This compilation of texts, which aims to be one of the first attempts to take praxeology beyond the realm of theory, brings together a wide range of socio-cultural fields that could benefit from a praxeological approach. For some of the contributors, praxeology is well known and already a part of their work. For me, studying the historical development of religion in Late Antiquity, working with this approach has been a somewhat novel journey. Praxeology does much to challenge the theoretical basis, or lack thereof, of previous approaches to historical research. Old ideas of innate meaning, direct access to sources and the old reliable aim to discover wie es eigentlich gewesen ist are easily discarded to make room for an approach that operates with networks, contexts, interpretive communities, Bedeutungskongruenz and so much more. In short, to even approach the extensive processes of past meaning formation, meaning production and the role of practice and/or praxis therein, a historian must take a great many aspects into account, with the aim of discovering and recreating a historical phenomenon in its widest sense. But how can historians do this? Studying phenomena that are often far removed, both in time and space, from our own, from which there is limited and random source material, we simply do not have access to all the contextual processes and practices that guide and influence meaning formation. How, then, can we approach history praxeologically, when it is precisely the context that we lack, and in many cases are trying to discover?

Andreas Reckwitz writes, in the opening chapter of this publication, of the importance of bridging the divide, the analytic opposition that has been built and maintained between culture and the material in socio-cultural studies. Rather, culture and materiality should be understood and studied as working together in the formation of meaning and knowledge. Our contributions to this volume are meant to substantiate this praxeological material turn in studying culture, and my attempt, then, to operationalise praxeological theory will be through Edwin Hutchins’ adaption of blending theory. Here, Hutchins takes a cognitive approach to culture, which explores the role

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1 Reckwitz, this volume.
2 Hutchins 2005.
of the interplay between materiality and culture in human conceptualisation. Briefly put, blending theory maps how different concepts and ideas are appreciated, used and developed in human cognition, and Hutchins expands the theory to include material phenomena in the cognitive processes, as what he calls \textit{material anchors}.

Yet this is not my only reason for wishing to explore Hutchins' cognitive theory. Cognitive approaches to culture have developed from cognitive linguistics and their idea of \textit{embodied mind}. Its fundamental tenet is that although culture is a many-faceted thing, it is still appreciated and remembered through the human body and the cognitive make-up of the mind. Hence, the new, but expanding, field of cognitive cultural studies is now addressing everything from pre-historic ritual to why humans believe in gods. Some even write of a \textit{bio-cultural turn}. What cognitive theories offer to historians studying culture is the use of the human body and mind, which arguably does not change notably across time or space, as a constant when studying cultures far removed from our own. Hugo Lundhaug, who is one of the few to have used blending theory in historical studies, writes that since “the mechanics of thought are fundamentally human and embodied and the same across cultures,” they allow us to “analyse the intellectual products and patterns of thought of peoples and cultures far removed from our own” when we examine them through cognitive criteria. In short, lacking direct access to the phenomena we study, cognitive theory offers historians indirect access, with, crucially, “an adequate degree of methodological clarity.”

My endeavour here will be twofold. I will see, first, whether Hutchins’ expansion of blending theory can be a concrete method for bridging the theoretical divide between culture and materiality in cultural studies, and then I will examine whether it thereby facilitates a praxeological study of historical phenomena. To start the paper, I will further introduce blending theory, and then elaborate more on Hutchins’ use of it. (These will necessarily be brief and simplified introductions; for a fuller understanding of the theory, the reader should consult the original works. However, I hope my outlines, combined with my case study, will provide a working understanding.) Then, I will move on to test Hutchins’ approach, by looking at lamps and their ritual use in Late Antiquity. Through this approach, I hope to not only explore praxeology’s applicability via certain theoretical developments in cognitive studies, but also to try its concrete potential in addressing questions of religion and culture in historical research.

\begin{itemize}
\item[4] Evan & Green 2006, 46.
\item[6] Lundhaug 2010, 64.
\item[7] Ibid.
\end{itemize}
1 Blending Theory

Gilles Fauconnier and Mark Turner introduced and started developing blending theory, which describes conceptual blending, in 1993: “Conceptual integration, which we also call conceptual blending, is another basic mental operation, highly imaginative but crucial to even the simplest kinds of thought.”8 They base their work on George Lakoff and Mark Johnson’s influential conceptual metaphor theory, launched in 1980. Lakoff and Johnson argue that metaphor is a mode of thinking, not just a rhetorical embellishment. As an example, they point to the classical metaphor life is a journey. This is not simply a literary analogy; it is a conceptualisation that compares and contrasts the notions of life and journey (for instance, having a beginning, an end, and possibly a goal), which is then opportunistically used to comprehend the situation or phenomenon at hand.9 Lundhaug summarises: “conceptual metaphors are employed as powerful cognitive tools enabling the readers or listeners to think about abstract [...] concepts in terms of more concrete and familiar concepts and imagery.”10 Fauconnier and Turner, then, recognise such processes, the formation of ideas and understanding through the opportunistic combination of different concepts or notions, in all human meaning formation, and therefore expand Lakoff and Johnson’s theory to human thought in general, as a key cognitive process.

Fauconnier and Turner start from the foundations of mental space-theory: “A theory of cognitive semantics, mental space theory locates meaning in speakers’ mental representations, and construes linguistic structures as cues that prompt speakers to set up elements in referential structure.”11 In layman’s terms, this means that concepts like life or journey, or our notion of things like a table or a chair, are mental spaces; “small conceptual packets constructed as we think and talk, for purposes of local understanding and action.”12 Mental spaces, then, are the cognitive representations of phenomena. But, importantly, these are not static: “Mental spaces are interconnected in working memory, can be modified dynamically as thought and discourse unfold, and can be used generally to model dynamic mappings in thought and language.”13 And it is these dynamic spaces, expressed as life or table, which may in turn be combined with one or more other mental spaces in what Fauconnier and Turner call conceptual blends.

A conceptual blend, or simply blend, maps or describes how such a combination, such a blend, of mental spaces plays out. Fauconnier and Turner call this process

8 Fauconnier & Turner 2002, 18.
9 Ibid., 35.
10 Lundhaug 2010, 27.
11 Coulson & Oakley 2000, 176.
12 Fauconnier & Turner 1998, 137.
conceptual integration, and they map it in a conceptual integration network. A basic network consists of, first, two input spaces, which are derived from mental spaces, for instance life and journey. These input spaces are then related through a generic space, which holds the relevant common traits of the two input spaces; for our metaphor, it would be a beginning, an end, etc. Finally, this combination of the two mental spaces, through the generic space, forms a new, blended space, wherein the metaphor life is a journey occurs. The network is perhaps better illustrated through the somewhat more elaborate blend of the Eucharist, which has become the classic example for blending theory:

![Diagram of the Eucharist as a blend](image-url)

**Fig. 1:** The Eucharist as a blend. From Lundhaug 2010, 418, reproduced with permission.

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Here, the two input spaces are 1) the bread and wine, and 2) the body and blood of Christ. In the generic space, their common properties are established as a) solid, and b) fluid and red. The concepts from the input spaces are then projected into the blended space, thereby making the Eucharistic elements the body and blood of Christ.\textsuperscript{15} An important distinction here is that this blend is not meant to describe a person’s appreciation of the transubstantiation every Sunday at Mass, but rather the underlying processes that make the relation between body and bread, blood and wine, cognitively plausible and permissible.

Furthermore, it is important to note that there may very well be more than two input spaces, and there may also be intermediate blends that function as inputs into new blends or conceptual integration networks.\textsuperscript{16} Another point to keep in mind is that the process is not straightforward and unidirectional. Rather, the blend may affect the entire network, with influences going back and forth along the connections and spaces that form the conceptual integration network.\textsuperscript{17} A consequence of this is that the blend may be selective in what is projected from the input spaces; including what contributes to the blending, but leaving out what does not.\textsuperscript{18} For instance, while pertinent to the wine, the colour of the bread is not projected into the generic space in the Eucharist. Finally, a blend may be asymmetrical, with one input space dominating or being privileged vis-à-vis the other(s), depending on the situation and aim of the blend.\textsuperscript{19}

Having noted these addenda, I can proceed to the principles that underlie the connections between the spaces in a blend. Fauconnier and Turner have a typology of fifteen types, although not claiming that this is an exhaustive list, of \textit{vital relations} that link the aspects in one input space with aspects in the other input space and thus facilitate the connections. These are \textit{change, identity, time, space, cause–effect, part–whole, representation, role, analogy, disanalogy, property, similarity, category, intentionality} and \textit{uniqueness}.\textsuperscript{20} For example, the wine and the blood in the Eucharist are linked by being \textit{similar, analogous} and having the same \textit{properties}. These vital relations are, then, the conceptual principles that relate wine to blood, bringing the two mental spaces together in a new blend. Now, these may appear almost banal in their very general, or abstract, nature, but Fauconnier and Turner are attempting here to go back to precisely the most abstract principles behind the different forms of relations (hence the appellation \textit{vital}), and then garner further understanding from

\begin{itemize}
\item \textsuperscript{15} Lundhaug 2010, 32.
\item \textsuperscript{16} Fauconnier & Turner 2002, 279.
\item \textsuperscript{17} Ibid., 47.
\item \textsuperscript{18} Ibid.
\item \textsuperscript{19} Ibid., 70.
\item \textsuperscript{20} Ibid., 101.
\end{itemize}
the different principles at play in a blend, as well as from the further constraints to a conceptual integration network that I will go on to outline now.

First, a conceptual integration network is constrained by certain *optimality principles*; conditions under which the blend works most efficiently. A successful blend should, first, *compress what is diffuse*; this means it should “simplify complex mental structures to a scale at which they become more easily manageable to the human mind, making it possible to think in terms of familiar objects, actions, and situations.”\(^{21}\) Second, it should help *obtain global insight*; it should make the matter easier, not more difficult, to understand. Third, a successful blend *strengthens vital relations* (typically by contextualising them through some form of a story); meaning that it will tighten, not loosen, the connections between the network’s spaces. Finally, it should *go from many to one*; the fewer elements and agents in a situation, the easier it is to deal with.\(^{22}\) These principles work towards producing a blend that is easy for human cognition to fathom and process, and Fauconnier and Turner observe that a typical way of meeting these optimality principles is for the blend to be compressed to *human scale*.\(^{23}\) For example, when God, in Western Christian traditions, is conceptualised as Father or King, he is brought down to human scale,\(^{24}\) which 1) compresses the diffuse idea of God, 2) increases insight by contextualising God in a familiar, patriarchal role, and 3) avoids any obfuscating Trinitarian questions, to name but a few functions. “Some of this compression [like God as Father] is so conventional and entrenched that it is hard to notice.”\(^{25}\)

However, there are also forces in conceptual integration that oppose compression, most notably the *topology principle*. *Topology* is the existing conceptual frame(s) from the input spaces, and important topological features will work to resist change brought on by compression: “The Topology Principle resists Compression that eliminates important topology.”\(^{26}\) For example, the Christian God might be brought down to human scale as a Father or King, but rarely as an insect or drainage pipe. This would, in different ways, violate an important topology of God as an input space. Certainly, exceptions exist; as I have noted, blends have different aims and different symmetries, but for a traditional Western Christian context, the input space including God would have to be seriously downplayed in order for its topology to be thus disregarded. Perhaps an analogy to the topology principle may be seen in Stanley Fish’s *interpretive communities*,\(^{27}\) or in Pierre Bourdieu’s *habitus*,\(^{28}\) where, simply put,
all agents and situations have certain restricting frameworks. Still, in every case, in every blend, there is no fixed role or importance of the topology principle; a blend will always be a balancing act between the topology principle and the principles of compression. Together, they create the dynamic that guides a blend’s conceptual integration.

Finally, a successful blend, like the Eucharist or God as Father, can become its own conceptual structure, containing “structure that is not copied from the inputs”, and in turn function as input space for other, new blends.29 Fauconnier and Turner outline this as a process of, first, composition; where the blend is formed and joins different mental spaces. Second, a process of completion will take the conceptualisation in the new blend and “evoke information in long-term memory that is used to fill in the blend.”30 Finally, elaboration is when the blend is simulated and used in the human mind as its own structure, forming what Fauconnier and Turner call an emergent structure.31 Returning to the Eucharist, once the bread and wine is established as the body and blood of Christ, we have the emergent structure of the Host. The Host can then take on its own role and significance, represented extensively in both art and ritual, and consuming it can be further elaborated as an affirmation of belonging to the Church, a unification with Christ, or absorbing the Holy Spirit. Thus, “the blend may be elaborated upon in ways that are in principle limitless.”32 One example of this is how the Eucharist is frequently seen reversed in the vampire-myth.33

By mapping and exploring processes of completion and elaboration, then, perhaps we can also approach the question of practice and praxis?

Cultures work hard to develop integration resources that can then be handed on with relative ease. [...] In cultural practices, the culture may already have run a blend to a great level of specificity for specific inputs, so that the entire integration network is available, with all of its projections and elaborations.34

But these processes are not without restrictions, as we have seen. A wide variety of creative blends may occur, but only those with resonance in the interpretive community and with potential for elaboration beyond their immediate situation will survive repetition and reuse, and potentially form a praxis. Conceptual integration and its emergent structures may in fact be quite conservative:

29 Fauconnier & Turner 2002, 49.
30 Lundhaug 2010, 33.
31 Fauconnier & Turner 2002, 49.
32 Lundhaug 2010, 33.
33 Joshi 2011.
34 Fauconnier & Turner 2002, 72.
It often uses input spaces, blending templates, and generic spaces that are anchored in existing conceptual structure; it has governing principles that drive blends in the direction of familiar, human-scale structures; and it readily anchors itself on existing material objects.35

Now, the theory and models outlined here, with the aim to dissect human cognition and map mind-processes, can be seen as yet another of the investigations of cultural phenomena that reduce the material to a simplistic search for cause and effect, which Reckwitz warns against in the opening chapter of this volume. And indeed, blending theory does move in dangerous waters in this respect. With its models, its vital relations and other integration principles, it deals with essentials and generalities, and this is a weakness that should be kept in mind. In fact, many scholars in cultural studies, be they historical, anthropological or from religious studies, are sceptical of cognitive theory for exactly this reason; they are concerned that it takes the field back to universalist, absolutist assessments of culture.36 Cognitive scholars try to counter this by underlining that while human cognition is universal, the phenomena and concepts it deals with of course are not.37 Yet maintaining the distinction may be challenging. I believe this is a charge cognitive theories can never fully avoid, but, as Lundhaug writes, they do offer an explicit theory for what is being done and thus a methodological clarity for our endeavours.38

2 Material Anchors in Conceptual Blends

Edwin Hutchins has a multifaceted background. Trained in cognitive anthropology and having published on the Trobriand Islanders in Papua New Guinea, he continued to work on Micronesian navigation traditions and then on research and projects for the US Navy, where he observed and charted the use and processes of navigation aboard a ship, alongside similar projects for commercial airlines. In his 2005 article in the Journal of Pragmatics, Material Anchors for Conceptual Blends, he includes many elements from his previous work to demonstrate how conceptual structure is associated with/to material structure, using Fauconnier and Turner’s model for conceptual blending. The key principle of his work is that human cognition operates with/through material instruments/objects/artefacts, not in a separate mental world: “Cultural models are not only ideas that reside inside minds, they are often also embodied in material artifacts.”39 As a basic concept or aim, I find this compares well with

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38 Lundhaug 2010, 64.
39 Hutchins 2005, 1558.
Bruno Latour’s idea of symmetrical anthropology\textsuperscript{40} and praxeology’s general aim to approach culture as interaction and negotiation in a network of human agents and artefacts, or actants, to use Latour’s term for objects that take an active role in cultural networks.\textsuperscript{41} It was this parallel that first led me to link the two theories, and which is my motivation for this paper.

Hutchins starts from the basic observation that “thinking processes sometimes involve complex manipulations of conceptual structure,”\textsuperscript{42} something few would deny. Any level of abstraction requires a manipulation of conceptual structure. To facilitate and ideally ease such complex manipulations, “conceptual structure must be represented in a way that allows some parts of the representation to be manipulated, while other parts remain stable” and, importantly, “the complexity of the manipulations of structure can be increased if the stability of the representations can be increased.”\textsuperscript{43} Simply look at the elaborate and complex data-sets that can be treated and analysed because they are fixed, and thus stabilised, in computer programmes. Of course, computers are not always available for cognitive processing: What better way, then, to stabilise representations of conceptual structure than to graft them into or onto material structure? “The ability to combine conceptual structure with material structure is a key cognitive strategy,”\textsuperscript{44} and Hutchins proceeds to list a number of psychological examples and experiments where materialisation simplifies logical problem-solving.\textsuperscript{45}

It is this conceptual use of artefacts that makes them into what Hutchins calls material anchors. This term is meant to denote how conceptual structure can be built into or fixed in durable objects, which are like anchors for the concept: On the one hand, their durability can be a conservative influence that carries and preserves conceptual structure, but on the other hand, they can also be introduced in new interpretative contexts and thereby enable or play a part in creative conceptual developments. As such, I would say that material anchors compare well with Markus Hilgert’s praxeological understanding of certain artefacts as epistemischen Dingen.\textsuperscript{46} Latour also sees a similar use of artefacts as actants in conceptual networks, because it facilitates greater abstraction in human conceptualisation. Actants can be holders, or anchors if you wish, of different ideas or concepts, and a creative process is opportunistic network-building between various concepts. It is precisely the fixing of a concept or an idea to an actant, a conceptual artefact, that allows the creative juggling and combination of initially strongly heterogeneous components, which is necessary

\begin{itemize}
\item \textsuperscript{40} Latour 1993.
\item \textsuperscript{41} Reckwitz 2002, 213.
\item \textsuperscript{42} Hutchins 2005, 1557.
\item \textsuperscript{43} Ibid.
\item \textsuperscript{44} Ibid., 1556.
\item \textsuperscript{45} Ibid., 1558.
\item \textsuperscript{46} Hilgert 2009, 288.
\end{itemize}
for technical and scientific thought. Anchoring conceptual structure in material structure, having artefacts as material anchors, is thus a key strategy for stabilising or fixing parts of conceptual structure, thereby facilitating more complex human cognition.

Yet how is this different from the classical symbolist approach to culture, seeing material artefacts as symbolic representations for cultural ideas or notions? Is dealing with conceptual structure embodied in material artefacts not simply perceiving the artefacts as symbolic expressions of the conceptual structure? Indeed, Hutchins appears to be doing just this when, for instance, he analyses the movement of a clock’s hands over the dial as a "cognitively advantageous representation" of the passing of time. However, although artefacts may be symbolic representations, Hutchins explores the ways in which they are also more than that in a later article: “But, what makes a material pattern into a representation, and further, what makes it into the particular representation it is? The answer in both cases is enactment.” Thus, Hutchins also includes the role and importance of social practice and praxis, which underlies praxeology. He maintains that gesture cannot be conceived of as simply the externalisation of an internal emotion or state, but should be defined as the enactment of concepts, and furthermore that “humans make material patterns into representations by enacting their meanings.”

A physical structure is not a material anchor because of some intrinsic quality, but because of the way it is used. It might be better to ask, under which conditions does something become a material anchor, than to ask whether it is a material anchor.

Having established this, I can now move on to the novelty in Hutchins’ work; mapping the inclusion of material anchors in cognitive processes or conceptual structure as blends. Fauconnier and Turner have already outlined how blends may bring together different mental spaces as input spaces in a conceptual integration network, and Hutchins here sees an opportunity to map also the conceptual combination of mental and material space: “I would like to explore the possibilities that arise when some or all of the structure contributed by one or more of the input spaces has physical form.” As his first example, Hutchins takes a queue:

47 Schulz-Schaeffer 2000, 198–199.
48 Reckwitz 2002, 202. See also his contribution to this volume.
49 Hutchins 2005, 1571.
50 Hutchins 2010, 429.
51 Reckwitz 2002, 211.
52 Hutchins 2010, 434.
53 Hutchins 2005, 1562.
54 Ibid., 1559.
Consider a line of people queuing for theatre tickets. This cultural practice creates a spatial memory for the order of arrival of clients. The participants use their own bodies and the locations of their bodies in space to encode order relations. The gestalt principle of linearity makes the line configuration perceptually salient. Our perceptual systems have a natural bias to find line-like structure. But seeing a line is not sufficient to make a queue. Not all lines are queues. Soldiers standing at attention in formation form a line, but not a queue. In order to see a line as a queue, one must project conceptual structure onto the line. The conceptual structure is the notion of sequential order. For our purposes, we will represent this directional ordering as a trajector (Langacker, 1987). Conceptually blending the physical structure of the line with an imagined directional trajector turns the line into a queue.55

Thus, the conceptual structure of a queue emerges as a blend: First, it is composed by combining the material structure of the line of people and the mental structure of a trajector. As separate entities, neither of these are a queue, but together they form this new conceptual structure. Then, the structure is completed by reinforcing memories, culture and behaviour, such as the first-come, first-served principle, people joining the queue or people avoiding breaking the line of the queue. Finally, when the conceptual structure of the queue is established, it can be elaborated by other questions and reasoning: Who is first in line? How many are in front of me? And so on.56

Here, then, Hutchins describes how the blend emerges as a new conceptual structure from its completion and elaboration, which I basically understand as its enactment, its use. Therefore, it is not simply a symbolic interpretation, but an element in social practice. This also appears analogous to one of the key tenets of Hilgert’s contribution to the praxeological corpus, namely that, at least to an extent, objects are made meaningful by routinized patterns of action/use, and are in this sense rather instrumentalised than objectified.57 Hence, understanding artefacts through cognitive processes does not discount the importance of the social or the cultural; in fact it relies on their influence. For instance, Hutchins remarks that the emergent queue-structure will be much stronger in societies where first-come, first-served is an established principle, which it is not in many places.58 In certain such areas the blend might even be rejected, because the lack of cultural reinforcement leaves it too weak, and the line of people may not be recognised as a queue at all. To summarise, there is first the cognitive processes mapped in the conceptual integration network, and then the completion and elaboration of these in relation to the context, to establish an emergent structure.

I have now briefly outlined how Hutchins proposes to bridge the divide between material and mental space in cultural studies. Throughout, I have pointed out parallels to key works or ideas in the praxeological corpus, and, as the latter has for

55 Hutchins 2005, 1559.
56 Ibid.
58 Hutchins 2005, 1559.
some time now remained primarily on the theoretical level, I find Hutchins’ work an interesting and promising possibility for operationalising the theory. But is the bridge Hutchins has built strong enough? First, using blending theory, with the conceptual integration network to map cognitive processes, takes away the opposition between ideas and materiality in socio-cultural studies. Reckwitz calls for *arrangements* of material and cultural elements,⁵⁹ or *constellations of interobjectivity*,⁶⁰ while Hilgert prefers to conceive of cultural phenomena in non-linear webs of ideas,⁶¹ and I find that Hutchins’ arrangement of conceptual processes in integration networks is at least something akin to what they seek. Second, Hutchins’ reliance on enactment incorporates the praxeological emphasis on practice for meaning-formation.⁶² Finally, Hutchins underlines that artefacts are not the only means of anchoring conceptual structure. Both the simplicity/form of the structure itself and its degree of incorporation in the culture are other ways of anchoring conceptual structures. These ways are also not mutually exclusive, but rather work together with varying emphasis in the different cases.⁶³ Thus, despite developing a strong model for mapping conceptual processes, I still find that Hutchins explores culture in a broader, not narrower, sense, as praxeology bids.

### 3 Lamps in Late Antiquity

Now, these theoretical deliberations may all be very interesting, but the proof of the pudding is in the eating. Does Hutchins’ theory help provide access to the workings and contexts of cultural phenomena that are far removed from us in time and space, making it a praxeological tool for historical study? To test this, I will look at the ritual use of lamps in Late Antiquity, and there are several reasons why I believe lamps are a good case on which to try Hutchins’ approach. First, the lamp was a common artefact that, through certain uses, became a ritually important artefact. In other words, it is an artefact that gains its ritual importance not in its manufactured form, but through *enaction*. Second, the lamps show a marked stability in their typology,⁶⁴ offering the possibility for precisely the material stability or fixation that Hutchins points to in material anchors. In fact, lamps maintained their religious and ritual significance into the Christian and the early Islamic centuries,⁶⁵ suggesting precisely such

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⁵⁹ Reckwitz, in this volume.  
⁶¹ Hilgert 2009, 304.  
⁶² Hutchins 2005, 1574.  
⁶³ Ibid.  
⁶⁴ Chehade & Ruprechtsberger 1993, 274.  
⁶⁵ Dauterman Maguire 2009.
an anchoring of ritual significance in the lamp. Finally, the considerable number of lamps found in connection with altars, ritual pyres and mixed with other sacrificial remains suggests that we can talk of some sort of praxis, not just practice. This will necessarily be a summary introduction to the ritual use of lamps in Late Antiquity, aiming only to facilitate an initial trial of Hutchins’ use of blending theory.

Fire and light have always been important elements in ritual. Although torches were the classical choice for fire and light in Hellenistic ritual, the lamp came to play a major role in Roman, and later, domestic cults, simply by being cheaper and easier to handle than the torch. Arguably, they could have been used in rituals simply for lighting purposes, but a great number of the lamps found show no traces of use, which suggests that the lamps were important beyond their most basic function. Indeed, several sources show them as either ritual elements constitutive of the sacred space, or as being the sacred space in and of themselves. Many lamps are decorated with scenes of worship, and “the arrangement of decorative elements around the nozzle – where the flame comes from – is regularly mimicking a small sanctuary: the flame of the lamp assumes the role of altar fire.” Archaeological finds from domestic cults in Roman Egypt also show “[l]amps and incense-burners in the shape of temples, miniature altars (...).”

Lamps are mentioned throughout the spells and recipes of the Greek Magical Papyri (PGM), the well-known compilation of magical recipes and ritual texts from Late Antiquity. Their use and description here show and describe how important lamps are in creating and demarcating sacred space in rituals. Frequently, lamps would be placed on or near the altar, in some cases simply as part of the sacrificial gifts, without any indication of use, while in other cases lamps take the place of the censer, with incense or spice being added to the wick. Moreover, there is an emphasis on purity, mirroring the importance of ritual purity in public temple service, insisting that the lamps used in the rites be either new or at least clean. Often, the spells also prescribe that the lamps should not be decorated, which is an interesting contrast to our archaeological finds. The oil should be pure and of good quality. Spells can be written on or in the wick, and the wick should preferably be made from new linen or from a burial shroud, the latter probably because effects from the dead have always been ritually potent. The spells address the powers that be, typically using

66 Patera 2010, 266.
67 Ibid., 264.
68 Zografou 2010, 276.
69 Patera 2010, 266.
71 Frankfurter 1998, 135.
72 Zografou 2008, 64.
73 Zografou 2010, 279.
74 Ibid.
 voces magicae (nonsensical magical formulae), invocations and forming requests. In addition, spells could be spoken to or over the lamp.\footnote{Zografou 2010, 280.} Finally, the general link between divinity and luminous phenomena is well documented in the Hellenistic world. Concerning lamps, many recipes in the PGM say that the flame is sustained by some divine presence, and several spells also liken the flame to the power of the sun, with all its ritual significance.\footnote{Ibid., 283.} Altogether, these descriptions of lamps and their ritual use makes Athanassia Zografou suggest that lamps in Late Antiquity functioned almost as portable sanctuaries.\footnote{Zografou 2008, 62.}

Now, I want to try to map how a lamp can be conceived of as a portable sanctuary, by placing important traits from temple service in one input space and corresponding features from the lamp in the other input space of a conceptual integration network (see figure 2). Here, we can see how essential features of temple service find their complement in the lamp, thus forming a portable sanctuary. Hutchins does not have a generic space, only input spaces and the blended space, and he also does not deal with the types of vital relations that link the input spaces. Still, I want to retain these aspects from Fauconnier and Turner in my use of Hutchins’ approach, as I think these shed light on interesting details in the working of the blend.

I will start with the more clear-cut aspects of the blend. First, there is ritual space, which is composed of two features. There is the decoration on the lamps that mirror temple structures, creating a relation as a representation, pointing to the special situation, or place, of ritual. Another feature is the demarcation of ritual space, which in the one case is marked by the temple precinct and in the lamp comes from the limited area that it illuminates and thus frames. Both aspects define a special, ritual space that is projected into the blend of the portable sanctuary. Then, there are the prayers or incantations of temple ritual, which are easily mirrored in the writing on the wick. They are both forms of communication, and they are joined in this blend by intentionality; the wish to communicate and establish contact with the divine. I have also put in a link between this process and the smoke or incense, since the upward motion of the rising smoke gives direction and also almost a physical contact between the ritual and the deities addressed; forming a line of communication, if you will. Of course, the smoke or incense is important in and of itself, as a mirror of burnt sacrifice, thereby projecting ritual action into the blended space. The overlap with the communicative features, however, shows how a network influences and strengthens itself; while the link between communication and rising smoke on its own is weak, by being in this blend, forming a network with the other ritual elements and projecting into the contact in the blended space, the relation is strengthened. And thus, both the
Fig. 2: The blend of a lamp as *portable sanctuary*.
writing on the wick and the rising smoke are joined in the blended space as establishing contact.

Another important feature is the flame of the lamp. Analogous to the altar fire, it projects divine presence into the blended space. Divine presence through the flame of the lamp is noted throughout the historical sources, and is also one of the important aspects in the continued use and ritual relevance of lamps into the Christian and Islamic eras. Furthermore, the ritual importance of the flame can be seen in the significance and use of torches in rituals, as well as other ritual and religious ideas related to light (for instance the sun). However, the most interesting aspect here is how the archaeological sources suggest the blend was elaborated: I have mentioned that many of the lamps found in ritual context show no sign of use. This suggests that the lamp could carry its emergent structure as a portable sanctuary without being lit, without having the actual flame, even if the flame is an important basis for its being a portable sanctuary. This shows how the blend is elaborated upon: As the blend is established, a lamp can carry the blend, even without possessing the initially requisite features (here, a flame). The lamp as portable sanctuary may then be used in new contexts and conditions, just as I described previously with the Host.

So far, the driving principle in the blend has been that features from the temple service are mirrored in the lamp. The conceptual integration network shows details of how this comes about, but what it shows, essentially, is how the lamp is a miniature metaphor for temple sacrifice. Hence, it so far is only a symbolist interpretation of ritual lamps, and not the symmetrical analysis that I was seeking as a praxeological example. But then there is the relation between ritual actor and lamp, connected by their common property of emphasising ritual purity. Now, this connection is not a simple metaphor, and far less obvious than those above, since it comes into conflict with important topology. There is the topology of an actor saying it should be an active agent, and then the topology of a lamp which says it is a passive object. Can the relation created by shared property override these topological aspects? Several spells in the PGM, where the lamp is addressed and thus seen as an active agent, suggest that indeed it can. Here, then, we see how compression in a blend can override important topology, and thereby create “structure that is not copied from the inputs.” Importantly, this compression is probably not only driven by the one vital relation between actor and lamp. I doubt whether this in and of itself would be strong enough to override the topology of the two input spaces. Rather, the compression is supported by all the other relations in the blend: The model in figure 2 shows that

78 Zografou 2010, 283.
79 Dauterman Maguire 2009, 139.
80 Zografou 2010, 283.
81 Ibid., 284.
82 Fauconnier & Turner 2002, 49.
there are many relations between the two input spaces, thereby creating a strong blend, with strong compression that can help overcome important topology. Furthermore, the spells where lamps are spoken to and addressed as agents show that this blend is supported through enactment as well; such use and practice around the lamps are elaborations on the blend and also help in the process of compression.

Finally, there is the lamp’s size, its smallness, which is not related to the temple service, but projected into the blended space only from the lamp. It is fully possible that an element is projected from only one input space, and this is usually caused by this element being a strong topological feature in the mental space from whence it originates. In this case, the size is of course the key feature that the lamp contributes to the blend; bringing temple service down to human scale, condensing all the different features and elements into one artefact that is manageable and inexpensive. In short, it is what makes the portable sanctuary portable. Again, here there is conflicting topology; the complexities of temple service and the simplicity of a lamp. But, through the links and compression provided by the other features, the blend is formed and composed, and the smallness of the lamp becomes a part of the emergent structure of the portable sanctuary.

All in all, then, the conceptual integration network shows how a lamp can help simplify the complexities of ritual. Most important here, of course, is the small size of the lamp. Then, there is the ritual space constructed around the lamp; ritual communication is materialised in the writing on the wick, and its direction or connection to divinity is carried by the smoke. The flame projects divine presence into the blend, but blending theory explains also how unlit lamps could come to carry the same ritual weight as lamps with a flame, as the blend of a lamp as a portable sanctuary was completed and elaborated upon. The compression of such a strong blend even makes it possible to overcome strong topology and allow an inanimate object like a lamp to serve as ritual agent, and therefore be addressed in spells in the *PGM*. This, in turn, is an enactment, or elaboration, that then reinforces the blend. In addition, this analysis shows how important it is to also include vital relations and a generic space in a blend, even if Hutchins himself does not. Without the specification that property is a potential vital relation, I might have missed the important link between ritual actor and lamp and ended up with only the metaphorical relations between the input spaces, with all the consequences this would hold for my analysis.

For I saw some cause for concern when it appeared, initially, that the lamp became only a metaphor for temple service. Of course, the metaphorical use of lamps is not uninteresting. After all, Hutchins’ project is to show how the constraints of the conceptual space are built into the artefact. Yet if the lamp remains only a metaphor, then it would be a symbolic interpretation of an artefact, and not a symmetrical analysis of the conceptualisation of a ritual lamp. Then, I came to the flame and the link

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83 Hutchins 2005, 1574.
between ritual actor and lamp, which show traces of more complex processes and indeed the emergence of new conceptual structure. In particular, the link between ritual actor and lamp combines some quite contrary topology.

All this makes me think that the other links, those functioning essentially as metaphors, are no accident. As the blend stands now, it is strong, with many connections, and it can therefore combine quite opposite features from its input spaces; its strength lies precisely in its metaphorical links. Thus, decorating a lamp with temple-like structures establishes a metaphorical link between lamp and temple, which strengthens the relation between the two so that the blend’s compression gains momentum and is also able to combine ritual actor and lamp in the *portable sanctuary*. Hutchins underlines that the artefact must be suitable to serve as an anchor; for instance, a room full of people is a poor anchor for conceptualising a queue. The more or less conscious grafting of temple structure onto lamps may then be done precisely to make lamps into a more suitable anchor, which in turn strengthens the blend and allows more dramatic compression.

4 Conclusion

I would say that Hutchins’ theory here shows promise as a means to operationalise praxeological theory. It bridges the material and the conceptual, it pays heed to and includes the importance of practice, and it maps conceptualisation processes in a network form. While these basic points may not satisfy all the aspects of all of the different praxeological approaches there are, I believe they capture the basic goals and premises for what praxeology aims to achieve. Yet the more interesting question is of course addressed in the second part of this paper, where Hutchins’ theory is put to the test by applying it to the ritual use and importance of lamps in Late Antiquity. And, again, I would say Hutchins’ theory delivers. Analysing the conceptualisation of lamps as portable sanctuaries through a conceptual integration network shows how features of temple service are mirrored in the lamp, thus creating strong links between the two concepts and a strong blend. Moreover, it shows that not all the links are simple mirrors; some of the features that are combined have quite conflicting characteristics, but through the compression of the network these are blended to form a new, emergent structure. Finally, the analysis also suggests how lamps could come to have ritual significance without being lit, through the running and elaboration of the blend, thereby pointing at the conceptual origin of a ritual practice or praxis in Late Antiquity.

84 Hutchins 2005, 1559.
However, the final test remains: What new knowledge of lamps and their ritual use does this analysis produce? What do we find using Hutchins’ theory that we could not have discovered otherwise? No wholly new information comes from this. I have used established knowledge about lamps, temple service and the ritual use of lamps, contributing nothing entirely new to these fields. Yet what this analysis does is to explore how these phenomena are related and interact in human conceptualisation. And here, it does find some interesting links, some enlightening points and suggestions for why lamps were suited to be portable sanctuaries in Late Antiquity. I do not argue that these links, points and suggestions could not have been reached via another route, since, as I have just mentioned, I am working from well-known historical material. However, I do think this use of blending theory organises and presents the material in a way that is fruitful, allowing researchers to get a sense and overview of complex conceptualising processes, and helping us to see connections, and disconnections, that can otherwise be more difficult to nail down. Of course, this approach will not uncover all aspects related to the cultural use and importance of artefacts, and it would be well served by a further, more elaborate and detailed application to a test case. Still, I hold that this initial exploration shows that there is potential here, and that it warrants further exploration.

Bibliography


