy I.<sup>53</sup> Most well preserved was the platform in area Δ of town II. It was built of two parallel rows of four stones each that were covered with a superstructure from slabs of schist and thus formed a regular oblong about 3 m long and 1.5 m wide (figure 69).<sup>54</sup> A similar but smaller example was excavated in area Γ8 (pl. I, 7) of town I. Four more platforms in the areas A, E, Z and possibly K could only be inferred from parallel rows of stones, while the superstructure was missing.<sup>55</sup> Winifred Lamb furthermore mentions smaller platforms, the function of which remains uncertain because information about their size was omitted.<sup>56</sup> The same problem occurs concerning the rounded

<sup>48</sup> Wace and Thompson 1912, 37–39.

<sup>49</sup> Hans-Joachim Weißhaar considers the rounded platform a hearth (Weißhaar 1989, 9), but Alan Wace and Maurice Thompson do not mention any traces of fire.

<sup>50</sup> Weißhaar 1989, 8–11.

<sup>51</sup> Theocharis 1973, 48.

<sup>52</sup> Alram-Stern 1996, 428. Unfortunately, information about its size is lacking.

<sup>53</sup> Alram-Stern 2004, 937; Korfmann 1983, 209–210. Lamb considered the houses in Thermi to be contemporary with the similar megara in Troy II (Lamb 1936, 8).

<sup>54</sup> Lamb 1936, 21.

<sup>55</sup> Lamb 1936, 10.

<sup>56</sup> The same applies to the sleeping platforms. The size of the platform in area Δ was estimated from the drawing.



Fig. 68 Figurine from the Magula Karamourlar

platform in the anteroom of megaron  $\Lambda_2$  in town 5.<sup>57</sup> Nevertheless, having discussed the platform in the Trojan anteroom as well as the example from Demircihüyük (see chapter 6.2), there is no reason not to consider it a possible sleeping place. Manfred Korfmann suggests that some of the pebble deposits and floors in Thermi served as foundations of sleeping places, but no conclusive evidence exists to separate them from ordinary paved floors, as documented in several locations of the settlement.<sup>58</sup> Lastly, considering that Lamb thinks that the roofs were flat, it is possible that they were used as sleeping places in warmer periods.<sup>59</sup>

A similar stone-covered area of about 2 m in Early Bronze Age Dikili Tash in eastern Macedonia (area R 24/R 25) is considered the remains of a possible platform by René Treuil.<sup>60</sup> Substructures from stone were found in house A of Early Bronze Age Argissa-Magula in Thessaly as well, but Eva Hanschmann and Vladimir Milojevic think them to have supported wooden cots or chests.<sup>61</sup> Additionally, in the Middle Bronze Age house 12 of the same settle-

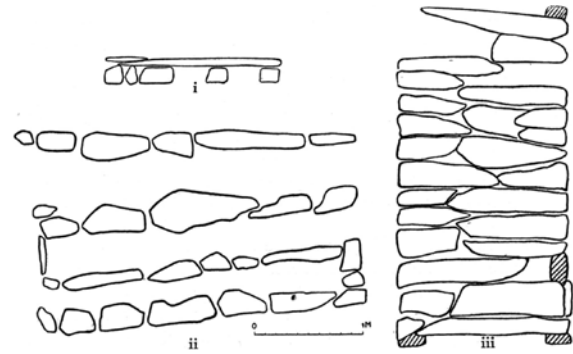


Fig. 69 Thermi, platform in area  $\Delta$ , town II (i section, ii plan of substructure, iii plan of platform)

ment a rectangular structure from clay, measuring about  $2.1 \times 1.1$  m, was discovered.<sup>62</sup> Early Helladic benches from stone were also excavated in Agios Dhimitrios in the Peloponnese.<sup>63</sup> Whereas the ones in house A appear too small to accommodate a sleeping person, the platform in house B has a length of more than 2 m and a width of about 1 m and therefore would have been the right size to allow a person to rest comfortably on it.

In the Early Helladic II settlement of Lithares in Boeotia, benches were found in eleven of the eighteen houses excavated.<sup>64</sup> They were always located along the longer sides of the room and usually consisted of one or two courses of stones. Traces of pavement from dirt survived on some of them. As sometimes pots and utensils were discovered on the benches, other functions apart from sleep seem likely, but it can not be ruled out that some were used for sleeping as well. A comparable bench exists in each of the settlements of Manika (Early Helladic II/III) and Kaloyrovrisi (Early Helladic II) on Euboea.<sup>65</sup> The interpretation of a round stone

<sup>57</sup> Lamb 1936, 49–50.

<sup>58</sup> Korfmann 1983, 209; Lamb 1936, 9.

<sup>59</sup> Lamb 1936, 9.

<sup>60</sup> Treuil 1992, 49.

<sup>61</sup> Alram-Stern 2004, 270; Hanschmann and Milojevic 1976, 15.

<sup>62</sup> Hanschmann 1981, 11.

<sup>63</sup> Zachos 2008, 50–52, 64. Measurements are inferred from the drawing.

<sup>64</sup> Alram-Stern 2004, 270; Tzavella-Evjen and Rohner 1990, 119, 121.



platform of 2.75 m in diameter from area 50 in Lithares (an area with no remains of walls, therefore a possible courtyard) poses more of a problem. Hara Tzavella-Evjen and Dorothy Rohner tentatively interpret it as a hearth by comparing it with similar structures from Early Helladic Samos and Olympia. However, the Lithares platform did not yield ashes or any other traces of fire, which makes this explanation implausible, as they admit themselves, and an interpretation as a sleeping platform might be possible. From the same settlement comes evidence of straw mats, but, unfortunately, the authors do not indicate the place where they were found. Remains of straw could also be discovered on a clay bench in room 185 of Early Helladic II Tiryns in the Peloponnese,<sup>66</sup> while the remains of a carbonised straw mat were found close to a hearth in Agios Mamas on the Chalkidiki (possibly Middle Bronze Age).<sup>67</sup>

A new approach to identify areas of rest was brought forward by Donald Sanders, who analysed domestic structures in the Early Minoan IIB settlement of Myrtos on Crete according to different behavioural markers.<sup>68</sup> House B forms a discrete architectural unit that, according to ethnographic analogies, housed a family of about four to five people. There is only one possible internal circulation path, which ends in area 79, at a point that is farthest from the entrance and is thus mostly hidden from view, shielded from smells and sounds from the outside (figure 70). Because this room is the most protected and shows the highest degree of privacy, it is likely to have been the building's sleeping place.<sup>69</sup> This view is supported by the observation that it contained mostly personal possessions but lacked tools. Additionally, a deposit of burnt wood that was found in the north-east corner of the same room is interpreted by Sanders as the remains of a sleeping platform. A hole in the wall 79/77 was probably meant to receive a beam that spanned the room and, on the other side, rested on the rock ledge that ran along the north-west and north walls, thus forming part of the frame that held the

outer edge of the platform. In this way, a platform of 1.4 × 1.8 m with a height of 1.0 m would have resulted, a size that is to be expected for a sleeping area. Area 79 was also equipped with a smooth floor and constitutes the only room with plastered walls, which were painted red. Sanders, therefore, suggests that its southern part was a space where ceremonial activities occurred and guests were entertained.

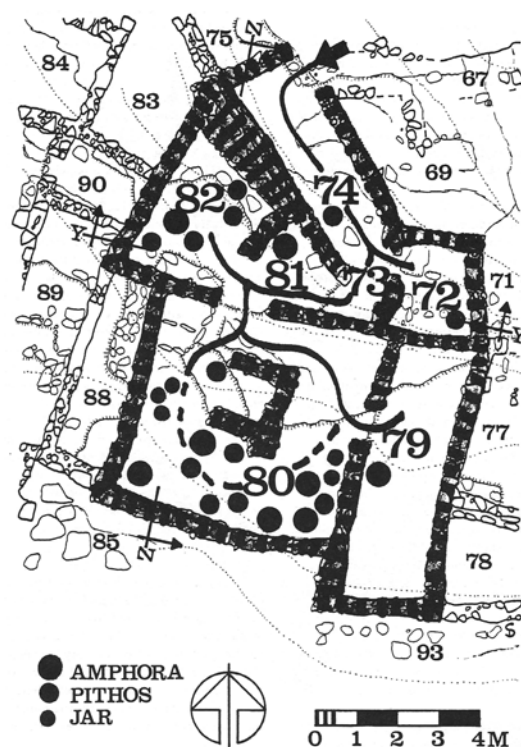


Fig. 70 Myrtos, house B, circulation path and large vessel distribution

Completely extraordinary was the situation in Akrotiri on Thera, where a wooden bed of 1.60 × 0.68 m could be reconstructed from the imprint it had left in the covering volcanic ash in the room of the lilies/room 2 of house Δ (figure 71).<sup>70</sup> Only houses of a very high living standard, furnished for example with elaborate wall paintings or bathrooms, have been excavated in Akrotiri so far, and it, therefore, seems fitting that the common sleeping platform or bench is lacking here.<sup>71</sup> It appears that, much like in the Near East and Egypt, wooden beds

<sup>65</sup> Alram-Stern 2004, 270, 704–705, 715; Sampsōn 1988, 121.

<sup>66</sup> Alram-Stern 2004, 270; Kilian 1983, 314.

<sup>67</sup> Alram-Stern 2004, 270.

<sup>68</sup> Sanders 1990, 43, 52–54, 57, 59–63, 68–70.

<sup>69</sup> Because of its location, the bench along the south wall of area 82 is not treated as a place of rest.

<sup>70</sup> Marinatos 1973, 23; Doulas 1991, 89.

<sup>71</sup> Although the house Xesté 3 contained three benches of a size suitable for sleeping, their location in the room with the staircase to the upper storey makes them an unlikely place of rest due to probable commotion (Doulas 1991, 53).



were considered a luxury product in the Aegean. Although the find falls slightly outside of the scope of this work as the volcanic eruption that destroyed Akrotiri occurred only at the beginning of the Late Bronze Age, it is mentioned here as an example illustrating that it might simply be due to preservation conditions that we do not possess earlier examples from the Mediterranean region.

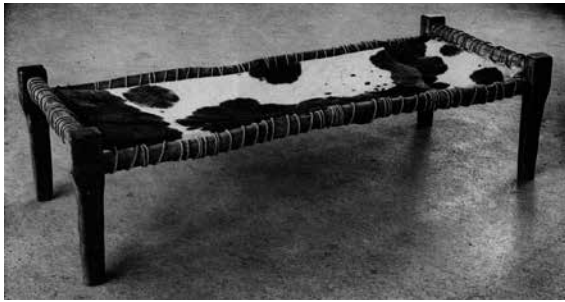


Fig. 71 Akrotiri, reconstruction of the bed from room 2 of house Δ

Clay models that show the interior of houses also allow inferences about sleeping places. So far, three examples have been uncovered, all of which feature a platform next to the oven. The most well preserved one was found in Platia Magula Zarkou in Thessaly and dates to the Late Neolithic I/Dimini I-Tsangli-Larisa phase (figure 72, top).<sup>72</sup> The model was found in a pit below the oldest floor level, making it a likely building sacrifice, which would account for its excellent *in situ* preservation. The model contained eight figurines (two females, two males, three children, one infant and one elongated object), of which the largest, a female, was found lying on her back on the platform. Eva Alram-Stern thinks the figurines are portrayals of the inhabitants of the house in which the model was found.

Another model with a large platform next to an oven was found on the surface of the Magula Kastro 1 in Thessaly and can therefore only be tentatively dated to the Middle or Late Neolithic (figure 72, middle).<sup>73</sup> With it comes proof that the model from Platia Magula Zarkou is not an isolated case. In the model from Sitagri in eastern Macedonia, dating to Late Neolithic II, the interpretation that the benches at either side of the oven are sleeping places is less reliable as they

appear quite small (figure 72, bottom).<sup>74</sup> Nevertheless, it remains unclear whether this is only a feature of the model – in other words, whether the model is meant to realistically depict the proportions of the interior of a real house.

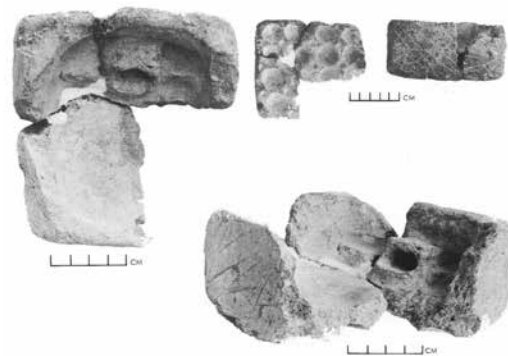
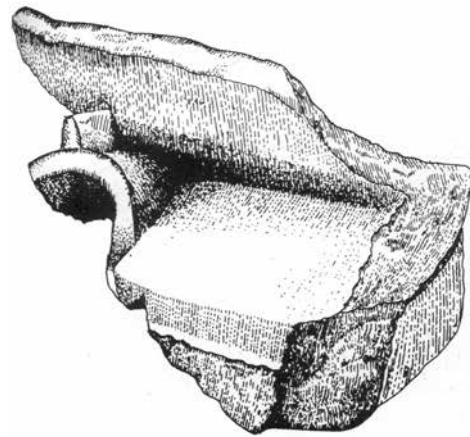


Fig. 72 Interior house models from Platia Magula Zarkou (top), Magula Kastro 1 (middle), Sitagri (bottom)

Considerably younger is the so-called Town Mosaic from Knossos on Crete, which dates to Middle Minoan IIIA and consists of several faience plaques that depict house fronts (figure 73).<sup>75</sup> As these are often equipped with a small annexe on the flat roof, the structure has

<sup>72</sup> Alram-Stern 1996, 526–527; Trenner 2010, 129.

<sup>73</sup> Trenner 2010, 131.

<sup>74</sup> Trenner 2010, 135.

<sup>75</sup> Löwe 2000, 99–100.



Fig. 73 Town Mosaic from Knossos



Fig. 74 House model from Archanes

been interpreted as the bedroom for the warmer months.<sup>76</sup> A flat roof that would have offered plenty of space for sleeping can be seen in a pottery house model from Archanes, also on Crete, which is contemporary to the Town Mosaic (figure 74). The custom of producing bed models is scantily attested by two specimens only, and because they both stem from unknown contexts,<sup>77</sup> they can only be stylistically dated to Late Helladic III (figure 75).<sup>78</sup>

Also of interest are findings of Cycladic figurines that could be placed into so-called “pal-ettes” or “cradles” (figure 76).<sup>79</sup> In two cases, these marble receptacles are equipped with

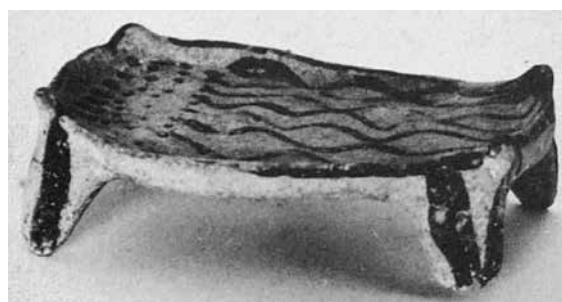


Fig. 75 Bed models, unknown provenance

perforations at each end, possibly to attach the figure to it. Unfortunately, both figurines stem from undocumented sources, so dating must again be based on stylistic features. Because forgeries are common where Cycladic figurines are concerned, we moreover cannot be sure that they, or the cradles, are genuine. Still, most Cycladic figurines have been discovered in graves, so it would not be surprising if they had been combined with biers, and forgeries rarely involve totally new objects. Generally speaking, the debate as to whether Cycladic figurines are designed for a standing or a lying position is ongoing<sup>80</sup> and is intertwined with the question of their meaning and whether they are supposed to represent gods, ancestors or ordinary humans, for example, their owners.<sup>81</sup> Yet, the evidence

<sup>76</sup> Marinatos 1959, 29.

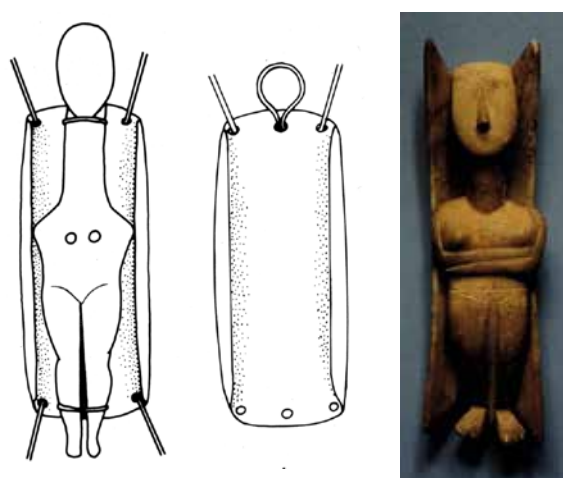
<sup>77</sup> The findspot of the bed model painted with wavy lines is indicated as “near Corinth” (Baker 1966, 252), whereas for the one with the couple on it no information about its origin exists at all.

<sup>78</sup> Buchholz and Karageorghis 1971, 103. Hollis Baker speaks of “about 1350 BC” (Baker 1966, 253). A Late Helladic date is supported by a comparable example from Palatial period Mycena (French 2002, 74–75).

<sup>79</sup> Alam-Stern 2004, 311–313; Getz-Preziosi 1987, 8, 25.

<sup>80</sup> Alam-Stern 2004, 318; Gill and Chippindale 1993, 655–656; Goodison 1989, 8.

of cradles, the observation that their backs are mostly undecorated, as well as the fact that the figurines are not able to stand unsupported while the great detail with which the feet are carved lets insertion into stands or holes appear unlikely, seems to point to a supine position. Additionally, the majority depict women, and if they were to be interpreted as sleepers, this would offer an interesting parallel to the Mesopotamian sources where dream specialists were exclusively female.<sup>82</sup> Lucy Goodison draws attention to the similarity to the “sleeping lady” of Malta, who lies in a kind of tray or cradle as well (see figure 82).<sup>83</sup>



**Fig. 76** Cycladic figurines with “palettes” or “cradles”; Naixos (Early Cycladic I/II, left), Paros (Early Cycladic II, right)

Cycladic figurines as well as their Minoan variant, the Koumasa type, have been excavated in the circular tombs of south-central Crete, where they concentrate on the edge of the Mesara plain and in the foothills that surround it.<sup>84</sup> The tombs date from Early Minoan I to Middle Minoan II and are mostly built on elevated ground and in close proximity to contemporary settlements. The majority of the tombs have their entrance to the east, and in the rare cases in which the original posture of the body in these communal burials could still be ascertained, they seem to have been laid down in an east-west orientation as well, in both contracted and extended position. Keith Branigan, therefore, suggests a connection to the rising sun and to the belief in the revival of the body after death and points out that the head was considered of special importance.<sup>85</sup> This is attested in some tombs where the skulls

(Horst 2011, 198–199). Therefore, she considers the assumption that the figurine was held by its owner during the ceremony an explanation of the fact that the figurines are unable to stand unsupported. However, that there might have been no need for it to stand at a certain moment seems an unsatisfactory explanation for a canon of forms that renders the object specifically unable to do so.

<sup>81</sup> Alam-Stern 2004, 318–322. “The range of proposed interpretations for the Cycladic ‘idols’ [...] starts at one end of the scale with the suggestion that the objects were toys; another suggestion is that they were simply an important possession of the deceased which it was thought necessary to bury with them. There is also the idea that the figures may have been intended to accompany or serve the dead person in some way, as nurse or protectress or perhaps as concubine, in the manner of the Egyptian ‘Ushabtis’. Alternatively, they have been interpreted as companions of the dead dedicated to some supernatural agency. Another idea is that they are portrayals of votaries to a deity. Their significance would be different again if they were understood as votive offerings to a deity, in which case they might be portrayals of the deceased or another human being, of a votary, or of the deity (whether anthropomorphic, or only occasionally anthropomorphic, in nature). Another possibility is that they are cult images used as objects of worship [...]” (Goodison 1989, 5). According to Katarina Horst, the figure symbolised its owner and was additionally painted to show remarkable occasions in that person’s life

<sup>82</sup> However, Goodison stresses that, while the higher frequency of women being depicted in religious contexts possibly indicates a higher social status than in later Greek society, it does not necessarily point to a greater measure of social control held by them (Goodison 1989, 65).

<sup>83</sup> Goodison 1989, 8. She also points out that the Cycladic “frying pans” can be seen as a distorted representation of the human body similar to the clay disc-shaped figurines from a Bronze Age stratum in the second temple of Tarxien (see figure 86), although she thinks them comparable only with respect to their shape as well as to the type and degree of stylisation, not concerning their significance or use (Goodison 1989, 18–19). Bernhard Steinmann, however, considers this a secondary interpretation because the design whereby the handle of the Cycladic “frying pans” resembles female legs and genitalia occurs only in a couple of examples (Steinmann 2011, 101–102).

<sup>84</sup> Branigan 1970, 9, 22, 73–76, 87–88, 104–106, 113.

<sup>85</sup> He also considers the observation that the alignment of the tomb’s doorway differs in rare cases to be proof that this orientation was not considered essential (Branigan 1970, 105). Yet, in most tombs he lists, the entrance was moved for practical reasons rather than for symbolic purposes. The interpretation that it is a house for the dead is more doubtful because, although the graves are equipped with doorways, evidence of circular domestic buildings in the region remains scarce (Branigan 1970, 105–106).



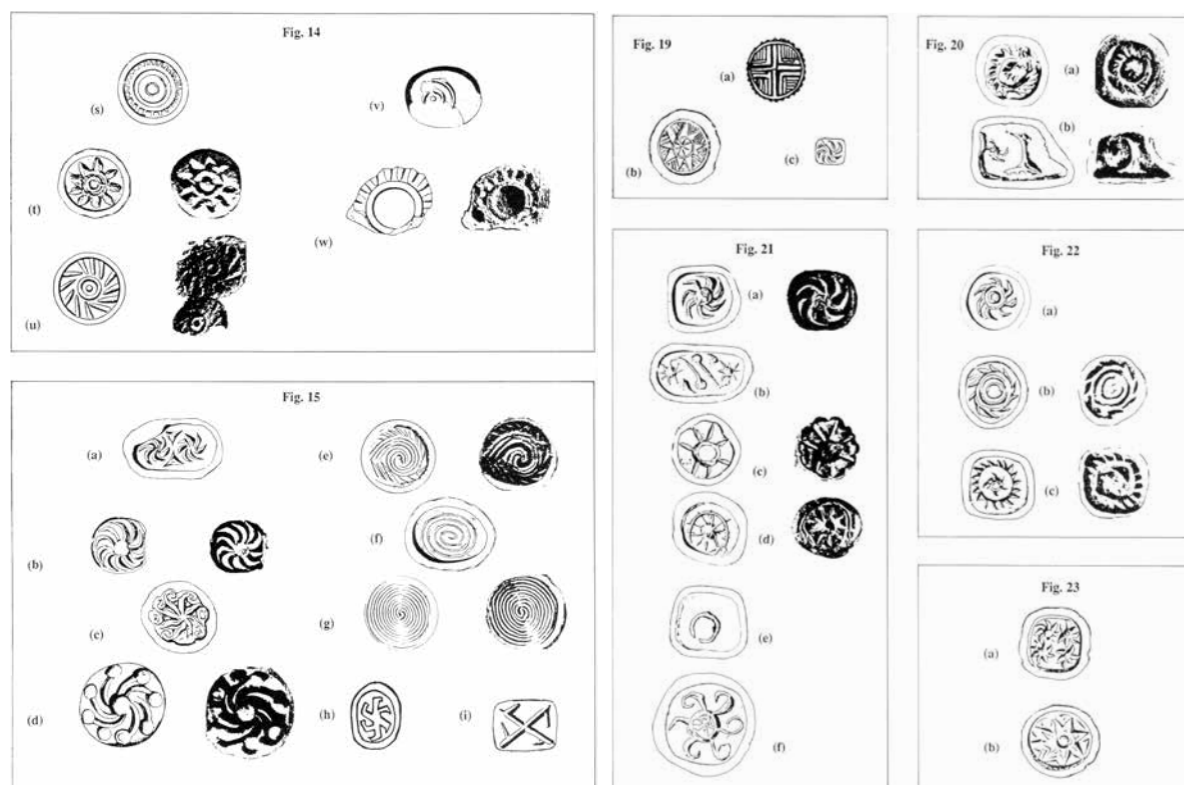


Fig. 77 Early and Middle Minoan seals with possible sun symbols

were deliberately preserved, while other skeletal remains were removed. At least ten tombs contained imports from the Cycladic islands as well as from Egypt and the Levant, pointing to close cultural contact among the people buried in them (see chapter 1.3). Malcolm Wiener summarises Egyptian elements in Minoan attitudes towards death:

“In MM IA, burial practices in elite Minoan tholos tombs in the Mesara Plain included the adoption or adaption of some Egyptian funerary practices and equipment, such as the use of clay coffins, stone cosmetic palettes, stone vases of types used in Egypt for funerary purposes, and clay models of bread loaves. In this period the Phourni cemetery at Archanes, on the slopes of Mount Jouktas, not far from Knossos, also shows strong Egyptian connections, including a stone vase, two scarabs, and a clay sistrum. [...] Phourni gives every indication of pronounced social stratification, with four monumental tombs containing many imported elite objects alongside very simple burials with few gravegoods. This distribution suggests that high social status and access to foreign prestige goods and knowledge were intimately connected.”<sup>86</sup>

In the context of her work about solar symbolism in the Aegean Bronze Age, Goodison has pointed out that a sun-deity was of central importance in both the Near East and Egypt and that contact of both regions with Crete is attested for the time in question.<sup>87</sup> Furthermore, looking at Crete, Egypt and the Near East, there is a certain overlap in motifs concerned with the heavenly bodies. Seals from the Early Minoan and Middle Minoan period frequently show patterns that are comparable to Near Eastern and Egyptian sun symbols (figure 77). What is more, in connection to burial customs a reference to the sun can be observed, for example in the east-facing doors of the Messara tholoi or of the Chrysolakkos ossuary at Mallia.<sup>88</sup> Radiating spikes or projecting slabs occur in at least ten of the Messara tombs, for example in the one at Platanos, prompting her to suggest that they were “rayed” and strengthening the connection between death and the sun (figure 78).<sup>89</sup> Based on these observations, Goodison’s

<sup>87</sup> Goodison 1989, 12–15.

<sup>88</sup> Goodison 1989, I, 23–24, 30–31.

<sup>89</sup> Furthermore, outside the tombs at Platanos, numerous parts of clay phalli were discovered, based on which Branigan suggests some kind of fertility ritual (Branigan 1970, 134). Phallus-shaped objects were

<sup>86</sup> Wiener 2013, 37.



hypothesis is that Early and Middle Minoan burial customs articulated a belief according to which the journey of the deceased was linked to the movements of the sun and that some sort of rebirth was expected by association with the re-emergence of the rising sun at dawn.<sup>90</sup>

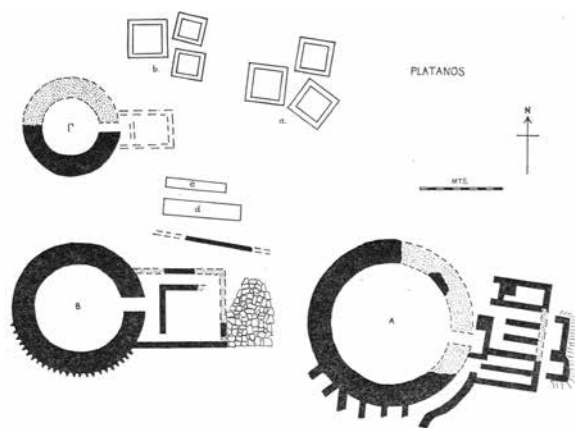


Fig. 78 Platanos, cemetery area (left), projecting slabs on the outside face of tholos B (right)

Another similarity to Egyptian burial customs lies in the usage of model boats, which can appear in a variety of contexts, including graves, as the clay model from an Early Minoan I-II ossuary in Palaikastro attests (figure 79).<sup>91</sup> The model's high bow resembles the form of ships depicted on the underside of Early Cycladic "frying-pans"<sup>92</sup>, which almost exclusively stem from burial contexts (figure 81).<sup>93</sup> Here, depictions of boats are often accompanied by fish as well as by spiral and circle motives that probably symbolise the sea and the sun. Furthermore, the fish and the sun can occur in combination without the boat:

also found at other tholos sites, for example at Koumasa, and from a Cycladic grave on Antiparos stem a couple of phallus-shaped beads (Goodison 1989, 45). In accordance with Branigan, Goodison proposes a link between fertility and death, but with respect to the connection to sleep observed in burial customs, one wonders whether their significance might rather lie in a reference to the erections so common during the REM sleep stage (see chapter 2.3).

<sup>90</sup> Goodison 1989, 33. She is also of the opinion that the sun was associated with the female principle in the Aegean (Goodison 1989, 16–20). Nevertheless, as this statement is of no concern for the themes treated in this work, I will not consider it any further.

<sup>91</sup> Evans 1928, 240; Goodison 1989, 35–38, 235.

<sup>92</sup> Steinmann suggests the more neutral term *Griffschale*, i.e. "grip plate" (Steinmann 2011, 100).

<sup>93</sup> Goodison 1989, 18–19; Steinmann 2011, 100–102; Wedde 2011, 74–75, 80.

"The island inhabitants of this early period<sup>94</sup> did not know the horse, and would more often see the sun set not over land but into the sea. I would like to put forward the hypothesis that they imagined it travelling in the form of a fish or a boat. [...] Such an idea, of the sun making a

sea journey, would account for all the puzzling representations and associations [...] and bring them into a coherent schema [...]."<sup>95</sup> "If [...] the journey of the sun below the horizon (prior to its reappearance in the east) was seen as analogous to the process followed by the dead soul (prior to some form of rebirth), then it is possible to postulate that the dead person was sometimes believed to need a boat for the after-life journey. The presence of boats in graves might be associated with this belief. The reference to the boat as well as to the sun (or instead of it) might have arisen from the same associations: both sun and boat stood as a shorthand for the journey ahead of the dead soul."<sup>96</sup>

In this context, it is lastly important to note the similarity of the Egyptian *akhet*, which shows the mountains at the horizon between which the sun rises and sets (see chapter 5.2), and the most common Minoan symbol, the so-called horns of consecration, which therefore might be interpreted as horizon mountains as well (figure 80).<sup>97</sup> All in all, the association between death

<sup>94</sup> I.e. before the Late Bronze Age.

<sup>95</sup> Goodison 1989, 37.

<sup>96</sup> Goodison 1989, 38. Steinmann is more cautious concerning the interpretation of the motives on Cycladic "frying-pans": „Das Schiff deutet eine Reise auf dem Meer an, sei es eine reale oder eine metaphorische, auf das Jenseits anspielende Überfahrt.“ (Steinmann 2011, 102).



Fig. 79 Boat model from Palaikastro (Early Minoan I–II)



Fig. 80 “Horns of consecration” from Gortys (Middle Minoan)

and water/the sea, travel by boat and the sun cycle are widespread topics in the late third and early second millennium BC, and in accordance with similar ideas in Mesopotamia and Egypt, the missing link between these thoughts might lie in a conceptualisation of death as sleep. Nevertheless, these ideas were integrated into local belief systems probably quite different from the ones of the contemporary early states.<sup>97</sup>

<sup>97</sup> Marinatos 2000, 159. Yet, we had seen in the case of Tutankhamun’s bed that both symbols can overlap (see chapter 5.2).

<sup>98</sup> For example, while the sun god was anthropomorphised in both Mesopotamia and Egypt, Goodison thinks the concept of personified deities to be anachronistic for Crete during the EM and MM period (Goodison 1989, 48): “[...] an ‘animistic’ religion [...] can see spirits or supernatural forces immanent in plants, animals, stones, streams and other elements of the natural world, and may moreover develop these into a schema of ideas about cycles of change in human life and nature before anthropomorphic divine characters enter the scene. Such a pluralistic, rather than monotheistic, basis for Aegean religion is acknowledged in talk of a Cretan ‘polysymbolism’ [...]. [...] The possibility that ‘animistic’ features may have been present in prehistoric Aegean religion has in some quarters been accepted.” (Goodison 1989, 10). “The number, and range, of scenes depicting such activities apparently focussed on plant and animal life might seem to confirm an interpretation of early Aegean religion as exhibiting largely an ‘animistic’ character in which elements of the natural world were revered and celebrated in their own right and had not yet become attributes of personified deities as in the later period.” (Goodison 1989, 56). Yet, by the time of the Minoan palaces at the latest, we come upon portrayals of anthropomorphised gods and goddesses, discernible from pictorial conventions, some of which were adopted from the Near East (Marinatos 2000, 151–154). Then again, the idea of powerful, anthropomorphised gods is intimately tied to the emergence of kingship in the Near East and Egypt and is therefore of limited value in explaining Minoan beliefs prior to the palatial period. Also, depictions of gods and kings are not clearly distinguishable (Marinatos 2000, 159).

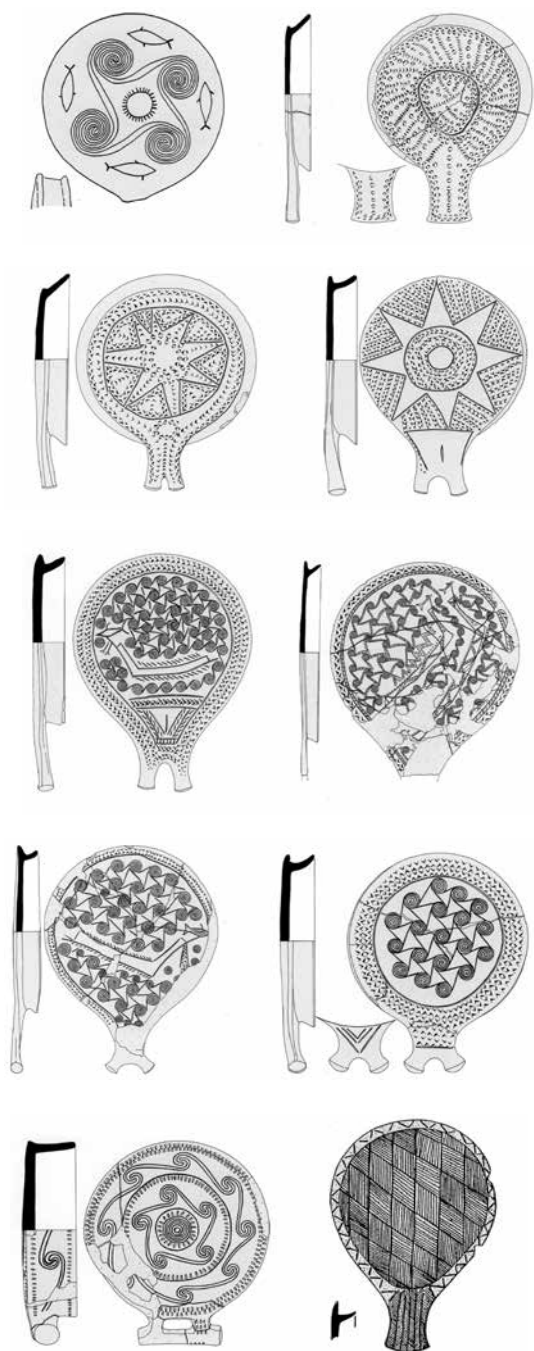
#### 6.4 MALTA

Whereas we do not possess any evidence for sleeping places from Malta, probably the most famous prehistoric depiction of a sleeping person, the so-called “sleeping lady” was found on the island.<sup>99</sup> The figurine was modelled from clay in great detail: she is naked from the waist upwards while her lower part is covered by a long skirt (figure 82, top). Her head rests on something that resembles a block headrest, and she lies on a slightly concave couch or bed with four legs, which is rendered in a similar way in two more figurines. The figurine has a height of 7 cm, a length of 12 cm and a width of 6.8 cm. In the second case, a human figure lies prone, wearing a similar skirt as the sleeping lady, but because of the position and because the head of the figurine is missing, its sex cannot be determined (figure 82, middle). It measures 4 × 9 × 5.6 cm. The third example is unusual as it was made from stone, and in this case, something that resembles a fish lies on the bed (figure 82, bottom).<sup>100</sup>

All three figurines were excavated in the Hal Saflieni hypogeum, a large underground structure that was in use between the Żebbuġ phase and the end of the Temple period, judging from the ceramic material found at the site (figure 83). The hypogeum served as a place of burial for about 7000 people and consists of three superimposed levels that were cut into the limestone consecutively (surface level = Żebbuġ phase, upper level = Ġgantija phase, middle and lower level = Tarxien phase). Because the hypogeum was excavated at the beginning of the twentieth

<sup>99</sup> Pace 2004, 21–23, 29–30, 32, 36–37, 39, 48; Sultana 2010, 16, 33, 35; Trump 1972, 60–63; von Freeden 1993, 18–19, 195–196, 283–285.

<sup>100</sup> Its size is similar to the other two, but no exact measurements could be found in the existing literature, and neither does an official photograph exist.



**Fig. 81** Early Cycladic “frying-pans”; 1 Louros Athalassou, Naxos, grave 26; 2 Chalandriani, Syros, grave 236; 3 Chalandriani, Syros, grave 377; 4 Chalandriani, Syros, grave 398; 5 Chalandriani, Syros, grave 174; 6 Chalandriani, Syros, grave 364; 7 Chalandriani, Syros, grave 351; 8 Chalandriani, Syros, grave 292; 9 Kampos, Paros, grave 3; 10 Aplomata, Naxos, grave 27

eth century, we, unfortunately, do not possess any detailed information about the sleeping lady’s circumstances of discovery, for example, whether she accompanied a burial. It is only known that she was excavated in the middle level in a pit enclosure of almost 2 m depth (21)



**Fig. 82** Figurines from the Hal Saflieni hypogeum

adjacent to the roughly circular chamber (20),<sup>101</sup> the ceiling of which was painted with elaborate red ochre designs (figure 84, left). Three patterns could be identified here: one consisting of spirals, one of a system of polygons which were also sometimes provided with spirals and a plantlike pattern that is derivative of the Maltese spiral. The hypogeum was also furnished with relief carvings that imitate architectural elements of the contemporary Tarxien temples, which lie in close proximity (figure 84, right).<sup>102</sup> The middle level contains the two most elaborate areas, i.e. the inner chamber (25), sometimes termed the “Holy of Holies”, and the Main Chamber (18), which also contains traces

<sup>101</sup> David Trump, however, states that both sleeping figurines were found in the Main Chamber (Trump 1972, 60).

<sup>102</sup> Pace 2010, 8.



of red painting and of a chequered decoration in black and white. Furthermore, a bull is rendered in painting<sup>103</sup> or in relief<sup>104</sup> close to the stairs to the lower level.

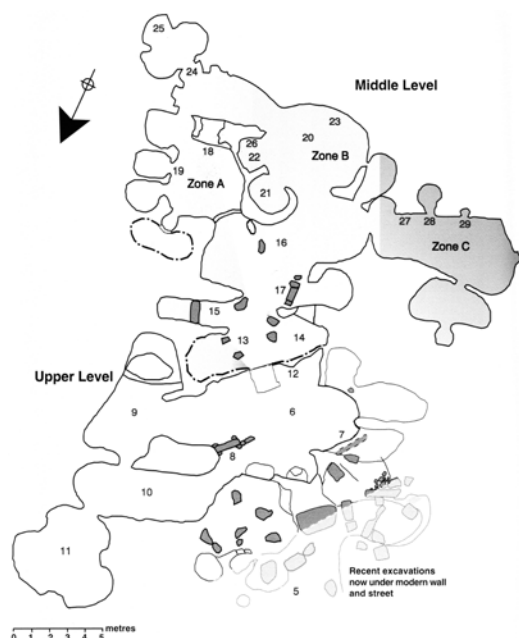


Fig. 83 Plan of the Hal Saflieni hypogeum

may have warranted a rite of passage that could somehow be mediated through familiar environments as well as familiar cultural icons. The megalithic temples would have provided familiar reference points in a landscape that was also very familiar. For the inhabitants of the Maltese islands, cemeteries such as the Hypogeum may have served to combine the complexities of an underworld and an afterlife with the realities of everyday life, through a visual metaphor.”<sup>106</sup>

In contrast, Johannes Maringer assumes a divination procedure in the form of an incubation, a view common in the older literature:

„Mit der Orakelbefragung im Hypogäum hat man einige merkwürdige dortselbst gefundene Tonfigürchen in Verbindung gebracht, die auf einer Art Ruhebett liegende Frauen wiedergeben. Man hat gemeint, daß die Orakelsuchenden nach dem Genuß irgendeines Mittels sich zum Schläfe niederlegten, um im Traume oder Trancezustand die Antwort auf ihre Fragen zu vernehmen.“<sup>107</sup>

Whereas these interpretations seem quite different at first sight, with the background of concepts observed in the Near East and Egypt, the seem-



Fig. 84 Hal Saflieni hypogeum, the ceiling of the Decorated Room (left) and the “Holy of Holies” (right)

Concerning the interpretation of the sleeping lady, different opinions have been brought forward. Anthony Pace points out the similarity between her position and contracted burials. He suggests that she might constitute “an iconographic representation of death or the afterlife”<sup>105</sup> and that the hypogeum can be seen as a visual metaphor for the underworld:

“At the Hypogeum, the use of architectural idioms may have provided a familiar language that communities could understand. The dead

ingly disparate elements of sleep and death that concur in the sleeping lady fall into place. Much depends on the Maltese chronology, which is far from definite. While most popular books still provide the scheme as outlined by Colin Renfrew in 1972,<sup>108</sup> in the most up to date chronology by Joseph Maran most phases are estimated to be several centuries younger and to contain a greater margin of error, with the effect that the Tarxien phase and Early Dynastic Egypt are seen as mostly contemporary (see table 10). This is

<sup>103</sup> Trump 1972, 63.

<sup>104</sup> Von Freeden 1993, 284.

<sup>105</sup> Pace 2004, 22.

<sup>106</sup> Pace 2004, 36.

<sup>107</sup> Maringer 1956, 258. See also Trump 1972, 64.

<sup>108</sup> Renfrew 1972, 144.



supported by the observations of Joachim von Freeden, who reasoned that the Maltese temples share elements with Early Dynastic Egypt with respect to building structure.<sup>109</sup> Contacts with the Aegean also become apparent as early as in the Ġgantija phase, with finds of a pottery type known from Troy I-Thermi,<sup>110</sup> and later with other objects of possible Aegean appearance, for example, the bossed bone plaques known from the Tarxien temples (figure 85) or the figurines excavated in the Tarxien cemetery (figure 86).<sup>111</sup>

Notwithstanding the chronological debate, on Malta, we observe the same interrelation of ideas about sleep and a subterranean realm of the dead that we saw in the Near East and

Egypt. Furthermore, if we accept the interpretation of a fish in the third sculpture, the now familiar element of water/the sea appears again. Nevertheless, no indication of a role of the sun in these concepts is attested from Malta, thus weakening a possible association with the Near East or Egypt. Currently, no final statement seems possible as to whether the Maltese association between sleep and death was arrived at independently, whether it derives from an outside influence or, on the contrary, whether Malta can be considered the source of the association, or whether both Malta and the Near East and Egypt inherited these beliefs from a shared predecessor of unknown provenance.



Fig. 85 Bossed bone plaques from the Tarxien temples

Fig. 86 Figurines from the Tarxien cemetery

<sup>109</sup> Von Freeden 1993, 46–49. „In einer [...] Richtung lassen sich [...] Verwandtschaften feststellen, die vor allem die Baustruktur und die formale Gliederung des Baukörpers betreffen. Trotz der kantigen und winkligen Formen hat die Steinbaukunst Ägyptens eine verblüffende Ähnlichkeit mit dem maltesischen Tempelbau aufzuweisen: die Nischengliederung. Das wohl eindrucksvollste Beispiel findet sich zur Zeit der 3. Dynastie [...] in Saqqara. Der Grabbezirk des Djoser wird von einer nischengegliederten Umfassungsmauer eingegleitet, deren dekorative Wirkung von tiefen Vor- und Rücksprüngen im Mauerwerk ausgeht [...]. Ähnliche Nischengliederung tritt bereits bei Mastabas der 1. Dynastie [...] auf.“ (von Freeden 1993, 46). „Strukturelle und gestalterisch-formale Ähnlichkeiten, die in ihrer Gesamtheit weit über reine Zufälligkeiten hinausgehen, machen deutlich, daß die maltesische Baukunst im 3. Jahrtausend v. Chr. den Bauschöpfungen Ägyptens näherstand als allen anderen Architekturformen im fernen Europa wie im nahe gelegenen Mittelmeerraum.“ (von Freeden 1993, 49).

<sup>110</sup> Another clue for a later date of the Maltese phases.

<sup>111</sup> Höckmann 1987, 88–89; Pace 2010, 47.

## 6.5 THE BRITISH ISLES

As opposed to the southern regions where clay was a common building material, the preservation conditions for sleeping places in regions that mostly employ wood for these purposes are far less favourable. A notable exception are the Orkney Islands, which lie too far north for growing trees, meaning that houses there as well as their interior fittings are constructed from sandstone slabs. In the well known Late Neolithic settlement of Skara Brae on Mainland Orkney, the dwellings are equipped with stone furniture, among them hearths, keeping places and beds.<sup>112</sup> Each house contains two box beds on opposite sides of the room, separated by the central hearth (figure 87). The beds are built from three slabs set at right an-

<sup>112</sup> Childe 1931, 14–16.

gles with a height of 0.5–0.9 m above the floor; the wall of the house constitutes the fourth side. Of the resulting enclosures, the right hand one is always the larger, its size ranging from 2.0 × 1.1 m in House 1 to 1.5 × 0.8 m in House 2. As opposed to this, the maximum length of the left-hand enclosure is 1.7 m, while the one in House 5 measured only 1.1 m. Slightly in front of the bed, there are usually two thin stone pillars, of which the best-preserved ones are still 1.3–1.5 m in height. These “bed posts” possibly supported some kind of canopy that also protected the keeping places above the beds. Their floor is assumed to have been covered with plant material, and in some beds, it was partially paved with slates. According to Vere Gordon Childe, the arrangement, size and contents of the beds might also allow inferences about who it was that they were used by. Because beads were found in the beds on the left-hand side in Houses 2 and 7 and because the beds on this side of the room are generally smaller, they are assumed to belong to women. In this context, it is also important to note that some distinction in building structure between a male and a female sphere apparently constitutes a human universal.<sup>113</sup> Lastly, the even smaller enclosures (1.2–1.6 m long) that were built against the front walls in some houses are seen as allocated to children or inferiors, an interpretation unlikely given our observations about the commonness of bed-sharing (see chapter 4.2 and 6.2).



*Fig. 87 Skara Brae, house 7*

Mike Parker Pearson and Colin Richards have emphasised the consistency of design pervasive in the Skara Brae houses, where the internal or-

ganisation of furniture results in a cruciform arrangement consisting of a central hearth, a rear dresser and two box beds on either side of the hearth.<sup>114</sup> The entrance is situated opposite the dresser but is often slightly offset, thus suggesting entry into the right side of the house, an observation supported by the existence of a line of entrance slabs leading to the right in House 7. Therefore, the left-hand side remains the less illuminated and more private side of the house, supporting the interpretation that it is the domain of women. The majority of the Orcadian houses lie on an axis that runs north-west south-east, apparently referring to the points of midsummer and midwinter sunset and sunrise, thus replicating cosmological structures:

“The architectural elements of the Neolithic house may be essentially static but they are also the framework for a symbolic organization which reveals itself through human agency, in this example through the movement of the subject within the house interior. The spatial organization may be an ideal structure of order based on cosmological themes; human activity within the domestic space is directed by the architectural arrangements, but the architecture is itself a product of cosmology. Human action and environment form parts of a symbolic structure in which each affects and reflects the other. In certain social circumstances different aspects of this symbolic structure will be drawn on, thereby providing ontological status to everyday actions. The discrepancy in bed sizes may relate to distinctions of function, age, or gender within a left/right division of space which is realized only in specific social situations.”<sup>115</sup>

In a later work, Richards doubts the general interpretation of the boxes as beds and points out that their function, particularly their gender-specific use, might not have been fixed.<sup>116</sup> Based on his excavations at Neolithic Barnhouse, Mainland Orkney, where the smaller dwellings are structured in the same cruciform pattern as at Skara Brae but where recesses, sometimes divided off by stone uprights, take the place of the box beds, he suggests that a single recess might have slept a whole family (figure 88). The interpretation of the left side of the house as the female sphere is also called

<sup>114</sup> Parker Pearson and Richards 1994, 36–41.

<sup>115</sup> Parker Pearson and Richards 1994, 39.

<sup>116</sup> Richards 2005, 68, 123–124.

<sup>113</sup> Hahn 2010, 113.

into question by the observation that House 7 in Skara Brae contained a double grave of two aged women, which was located beneath the west wall, behind the right-hand bed.<sup>117</sup> The two bodies had been placed inside a rude cist in a contracted position, and in the second case, observations were possible concerning the exact arrangement. The skeleton lay on its left side with the head in the north, i.e. facing east, the head placed on a stone slab “like a pillow”<sup>118</sup>. Still, as the grave antedates the building, its conceptual connection to the bed remains unclear, although the cover-stone lay directly below the house floor so the grave must have been known to its inhabitants.

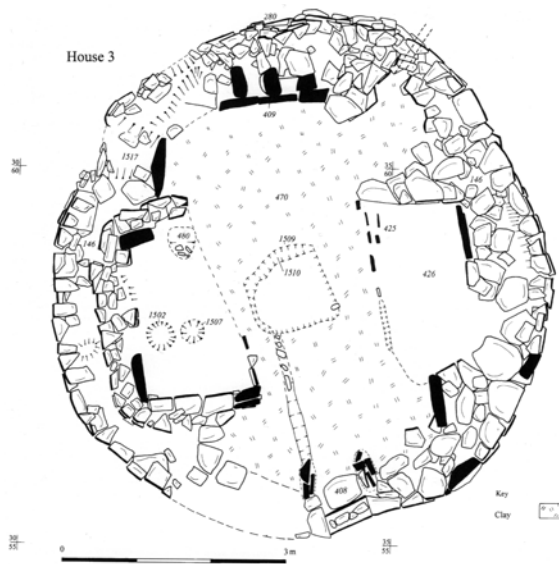


Fig. 88 Barnhouse, house 3

Parker Pearson reports a similar arrangement in four of the Grooved Ware houses by the Durrington Walls avenue, which are more or less contemporary with the latest phases of Skara Brae.<sup>119</sup> In House 851, the entrance lay at the west end of the south wall, and an oval hearth was set in the centre of the house. Knee-prints south of the fireplace suggested that it was tended from this side. The hearth was surrounded by beam slots for wooden box beds in the east and west as well as for a dresser in the north and for smaller storage units in the south-east and south-west corners. House 1360 had a similar

arrangement, but its doorway was at the south end of the north-west side, with box beds along the south-west and north-east sides. Here, the central hearth was tended from the north-east, i.e. from the left and more secluded side.

Late Neolithic<sup>120</sup> stone houses were also excavated on Mainland Shetland, with the ones at Stanydale and Gruting school, which lie in close proximity, each consisting of a large oval room with an adjacent smaller chamber.<sup>121</sup> Benches that might have served as sleeping places were discovered in both buildings, with the two examples at Gruting school much better preserved (figure 89). One roughly built example lay in a semi-circular recess of 1.6 × 0.6 m at the east side of the main chamber, whereas the other one in a segment of the inner chamber measured 2.3 × 0.7 m. As opposed to this, the size of the one in the house at Stanydale could not be ascertained because only a couple of scattered paving stones had survived. As these were bordered by the trace of a kerb, they are reconstructed as part of a low bench that was built against the wall in the main chamber. Lastly, in a one-chamber building on the Ness of Gruting, about a mile away, flat stones were found which might have been part of a bench.

## 6.6 CENTRAL EUROPE

The Neolithic lakeside settlements of the Alpine region offer favourable conditions for the investigation of sleeping places because organic materials are frequently preserved here due to the sites' waterlogging. In the settlement Horgen-Dampfschiffsteg at Lake Zurich, remains of a mat from what resembled bast were excavated.<sup>122</sup> Below the meshwork lay thick padding from moss, making it a likely seat or bedstead. The settlement belongs to the Pfyn culture and dates to 3725–3600 denBC. Remains of similar mats were also found at Thayngen-Weier<sup>123</sup> in Switzerland and at Steckborn-Schanz<sup>124</sup> at Lake Constance, both settlements belonging to the Pfyn culture. Information about the contexts in which the mats were found is, however, miss-

<sup>117</sup> Childe 1931, 140–141.

<sup>118</sup> Childe 1931, 141.

<sup>119</sup> Parker Pearson 2012, 96–100.

<sup>120</sup> Piggott 1981, 52.

<sup>121</sup> Calder 1955/1956, 340–350.

<sup>122</sup> Achour-Uster 2002, 20, 76.

<sup>123</sup> Winiger 1971, 54.

<sup>124</sup> Winiger and Hasenfratz 1985, 116–118.



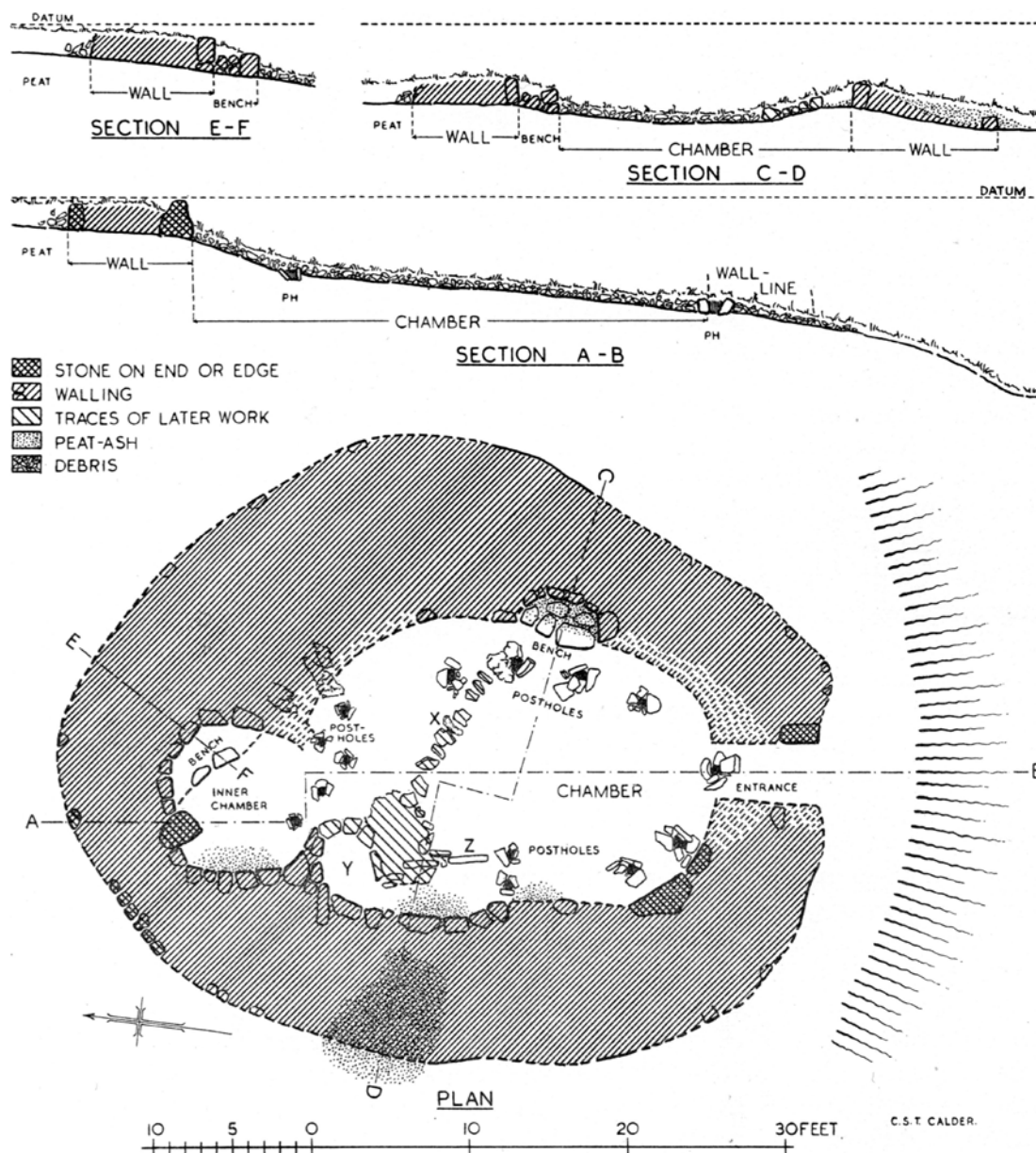


Fig. 89 Gruting school, house 1

ing. Likely sleeping places were furthermore discovered in the neighbouring location Horgen-Scheller (Horgen culture, 3110–2975 denBC), where clusters of thin twigs and chaff were often concentrated close to hearths, thus forming a kind of cushioning.<sup>125</sup>

The custom of burying the deceased on beds is attested in the burial mound of Helmsdorf, Mansfelder Land district, Germany, which be-

longs to the Unetice culture and dates to 1840 denBC (figure 90, left).<sup>126</sup> Inside the wooden, tentlike burial chamber, a bed (“Totenlade”) from oaken planks, which measured 2.05 × 0.98 m, had been placed in a south-north orientation on a platform from white sandstone slabs (figure 90, right).<sup>127</sup> Even though the remains of the deceased male were badly preserved, his spine allowed inferences about the body’s position, indicating that it was contracted with the face towards the east, i.e. the

<sup>125</sup> Eberli et al. 2002, 20, 208. Beds from ferns, bark, straw, pine brushwood and leaves, which were covered by woven mats, are furthermore assumed for the Pfyn culture settlement Egolzwil 5, Switzerland, although elsewhere it is stated that no woven fabrics were preserved there (Wyss 1976, 40, 42, 105).

<sup>126</sup> Größler 1907, 19–22; Zich 2004b, 156.

<sup>127</sup> The preliminary report states a length of 1.61 m for the funerary bed, but this is probably a mistake (Höfer 1906, 98).



rising sun. This is in accordance with the burial customs of lower-ranking people of the Unetice culture, who were interred in flat graves where they usually lay in a contracted position on their right side, facing east.<sup>128</sup>

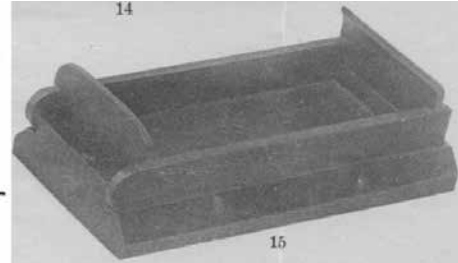
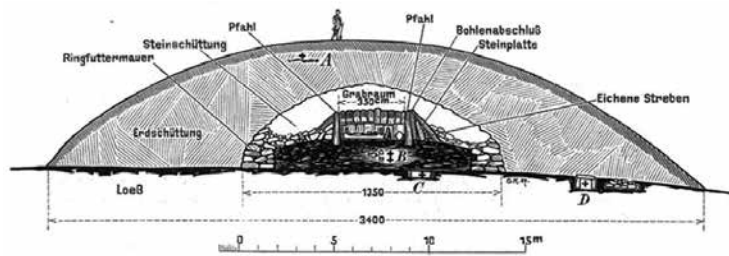


Fig. 90 Helmsdorf; burial mound (left), replica of the funerary bed (right)

Similar customs could be observed in the cemeteries of Rudelsdorf III and Haid at Hörsching, Austria (both Bronze Age A1).<sup>129</sup> In the larger cemetery of Haid, six wooden biers ("Totenbrett"), three wooden coffins and two tree-coffins were found. The cemetery is characterised by a gender-specific mortuary practice, in which the women were placed on their right side with the head in the south and the men on their left side with the head in the north. In this way, both women and men face east towards the rising sun. The cemetery Rudelsdorf III yielded two coffins from wooden planks as well as one funerary bier. In the case of the bier, however, the typical arrangement was abandoned in favour of a supine position, but the north-south orientation was still heeded.

In the Singen cemetery, southern Germany, which dates to Bronze Age A1, remains of wooden containers were discovered as well.<sup>130</sup> Almost all graves had been equipped with stone

Rüdiger Krause thinks that burial in a coffin was the norm at Singen, although these wooden installations have not been preserved. To the extent that the positions could still be ascertained, the majority of cases in the Singen cemetery are characterised by the same gender-specific mortuary practice as is observed in Haid; thus, the dead lie with their faces towards the east.<sup>132</sup> Krause specifically points out the close association between contracted burials and sleep, although he considers a foetal position equally probable:

„In der Möglichkeit, die Bestattung in Hockerlage am ehesten mit der Embryonal- oder Schlafstellung in Verbindung zu bringen, sehe ich die aus der Regelmäßigkeit der Befunde und der daran angeschlossenen Überlegungen sich am ehesten ergebende Erklärung. Ob sie nun im Endstadium, im Tod und der Totenlage des Individuums, die zum Ursprung zurückgekehrte Haltung des Embryos widerspiegelt, oder ob damit die vorübergehende Schlafstellung bis zum Erwachen im Jenseits bzw. in der Embryonalstellung bis zur Wiedergeburt gemeint ist, bleibt uns verschlossen.“<sup>133</sup>

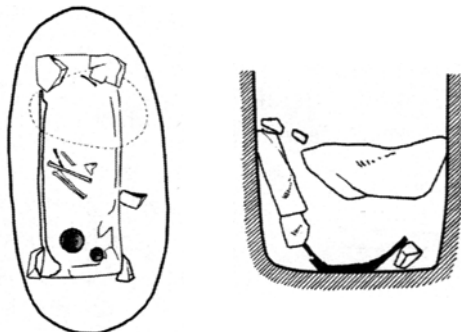


Fig. 91 Rebešovice; grave 258 (left), grave 150 (right)

In the cemetery at Gemeinlebarn, Lower Austria, which dates to Bronze Age A1–A2, remains of wooden coffins could be observed in the majority of burials.<sup>134</sup> Still, while the conditions are better than at Singen, allowing inferences about the type of coffin, which were mostly box-shaped, this case is also characterised by the fact that no larger pieces of wood survived. In

<sup>128</sup> Zich 2004a, 126.

<sup>129</sup> Kloiber 1964, 153–156; Kloiber 1965, 159, 161.

<sup>130</sup> Krause 1988, 32, 36–37, 39–40, 43.

<sup>131</sup> Krause 1988, 32.

<sup>132</sup> For exceptional burials with deviating position or orientation, see Krause 1988, 44–46.

<sup>133</sup> Krause 1988, 42.

<sup>134</sup> Neugebauer 1991, 51, 66, 72–73, 78–79, 83–84.

Gemeinlebarn, the dead were interred in a contracted position in gender-specific orientation with the face towards the east as well, and Johannes-Wolfgang Neugebauer agrees with the interpretation that this is a sleeping position:<sup>135</sup>

„Die Nachahmung der menschlichen Schlafstellung in Verbindung mit einer Vorstellung des Weiterlebens, ohne die das Bestattungsbrauchtum und auch das Beigabenwesen weitgehend unerklärlich wäre, bliebe demnach als wahrscheinlichste Theorie auf der Basis der neueren Befunde übrig.“<sup>136</sup>

Contracted burials were also the norm in the eastern Unetice culture (parallel to Bronze Age A2) in Moravia and Lower Austria, where the dead mostly lie with the head in the south-west on their right side, thus again facing roughly east.<sup>137</sup> Wooden coffins are reported from the cemeteries of Velké Pavlovice, Mušov, Rebešovice (figure 91), Slavkov u Brna, Unterhautzenthal, Těšetice-Kyjovice, Čejč, Moravský Nový Ves and Holešov as well as from Rumanová in Slovakia. As in the examples described above, the wood had mostly decayed, only allowing inferences about features such as handles or lids in singular cases. One of the rare exceptions is grave 294 from Rebešovice, where the existence of a lid has been reported.<sup>138</sup> A grave in Bruszczewo, western Poland (1880–1780 BC<sup>139</sup>), was framed by wooden planks on its long sides, and the deceased was placed on or wrapped into a mat from wickerwork (figure 92).<sup>140</sup> In this settlement burial, however, customs concerning orientation were not heeded: he was lying in a slightly contracted position on his right side with the head in the north-west and the face to the south.



Fig. 92 Bruszczewo, grave 2020

Occasional finds of wooden containers are already described from the Late Neolithic Bell-Beaker culture, which is characterised by the same gender-specific mortuary practice that is apparent in the succeeding Early Bronze Age cemeteries of the Alpine region.<sup>141</sup> In Moravia and Lower Austria, wooden coffins are reported from the cemeteries at Dolní Věstonice III, Hrušky I, Ledce II, Oberbierbaum as well as from the already mentioned cemetery at Gemeinlebarn. Remains of what might have been a coffin were also found in a grave in the Bell-Beaker cemetery at Kölsa, Saxony, which contained stones that are interpreted as an installation to support the coffin similar to the Singen cemetery.<sup>142</sup> Bell-Beaker cemeteries in Saxony-Anhalt yielded additional remnants of wood: remains of a bier in a grave at Köthen<sup>143</sup>, lateral wooden installations with projecting edges in two graves at Löbnitz (figure 93)<sup>144</sup> and areas of charcoal on the bottom and sides of the grave that suggested the existence of a coffin at Osmarsleben.<sup>145</sup>

<sup>135</sup> Three to four long and narrow tree-coffins were an exception insofar as their dimensions allowed only for an extended position. In one of these the deceased lay prone (Neugebauer 1991, 72–73). For deviations from the usual orientation, see Neugebauer 1991, 86.

<sup>136</sup> Neugebauer 1991, 79.

<sup>137</sup> Kraus 2006, 95–96, 286, 307, 318, 329, 340–341, 351, 359, 366, 368, 420–421, 438–441.

<sup>138</sup> Krause 1988, 36.

<sup>139</sup> This date is based on three <sup>14</sup>C samples: Poz-12272 3470 ± 35 BP, 1880–1740 calBC (wooden planks); Poz-12271 3550 ± 35BP, 1950–1780 calBC (human bone); Poz-12270 3510 ± 30 BP, 1890–1770 calBC (grain depot above the grave).

<sup>140</sup> Kneisel 2010, 725–727, 729.

<sup>141</sup> Schwarz 2008, 48, 53, 223.

<sup>142</sup> Conrad 2009/2010, 45, 48.

<sup>143</sup> Götze 1927, 17–18.

<sup>144</sup> Kaufmann 1969, 27–29.

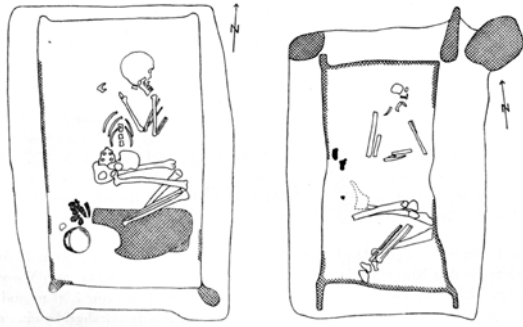


Fig. 93 Löbnitz; grave 1 (left), grave 2 (right)

Generally speaking, the adoption of wooden coffins is a widespread phenomenon in the Late Neolithic and Early Bronze Age of central Europe,<sup>146</sup> and this coincides with the custom of orienting the dead with the face towards the east. However, as lids were almost never reported, the term “coffin” might be somewhat misleading, carrying with it contemporary ideas about burials. Rather, we seem to be dealing with open boxes comparable to the one from Helmsdorf, even though they are of much simpler type, that is to say, they feature funerary biers and beds on which the dead were laid out.

Alexander Häusler has analysed a vast number of burials between the rivers Rhine and Wolga and has concluded that certain practices are widely shared in the Early Bronze Age (figure 94).<sup>147</sup> Especially the custom of burying the dead with the face towards the east has a long tradition and is already attested during

the Bell-Beaker culture. Whereas Häusler specifically points out the novelty established by the Unetice culture in burying both women and men in the same position, the fact that the dead face towards the rising sun constitutes the static element that remains unaffected regardless of these changes.

Interestingly, in the Unetice culture and in neighbouring cultures, frequent reference is made to the sun, which seems to have been of central religious importance. Probably the most famous example is the Nebra sky disc, which depicts the night sky (figure 95).<sup>148</sup> It was deposited around 1600 BC, but its production might date back to the beginning of the second millennium BC, thus connecting it with the Unetice “chieftain’s” tumuli. Inlaid with gold on the bronze disc were a round object that is either the sun or the full moon, a crescent moon, several stars – among them a cluster that is interpreted as the Pleiades – and two arcs that mark the points of summer and winter solstice at the horizon, one of which is missing today. The disc was altered several times, and in a later phase, a boat was added. Harald Meller points out the similarity to depictions of boats in the Cycladic and Nordic Bronze Age,<sup>149</sup> where the crew or, as a *pars pro toto*, the oars were represented by small strokes as well. While the debate about whether the round object is supposed to represent the sun or the full moon is ongoing, the commonness of the idea that the sun travels in a barque makes the former more likely:

„Hat die Scheibe in der ersten Phase einen definitiv lunaren Bezug, so tritt zumindest in der zweiten Phase mit den Horizonten ein solarer Bezug hinzu. Auf diesem Hintergrund könnte der Vollmond der ersten Phase nun auch als Sonne gesehen worden sein. Die genaue Bedeutung des Schiffes wird sich kaum exakt fassen lassen. Dass es als Transportmittel der Sonne, als Symbol der Bewegung der Himmelselemente oder, weil den Süden durchmessend, vielleicht sogar als Symbol der Sonne selbst gesehen wurde, liegt im Rahmen der Interpretationsmöglichkeiten.“<sup>150</sup>

Only slightly later, at around 1400 BC, the Trundholm sun chariot serves as evidence that the idea of the sun travelling by mechanical

<sup>145</sup> Stahlhofen 1973, 24.

<sup>146</sup> Krause 1988, 36; Neugebauer 1991, 73, 75. According to new radiocarbon measurements, among them several from the Singen cemetery, it is even possible that Bronze Age A1 and A2 do not constitute distinct chronological stages but overlap significantly (Stockhammer et al. 2015, 24–29).

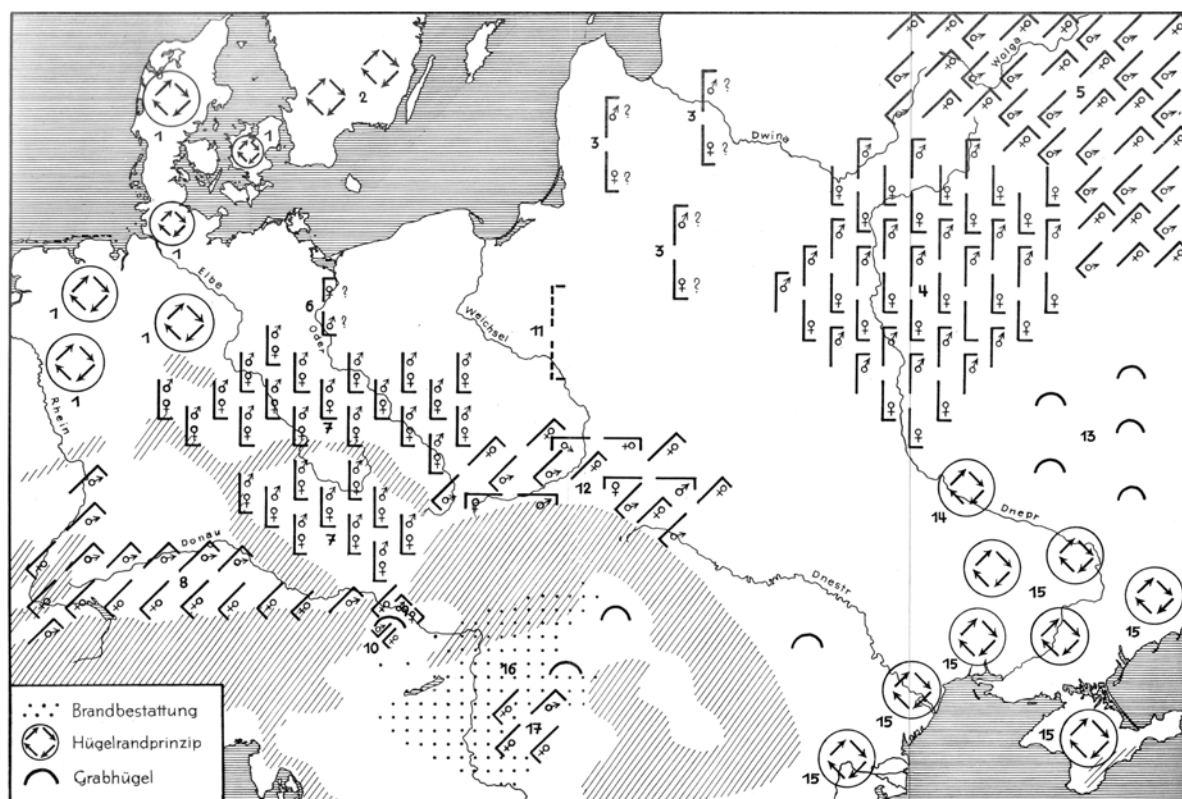
<sup>147</sup> Häusler 1977, 14–16, 18, 25–26. „Orientierung, Blickrichtung und Seitenlage erweisen sich für die Zeit des Spätneolithikums und der frühen Bronzezeit als die wesentlichsten Gesichtspunkte, die es ermöglichen, Zusammenhänge bzw. Unterschiede zwischen den Bestattungssitten verschiedener Kulturen und Regionen zu erkennen. Da es sich jeweils nicht um eine zufällige Addition von Einzelmerkmalen handelt, sondern um bestimmte Merkmalskomplexe, ist anzunehmen, daß sie Widerspiegelungen bestimmter Vorstellungsinhalte sind, die in ihnen ihren Ausdruck gefunden haben.“ (Häusler 1977, 43). Needless to say, there are always cases in which widespread customs are not heeded. These do not constitute proof of the contrary (Häusler 1977, 43–44).

<sup>148</sup> Meller 2004, 26–30.

<sup>149</sup> Here, depictions of ships appear at around 1600 BC (Kaul 2004b, 58).

<sup>150</sup> Meller 2004, 29.





12 Chlopiec-Veselé- und Mierzanowice-Kultur; 13 Kurgane der älteren Ockergrabkultur; 14 Mitteldneprkultur, Südgruppe; 15 ältere Ockergrabkultur; 16 frühe Bronzezeit in Ungarn und auf dem Balkan (Brandbestattung); 17 Pećica-Periaș-Kultur

♂ ♀ rechte Hocker 1 Orientierung	♂ ♀ 1	♂ ♀ 2	♂ ♀ 3	♂ ♀ 4			↑ N
♂ ♀ linke Hocker 1 Orientierung	♂ ♀ 5	♂ ♀ 6	♂ ♀ 7	♂ ♀ 8			
♂ ♀ rechte Hocker 2 Orientierungen	♂ ♀ 9	♂ ♀ 10	♂ ♀ 11	♂ ♀ 12	♂ ♀ 13	♂ ♀ 14	
♂ ♀ linke Hocker 2 Orientierungen	♂ ♀ 15	♂ ♀ 16	♂ ♀ 17	♂ ♀ 18	♂ ♀ 19	♂ ♀ 20	
♂ rechte ♀ linke Hocker 1 Orientierung	♂ ♀ 21	♂ ♀ 22	♂ ♀ 23	♂ ♀ 24			
♂ linke ♀ rechte Hocker 1 Orientierung	♀ ♂ 25	♀ ♂ 26	♀ ♂ 27	♀ ♂ 28			
♂ rechte ♀ linke Hocker 2 Orientierungen	♂ ♀ 29	♂ ♀ 30	♂ ♀ 31	♂ ♀ 32	♂ ♀ 33	♂ ♀ 34	
	♂ ♀ 35	♂ ♀ 36	♂ ♀ 37	♂ ♀ 38	♂ ♀ 39	♂ ♀ 40	
♂ linke ♀ rechte Hocker 2 Orientierungen	♀ ♂ 41	♀ ♂ 42	♀ ♂ 43	♀ ♂ 44	♀ ♂ 45	♀ ♂ 46	
	♀ ♂ 47	♀ ♂ 48	♀ ♂ 49	♀ ♂ 50	♀ ♂ 51	♀ ♂ 52	

*Fig. 94 Early Bronze Age burial customs*

means was not unknown in central and northern Europe.<sup>151</sup> The Trundholm sun chariot shows the sun disc as drawn by a horse,<sup>152</sup> with the two sides of the disc – one gilded, one not, but both with a spiral design – pointing to the travel of the sun during the day and night.

Highly debated is the question of trans-regional contact during the Early Bronze Age in central Europe, where the Unetice culture was strategically located at the intersection of several natural transport routes in a world in which the use of metals required trade relations between distant regions.<sup>153</sup> Whereas copper was

<sup>151</sup> Kaul 2004a, 55–57. While I consider Flemming Kaul’s reconstruction of the myth about the travel of the sun, which is based on depictions on razors from the Nordic Late Bronze Age, to be mostly accurate, because of their date they fall outside of the scope of this work (Kaul 2004b, 62–63, Kaul 2013, 70–76).

<sup>152</sup> The chariot itself seems not to have been part of the underlying mythological idea, but simply facilitated the depiction of the movement of the sun in ritual (Kaul 2004a, 55).

<sup>153</sup> Genz 2004a, 168, 170; Gerloff 1993, 58–60, 83–86; Gerloff 2007, 128–136. „Auch unter Berücksichti-





Fig. 95 *The Nebra sky disc*

mostly imported from the eastern Alpine regions, the export of tin may have played a role in the wealth expressed in the Unetice tumuli. Sabine Gerloff stresses that at the beginning of the Early Bronze Age, tin was likely traded from the Erzgebirge region to the Near East via the Danube, thus offering an explanation why it is specifically the Unetice culture that appropriated foreign customs at such an early time. Foreign relations can also be ascertained when considering the form and decoration of objects, which show elements from the Alpine region, the British Isles, Scandinavia, the Carpathian Basin and the Aegean. Also, most amber discovered in Bronze Age contexts in the Mediterranean region stems from Baltic sources. Yet, contact with the more distant regions seems to have been limited, and the spearhead from Kyhna, Saxony, which imitates an Aegean form that was most common on the Cycladic islands, constitutes an isolated case.<sup>154</sup> While I agree with

gung der neuesten naturwissenschaftlichen Datierungsmethoden können die von der traditionellen Forschung erkannten Kontaktfunde und die teilweise Gleichzeitigkeit zwischen den mittel- und westeuropäischen frühbronzezeitlichen Kulturgruppen einerseits und den bronzezeitlichen Hochkulturen des Mittelmeerraumes andererseits aufrechterhalten werden. Wir konnten nachweisen, daß die Bz A1-zeitlichen Verbindungsfunde zwischen beiden Kulturkreisen nicht im mittel- und spätbronzezeitlichen minoisch-mykenischen, sondern im end-frühbronzezeitlichen vorderasiatischen Raum beheimatet sind und hier in die ausgehenden Jahrzehnte des letzten Drittels des 3. vorchristlichen Jahrtausends gehören.“ (Gerloff 1993, 85).

<sup>154</sup> Genz 2004b, 186.

Reinhard Jung that the contact between the Aegean, Egypt and the Levant was infinitely closer than with the societies in the north, I nevertheless consider it probable that there was a certain transfer of ideas.<sup>155</sup> Certainly, his statement that the idea of a solar barque was unknown in the Bronze Age Aegean ignores the pervasiveness of such ideas in Mesopotamia and Egypt, and it is highly unlikely that no information about it was transmitted to the Aegean given the longstanding and close contact between the regions.<sup>156</sup> Moreover, the convention of depicting the crew or the oars by small strokes shared by the ships on the Cycladic “frying pans” and by the barque on the Nebra sky disc thus remains unexplained. Jung’s underlying assumption seems to be that any transfer of religious concepts requires continuous exertion of influence, similar to the missionary movement of modern times, but the time of the Nebra sky disc seems rather to have been characterised by innovation and fluidity in a setting in which ideas spread much more readily than goods. Häusler already noted the similarity between burial customs in central Europe and Egypt and pointed out that the temporal sequence of contracted burials with the face towards the east, followed by adoption of burials in an extended position on the back, can be observed in both regions:<sup>157</sup>

„Auch wenn vorläufig noch nicht alle Vorgänge klar sind, die zur Ausbreitung zumindest von Teilaspekten der zuerst in Ägypten neu aufgetretenen Jenseitsvorstellungen und Bestattungssitten nach Europa geführt haben, kann zumindest die gleichgerichtete Abfolge wesentlicher Merkmale der Bestattungssitten

<sup>155</sup> Jung 2004, 190, 192–193.

<sup>156</sup> „Aus der Ägäis kennen wir seetüchtige Schiffe, die um 1600 v. Chr. mit Sicherheit bis in den südlichen Adriaum vordrangen [...]. Eine stark abstrahierte Darstellung solcher in Mitteldeutschland vielleicht ebenfalls nur durch mündliche Erzählung bekannten Schiffe könnte wie der gefiederte Goldbogen auf der Himmelsscheibe aussehen. Andererseits waren die Schiffe des Ostseeraumes in Mitteldeutschland ebenfalls bekannt, so dass auch sie Vorbild gewesen sein mögen. Dass man unabhängig vom östlichen Mittelmeerraum zur Vorstellung eines über den Himmel fahrenden Schiffes gelangen konnte, erscheint also plausibel.“ (Jung 2004, 193). Thus, the independent invention of both the idea of a solar barque and of the convention concerning depictions of ships is considered more likely than cultural contact, an assumption that appears doubtful to me.

<sup>157</sup> Häusler 1977, 36–40, 44.

in Ägypten und Europa nicht mehr bezweifelt werden. Es handelt sich bei den Parallelentwicklungen in beiden Gebieten vor allem um die nachstehenden Abfolgen: Strenge Orientierungsvorschriften bei der Niederlegung der Toten für einzelne Kulturen bzw. Gräberfelder – Übergang zur unbedingten Blickrichtung aller gehockt bestatteten Toten des Gesamtgebietes nach dem O – gestreckte Bestattung und radikale Abnahme der Beigabezahl [sic].<sup>158</sup>

Even though I disagree with his assumption of a unilinear diffusion of Egyptian customs to the north, his basic statement is correct, and the parallel development of the different regions calls for an explanation as a local evolution of several interrelated aspects appears unlikely. Rather than postulating a simple adoption of Egyptian traditions in central Europe, however, the connecting element that facilitated the spread of these burial customs appears to lie in the metaphorical equation of death with sleep. Nevertheless, I do not intend to make any statements relating to chronological discussions<sup>159</sup> or the direction of the transfer of information because at present it is unclear when and how these impulses occurred.

## 6.7 SYNOPSIS

The findings from the prehistoric regions have offered an inconsistent picture. Platforms and benches from clay or stone abound in the Early and Middle Bronze Age in the eastern Mediterranean. One example, discovered in Pulus/Sakyol, was decorated with geometric applications, while at Myrtos the room that contained the wooden sleeping platform was the most elaborate, with walls plastered and painted red. Sleeping platforms and benches were also depicted in three Neolithic house models. Occasionally, remains of cushioning, mats and other textiles were found in these regions, and it appears that roofs were used as a sleeping place, as supported by the depiction of annexes on the roofs in the Middle Minoan town mosaic from Knossos.

Incorporation of burials into sleeping platforms is a custom solely attested from the Ne-

olithic, namely from Khirokitia, where some of the intramural burials lay below platforms, and from Çatalhöyük. Here, a definite connection between burials and sleeping platforms could be observed, a connection that is further emphasised by art and installations in the burial areas. Interestingly, scholars have remarked on the structure of the buildings as representing a symbolic association between the movement of the sun and the human life cycle as well as on the vertical arrangement in which the realm of the dead lies directly beneath the sphere of the living. Lewis-Williams and Pearce have furthermore suggested that altered states of consciousness contributed to the adoption of a tiered cosmology by the inhabitants of Çatalhöyük. It also becomes apparent that sleep was a state considered to be of significance when we consider a schist plaque that depicts resting people. As opposed to this, it seems more uncertain to identify as sleepers two Neolithic figurines from the Pevkakia-Magula and from Magula Karamourlar.

The custom of laying out the deceased on biers or beds is attested from Chalcolithic Alaca Höyük, and parts of a possible canopy that might employ solar symbolism were found in Early Bronze Age graves at the same site. Attachments that could have been part of a bed and/or canopy were excavated in a tomb at Horoztepe as well. The only evidence of a bed for the living, however, already belongs to the Late Bronze Age in Akrotiri, as is likely for the two bed models from unknown contexts.

For the Early Cycladic figurines, a supine position has been discussed due to the figures' inability to stand unsupported and because of the existence of cradles. The majority of Cycladic figurines have been excavated in graves, as have the examples from Crete. Here, solar symbolism is apparent in the commonness of such motifs on seals as well as in the Mesara tholoi, which are mostly oriented eastwards and in which Egyptian and Near Eastern elements have been observed. Moreover, it has been suggested that there exists a connection between the Minoan "horns of consecration" and the Egyptian *akhet*. Crete and the Cyclades share a symbolic repertoire that includes, apart from sun motifs, the depiction of boats, fish and the sea, which can occur in varying combinations, as visible for example on the Cycladic "frying pans". According to Goodison, these indicate a belief that the sun travels by boat or takes the

<sup>158</sup> Häusler 1977, 40.

<sup>159</sup> For an in-depth discussion, see Gerloff 2007, 117–154.

shape of a fish for its travel, a belief that was intertwined with ideas about the journey a dead person underwent in the afterlife. As such, this resembles Egyptian concepts of death.

A correlation between sleep and a subterranean realm of the dead became apparent on Malta as well. Here, two figurines of persons lying on a bed as well as one that might be a fish were discovered in the Hal Saflieni hypogeum. Concerning the sleeping lady's interpretation, both a depiction of death as well as of an incubation have been suggested. The hypogeum served as a collective burial site and was furnished with relief carvings of architectural elements as well as painted in places with red ochre spiral designs. Unfortunately, however, considerable uncertainties about both Maltese chronology as well as the sleeping lady's circumstances of discovery exist, which complicate a parallelisation with other regions.

Evidence for sleep from areas in which organic building materials are common is much less frequent and dependent on the randomness of preservation conditions. Notable exceptions are the Neolithic lakeside settlements of the Alpine region, where remains of textiles are preserved, and the Shetland and Orkney islands that employ stone as a building material for box beds and benches. On the British Isles, Late Neolithic house structure often followed a cruciform pattern that could be oriented based on the points of midsummer and midwinter sunset and sunrise, and the resulting two halves of the dwellings might be interpretable as the female and the male sphere. A burial of two women was also found beneath a box bed in Skara Brae.

Interesting observations could be made concerning funerary beliefs in central Europe. In the Unetice burial mound at Helmsdorf, the

deceased had been placed on a funerary bed with the face towards the east. We then discussed a broader framework of burial customs and observed that in the Late Neolithic and Early Bronze Age, an orientation with the face towards the east along with the adoption of wooden coffins became widespread. Yet, the exact form these "coffins" took could only rarely be observed, and in these cases, the existence of lids seems to have been the absolute exception. It is therefore proposed here that we are dealing with simple funerary beds and biers in the majority of examples rather than with coffins in the modern sense. In this context, it is important to note that the sun played a central role in religious beliefs and that there likely existed an idea about its journey by boat, as becomes apparent on the Nebra sky disc. Whereas interactions between central Europe, the eastern Mediterranean, Mesopotamia and Egypt are the subject of controversial debate and whereas it is possible that we are facing independent, parallel developments facilitated by the same underlying structures, the combined evidence about the sun's travel by mechanical means together with the adoption of burials on funerary beds in an orientation towards the east appears to be more than mere coincidence. Instead, it seems that beliefs that metaphorically equated death with sleep by tying it to ideas about the travel of the sun at night were as widespread in the central European Bronze Age as they were in the Near East and Egypt. Because sleep resembles death on the one hand and is dependent on the alternation of day and night on the other, it can be considered the missing link between beliefs about death and the sun, a connection that is made extensively in both temporal and geographical terms.





## 7 CONCLUSION

### 7.1 DISCUSSION OF THE RESULTS

Even at the beginning of written tradition in the second half of the third millennium BC, the Sumerians possessed a substantial body of knowledge concerning dreams, which finds mention mainly in ritual contexts. Sophisticated techniques for incubation or for the interpretation and solution of dreams can hardly be imagined without precursors, and it can therefore be assumed that some of them had been in place for a considerable amount of time. This supports the idea of a highly developed system of knowledge and religious beliefs surrounding dreaming at the dawn of history, whereas systematic collections of dream omens and rituals were probably not recorded before the second half of the second millennium BC. From the different sources, three groups of actions initiated by dreams can be reconstructed: the verification of the dream by other divinatory means, the attempt to solve the dream, i.e. to interpret it and, if necessary, to avert the predicted evil, and lastly, the action according to the command received in it. Interpretation (*bur<sub>2</sub>*) commonly relied on similarities between the images or on words' acoustic likeness and was usually done by a female *ensi*, either a divinity or a human of priestly rank. Contrary to this, the younger Akkadian literature does not mention any specific dream specialist but uses the more general terms *šā'iltu/šā'ilu* or *bārû*, specialists which were concerned with other types of divination as well. Gudea's temple hymn extensively describes the process of dealing with meaningful dreams that is illustrated in several of the younger literary compositions as well. As opposed to this, the Egyptian sources are mainly concerned with bad dreams as well as with ritual and magical activities to protect against those harmful forces, and some of these techniques were possibly part of the scope of duties of a person whose equipment was discovered in the tomb beneath the Ramesseum. Although, of course, this major disparity is also due to the diversity of source material both concerning its type and its dating, still the fact that there is this difference of source material at all seems significant. In Mesopotamia, the earliest recorded dreams stem from ritual contexts or royal inscriptions, whereas in Egypt they were first written down by private persons with a more provincial

background and do not appear at all in official contexts before the New Kingdom – almost a millennium later in other words. This points to distinct approaches to dealing with dreams. Surprisingly, neither the Mesopotamians nor the Egyptians employed any categorisation or any theories addressing the nature of dreams during the time considered here, although the former ascribed dreams not only to humans but also to animals (Sumerian proverb) as well as to the gods and other mythical creatures (*Origin of Grain*, *Epic of Gilgameš*).

In Mesopotamia, dreams were conceived as personal encounters between the human and the visiting god, as can be inferred from the phrases in which the god (or, in the case of *Sîn-iddinam*, a demon) approaches the dreamer. In many Sumerian writings, he positions himself close to the head (*Stele of the Vultures*, Gudea's temple hymn, hymn *Šulgi D*, *Sîn-iddinam's* letter-prayer, Mari letters No. 238 and 239, *Lugalbanda in the Cave of the Mountains*), thus alluding to both the physical and the mental component of dream experiences. Occasionally, it can be the dreamer who visits another place (*Iddin-Dagan's* hymn, Mari letters No. 233, 237 and 239), and in both instances, an intermediary sometimes bridges the gap between the human and the divine (for example the reed hut in the *Epic of Atramhasis*).<sup>1</sup> For a dream to be considered meaningful and to contain binding instructions, it had to be sent by a god.<sup>2</sup> Accordingly, the majority of dream episodes mention its divine sender, most commonly an important divinity, thus rendering them reliable and important. While in the Sumerian royal dreams the messages consist mainly of divine assignments, in the later literary compositions we observe a shift towards portentous content (*Curse of Agade*, *Sargon Legend*, *Dumuzi's Dream*, *Death of Gilgameš*). This is in accordance with the threat simulation theory (see chapter 2.6) as it can be expected that negative dream content increased in times of widespread conflict such as during the wars between the Near Eastern city states.

<sup>1</sup> Zgoll 2006, 262–270, 285. It is also important to note that the use of an intermediary increases in the course of time, giving the impression of a growing distance between the human and the god (Zgoll 2006, 295).

<sup>2</sup> Zgoll 2006, 177.

Chief among the gods to appear in dreams is Inana (Old Sumerian tablet from Mari, *Nin-me-šara*, Iddin-Dagan's hymn, *Lugalbanda in the Cave of the Mountains*, *Enmerkar and EnSUHkešda'ana*, *Sargon Legend* and indirectly in *Curse of Agade and Dumuzi's Dream*), a fact that finds its explanation in her association with sexuality. That she was linked with the erotic aspect so common in dreams is explicitly mentioned in *Lugalbanda in the Cave of the Mountains*.<sup>3</sup> The sun god is referred to nearly as often (Utu in the Old Sumerian tablet from Mari, *Origin of Grain*, *Gilgameš and Huwawa*, *Death of Gilgameš*, *Gilgameš and the Netherworld*, *Incantation to Utu*; Šamaš in the Akkadian *Epic of Gilgameš*) as the alternation of day and night effected by the movement of the sun relates directly to the sleep-wake cycle. It is, therefore, possible that the scorpions which are occasionally depicted beneath beds on Early Dynastic seals refer to the Scorpion-man that can precede the sun god's boat on seals of the same period. The people of Mesopotamia also knew a god of dreams called Sisig (*Death of Gilgameš*, Sumerian proverb), who was conceived as being Utu's son. In addition, there existed the god Anzaqar, who appears as early as the hymn Šulgi D and later on in *Lugalbanda in the Cave of the Mountains*, as well as the deified dream Mamu, mentioned two times in Old Babylonian tablets and listed there in connection with Utu/Šamaš.<sup>4</sup> Anzaqar is moreover mentioned to appear in the shape of a bull in *Lugalbanda in the Cave of the Mountains*.

Contrary to Mesopotamia, the appearance of deities in dreams is not attested before the New Kingdom in Egypt, a fact again due to the difference in the source material but complicating the question of whether incubations existed. On the one hand, explicit mention is lacking, probably pointing to an absence of specific

ritual techniques, i.e. incubations in the formal sense. On the other hand, the allusion to the divine origin of dreams in the *Tale of Sinuhe* together with the protagonist's unconscious state while his god, the king, addresses him at the time of dusk can be seen as a hint that deities presented themselves in dreams after all. Similarly, in the letter on the stela, the author asks his deceased wife to appear in a dream. It seems that the deceased were able to send dreams to the living even against their will (Papyrus Nag ed-Deir 3737), and the *Execration Texts* hint at the idea that these assaults could be directed by living people as well.<sup>5</sup> At the very least, dreams were thought of as something realistic, potent and desirable, even though people were aware of their ambiguous, unpredictable and unstable nature (*Teaching of Ptahhotep*, *Tale of the Eloquent Peasant*, *Tale of Sinuhe*).

As opposed to this, Mesopotamian sources regularly mention incubations, distinguished by the fixed formula (*ma-mu<sub>2</sub>-de<sub>3</sub>/da ba-nu<sub>2</sub>*) as well as by the particular sleep (*u<sub>3</sub>-sa<sub>2</sub>.g*) desired in it, which, together with the topos of fearful or at least amazed awakening and sometimes rubbing of the eyes, could be identified as sleep paralysis. This hypothesis is augmented by the reference to hypnopompic lucid dreams (*gi-ri<sub>3</sub>-babbar-ra*) in the hymn Šulgi O and in *Enmerkar and EnSUHkešda'ana*, by Gilgameš's inability to move in the *Epic of Gilgameš* and by indications for an altered state of consciousness accompanied by vertigo in *Death of Gilgameš*, pointing to dreams with a strong sensorimotor component. Also, light phenomena, a common concomitant feature of both dreams with

<sup>3</sup> Bed models that have been found in temple-complexes are predominantly associated with the cult of Ištar, while bed models depicting couples having sexual intercourse may point to the erotic quality of dreams as well. However, both kinds of models might also refer to a *hieros gamos*, which is why they cannot be considered conclusive evidence.

<sup>4</sup> Butler 1998, 74, 80, 83; Oppenheim 1956, 232. It is unclear, however, in what ways the two deities differ and why the Sumerian word <sup>d</sup>MA-MÚ is only attested from Akkadian sources, while all preserved Sumerian texts use the Akkadian loan <sup>d</sup>AN.ZA.GAR (Butler 1998, 74).

<sup>5</sup> Interestingly, this is similar to children's ideas about the origin of dreams, which can be grouped into three main stages. In the first stage (Integral Realism), dreams are thought to be real, to come from external sources and to stay external throughout the course of the dream. Commonly claimed origins are the night, the dark, the window or lights, but also that dreams are produced by the people the dream is about. Furthermore, some 3-year-olds held the view that dream content is shared between sleeping persons. The second stage (Mitigated Realism, reached by age 5 or 6) consists of a variety of transitional states, among them the idea of a dream as an external event with an internal origin or the other way round. In the third stage (Integral Subjectivism, reached by age 6 or 7) children arrive at an understanding of dreams as unreal as well as resulting from and taking place inside the dreamer (Woolley 1995, 189, 193–194).

a strong sensorimotor component and lucid dreams, are mentioned and can accompany the appearance of a god as in Gudea's temple hymn or the *Epic of Gilgamesh*. Lastly, in *Lugalbanda in the Cave of the Mountains*, the god of dreams Anzaqar manifests himself with noises similar to typical acoustic hallucinations in sleep paralysis. Drawing together these different clues, it seems that whether dreams were considered omens or not was dependent on the dreamer's heightened state of consciousness that allowed for a reflection on the dream images while experiencing them. The related and partially overlapping phenomena of sleep paralysis, lucid dreaming and dreams with a strong sensorimotor component constitute states in-between sleeping and waking, which are characterised by the astonishing fact that dream content is experienced while the dreamer's mind is at least partially awake, making them appear more real than an ordinary dream and making it easy to employ them in ritual contexts in an intermediary role between the worlds.

Dreams from the second part of the night were considered to be of special importance (Mari letters No. 142 and 237, Old Babylonian Private letter, *Epic of Atramhasis* but differing in the *Epic of Gilgamesh*), probably because the increase of REM sleep in the early morning hours and the corresponding increase of dreams characterised by a heightened degree of consciousness was known. The Egyptians do not seem to have considered this important as the *Tale of Sinuhe* is the only instance in which the time of day is stated when the king speaks to the unconscious Sinuhe at dusk. Likewise, we do not possess any information about the existence of Egyptian dream specialists, even less on their gender. Dream specialists in Mesopotamia are almost exclusively female, an observation that can be explained by the fact that women are more prone to experience sleep-related hallucinations than men. That dreams were sometimes induced artificially by drugs, in this case, alcohol, is explicitly stated in *Lugalbanda in the Cave of the Mountains*. Occasionally, a temple is given as the locus of incubation (Mari letters No. 233 and possibly 236, *Sargon Legend*, *Song of the Plowing Oxen*), while others are performed in natural surroundings (*Lugalbanda in the Cave of the Mountains*, *Dumuzi's Dream*, *Epic of Gilgamesh*, *Epic of Atramhasis*). Lastly, Gudea's temple hymn contains proof that the dream was not incubated by Gudea

himself but by a professional dream specialist (*lu<sub>2</sub>-saĝ-še<sub>3</sub>-nu<sub>2</sub>-a*).

An interesting parallel between both the Sumerian and the Akkadian as well as the Egyptian language is that all three languages only know the expression "to see in a dream" but do not contain the verb "to dream".<sup>6</sup> Such a concept, in which the dream is thought to be independent of the dreamer and as real as the waking world, is called an "external dream".<sup>7</sup> That the sleeper – or some part of her – was thought to leave the body and to enter the realm of the gods in her dreams becomes apparent from Iddin-Dagan's hymn as well as from Mari letters No. 233, 237 and 239. Antti Revonsuo explains why ideas like that of a *si-si-ig/zaqīqu* and a spatial dream world come easily to humans:

"It is quite understandable why people all over the world have come up with a dualistic theory of dreaming where the soul enters another reality. Dreaming as a subjective experience feels like *being in a world* – the world of the dream is presented to the dreamer in much the same way as the waking world is. The world in the dream, obviously, is not the waking world; thus, it must be some sort of alternative reality. The dreamer in the dreamworld, presumably, has not taken his physical body with him into the dreamworld; thus, it must be the dreamer as a spiritual being only who has entered the dreamworld."<sup>8</sup>

However, while the Mesopotamians conceived the dream as a place visited by the sleeper's *si-si-ig/zaqīqu*, i.e. the dream spirit, at least in some cases, the Egyptians did not express the idea of

<sup>6</sup> Szpakowska 2003, 15–16, 18–19; Zgoll 2006, 74–76. Egyptian *rsw.t* – "dream", derived from *rs* – "to awaken" (Perraud 1997, 34; Szpakowska 2003, 16); Sumerian *maš<sub>(2)</sub>-ġi<sub>6</sub>.k* – general term for "dream" without valuation (Zgoll 2006, 55, 58, 60), *ma-mu<sub>(2)</sub>.d* – "meaningful dream", "dream omen", especially used for incubated dreams sent by the gods (Zgoll 2006, 60–61); Akkadian *šuttu* – "dream", derived from *šittu* – "sleep" (Zgoll 2006, 69). A similar concept can be seen in the German language, which has two expressions for "dreaming", namely *ich träume* (active) and *mir träumt* (passive), the latter being the more antiquated phrase.

<sup>7</sup> Zgoll 2006, 263–264. This idea would have been strengthened by the seeming contradiction between consciousness and lack of power exercised in dreams (Szpakowska 2003, 28–29). Thinking of dreams as coming from the outside of the dreamer is also typical of young children (see footnote 5).

<sup>8</sup> Revonsuo 2010, 236.

the dreamer physically travelling to a different place or of her soul leaving the body.<sup>9</sup> In their opinion, the dream itself was considered both an alternate state of reality and a physical location, allowing the perception of things not normally within eyesight from a transparent area between the different worlds. The dreamer was thought to awaken during sleep in this specific zone, a concept that appears to denote lucid dreaming. This interpretation gains additional credibility when we consider the attention afforded to both sexuality and consciousness exercises, i.e. the finger counting technique, in the guides to the hereafter. The repetitiveness of the *Pyramid Texts* has been interpreted as a device to attain altered states of consciousness, a feature that we can observe in *Dumuzi's Dream* and the *Song of the Plowing Oxen* as well. It is furthermore interesting to note that the same root is shared not only by the words “to awaken” (*rs*) and “dream” (*rsu.t*) but also by “headrest” (*wrs*)<sup>10</sup> and that headrests are a common grave good alongside the guides to the hereafter. While we do not possess any Egyptian records about the function of headrests, we can expect that both the greater likeliness of short arousals and the tilted position of someone sleeping on a headrest would have raised the number of dreams characterised by a heightened degree of consciousness, an assumption that is unfortunately backed by only a single modern sleep study, in which the upper part of a hospital type bed was moved. Thus, mind, body and society commingle in the object of the headrest. Headrests might have been exported to Mesopotamia as well, but their use was uncustomary there, possibly because other techniques for attaining religiously significant dreams were already in place.

Certain Mesopotamian texts describe the transition between the different realms as an up-and-down motion on a vertical axis, of which the earliest possible instance could be observed in the Old Sumerian tablet from Mari that alludes to an upward movement to the heavens or sky.<sup>11</sup> In addition, rooftops are mentioned as a

suitable place for incubations in Iddin-Dagan's hymn and the *Song of the Plowing Oxen*. In the *Epic of Gilgameš*, dreams are induced twice after Gilgameš has climbed a mountain, while in a third instance he is advised to dig a well for that purpose. The latter points to a connection with the god Enki's dwelling place in the subterranean ocean Apsû, which mediates between the earth and the netherworld, as Enki is, after Inana and Utu, the god most commonly mentioned in connection with dreams (*Gilgameš and Huwawa*, *Death of Gilgameš*, *Epic of Atramhasis*<sup>12</sup>). Falling into a well is a typical example of making sense of a dream with a strong sensorimotor component in non-industrialised societies,<sup>13</sup> and similar interpretations had occurred in the dreams of a twentieth century !Kung woman (see chapter 2.10).

In Egypt, a related idea existed about the chaotic primeval ocean of Nun, into which both sleepers and the deceased were thought to enter, thus connecting them with each other as well as with the gods. Boats and a ferryman also play a prominent role in Egyptian funerary texts and burial customs, and in the case of the wooden boat models, an explicit connection to sleep is made by placing the model mummies among bedroom furnishings. Boat models have been excavated in Early Dynastic graves in Mesopotamia as well, and the myth of the ferryman is likely to date back equally far. In the later literary compositions, Gilgameš is said to cross the “Waters of Death” aided by a ferryman. Today, traveling down a river, crossing a river and travel by ship in general constitute typical versions of a taking-a-journey dream, known from psychological research to be common in coming to

<sup>9</sup> To what extent the Egyptian concepts of the ba, ka, akh and shadow (Hornung 1986, 19–21; Kees 1956, 35–58; Taylor 2001, 15–20, 31–32; Trigger 2003, 535–538) resemble the Mesopotamian ideas of the *si-si-ig/zaqīqu* or the *gidim/eṭimmu* can only be speculation at present.

<sup>10</sup> Perraud 1997, 35; Szpakowska 2003, 179. See also Jéquier 1921, 237–238.

<sup>11</sup> It is possible that the phrase about the god that positions himself close to the head of the dreamer, i.e. comes from the realm above (*Stele of the Vultures*, Gudea's temple hymn, hymn Šulgi D, Šin-iddinam's letter-prayer, Mari letters No. 238 and 239, *Lugalbanda in the Cave of the Mountains*), points in the same direction, particularly if contrasted to the demon that is somehow connected to the feet, i.e. the realm below, in Šin-iddinam's letter-prayer. However, as the translation of the latter is not entirely clear, no final conclusion can be offered here.

<sup>12</sup> One wonders whether the goddess' Nanše's role as an *ensi* in Gudea's temple hymn derives from the fact that she is conceptualised as Enki's daughter.

<sup>13</sup> Classic interpretations in industrialised societies would be falling or flying down stairs as well as riding an elevator (Schönhammer 2004, 110–126, 210–211).



terms with bereavement (see chapter 2.9).<sup>14</sup> As a boat was the only available means of transport over long distances during the time considered in this work, it seems reasonable to regard it as the material equivalent of the departure to death alluded to in taking-a-journey dreams.

The fact that Mesopotamia and Egypt share, in the concepts of the Apsû and the Nun, a very similar, yet unusual, belief about the origin of the world points to a historical link between the cultures.<sup>15</sup> Nevertheless, in this context, it is also notable that the feeling of flying so common in dreams characterised by a heightened degree of consciousness is often experienced as a sensation similar to swimming in the air and that swimming and flying in dreams tend to merge into each other.<sup>16</sup> This offers an additional clue why the dreamworld, which was thought of as connected to the Apsû/Nun, could be conceptualised as a body of water. On a more general level, the feeling of flying and falling that is, as we have seen, neurologically tied to the types of dreams that were considered of special religious significance in Mesopotamia can explain why other realms of the world were thought to literally lie above or beneath the waking world, i.e. the world of the living.<sup>17</sup> This is not a metaphorical description but a quite naturalistic account of what the dreamer perceived to be happening.

In accordance with these observations, the connection between dreams and the netherworld constitutes another instance of movement in the three-tiered cosmos, showing that the different levels were considered spatial rather than metaphysical realms that could theoretically be reached from the world of the living.<sup>18</sup>

This is made explicit in *Gilgameš and the Netherworld*, where the world of the dead is thought to lie beneath a hole in the ground, stressing the falling movement of Gilgameš's playthings. When Enkidu's *si-si-ig* is summoned from the netherworld to the world of the living, we can moreover see that it was the dream spirit that was conceived as moving between the levels of the cosmos and allowing communication between the living and the deceased as well as the gods. Also, it is the sun god Utu who brings along Enkidu's *si-si-ig* at dawn, showing that the "lap of heaven" through which the sun passes at night was thought to lie in the same subterranean area of the world as the realm of the dead. The aforementioned well that Gilgameš has to dig in the *Epic of Gilgameš* might allude to the same idea of the sun rising through a hole in the ground because it is the sun god Šamaš who appears in the subsequent dream. In the *Incantation to Utu*, Utu's travel across the sky and through the sea is described as taking place in a chariot that is drawn by two yokes of four lions each, and on cylinder seals, the sun god can be shown both in a chariot and in a boat. Generally speaking, regarding the location of the netherworld and the travel of the sun at night, two separate traditions existed in Mesopotamia. Besides the one described above, which was mostly concerned with water and travel by boat, the other tradition placed them in a mountainous region at the edge of the world. For example, the end of the world, which again is described as a physical location, can be reached by simply following the path of the sun to a mountainous region as Gilgameš does towards the end of the Old Babylonian epic. Furthermore, in his speech to Šamaš, he explicitly compares death to sleep in the netherworld.

A similar concept can be observed in Egypt, where it was believed that the dead king accompanied the sun god Ra in his barque on his journey through the netherworld, to be reborn together with the sun from Nun in its daily cy-

the belief that ghosts and evil spirits were as a rule thought of as inhabiting the realm of the dead and to take into account the appearance of the deceased in dreams which necessarily fosters notions linking dreams and the netherworld. Though there exists an intimate relationship in the classical world between death and sleep and dream which favors the locating of dreams in that region such a relationship is not in harmony with the Mesopotamian concept of death." (Oppenheim 1956, 236).

<sup>14</sup> Garfield 1996, 194–195, 209.

<sup>15</sup> Trigger 2003, 463–464.

<sup>16</sup> Schönhammer 2004, 132–135.

<sup>17</sup> Needless to say, this is only one of several observations that contributed to the idea of a netherworld below ground, first and foremost the fact that dead bodies are buried in the earth (Bottéro 1980, 29–30).

<sup>18</sup> Oppenheim already arrived at very similar conclusions, only to reject them for reasons quite unclear: "Are we then allowed to assume that the Mesopotamian dream-demons and their ruler, be he called *Mamû*, *Zaqīqu* or *An.zaqar*, are likewise thought to inhabit the netherworld? There are, undoubtedly, certain indications pointing in that very direction. Such are the passage which likens the appearing ghost of Enkidu [...] to a *zaqīqu*, or the fact that Gilgameš had to dig a trench to conjure up dreams [...] exactly as Odysseus dug his pit (*bothnos*) [...]. One has, furthermore, to consider

cle, i.e. to reawaken in the afterlife. The chaos of Nun is equated to the Duat; both are considered physical places, although without a stable location because their chaotic nature places them outside of space and time. Still, the *Pyramid* and *Coffin Texts* describe a journey that starts at the grave and continues either upwards to the sun and stars in the sky or downwards through a dark and murky realm below the earth that, as in the Mesopotamian sources, can be reached by travelling with the sun through gates between mountains at the western horizon as well. Similarly, in the *Book of Two Ways*, both a way by land and a way by water to enter the netherworld are depicted. Pyramids were images of the cosmos and acted as symbolic stairways or ramps to heaven that aided the king in his ascension, and again boats were sometimes buried alongside them as a means of transport. Altogether, physical movement on a vertical axis is a common feature in Egyptian funerary texts, both to reach the farworld, i.e. the lower and upper Duat, as well as within it. Additionally, downward movement is mostly depicted as dark and dangerous and upward movement as bright and pleasant, a convention that is in accordance with our observations concerning the neurological connection between loss of consciousness, reduced visual quality of dreams with subdued colours, falling sensations and fear as well as between an increase in consciousness, luminous colours and light phenomena, flying sensations and pleasant feelings.

As in the Egyptian sources, Gilgamesh's grave in *Death of Gilgamesh* represents an entrance into the subterranean realm, an idea that becomes apparent in the archaeological record in the subterranean corridor that leads to the royal tomb in Qatna. One wonders whether the well Gilgamesh has to dig to conjure dreams in the *Epic of Gilgamesh* can be interpreted, above and beyond its connection to the realm of Enki and Šamaš, as a temporary grave to establish a connection to the netherworld for the duration of the night. In his incubation, Gilgamesh certainly assumes an unusual posture when he goes to sleep in a curled-up position that recalls the alignment of the body so common in burials. Similarly, in the Egyptian *Tale of Sinuhe*, the protagonist lies down unconsciously – although in a prostrate position – while receiving the message of his god, a state that is moreover compared to death and nightfall. Gilgamesh's unusual connection to both the world of dreams

and the netherworld is also stressed in *Death of Gilgamesh* where he receives a vision of his fate after death in a dream with a strong sensorimotor component characterised by a feeling of vertigo, again pointing to a connection with falling movements in dreams. Interestingly, the Sumerian incubation formula *ma-mu<sub>2</sub>-de<sub>3</sub> ba-nu<sub>2</sub>* employs the same verb for “to lie down” which also denotes burials.

The subject of human mortality is addressed in both *Death of Gilgamesh* and *Dumuzi's Dream* when both protagonists try to escape their fate but fail eventually, whereas in the *Epic of Atrahasis* the fate of humanity in general is discussed. In the *Sargon Legend*, impending death is foreshadowed as well, although here it constitutes a positive feature because it is Sargon's adversary Ur-Zababa who is affected. While interpretation and solution are techniques commonly used for meaningful dreams, the announcement of death seems to lie outside the scope of solvable omens. This applies despite the fact that both Dumuzi and Gilgamesh possess an ambiguous status between the human and the divine; still, their death is inevitable, although in the case of Dumuzi there is the prospect of resurrection in spring. The myth about Dumuzi therefore shares with the myth about Osiris a twofold reference of sleep to both death and to resurrection, renewal of life and fertility of the earth in the seasonal cycle. That not even the gods are immune to the laws of the netherworld can be seen in *Inana's Descent to the Nether World*, where her trespassing into Ereškigal's kingdom results in Inana's death, although in this case, she is eventually able to escape. Not so with Enkidu: once he has gone down to the realm of the dead, only his *si-si-ig* can be summoned. Generally speaking, it appears that the segregation between the waking world, the realm of dreams and the domain of the dead was not yet as absolute as we tend to imagine today. All three were treated as physical locations in a tiered cosmology rather than as metaphysical realms, and accordingly, they were thought to have an impact on each other.

The deceased also feature in the Mari letters, where in one case (No. 227) they assume the role of the gods, transmitting messages, and as such act as intermediaries between the sphere of the living, the dead and the gods via the realm of dreams. Letter No. 230 contrasts necromancy and prophetic enquiries with the gods and hints at the idea that the appearance of the dead

in dreams is of greater antiquity than encounters with the divine. In the associated cemetery of Baġūz, some people were buried on beds, and a close connection between the dreamworld and the netherworld is suggested in the administration record from Mari that mentions food offerings to the dead, which they had requested in a dream. As this source is of an earlier date than the oldest request of offerings by a deity in a dream, it supports the conclusion drawn from letter No. 230 that the role of the deceased in dreams antedates the one of the gods. Additionally, in the *Incantation to Utu*, the spirit (*gidim*) of a dead person whose judgement has not yet been passed is thought to terrorise the living in their dreams.

Likewise, the Egyptian letters to the dead in which the deceased appear in dreams pre-date any record of manifestations of gods by far. Their addressees, in one case the father in the other the wife of the author, are typical deceased relations to appear in dreams and to offer protection and guidance to the living even by today's standards.<sup>19</sup> Similarly, dreams of receiving a letter from the dead are still commonly experienced in the contemporary United States. As in Mesopotamia, the deceased are thought to mediate between the different realms of the world and can both help and harm the living, while the dream itself was treated as a spatial zone that allowed views into the netherworld. Furthermore, Papyrus Nag ed-Deir 3737 was found in a funerary context, as were many execration texts that were used to repel the negative effects of bad dreams, among other things. It seems that, while in Mesopotamia the manifestation of gods in dreams was an important means of political legitimation for kings, the appearance of the deceased was more common for lower-ranking people in both cultures. But while the Egyptian letters considered here already stem from the First Intermediate period, private documents are rarely attested before the Old Babylonian period in Mesopotamia. Combined with the evidence from Mari letter No. 230, this may indicate that communication with the deceased is in fact older than can be determined from the extant sources.

Inferences about the relevance of sleep and dreaming for the afterlife can also be drawn from burial practices and funerary texts, a fact

that is possibly alluded to in the *Tale of the Eloquent Peasant* and the *Tale of Sinuhe*. The words Egyptians used for sleeping were analogous to terms for death, and resurrection was likened to awakening, while the same Sumerian verbs could take the meaning of "to lie down to sleep" and "to be dead". In the habit of laying bodies out on beds apparent in rich graves in the Near East and occasionally observable in Egypt as well, it can be seen that burial practices were informed by ideas about sleep. Also, this custom is possibly depicted on the Arad stela in connection with the death of Dumuzi, pointing to its role in mythology and cult. In both regions, the preserved bedframes stem exclusively from graves, which were equipped with other necessities of daily life as well, suggesting the idea of a house for the dead in which the dead sleep on their funerary beds in the burial chamber. This concept becomes especially clear when tomb architecture employs elements from houses of the living, a custom observable in both Egypt and the Near East. Additionally, the *Incantation to Utu* speaks about the deceased as eating and drinking as well as sleeping in his house, and a role of the beds as an emplacement for the *si-si-ig/zaqīqu* seems conceivable. In Egypt, pottery house models complemented the burial shafts of poorer individuals, and the decoration of coffins could replicate the tomb in its conceptual role as a house or sleeping place. Coffins also symbolised the cosmos, the base being equated with the earth or the underworld, the lid with the sky and the sides with the underworld or the eastern and western horizon. The body was usually oriented with the head to the north and the face towards the east, looking from the realm of the dead and the place of sunset towards the world of the living and the rising sun.

Although it needs to be conceded that beds are rare among tomb equipment and were limited to persons of the highest classes,<sup>20</sup> similar ideas can be expected for lower-ranking individuals. Already during the Old Kingdom, scaled-down versions of the funerary cults for people of high rank are detectable in the graves of the lower classes, pointing to the same gen-

<sup>19</sup> Garfield 1996, 195, 207–208.

<sup>20</sup> Mesopotamian written sources list substantially more beds than have been preserved (see chapter 4.2). Then again, it is unclear how much of this is an exaggeration as is surely the mention of beds from solid gold.

eral ideas about life after death, and with the *Coffin Texts*, magical texts that guaranteed the well-being of the deceased became available for people other than kings and queens.<sup>21</sup> Headrests were a grave good more common than beds, with headrests also discovered in the graves of the lowest social classes in the Elephantine cemetery, where they could be substituted by bricks, yet the posture of the deceased mirrored that of sleepers, as known from New Kingdom statues. Headrests were often placed under the deceased's head to magically protect the head as well as to raise it and thus to aid in awakening, i.e. in resurrection. The emphasis on seeing indicated by eyes sometimes painted on the coffin in front of the mummy's face is also found in the Egyptian concept of dreams and, together with the headrest's supposed function of increasing dreams characterised by a heightened degree of consciousness, it offers additional support for a connection between the netherworld and the nightly realm. Interestingly enough, in several modern African societies, headrests are considered a kind of antenna between the head of the sleeper and the subterranean domain, from where the ancestors send dreams to the living.

A relation between headrests and the netherworld can also be seen in the correspondence between the head on the headrest and the sun between the two mountains at the horizon that mark the place where the sun rises and sets, i.e. the entrance to the realm of the dead.<sup>22</sup> The mountains can be represented by a pair of lions as well, offering a clue about their role in the decoration of beds. In a similar vein, the common usage of bovine feet might be explained as a reference to the heavenly cow, and a link between the shape of headrests and horns has been suggested, although these theories are based on New Kingdom sources. The same applies to the interpretation of the bier and the headrest as the solar barque, still, it would certainly fit well with other evidence concerning a connection between burials and boats in earlier times. Thus, the combined evidence suggests that beds in tombs are more than just a part of burial equipment in the form of furniture but additionally serve to emphasise the equation

between sleep and death that is also evident in written sources.

It is surprising that it has gone unnoticed for so long to what extent Mesopotamian and Egyptian beliefs about the netherworld can be related to universal human experience in dreams, in spite of the fact that the research situation is favourable and offers a variety of sources to approach the matter. While scholars such as Adriaan de Buck or A. Leo Oppenheim had pointed out the topic more than half a century ago, the necessary research in the science of dreaming occurred only in the past decades. Furthermore, the fact that, despite longstanding contact, Mesopotamian and Egyptian culture differ substantially with respect to other central aspects of the afterlife, for example, whether a pleasant continuation of earthly life or an existence characterised by privation was imagined, has obscured the recognition of underlying similarities.<sup>23</sup> The sources treated in this work are a case in point as, although dissimilar in terms of the dating and, at least partly as a consequence, in terms of the type of source, certain cross-cultural similarities nevertheless become apparent. In Mesopotamia, on the one hand, dreams were seen as meaningful and sent by the gods and therefore employed in ritual contexts or as a means of political legitimisation from the earliest times. In Egypt, on the other hand, people were more concerned with bad dreams and with dealing with them as middle-class individuals, and dream accounts completely lack in the monumental inscriptions that form the earliest instances of writing. This observation gains even more significance if we consider that in its beginnings, Egyptology concentrated mostly on monumental burials and that therefore there is usually a bias towards the highest social classes in the information we possess. Nevertheless, the same anthropological constants show up in both cultures, with Mesopotamian proceedings concerning interpretation and political legitimisation explicitly relying on dreams characterised by a heightened state of consciousness as recognisable by their specific universal features.

Evidence from the prehistoric regions resulted in a less consistent picture, but certain themes common in Mesopotamia and Egypt could be observed there as well. Funerary beds and attachments of what might have been can-

<sup>21</sup> Trigger 2003, 537–538.

<sup>22</sup> Nona Palincas thinks there was a symbolical relation of the head with the sun in Middle Bronze Age Wietenberg and Monteoru burials in Romania as well (Palincas 2013, 313–316).

<sup>23</sup> Trigger 2003, 37, 106–107.



opies are attested from Anatolia, even though scantily, whereas beds for the living do not appear at all before the Late Bronze Age in the region surrounding the north-eastern Mediterranean. However, burial customs in the Mesara tholoi on Crete show Egyptian and Near Eastern elements, and in their easterly orientation, a reference to the sun is visible. Moreover, Early Cycladic figurines, which mostly have been discovered in graves on the Cyclades and on Crete, might be interpretable as lying supine. Aegean solar symbolism also appears on the Cycladic “frying pans”, on Minoan seals and possibly in the “horns of consecration” if their parallelisation to the Egyptian *akhet* is accepted. Lucy Goodison has suggested that a set of symbols that included sun motifs, boats, fish and the sea was known in the Minoan and Cycladic Early and Middle Bronze Age and that it was tied to ideas about the journey of the sun and beliefs about death and the afterlife.

Unfortunately, Maltese chronology and the circumstances under which the three figurines that show beds were discovered do not allow an exact comparison to the regions to the south-east, but some connection between sleep and a subterranean realm of the dead appears to have existed here as well because all three figurines were excavated in the Hal Saflieni hypogeum, which served as a collective burial place. In the two cases in which persons lie on the bed, they might be interpretable as depictions of incubations or of death, but the third example that depicts something that resembles a fish remains mysterious, although water/ oceans are elements that appear in connection with sleep in other regions as well. Still, Malta shows no evidence that the sun was incorporated into these beliefs and is thus quite different from its south-eastern neighbours.

In central Europe and the British Isles, evidence for sleeping places was limited to locations with exceptional preservation conditions such as the Shetland and Orkney islands, where box beds and benches from stone were discovered, or the Neolithic lakeside settlements of the Alpine region, where remains of textiles exist. Late Neolithic houses on the British Isles were by the arrangement of furniture divided into what is likely a female and a male side and sometimes oriented along the axis of midsummer and midwinter sunset and sunrise. Also, under a box bed in Skara Brae a double burial was discovered.

Yet, despite the much poorer preservation conditions, the most interesting archaeological findings with respect to beliefs about death stem from central Europe. On the one hand, burial with the face towards the east and thus towards the rising sun was adopted in a wide geographic area in the Late Neolithic and Early Bronze Age. On the other hand, at about the same time the use of wooden “coffins” became a widespread custom, and with the background of the observation of a funerary bed in the Unetice burial mound at Helmsdorf together with the fact that lids are almost never extant in the graves of lower-ranking people, I suggest that most “coffins” are in fact funerary beds and biers on which the dead were laid out. Furthermore, as in the Near East, Egypt and possibly the Aegean, it appears that concepts about a sun barque existed, as is the most likely interpretation of the depiction of a boat on the Nebra sky disc.

When it comes to cross-cultural regularities, a central problem lies in the distinction between homologies, i. e. similarities resulting from historical connections and analogies, i. e. similarities resulting from independent development.<sup>24</sup> All early civilisations inhabited the same world and, accordingly, cosmology cross-culturally shares certain features:

“As Alan Sokal and Jean Bricmont [...] observe, ‘All beliefs, even mythical ones, are constrained, at least in part, by the phenomena to which they refer’. The best-informed individuals in early civilizations knew about lands many hundreds of kilometres from their own but had no detailed information about regions that were more than a few thousand kilometres away. They tended to think of the terrestrial world as being a relatively flat plane only a few thousand kilometres across. All early civilizations were located close to seas or oceans; therefore it was inferred that saltwater encircled the whole earth. Above the terrestrial plane was the sky, which was filled with moving, hence living, celestial bodies. Most cosmographies posited some form of counterpart of the sky located under the earth. Especially in civilizations that interred the dead, this underworld was equated with death and decay and populated with the deities, spirits, and souls of the dead. Because the surface of the earth provided food for humans, it was often concluded that the underworld was a place of regeneration, where death gave rise to new life. [...] The belief that spirits

<sup>24</sup> Trigger 2003, 20.

and supernatural forces moved from one level of the cosmos to another encouraged symbolic elaboration. The widespread idea that the sun returned from west to east either below the earth or above the sky accorded with a widely shared belief that both earth and sky were opaque bodies that would render such movements invisible. It is also not surprising that an east-west axis, which corresponds to the visible movement of the sun, was generally privileged over a north-south axis.”<sup>25</sup>

While I agree that equal conditions can result in equal beliefs, the concurrence of habits that connect sleep with concepts about the sun’s journey in a boat and beliefs about death appears to be too much of a coincidence. Especially the unusual nature of the concepts of the Apsû and the Nun, which are closely tied to these notions and which are only shared by Mesopotamia and Egypt, suggest them to be the result of cultural contact.<sup>26</sup> As opposed to this, whereas there was some association between sleep and a subterranean realm of the dead on Malta as well, the absence of the sun in these beliefs makes a direct connection appear less probable. Also, a metaphorical equation of death with sleep likely existed in the Anatolian Neolithic already, as becomes apparent at Çatalhöyük, where the dead were interred beneath the sleeping platforms of the living, pointing to a vertical organisation, i.e. a tiered cosmology as well. Here, we also find indications that altered states of consciousness were of significance, and in a carving of resting people, we encounter evidence that sleep was considered important in some way. But while the movement of the sun appears to have played a role at Çatalhöyük by symbolising the human life cycle that in turn was mapped onto building structure, no association between ideas about resurrection and the rising sun seems to have existed at that time.

The work of the cognitive linguists George Lakoff and Mark Johnson is of help in understanding the correspondence that is assumed between sleep and death in such a spectrum of cultures, one that is broad both temporally and geographically. We are dealing here with a conceptual metaphor, in which knowledge from a source domain is projected onto an initially

unrelated target domain in order to enable its understanding (see chapter 2.10). Thereby, characteristics of an experientially well-understood phenomenon, in this case, sleep, can be transferred to form a mental concept of another phenomenon that is more complex, abstract or even of a nature that is intrinsically impossible to understand experientially as in the case of death. I, therefore, propose to add DEATH IS SLEEP to the known primary metaphors, which are directly grounded in universal embodied experience. The methodology of conceptual metaphor is especially useful for the study of ancient religions because, due to its theoretical grounding in “embodied/experiential realism”, it can account for human universals and still avoid the pitfalls of assumed innate beliefs.<sup>27</sup> Insofar as humans share the same body structure and interact with their environment in a comparable way, their experiences will resemble each other to a certain degree, leading to similar basic concepts, which are then interpreted in a culture-specific way to form more complex ideas.

So, whereas the fragmentary data situation makes it difficult to distinguish between concepts that are arrived at independently, those that are transferred between contemporary cultures and those that are inherited from shared predecessors, a tentative suggestion might be as follows: DEATH IS SLEEP is a primary metaphor that was already widespread in the earliest times considered here, as attested by the findings from Çatalhöyük and Hal Saflieni. No statement is possible about when, where and how it originated. However, if its classification as a primary metaphor proves true, this would indicate great ancestry.<sup>28</sup> Consequently, if sleep and death are metaphorically equated, the dream state and the netherworld are considered to be connected in some way as well. Sometime in the third millennium BC these concepts were complemented by the newfound idea about the journey of the sun and tied to beliefs about resurrection and travel through the hereafter by linking the fate of the deceased with the sun’s cyclic movement. Again, it is impossible to determine the

<sup>25</sup> Trigger 2003, 454–455. See also Trigger 2001, 89–90; Trigger 2003, 470–471, 644–645.

<sup>26</sup> Trigger 2003, 463–464.

<sup>27</sup> Slingerland 2004, 1, 8–11, 15.

<sup>28</sup> For a distinction between shared ideas derived from human universals and shared ideas resulting from cultural transfer, more studies would be needed that also incorporate beliefs of populations about which we can be sure that they are not historically related (Smith 2012; Trigger 2003).

time and place of origin of these notions. However, because of the resemblance between sleep and death on the one hand and the dependence of sleep on the alternation of day and night on the other, the incorporation of concepts about the journey of the sun into beliefs about death would have made immediate sense to a person from a culture where the primary metaphor DEATH IS SLEEP was already in place. Thus, the rapid spread of such notions can be explained by the fact that ideas grounded in universal embodied cognition are transmitted particularly easily due to the shared experiential basis. Additionally, dealing with human mortality and accounting for the nature of the cosmos are matters of immediate concern for every human and pervasive in many religions<sup>29</sup> It seems that several factors contributed to the widespread incorporation of dreams into ritual contexts in the second and third millennium BC. On the one hand, sleep and dreaming are universal embodied and embrained phenomena, whose characteristics prompt certain kinds of explanation. On the other hand, social conditions shape the way these phenomena are employed for a variety of means and therefore allow them to be incorporated into diverse cultural contexts.

## 7.2 DREAMS AND OTHER ALTERED STATES OF CONSCIOUSNESS IN THE COGNITIVE SCIENCE OF RELIGION

Patrick McNamara follows in the footsteps of Edward Burnett Tylor in regarding dream characters as the cognitive source for supernatural beings.<sup>30</sup> Among many traditional peoples, ancestral figures and nonancestral supernatural agents are venerated in waking life and are present in dreams as well, both in the form of evil and good forces. Therefore, dealing with these entities in dreams can bestow prestige on the dreamer and can result in her attaining the rank of a religious specialist. We may note that this fits exactly with the evidence from Mesopotamia and Egypt and thus that McNamara's assumption that similar beliefs were common in prehistoric times is justified. He goes on to relate dream characters to aspects usually ascribed

to gods and other spirit beings by the cognitive science of religion. The first of these is that they are "minimally counterintuitive",<sup>31</sup> i.e. violating instinctive ideas only slightly, because, from the perspective of waking consciousness, they are minds without bodies, similar as the dreamer herself seemingly has left her body behind. Nevertheless, the dream world appears to be as real as the waking world and is thus considered a complementary realm from which supernatural beings can affect particular features of the waking world such as healing potential, personal power and status as well as general knowledge stores. Secondly, dream characters have "full strategic access"<sup>32</sup> to the mind of the dreamer: it is almost impossible to deceive them as they always seem to know the thoughts and intentions of all characters in a dream. Lastly, dream images are characterised by their vividness, complexity, memorability and high emotional charge, contributing to their significance for other cognitive and behavioural systems and thus to their incorporation into religious contexts.

That dream characters satisfy criteria for being mental agents in and of themselves can be seen when they behave independently of the dreamer's will, for example in dreams of pursuit (see chapter 2.10), and as such appear to be more than mere inventions of the dreamer. Additionally, dream characters express thoughts, feelings, desires, emotions, sensations and other mental states.<sup>33</sup> McNamara argues that children's ideas about supernatural beings like ghosts, monsters and imaginary friends are connected to their dreaming experiences and that these "God concepts" start at the latest at the age of four, a date consonant with the development of general dreaming abilities (see chapter 3.3).<sup>34</sup> Children also report auditory messages in dreams independently of religious affiliation and these can be identified as divine messages even by children who are not reared in a specifically religious environment.<sup>35</sup> A connection between beliefs in spirits or souls and the appearance of the deceased in memories<sup>36</sup>

<sup>29</sup> Assmann 2002, 12.

<sup>30</sup> McNamara 2009, 193–194, 196–198, 200, 202–204.

<sup>31</sup> Schüler 2012, 125–130.

<sup>32</sup> Schüler 2012, 146–148.

<sup>33</sup> McNamara 2009, 197–198.

<sup>34</sup> McNamara 2009, 235–236. Still, it needs to be conceded that their dreams could also be a reflection of their daytime fears instead of the other way around.

<sup>35</sup> Adams 2005, 198–199, 201–202.

<sup>36</sup> Feuerbach 1847, 264; Hahn 2002, 576–577.

and dreams<sup>37</sup> is also seen by Thomas Junker, who, because of the ubiquity of such beliefs, suggests a differentiation between animism and religion, the former of which he considers a prerequisite for the latter.<sup>38</sup> Again, this fits well with the evidence encountered in the early textual sources, where, as opposed to divine appearances, consultation with the dead

<sup>37</sup> Hahn 2002, 576–577; Tylor 1889 II, 24.

<sup>38</sup> Junker 2014, 6–7. Although it needs to be noted that Junker quite carelessly operates with pejorative or at least poorly defined terms such as *Aberglaube* (“superstition”) or *Magie* (“magic”), still his suggestion not to consider animism a form of religion might turn out helpful for a definition of religions and their distinction from one another as well as from related phenomena such as, for example, political ideologies. „Die soziologische Hypothese, die ich für die Entstehung aller Formen des Jenseitsglaubens formulieren möchte, wäre also: Wir verdanken die Unterstellung eines Lebens nach dem Tode dieser realen Weiterexistenz in den Vorstellungen von alter ego. So wie für den an Phantomschmerz Leidenden eine Wirklichkeit sich aufdrängt, die unsichtbar bleibt, so drängt auch die Präsenz des Toten bei den Überlebenden auf das Postulat einer jener Empfindung entsprechenden Wirklichkeit. Folgt man neueren Theorien über die Wahrnehmung, wie sie von manchen Systemtheoretikern entwickelt worden sind, könnte man sagen, daß die Konstruktion fremder Identität und die Unterstellung ihrer Wirklichkeit den gleichen Regeln folgt, denen die Realitätsunterstellung aller Wahrnehmungsobjekte folgt. Unserem Bewußtsein ist etwas als äußere Wirklichkeit zwingend gegeben. Deshalb können wir gar nicht anders, als davon auszugehen, daß dem, was unser Bewußtsein uns als Wirklichkeit vorstellt, das unabhängig von seiner eigenen Konstruktion ist, auch tatsächlich vom Bewußtsein unabhängige Realität ist. Die Form unserer Identität, auf die das zutrifft, ist aber gerade die von anderen bedachte, beredete, beschriebene, gemalte oder sonst verewigte.“ (Hahn 2002, 578). „In einer Vielzahl von Gesellschaften schiebt sich aber über die Erfahrung vom realen Weiterleben der Toten im Diesseits eine zweite Vorstellungsebene. Es wird der in uns, den Überlebenden, gegebenen Wirklichkeit eine Realität an sich zugesprochen. Ganz generell scheint es für Menschen nahezu unmöglich zu sein, etwas, das für sie unverbrüchlich wirklich ist, als gegeben erfahren wird, nicht als objektiv vorhanden anzusehen, so wie wir ja auch die Welt als wirklich unterstellen, weil wir sie als wirklich erfahren und aus der Tatsache, daß die Realität der Außenwelt letztlich nur in uns gewiß ist, nicht einen generellen Zweifel an ihrer von uns unabhängigen Wirklichkeit ableiten. Für die Überlebensvorstellungen ergibt sich daraus, daß den Toten eine reale, von unseren Erinnerungen unabhängige Existenz vindiziert wird.“ (Hahn 2002, 580).

in dreams was not part of the official state religion.

In a wider context, it needs to be stated that the distinction between dreams and other hallucinatory experiences (visions, hallucinations, meditation, daydreaming) is at least partly dependent on cultural dogma, which in turn influences the subjective experience of these states.<sup>39</sup> Furthermore, due to the similarity of the experience, there is a statistical correlation in assigning religious significance both to dreams and to hallucinatory trance states in a variety of societies (figure 96). From the mention of the induction of dreams by alcohol in *Lugalbanda in the Cave of the Mountains*, it can be inferred that dreaming was not considered categorically different from other altered states of consciousness in Mesopotamia. Similarly, concerning the kind of use that is made of dreams by the various societies, four traits can be distinguished, all of which are present in Mesopotamia:

- “a. Supernaturals appear in dreams and give important powers, aid, ritual, and information.
- b. Religious experts (priests, shamans) expected to use their own dreams in performance of their role (e. g., curing, divination).
- c. Culture pattern dreams required before some roles may be assumed.
- d. Dreams induced by special techniques (e. g., fasting, drugs, sleeping alone, etc.).”<sup>40</sup>

Armin Geertz considers “experiences such as altered states of consciousness (dreams, fasting and hunger, psychopharmica [sic], self-inflicted pain, etc.)” as having been a feature of “proto-religious behaviour” during human evolution already,<sup>41</sup> whereas David Lewis-Williams and David Pearce think all religions possess an ecstatic component and alter human consciousness to some degree by techniques such as prayer, meditation or chanting.<sup>42</sup> Among the

<sup>39</sup> Bourguignon 1972, 415–416, 420–421; Szpakowska 2003, 10.

<sup>40</sup> Bourguignon 1972, 421.

<sup>41</sup> Geertz 2013, 51.

<sup>42</sup> Lewis-Williams and Pearce 2009, 10, 45. As further means of induction, they list the following: ingestion of psychotropic substances, *hypnagogia*, *near-death experiences*, intense, rhythmic dancing, auditory-driving (e.g. chanting, clapping, drumming), electrical stimulation, flickering light, *fatigue*, hunger, sensory deprivation, extreme pain, intense concentration (meditation), migraine, temporal lobe epilepsy, schizophrenia and other pathological conditions (Lewis-Williams and Pearce 2009, 46, my italics).



commonalities of altered states of consciousness, they list the following elements: seeing bright geometric patterns, floating or flying, passage through a tunnel, transformations of one thing into another, transformations into animal forms and the ability to see mercurially, even though vividly. Against this background, they interpret the geometric motifs in the Çatalhöyük wall paintings to be the result of altered states of consciousness (see chapter 6.2). In this context, it is also interesting to note the spiral decor in the Hal Saflieni hypogeum, where it can be safely assumed that some association between sleep and death existed (see chapter 6.4).

understanding the possible fish on a bed from the Hal Saflieni hypogeum.

Michael Schröter-Kunhardt is a representative of the hypothesis according to which the belief in life after death can be ascribed to so-called near-death-experiences (NDE), which are characterised by certain universal traits.<sup>46</sup> NDE are reported by up to half of the people who have been – or thought themselves to be – close to death but can occur during non-life-threatening events as well, thus suggesting that they are not categorically different from other altered states of consciousness.<sup>47</sup> NDE can be triggered both during states of high arousal

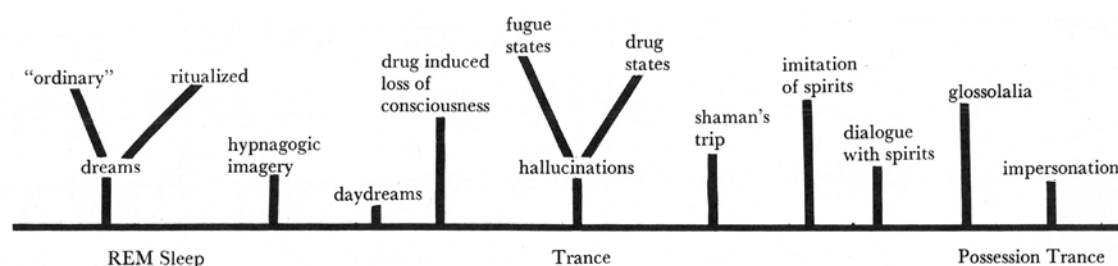


Fig. 96 Continuum from REM sleep via trance to possession trance

Starting from these observations, Lewis-Williams and Pearce argue that the ubiquity of tiered cosmologies can be explained by their shared neurological basis, which results in the idea of another realm that is both spatially removed and immanent in the material world.<sup>43</sup> Due to this experiential dimension, cosmology is often constructed in and mapped onto human-made structures such as standing stones or holes sunk into the floor and subfloor channels, all of which indicate the vertical dimension of the tiered cosmos. When they use the *Epic of Gilgamesh* as an example, pointing out the prominence of the tiered cosmology and movement through it, they also emphasise dreams as a key element of the “consciousness contract” (see chapter 1.1), but, oddly enough, dreams do not play a major role in the remainder of the book.<sup>44</sup> Moreover, they point out that the idea of a sub-aquatic netherworld is connected to the fact that the neurologically generated vortex commonly occurs together with sensations of immersion.<sup>45</sup> This is a thought that complements our observations concerning the subterranean oceans of Apsû and Nun, and it might play a role in un-

such as fear of death as well as when arousal is mostly absent such as during meditation.<sup>48</sup> Formal features include the dominance of visual over auditory over proprioceptive sensations (compare dream content, chapter 2.9), the (to a certain degree) formal intactness of rational thinking, suspension of the experience of time. Concerning content, about 61 %<sup>49</sup> of NDE start with pleasant feelings such as calm, serenity and peacefulness, whereas up to 18 % are characterised by negative emotions such as a feeling of danger and fear. 58 % are accompanied by so-called out-of-body experiences (OBE), i.e. the feeling of separation of the sense of self and the perception of the physical body. In these, the body is commonly seen from above by a self that can occupy a second body in 41 % of cases.

<sup>44</sup> Lewis-Williams and Pearce 2009, 154–159.

<sup>45</sup> Lewis-Williams and Pearce 2009, 111.

<sup>46</sup> Murray 2010, 38–40; Revonsuo 2009, 271–274; Schröter-Kunhardt 2002, 712–715. The figures constitute the mean of several studies (Schröter-Kunhardt 2002, 713). Differing estimates are given in the following footnotes.

<sup>47</sup> Estimates vary from 6 to 50 %, depending on definitions and methods that were used (Revonsuo 2009, 272).

<sup>48</sup> Duerr 2015, 15.

<sup>49</sup> Revonsuo: peacefulness 60 % (Revonsuo 2009, 273).

<sup>43</sup> Lewis-Williams and Pearce 2009, 69, 88, 101, 167.

Often, the OBE is associated with sudden freedom from pain. Following this, 32 % of people experience flying at high speed through a tunnel either horizontally or, in the more rarely occurring negative NDE, downwards (compare the connection of downward movement and fear and of upward movement and pleasant feelings in dreams with a strong sensorimotor component, chapter 2.10).<sup>50</sup> In 13 % of cases, this movement is accompanied by sounds such as hissing, buzzing, ringing, moaning, wailing or distant noises, but more often by beautiful, harmonic music (compare the common auditory hallucinations in sleep paralysis, chapter 2.11). In negative NDE, the noises are usually unpleasant. A light at the end of the tunnel is seen by 38 % of people, to which they feel drawn by a strong force and that is almost always associated with feelings such as bliss, unconditional love or omniscience, especially if they merge with it (compare the Egyptian kings rising to heaven and merging with the sun, chapter 5.3 and 5.5).<sup>51</sup> Afterward, 35 % of people emerge into a beautiful, culturally and religiously specific landscape, where 30 % meet deceased acquaintances and 27 % (shining<sup>52</sup>) religious figures connected to their specific cultures and religions.<sup>53</sup> In negative NDE, these take the form of a hellish afterworld, populated by menacing beings such as demons. Eventually, 33 % reach a border zone, which is for example comprised of rivers, streams, fences or gates that cannot be crossed as this is thought to render the return to the body impossible.<sup>54</sup> At different times during the NDE, 21 % of people experience a film composed of autobiographic images, which are as vivid as ordinary perception.<sup>55</sup> This

review of life can take the form of an ethical assessment as well.

As previously stated for dream form and content, the generation and prevalence of the NDE as well as the combination of its basic elements are independent of culture, religion, gender, age or other personality factors, which only influence the specific configuration of the universal elements and the positive or negative connotation of the experience. Nevertheless, some studies suggest that NDE occur more often in women than in men and more often in young persons than in older ones, a distribution that resembles the propensity of sleep paralysis (see chapter 2.11). Yet, only a minority of people experience the whole range of features, and it is, therefore, possible that NDE consist of a group of loosely associated experiences instead of being a single and unified phenomenon. Elements of NDE can also be artificially induced by hallucinogens, electric stimulation of the brain, hypnosis, meditation, autogenic training or eidetic techniques. Then again, the coherence and similarity of most NDE appears to be more than just coincidence.<sup>56</sup>

Schröter-Kunhardt points out that, as opposed to hallucinations, NDE are consistent but not invariant and considers several traits of religions to be derived from these universal human experiences rather than the other way round.<sup>57</sup> Above all, he thinks that ideas about the afterlife develop from them, for example, the common belief that the dead must pass through a dark and threatening netherworld in order to enter the light-filled, heavenly realm. Jan Assmann summarises Schröter-Kunhardt's "empirical phenomenology of the hereafter"<sup>58</sup>,

<sup>50</sup> Revonsuo: tunnel and light 25 % (Revonsuo 2009, 273). Darkness seems to be a variant of the tunnel experience, which is lacking in many non-western NDE (Schröter-Kunhardt 2002, 715).

<sup>51</sup> Revonsuo: mystical experience of "oneness" or visit in a supernatural "other world" 20–50 % (Revonsuo 2009, 273).

<sup>52</sup> Ordinary dreams about the deceased also often include images of light that surrounds them or shines from their faces, hair or garment (Garfield 1996, 210).

<sup>53</sup> Revonsuo: encounters with other beings, either deceased relatives or friends, or various religious figures 40–50 % (Revonsuo 2009, 273).

<sup>54</sup> Encountering some kind of barrier or border between the living and the dead is another common theme in ordinary dreams about the deceased (Garfield 1996, 194, 200).

<sup>55</sup> Revonsuo: life-review or chronological sequence of past events 10–30 % (Revonsuo 2009, 273).

<sup>56</sup> Revonsuo 2009, 274.

<sup>57</sup> Schröter-Kunhardt 2002, 715. See also Murray 2010, 42, 48. Duerr considers the observation that the hereafter takes a culturally specific form as proof of the contrary (Duerr 2015, 77), a quite enigmatic remark because his study compiles the most comprehensive body of data concerning universal features of NDE. The only explanation I can think of is that we are dealing with a misunderstanding between the two scholars based on a lack of conceptual clarity in the distinction between universal features and their culturally specific interpretation, i.e. between form and content (see chapter 2.9).

<sup>58</sup> Needless to say, this does not allow any inferences about whether life after death really exists, although, unfortunately, many scholars seem unable to distin-

which regards the Egyptian traditions of Ra and Osiris as examples of religions influenced by NDE, as such:

„Sämtliche Elemente dieser empirischen Phänomenologie des Jenseits lassen sich in kulturellen Jenseitslandschaften wie etwa den besonders elaborierten altägyptischen Jenseitsvorstellungen wiederfinden. Wir haben die starke Betonung einer Dissoziation von Körper und Seele bzw. verschiedenen Seelen (Ka und Ba) im Tode, wenn auch im Hinblick auf ihre letztendliche Wiedervereinigung unter veränderten Bedingungen, wir haben die mannigfaltigen, zuweilen durchaus tunnelartigen Ausgestaltungen eines Jenseitsweges, die sich auch in der Grabarchitektur insbesondere der Ramessidenzeit (13.–12. Jh.; in den Königsgräbern schon früher) in tunnelartigen Gängen ausprägen, Geräusche und Licht spielen besonders in den elaborierten Jenseitsbeschreibungen der Unterweltbücher eine Rolle [...], die Begegnung mit früher Verstorbenen, der Empfang des Verstorbenen durch die Jenseitsbewohner ist ein zentrales Thema, ein Lebensfilm läuft im Totengericht ab, dessen Richter das Leben des Verstorbenen ‚wie eine Stunde‘ sehen, und das Bild einer lieblichen Landschaft wird in Gestalt des ‚Binsen-‘ und des ‚Opfergefildes‘ ausgemalt. Sollte es wirklich eine nicht nur universale, sondern auch empirische Basis dieser Jenseitsvorstellungen und Unsterblichkeitsintuitionen geben?“<sup>59</sup>

guish between their research and their personal religious beliefs (see for example Schröter-Kunhardt 2002, 734–736). For the division of supernatural (dualistic) and natural (physiological, psychological and neurocognitive) explanations see Revonsuo 2009, 273–274.

- <sup>59</sup> Assmann 2002, 26. „Schon in der ca 5000 Jahre alten *Religion des Sonnengottes Re* gab es sowohl einen lichterfüllten Himmel als auch eine Höllen- oder Fegefeuer-ähnliche Welt der Verdammten. Die Sonnengott-Religion kannte wohl auch die Erfahrung der Lenkbarkeit der Sterbevisionen über entsprechende religiöse Übungen. Die *ägyptische Osiris-Tradition* wiederum beschreibt ein Verlassen des Körpers, das Phänomen des göttlichen Lichtes bzw. des Kampfes von Gut gegen Böse und damit der Kräfte des Lichtes gegen die der Finsternis, ein Wägen der Seele beim Totengericht, ein Weiterleben der Guten im Paradies aus herrlichen Naturlandschaften in leuchtenden Farben und eine Bestrafung der Bösen bzw. der Feinde des Sonnengottes und des Osiris. Auch von Ordalen und Hindernissen, die der einzelne überwinden muß, wird berichtet.“ (Schröter-Kunhardt 2002, 715). Cultures and epochs that do not hold ideas about a hereafter such as Israel during Old Testament times or the modern

Nevertheless, while Schröter-Kunhardt's observations seem justified to a certain extent, his statement that NDE are the most common and basic religious experiences ignores the religious significance of dreaming, particularly of states in between sleeping and waking, and he acknowledges a certain overlap concerning traits of NDE and dreams, especially hypnagogic imagery, dreams of flying and lucid dreams, the latter of which sometimes occurs together with OBE.<sup>60</sup> Hans Peter Duerr has compiled an extensive body of data concerning historical accounts of NDE and journeys to the hereafter as well as their incorporation into different belief systems, and it seems that then as now, characteristics typical of dreams with a strong sensorimotor component, lucid dreams and sleep paralysis are also prominent among the recurring NDE features. Intense fear (mostly but not only in negative NDE), rigidity and an inability to move,<sup>61</sup> roaring and buzzing sounds, vibrations of the body, whirling movements and feelings of vertigo, falling and flying sensations as well as strong downward and upward movement are reported by people from a variety of cultures and times.<sup>62</sup> However, although Duerr concedes that states between sleeping and waking are particularly suitable for NDE and that they are sometimes described as dream-like, he insists that we are facing distinct phenomena because NDE are clearer, more vivid, realistic and continuous as well as less blurred, bizarre and fragmentary than even the most intense dreams.<sup>63</sup> Part of the problem seems to lie in

era after the Enlightenment might have polemically abolished the hereafter and thus recognise it *ex negativo*. An Egyptian example is the monotheistic or rather monistic religion that king Amenhotep IV alias Akhenaten (1353–1336 BC, Dynasty 18, New Kingdom (Hornung et al. 2006, 492)) introduced by force. The souls of the dead live on in the tomb, in the garden and in the temple of Amarna, rendering it the earliest evidence of a theory of a single world (Assmann 2002, 26–27).

<sup>60</sup> Schröter-Kunhardt 2002, 723–726.

<sup>61</sup> In at least one case, the eyes were reported to follow the perceived imagery while staying unreactive to external stimuli (Duerr 2015, 130), therefore pointing to an even stronger connection to REM sleep, in which the eyes are exempt from muscle atonia.

<sup>62</sup> Duerr 2015, 29, 33, 43–45, 50–52, 63–64, 66–67, 70, 73, 79, 92, 106–107, 120, 125–126, 128.

<sup>63</sup> Duerr 2015, 14, 30, 32, 100–101, 239–241. Contrary to this, Schönhammer stresses the similarity of „catastrophic dreams“ in which the dreamer's body is shattered and NDE (Schönhammer 2012, 258).

an imprecise description of the dream states in question, for example when he discusses lucid dreams and points out the supposed activity in them as opposed to the passivity in NDE or claims that, in contrast to NDE, perceptions and sensations in lucid dreams seem less real. Had he considered the related phenomena of sleep paralysis and dreams with a strong sensorimotor component, it would have become obvious that the degree of consciousness and the consistency of the experience is subject to wide variation and that the states in question share certain traits. Rather, it seems that we are dealing with a continuum, in which the respective states are distinguished by their intensity and, possibly as a consequence, their perceived reality (compare the continuum of consciousness in sleep in figure 4 or the continuum from REM sleep via trance to possession trance in figure 96).<sup>64</sup> Most importantly, Duerr argues that in all cultural systems, a deliberate distinction is made between dreams on the one hand and NDE and visions, which are considered more real, on the other. Yet, this claim does not hold up to the evidence because, for example, in Mesopotamia, the distinction concerning ominous significance was made within the physiological category of dream states. His statement is also at odds with ethnographic observations, according to which the important distinction lies between spontaneous “individual” dreams and sought “culture pattern” dreams, the latter of which can encompass a variety of states, i.e. between the types of meanings culturally assigned to them.<sup>65</sup> Currently, no final statements about the exact relation between NDE, OBE, sleep paralysis, lucid dreams and dreams with a strong sensorimotor component seem possible, and more studies are needed that incorporate not only descriptions from the viewpoint of the experiencing person but information about the accompanying brain states as well. Mary Murray points out that spatialisation is pervasive in NDE, another feature shared with dreams and crucial for ideas about death:<sup>66</sup>

“The near death experience seems to take place in liminal ‘other worldly’ space. It is a place and space different to the ‘this worldly’ place and space that the person usually inhabits. It is also

one that appears to lie somewhat betwixt and between the land of the living and the land of the dead.”<sup>67</sup> “In the cosmological cartographies of such ‘imagined geographies’ the places and spaces that the dead occupy are usually held to be profoundly ‘other’ to the ones that the living generally occupy. However, near death experience testimonies, as resurrective narratives, connect the world of the living with the world of the dead in a way that both confirms and confounds the boundaries between the living and the dead. Boundaries between the living and the dead, normally held in by rituals of separation, are transgressed as they are upheld in the resurrective narrative of the near death experience. Professional and academic arguments that attempt to explain the near death experience perform the function of ‘border control’, situating the dead in the place of the dead and the living in the world of the living.”<sup>68</sup>

Murray focuses on the time since the European Reformation but stresses that in pre-modern Europe the barrier that separated the world of the living from the netherworld was considered to be even more permeable than in later times.<sup>69</sup> Spatialisation appears to be the defining aspect for ideas about death even at the dawn of written tradition.

Mircea Eliade had already argued for the commonness of cosmologies consisting of three levels which he terms “Heaven”, “Earth” and “Hell” in the 1950s.<sup>70</sup> These are thought to intersect in the “Centre” and therefore to allow a transition between the realms by upward and occasionally downward movement. As evidence, he compiles numerous examples for cosmologies of this type together with a variety of means of ascension through the different levels (for example climbing stairways, ladders, ropes, pillars, trees or mountains) and even mentions examples from dreams. Bruce Trigger legitimately criticises a tendency in the study of cosmologies to overestimate the idea of a central vertical axis when it is not made explicit that resulted from Eliade’s work such as in the case of ancient Egypt, where the importance of the circumpolar region of the sky can be confusing.<sup>71</sup>

<sup>67</sup> Murray 2010, 39.

<sup>68</sup> Murray 2010, 37.

<sup>69</sup> Murray 2010, 43.

<sup>70</sup> Eliade 1961, 39–51. See also Schönhammer 2004, 123.

<sup>71</sup> Trigger 2003, 445–446, 645. On the creation of cosmograms by early civilisations, see Trigger 2003, 467–470.

<sup>64</sup> Lewis-Williams and Pearce 2009, 56.

<sup>65</sup> Bourguignon 1972, 415–416.

<sup>66</sup> Murray 2010, 37–38, 43–44. See also Duerr 2015, 167–176.



Nevertheless, he concedes that cosmologies of early civilisations share certain similarities that could be explained if they were derived from cross-culturally uniform beliefs of preceding, less complex societies.

While I agree that not every account of ascent or descent in a religious context points to a conception of a world axis, recent advancements in the science of sleep and dreaming allow the recognition of the underlying pattern that (mis-) led scholars to assumptions of this sort. If the feeling of falling or flying is neurologically tied to certain types of dreams – and other altered states of consciousness –, it is hardly surprising that, in cultures that ascribed religious significance to dreams, vertical movement features in religious contexts. Even after the concepts of metaphysics and transcendence came into being in Late Antiquity, people could hardly help themselves and pictured the afterlife as a place that they somehow entered, and subjects who declare in surveys that they do not believe in life after death behave in relation to the deceased as if they did believe in it after all.<sup>72</sup> Trigger is on the right track when he assumes embodied cognition as the root of the phenomenon:

“It is [...] difficult to explain the widespread notion of a vertical central axis and quadripartition among the early civilizations. These concepts appear to have been present in many small-scale societies and ultimately may have been grounded in the coordinates that any upright primate would have required to monitor the natural environment. The human body itself would have suggested a vertical axis, while, given the limited range of clear vision, scanning in four directions (front, back, and to each side) would have been necessary to secure the visual coverage required to detect game, as well as animal predators and other dangers. Out of these perceptual foundations may have evolved the tendencies found in early and later preindustrial civilizations to draw complex analogies between the human body and the cosmos [...].”<sup>73</sup>

This recalls the primary metaphor CONSCIOUS IS UP; UNCONSCIOUS IS DOWN which Lakoff and Johnson attributed to the fact that humans lie down to sleep rather than to the feeling of upward or downward movement while waking *up* or *falling* asleep (see chapter 2.10). However,

from Trigger’s quote, it does not become clear why a static body would suggest a vertical axis because an axis of any kind always implies motion. One could just as well argue for a horizontal one because walking occurs on a horizontal plane. Trigger, like many others, falls into the trap of mistaking the explanandum for the explanation. Lewis-Williams and Pearce come closer to the truth when they consider the three-realm cosmology to originate from a neurological basis and, with their reference to the “social contract” and the “consciousness contract”, also incorporate the cultural dimension.<sup>74</sup> Still, their work fails to explicitly account for the bodily aspect of the experiences in question (see figure 1). It seems that the interweaving between the sensorimotor system and altered states of consciousness, including but not limited to sleep paralysis, lucid dreaming and flying and falling dreams, is a given from which the different phenomena discussed in this work result.

A holistic, transdisciplinary approach between history, archaeology and the natural sciences shows that, while a belief in life after death itself is not shared by all humans,<sup>75</sup> the underlying mental structures facilitating such beliefs are universal and reach far beyond the obvious similarity between sleep and death, i.e. the outward unresponsiveness of body and mind. Rather, the simulated world that is experienced in dreams is not random but possesses certain characteristics, which are at least partially shared by other altered states of consciousness and which prompt a specific set of ideas that therefore shows up in varying configurations under different circumstances. Chief among them is the role that the body and the

<sup>72</sup> Hahn 2002, 578.

<sup>73</sup> Trigger 2003, 455.

<sup>74</sup> Lewis-Williams and Pearce 2009, 62, 250–251. “Many myths derive from, or have in them elements of, a consciousness contract. [...] Their narration is embedded in a social contract. [...] In the first instance, the consciousness contract (what one might call the psychological component), together with its associated tiered cosmology, supplies building-blocks, episodes that we believe constitute part of the ‘deep structure’ of a myth. Importantly, these building-blocks trigger profound emotions. [...] Emotion, closely allied to shifting consciousness, internalizes myths and burns them into people’s minds. The social contract, on the other hand, is the arena of manipulation [...]. The building-blocks can be articulated in various combinations and transformations [...]” (Lewis-Williams and Pearce 2009, 151–152).

<sup>75</sup> Hahn 2002, 575–576.

sensorimotor system play in experiencing these states, inevitably leading to a netherworld conceptualised as a spatial category if there is any such concept at all. Here, the commonness of tiered cosmologies throughout human history is accounted for. Because these experiences are inevitable for all humans, they require ways of dealing with them, although the measures that each culture will take are subject to great variation. Dreams are therefore a prime example in which to observe the three interlocking dimensions of religion, namely experience, belief and practice, as well as the mental, bodily and social aspects of the topic. Thus, cognitive archaeology and the cognitive science of religion have proven an apt way to advance the matter and to study embodied cognition in historic and prehistoric cultures.

### 7.3 AFTERWORD AND OUTLOOK FOR FURTHER RESEARCH

The present work has aimed to examine sources connected with sleep and dreaming older than 1500 BC. Yet, whereas the entirety of written sources about dreaming was presented, an attempt to do the same for texts that mention sleep is simply not feasible. For Egypt, textual and archaeological aspects of sleep are also being investigated as part of two other doctoral projects,<sup>76</sup> but there is no equivalent comprehensive study for Mesopotamia so far apart from a single article.<sup>77</sup> With respect to the prehistoric regions, I have aimed at exhaustiveness concerning evidence for sleep, but because of the scattered nature of sources there will be many instances that have escaped my research, and some regions such as south-western Europe or the Carpathian Basin and its surroundings were not included at all. Still, my work constitutes the first study that compiles evidence of this sort, and I hope that it will be of help for future scholars in recognising archaeological clues for sleep both in excavations and in literature research. Interestingly, the interconnectedness of ideas of sleep and dreaming with ideas about

death and the netherworld turned out to be ubiquitous, a plausible observation given their grounding in universal embodied cognition. A comparative cross-cultural study that also incorporates historically unrelated cultures could shed light on the question of whether the primary metaphor *DEATH IS SLEEP* indeed constitutes a human universal.<sup>78</sup>

The evolution of sleep and dreaming also has left unanswered several questions that are open to empirical research, for example, what role the construction of sleeping platforms plays for the cognitive development of the great apes and whether there is a general connection between the ability of cognitive blending and the ability to combine materials into artificial objects by weaving or knotting, a question that is important not only with respect to hominids but also to birds. Regarding the development of dreaming, the relation between complex visual-spatial skills and cognitive blending, both of which seem necessary for genuine dreaming, remains to be investigated, preferably in a study of children younger than three years. Similarly, the association between NDE, OBE, sleep paralysis, lucid dreams and dreams with a strong sensorimotor component needs to be described not only subjectively by the experiencing person but also objectively by studying the accompanying brain states.

Lastly and most importantly, this work has extensively demonstrated that the sensorimotor system is highly involved in experiencing dreams and other altered states of consciousness. However, it remains unexplored how this interweaving occurs, what its causes are and what its function is – if it has any at all – as well as when it appeared during human evolution. More studies are needed that investigate these questions from different angles, taking into account the neurological, the bodily and the social dimensions, for example, which tools or techniques influence the physical experience as well as the brain states of the dreamer in what way.<sup>79</sup> Particularly the role that headrests might play for achieving dream states characterised by a heightened degree of consciousness by putting the sleeper in a tilted position and therefore pre-

<sup>76</sup> Gerhards 2020; Schutz forthcoming. In 2018, and thus after I had submitted my dissertation, Simone Gerhards published an article, in which she arrived at similar conclusions as I did (Gerhards 2018).

<sup>77</sup> Steinert 2010.

<sup>78</sup> Smith 2012; Trigger 2003.

<sup>79</sup> For example, Rebecca Sachs Norris has stressed the role that ritualised posture of the body plays in experiencing religious states by “re feeling” emotions of previous, similar experience (Sachs Norris 2005, 181).

sumably disrupting the sense of balance could be a fruitful topic to investigate in a transdisciplinary framework involving experimental archaeology and cognitive neuroscience.

Since I submitted my dissertation in April 2017, the science of sleep and dreaming has further advanced, and a multitude of scholarly work has appeared in print. Although I have since then made amendments to the original text, I have refrained from incorporating sources younger than 2016. In this context, I can only make mention in passing of important works such as *Traum und Schlaf. Ein interdisziplinäres Handbuch*<sup>80</sup> edited by Alfred Krovoza and Christine Walde or *Dreams. Understanding Biology, Psychology, and Culture*<sup>81</sup> edited by Robert Hoss, Katja Valli and Robert Gongloff, both of which bring together studies from a variety of disciplines. With his open access projects *Open MIND*<sup>82</sup> (edited together with Jennifer Windt) and *Philosophy and Predictive Processing*<sup>83</sup> (edited together with Wanja Wiese) Thomas Metzinger has furthermore set standards for consciousness science in general, thereby also touching on the investigation of sleep and dreaming.

The last word belongs to Oppenheim, who was the first to systematically collect information about dreams in ancient Mesopotamia:

“In dreams intermingle in many and curious ways the influences of the conceptual conditioning of the waking world with all its manifold and interconnected configurations of experiences, attitudes, and expectations and that fundamental inventory of dream-contents which is most likely shared in varying degrees by all humans of all periods. The terrors of the dream and its delights, the meeting with the departed, the untrammelled sweep of the earth, the nether-world, and the heavens, the pressures of the needs of the creature, the encroachment of the troubles of the daily life, to mention only a few aspects, produce an ubiquitous fundus in that world of dreams upon which is superimposed a rigid pattern of selections and restrictions adopted by the individual civilization and adjusted to the cultic and social standing of the

dreamer. This pattern derives its ultimate authority and unshakable consistency from that setting of the waking world which, by some unknown process, each civilization creates as the only admissible vehicle of its self-expression.”<sup>84</sup>

I hope that I have succeeded in shedding some light on these unknown processes, but there is still plenty to be explored in the future.

<sup>80</sup> Krovoza and Walde 2018.

<sup>81</sup> Hoss et al. 2019.

<sup>82</sup> Metzinger and Windt 2015, <http://open-mind.net/> 15 April 2021.

<sup>83</sup> Metzinger and Wiese 2017, <http://predictive-mind.net/> 15 April 2021.

<sup>84</sup> Oppenheim 1956, 184.





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