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5

Drawing Attention to Metaphor

EDITED BY
Camilla Di Biase-Dyson
and Markus Egg

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Drawing Attention to Metaphor

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Volume 5

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Case studies across time periods, cultures and modalities
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Edited by

Camilla Di Biase-Dyson
Georg-August-Universität Göttingen

Markus Egg
Humboldt-Universität zu Berlin

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Drawing attention to metaphor

An introduction to the debate

Camilla Di Biase-Dyson & Markus Egg
Georg-August-Universität Göttingen / Humboldt-Universität zu Berlin

1. By means of context

This volume is the product of a conference, *The premeditated path. Deliberate metaphor in ancient and modern texts*, that was held in Berlin in July 2016 under the auspices of the Excellence Cluster 264 'Topoi: The Formation and Transformation of Space and Knowledge in Ancient Civilizations'. The impetus for the conference and its subsequent publication was twofold: firstly to attempt to engage with the different sides of the debate about "deliberateness" or "marking" in metaphor usage and secondly to see whether texts from the ancient world could offer some new perspectives on the signalling of metaphorical language.

In recent times, as indicated particularly by a number of contributions to the inaugural volume of the journal *Metaphor and the Social World* in 2011, a debate has raged about whether the terminology of "deliberateness" in relation to metaphor use is appropriate. As we shall describe in more detail in Section 3, some scholars working in psycholinguistics and gesture studies highlighted the problematic implications of the label "deliberateness", which implies conscious language use (Steen, 2007, p. 248) and, in particular, conscious metaphor production (for this, see Müller, 2008a, pp. 184–185). On this basis, terms like "activation" (Müller, 2008a, p. 190), "attention" (Müller, 2008a, p. 207) "marking" (Goatly, 2011, p. 180) or "signalling" (Goatly, 2011, pp. 178–179), which more broadly imply some kind of effort on the part of the speaker (or writer, gesturer or signer) to mark what they are communicating to the hearer (or receiver) as particularly salient, may be proposed as an alternate, more appropriate, designation, particularly for interdisciplinary study. This broadening of the terminological focus is reflected in the various contributions to this book.[1]

1. This being said, we leave to our authors' discretion with what terminology they choose to describe what we call attention-drawing devices.

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The aim of this book is to investigate this idea of attention-drawing from a strongly diachronic and comparative, not to mention multimodal, perspective, in order to understand what kinds of attention-drawing strategies exist across languages, the situations in which they are used, what kinds of genres and topics employ attention-drawing strategies more than others, and how they are implemented in different modes. Moreover, an elucidation of the *method* of identifying attention-drawing is a crucial consideration for ancient text studies. However, before we move on to a closer discussion of the method, the case studies and the conclusions we were able to draw from them, it may be wise to first establish some definitional boundaries and outline the theory behind the "deliberateness debate".

2. Definitions: Metaphor, "deliberateness" and "attention-drawing"

A metaphor is a phenomenon occurring across modalities in which a more abstract entity (a Tenor or Topic in its linguistic realisation or Target Domain at the conceptual level) is described in terms of an entity that is more tangible (Vehicle or Source Domain). Metaphors are found in language, thought and communication (Steen, 2011a, p. 83). The linguistic level represents the formal relationship of Topic and Vehicle (in terms of their realisation as a metaphor, simile, etc.). The conceptual level concerns the nature of the Target Domain and Source Domain and their interaction with each other – Andrew Goatly (2011, p. 9) calls the latter "Grounds". Lastly, the communicative level engages, amongst other things, with the notion of deliberateness, signalling or attention-drawing that can accompany figurative language.

Deliberate metaphors, if we follow Gerard Steen's terminology, "involve mandatory attention to the fact that they are metaphorical" (Steen 2011a, p. 84). Deliberateness can be manifested at the linguistic level (via explicit signalling using a direct metaphor or simile like "She was *like* **a flower**") or at the conceptual level (via a novel metaphor like "She is **a lightbulb**!"). However, we are just as likely to find deliberateness in less obvious places, in indirect metaphor or conventional metaphor (Beger, 2011, p. 41).

Although deliberate metaphors are often associated with the research of Steen and the Metaphor Lab, the use of the terminology is documented already in contributions by Lynne Cameron (1999, p. 26) and Yeshayahu Shen and Noga Balaban (1999, p. 139), who placed emphasis on the context-bound use of metaphor. The terminology is used in reference to different strategies used in very different communicative contexts: Cameron focuses on the dynamic, spontaneous use of metaphor in spoken communication whereas Shen and Balaban's research concerns itself with metaphor in carefully-composed, rhetorically-charged newspaper texts.

Berenike Herrmann (2013, p. 171) has shown this distinction to be significant and also motivated:

> [D]eliberate use of metaphor (both in direct and indirect metaphors) may have different goals in the distinct sub-registers, such as evaluation in social sciences, humanities & arts, aesthetic and pleasure in humanities & arts, and education in natural sciences, but also in humanities & arts.

The phenomenon of "deliberateness" has furthermore been described by other scholars in other ways: Cornelia Müller (2008a, p. 6) characterises the metaphors as being "waking" or "activated" in the context of use, which draws on, but goes far beyond, the more traditional distinction of "dead" vs. "alive" metaphors. Müller (2008a, p. 200) calls the kinds of devices used to mark a metaphor "activation indicators". Goatly (2011, pp. 178–209) calls those devices "metaphor signals" and Lynne Cameron and Alice Deignan (2003, p. 150) call them "tuning devices", to indicate the way in which they, like other discourse markers, modulate meaning and affect in communication.

3. The theory and the debate(s)

As mentioned in Section 1, the debate around the issue of metaphor signals has arisen chiefly since Steen suggested that the investigation of "deliberateness" was something that required its own framework, namely Deliberate Metaphor Theory, or DMT. Quantitative and qualitative research into this phenomenon has never been lacking, but this new line of argument confirmed that the matter was worth discussing in more detail, and with more attention to a method (cf. Reijnierse, 2017, p. 11 and this volume). Thus, the principal gain of DMT (together with other contemporary text- and gesture-based approaches) was to refocus the attention of metaphor analysts onto the issue of attention-drawing, as was more typical of studies of metaphor in the time before Conceptual Metaphor Theory (CMT), when consciously-phrased literary or rhetorical metaphors formed the focus of scholarly attention in the fields of linguistics, literary studies and hermeneutics.

The advent of CMT (Lakoff & Johnson, 1980, 1999; Lakoff, 1993) had pushed to the forefront typically unobtrusive metaphors in everyday language, which provided for completely new ways of appraising figuration in the context not of language but of *thought* across a wide range of disciplines. In this context, DMT emerges as one of several attempts to refocus scholastic enquiry on metaphors that were deliberately created as metaphors and consequently draw attention. It shares this goal with other approaches, among them George Lakoff and Mark Turner's

(1989) account of poetic metaphor, which in fact is not restricted to poetry (for which see Piata, this volume) but can be applied to other genres as well (Egg, this volume).

DMT is characterised as both as a refinement and an extension of CMT (Steen, 2017), since it not only analyses metaphor as a mapping of a Source Domain structure onto a Target Domain (Steen, 2011b, p. 54) but additionally "asks precise questions about the role of metaphorical language in utterance processing at various levels of mental model construction and maintenance" (Steen, 2015, p. 71).

DMT distinguishes itself from CMT by focusing on metaphors in which the fundamental process of cross-domain mapping is exploited to enforce a novel perspective on specific topics. For this to take place, deliberate metaphor must be processed in terms of an explicit cross-domain mapping, while the processing of non-deliberate metaphor boils down to mere word-sense disambiguation for a polysemous item (Steen, 2015, p. 69).

The metaphors investigated by DMT thus exhibit a higher prominence of the Source Domain in the interpretation of the metaphor. Consider the definition of deliberateness in the research conducted by Gudrun Reijnierse et al. (2018, p. 136):

> A metaphor is potentially deliberate when the source domain of the metaphor is part of the referential meaning of the utterance in which it is used.

This prominence of the Source Domain has been linked to the novel perspective on the Target Domain that deliberate metaphors enforce, in that the Source Domain acts as a kind of reference point from which the Target Domain is viewed (Steen, 2017, p. 281). Consequently, the focus on the differences between the Source Domain and the Target Domain is more significant in DMT than in CMT, where the differences were to an extent relativised by the "Invariance Principle" (Turner, 1990, p. 248).

Although the connection between DMT and CMT via the shared idea of a mapping between Domains is openly acknowledged, the methodology implied by the statement presents a more complex reality. The method behind the Deliberate Metaphor Identification Procedure (DMIP, cf. Reijnierse et al., this volume) is based on the Metaphor Identification Procedure VU University Amsterdam (Steen et al., 2010). It is claimed that the end result need not be the elucidation of the domains in a conceptual metaphor (Steen et al., 2010, p. 8). However, such a statement leaves one questioning how one should access the Source Domain (which is so crucial to the concept of deliberateness) in a replicable manner. It seems that the movement towards more empirical approaches of metaphorical analysis has at times lost sight of the great gains made by CMT in relation to the elucidation and enumeration of conceptual domains. In any case, all scholars dealing with

attention-drawing phenomena cannot escape the fact that there is some sort of activation of a specific domain, even if it is not explicitly identified.

Prominence of the Source Domain in the speaker's mind is, for instance, at the heart of Müller's (2008a) notion of "activation" (or "awakening") of metaphors, which often has empirically observable consequences, among them accompanying gestures. Like in DMT, the special status of an activated metaphor in Müller's theory is not a property of the linguistic item but a "cognitive achievement" of the interlocutors.

At the same time, Müller (2008a, p. 198) deliberately avoids distinguishing metaphors in terms of consciousness, pointing out the lack of sufficient agreement on what consciousness actually is. Such a position has clear implications for "deliberateness", about which Müller (2011, p. 62) says:

> [A] proper inclusion of this notion into a theory of metaphor use presupposes a theory and a concept of what consciousness is, how deliberateness and non-deliberateness relate to it, and how deliberate and non-deliberate metaphors can be empirically identified and reconstructed.

Ray Gibbs (2011, p. 43) echoes this sentiment and doubts the applicability of the category of deliberateness in metaphor from a psychological perspective, questioning the role of human consciousness in explicit language use. Perhaps it was criticism of this kind that led to more precise formulations of the principles behind deliberateness (Steen, 2015, p. 71; Reijnierse et al., 2018, p. 136).

Another point of contention is the role of the Source Domain in metaphor processing. While Gibbs does not deny that metaphors can be used deliberately, he claims that Steen's distinction of deliberate metaphors wrongly predicts that only they involve activation of the Source Domain during metaphor processing. Gibbs argues that the Source Domain can also be activated routinely in the processing of metaphors that would be categorised as "non-deliberate" (2015a, p. 74). However, this point does not undermine the theory of Steen (2015, pp. 68–69), who argues that non-deliberate metaphor is processed by general word-sense disambiguation, which can indeed activate the Source Domain: Its first step consists in activating all word senses (including those referring to the Source Domain) before choosing the appropriate one. The crucial difference is that with non-deliberate metaphors there is neither comparison between referents from Source and Target Domains nor integration of Source Domain referents in the resulting discourse model.

In the light of this discussion, however, we might be justified in questioning whether "deliberateness" is the right way to describe what is going on in thought and language when a metaphor is marked. As mentioned briefly in Section 1, these terminological considerations motivate the use of more general terms like

"attention" and "awareness". For this, we are indebted not only to the work of Müller (2008a) and Alan Cienki (this volume), but also to recent work by Steen, who claims that "attention to metaphor is the place where embodied cognition and social interaction can meet" (Steen, 2017, p. 281), as well as the recent monograph of Valentina Cuccio (2018).

In sum, the debate about DMT continues, not only with respect to the terminology and its implications. Indeed, its overall status remains a topic of discussion: Is it a new theory, a novel framework – or just a more precise method of investigation?

Answering these questions depends on the way in which one assesses the contributions of DMT. While its contribution to the methodology of investigating metaphors, particularly its provision of a more precise method for reliable and robust corpus annotation, has generally been welcomed, its theoretical predictions and their ramifications for metaphor production and processing have been received more critically, and there is as yet no unanimity about the classification of deliberate metaphors or attention-drawing within metaphor theory in general. It is at this juncture that this publication hopes to contribute to the discussion, via the further development of theory, method and practice on the subject of attention-drawing.

4. Methods

The question of how to identify deliberate metaphors has, in addition to the theory itself, been the subject of much recent debate. The challenge in identifying so-called deliberate metaphors lies in the fact that deliberateness can be identified at several levels, often simultaneously, and that a complex method is required to take stock of this. Beger (2011, pp. 44, 49), amongst others, calls for a discourse-based method, which considers such features as the accumulation of metaphors sharing a common Source Domain in a particular part of the text or a recurrence of these metaphors at a later point in the text.

The renewed focus on how to empirically identify and quantify deliberateness has engendered a method of identification (DMIP) by the Metaphor Lab in Amsterdam, which the doctoral thesis of Gudrun Reijnierse (2017) summarises and elucidates. The Deliberate Metaphor Identification Procedure (DMIP) is a semiotic approach that intends to identify potential deliberate metaphors only and deliberately refrains from making predictions about their effect in speakers' minds (Reijnierse et al., 2018). As a result of operationalising the identification of deliberate metaphor, features that can signal deliberateness have been compiled (cf. Krennmayr, 2011, p. 154; Reijnierse et al., this volume).

It must be noted, however, that such properties do not necessarily signal deliberateness. What is more, the lack of some or most of these properties does not necessarily rule out deliberateness of a metaphor, since, for instance, conventionalised metaphor may be "revitalised" and thus become deliberate (Steen, 2008). In sum, deliberate metaphors do not form a uniform class in terms of form or content. Only at the level of communication does the common ground manifest itself. This is seen also in the work of Müller (2008a), who offers detailed analyses of how the Source Domains of metaphors that would be classified as deliberate in DMT are depicted in co-occurring modalities, e.g., illustrations or gestures (see Section 5 below for further discussion). However, given the basis of deliberateness in communicative acts, the checklists and typologies of deliberateness markers produced to date, though useful for the execution of comparative research, are not exhaustive and will probably never be so.

Consequently, the status of potential linguistic signals of deliberateness can be a point of contention, e.g., in the discussion between Steen (2015) and Gibbs (2015a, 2015b) about Gibbs' (2015b) attempt to test deliberateness experimentally, which did not reveal deliberateness effects. While we do agree with Steen's (2015) criticism that some of the signalling elements Gibbs used to identify the deliberateness of metaphors were not appropriate, e.g., *well*, we feel that Gibbs has a point when he calls for a comprehensive definition of signals of deliberateness. To this end, the issue of identifying context-based indications and other text-based criteria for attention-drawing will be addressed in some of the papers in this volume.

The contribution of *Gudrun Reijnierse*, *Christian Burgers*, *Tina Krennmayr* and *Gerard Steen* to this volume engages with this need by presenting a nuanced application of Deliberate Metaphor Theory (Steen, 2015) that considers the kinds of textual conditions under which metaphors can be identified as potentially deliberate in a discursive context. A range of case studies from VUAMC (Vrije Universiteit Amsterdam Metaphor Corpus) are presented in the first instance merely at the utterance level, but they are are enriched by the subsequent co-textual information, which leads the authors to conclude that identifying and analysing deliberate metaphor needs to take into account larger contexts (the focus here lies on co-text), sometimes to identify potentially deliberate metaphors in the first place (especially extended metaphors), sometimes to fully assess their characteristics and their impact.

The paper of *Camilla Di Biase-Dyson* attempts a systematisation of metaphorical markers from the perspective of ancient texts, considering the means by which we can draw on and even optimise contemporary typologies of metaphorical language markers with references to features in texts from the ancient world. By means of a series of case studies from her corpus of Ancient Egyptian texts (comprising educational, epistolary and narrative genres), she outlines the means by which markers are to be found emerging, often simultaneously, not just in

language or in discourse, but in a whole series of graphemic and linguistic levels, ranging from the orthography of a text through to its thematic structure.

5. The role of non-textual modes

In the light of the discussion of gestures, signs and images as potential signals of attention-drawing, we have seen that a multimodal approach, which incorporates both language with iconography, script, signs or gestures, promises to provide further crucial insights into this matter. Gesture studies in particular can offer "specific access to online processes of spontaneous metaphor production" (Müller, 2008b, p. 222). This is presumably linked to the fact that "activation of metaphoricity critically depends upon the dynamic flow of the speaker's focal attention" (Müller, 2008b, p. 219), much of which can be commanded by gestures. Specifically, gaze, gesture and speech often work together to "dynamically activate" a metaphor (Müller, 2008b, pp. 236–237). Müller considers this activation a matter of degree, as opposed to DMT, in which activation of the Source Domain via deliberateness is represented as a binary opposition.

Cienki (2013, p. 349) also shows that the dynamicity of gestures, the flexibility of their symbolic status and the varying degrees of awareness raises questions for Conceptual Metaphor Theory (CMT). He shows, specifically, that binary categories (like deliberate vs. non-deliberate) for defining metaphoricity are not helpful for gesture studies, which may be in part due to the variability of the symbolic status of a gesture (Cienki, 2013, p. 349). Instead, we need to think rather in terms of degree and quality of metaphoricity (Cienki, 2013, p. 361).

Alan Cienki's contribution to this volume takes his idea further and in a practical direction. He first defines "metacommunicative awareness" (MCA) as a degree of awareness about the communicative potential of our words and actions. Signals of possible MCA that are based on greater use of effort appear on a number of communicative dimensions, including verbal, prosodic and gestural levels, all of which are taken into consideration in this paper. In his examples, Cienki focuses on gestures that can be interpreted in terms of metaphor theory. For instance, these gestures can provide a domain that serves as the Source Domain for a metaphorical mapping whose Target Domain is provided by an aligned speech event. Cienki argues that this meta-communicative awareness is not only a matter of degree. Rather, it is a phenomenon transcending the dichotomy between literal and metaphorical expressions that could also be used to explain those aspects of metaphor that have elsewhere been explained in terms of deliberateness. Cienki further distinguishes his model from DMT in the following way: whereas, according to

DMT, the producer of a communicative act instructs the receiver to adopt a new perspective of a metaphor, possible signals of MCA do not entail this.

Another mode that must be taken into consideration is the less dynamic side of the visual domain, namely the role of static visual cues like script and iconography. The contribution of *Kyra van der Moezel* describes in detail the role of visual, iconographic cues in marking metaphors, which complements the work on graphical cues that signal metaphors already mentioned (Di Biase-Dyson, this volume). Van der Moezel considers deliberate and non-deliberate metaphor use within the context of an Ancient Egyptian non-linguistic marking system that was used by workers in the royal necropolis of the Egyptian New Kingdom (ca. 1550–1070 BC). The marks in question, geometrical shapes, depictions of concrete objects and script-based signs, are metaphorical and metonymic constructs that were used as identity markers to identify individual people. Her contribution introduces a diachronic and multimodal perspective into the discussion of deliberate metaphor by investigating how deliberate metaphors can emerge and how their deliberateness may change over time. The latter is achieved by transferring these metaphors to other referents and to other generations of writers.

6. The antiquity debate: Are we second-guessing ancient authors?

This volume takes additionally into consideration historical and diachronic perspectives. In our opinion, the diachronic dimension of metaphor research is a neglected yet potentially profitable avenue for considering the role of attention-drawing in figurative language. The contributions to this volume consider whether attention-drawing is a valuable perspective for the study of ancient texts and, if so, what ancient texts can contribute to the debate.

Historical perspectives on metaphor have been achieved in part from the perspective of historical linguistics (see Traugott, 1985), and in part from studies of metaphors in ancient textual corpora (particularly in Biblical scholarship, e.g., Ricœur, 1975 or Collins, 2008). However, with the exception of the truly groundbreaking work of Paul Ricœur, this field of research has rarely attempted to problematise the issue of analysis, merely taking figurative language at face value.

In fact, studying metaphorical language in ancient texts brings with it its own challenges, making it potentially even harder to deduce attention-drawing elements from texts of a different culture and time. Firstly, the languages are dead and thus there is therefore no means of eliciting data – the scholar must rely on textual corpora. Secondly, one must consider the problem of cultural differences (Kövecses, 2005), which lay the ground for misinterpretations at the level of figuration.

Nevertheless, a degree of awareness of metaphorical language use did exist in ancient times, as many of the case studies in this volume make evident. We must simply become more sensitive to cultural and temporal divides. An example of this is the Ancient Egyptian conception of the immune system. The modern world explains what can otherwise only be examined under a microscope *metaphorically*, in the best-case scenario by means of deliberate metaphor (Beger, 2011, p. 50; Semino et al., 2017), but also in very conventional ways, e.g. "Fighting a cold" [SICKNESS IS WAR]. The Egyptians used the same language (of defence – as we see by usage of the verb *dr* 'to drive away, repel' in relation to warding off sickness), but they interpreted what could not be seen in religious terms, namely, that a supernatural being entered the body and made it sick (Di Biase-Dyson, talk, 2019). The term, however metaphorical it may seem to us, is a "false friend" and not a metaphor.

This very same problem, namely, the access of modern scholars to ancient medical language and the latter's metaphorical potential, is highlighted by the contribution of *Chiara Ferella*. She analyses analogies and comparisons in Ancient Greek medical texts, specifically, in three Hippocratic treatises, as well as two famous similes to be found in the works of Empedocles. Direct metaphors, and the textual markers used for them, form the locus of her enquiry into the communicative functions of metaphors in ancient Greek anatomical and physiological argumentation. She argues that metaphor, and deliberate metaphor in particular, is used both for the explanation of conceptually more distant domains and as part of a heuristic method of enquiry which yields evidence for a hypothesis or theory. The analyses of medical metaphors link up to a very active field of research of metaphor usage and shed new light on old debates, especially in the discussion of the clepsydra metaphor to explain the cardiovascular system.[2]

Other papers in this volume push the boundaries of what we can conclude about metaphoricity and attention-drawing in ancient textual material. These contributions, which consider figuration in highly conventionalised material that forms the cornerstone of ancient identities, shows the crucial role of ancient material in testing theories about attention-drawing.

Fabian Horn investigates the question of deliberateness with regard to early Greek poetry, in particular, metaphors and metonyms of death in battle in Homer's *Iliad*. In contrast to Anna Piata's contribution to this volume, which is based on a modern poetic corpus, he argues that deliberateness should not be used as a reliable criterion for metaphors with poetic purpose and effect, because

2. The term "clepsydra" refers to a kind of pipette which works by closing an opening on its top after it has been dipped into the liquid and a certain amount of the liquid has entered through an opening at the bottom.

the communicative purpose of metaphors does not depend on deliberateness. He bases his argument on an extensive analysis of metaphors and metonyms for death that are poetic but entirely formulaic in character, which he considers an inheritance from the tradition of oral composition underlying Homer's epic poems.

Agnieszka Hamann demonstrates in her paper how Maya glyphic texts provide a singular insight into the grapholect known as Classic Mayan. This script is shown to have metaphoric and metonymic bases, as is reflected by the accompanying iconography, but Hamann also demonstrates the necessity of intensively questioning the culture-specific grounding of metaphor. For instance, she questions the delimititation of metaphorical against literal language use and investigates how to identify deliberateness of metaphors in texts from an ancient culture. She concludes that the available evidence does not suffice to claim that the metaphors analysed in the paper were used in a deliberate manner.

In sum, the papers by all scholars of ancient languages in this volume show that researching attention-drawing metaphor in ancient languages is subject to the availability of a sufficiently large text (or object) corpus and, still more important, to substantial knowledge about the cultural background of the respective language community. But even for languages or genres in which these preconditions are not met, the valuable contribution of DMT to these investigations is heightening researchers' sensitivity to the question of what exactly counts as metaphorical in a given language. In turn, such studies help modern analysts by testing the current methods and bringing valuable and previously unseen data forward for discussion and comparison.

7. The role of genre

In addition to a multimodal approach supplying a more nuanced perspective on the issue of attention-drawing, the inclusion of research into the interdependence between metaphor and genre can provide further crucial insights into this matter.

The intended effect of deliberate metaphors in discourse is closely linked to the genres and registers in which they occur, which makes them extremely varied. They can be used to signal a genre or to support the purpose of a genre (including instruction, exhortation, persuasion, information, or entertainment, Steen et al., 2010). Many contributions of our edited volume illustrate specific ways in which metaphors are signalled in specific genres.[3]

3. The influence of genre on attention-drawing to metaphor is also investigated in the contributions of Hamann, Horn, Ferella and Di Biase-Dyson.

Anna Piata's contribution considers poetic metaphor in order to explore the relationship between verbal creativity and deliberateness in the poetic genre. In particular, she analyses indirect and conventional TIME IS SPACE metaphors that are nevertheless deliberate in their context of use. Through many detailed analyses of examples taken from English and Modern Greek poetry she investigates the way in which such conventional metaphors can be reactivated by creative variation. Her article makes the argument that "poetic metaphor" should be distinguished from "metaphor in poetry". In so doing, she redefines the relationship between deliberateness and poetic metaphor by identifying deliberateness as prerequisite for a metaphor to be perceived as poetic.

The contribution by *Markus Egg* considers selected metaphors from the Pauline epistles with reference to Deliberate Metaphor Theory (DMT), Conceptual Metaphor Theory, hermeneutics and Blending Theory. His analysis of selected passages allows him to test the relative strengths and weaknesses of these frameworks and lead him to the conclusion that the deliberateness of the metaphors in question emerges through alienation, since it highlights the differences between the Vehicle and Tenor and creates a tension between the two concepts to express a specific message. Since epistles are a persuasive and exhortative genre, these metaphors support the genre-specific discursive goals of the discourse in which they are embedded.

8. Summing up

The topic of attention-drawing is by no means exhausted. So much has been done but many things remain open. Essentially this book represents a consensus that we need more scalar approaches, not just to the category of metaphoricity (see Müller, 2008a, pp. 194–195) but also to the idea of attention-drawing or activation (Müller, 2008a, p. 197). We suggest that the contributions to this book supply to the ongoing debate a clear method of analysis, more detailed typologies, and a broad range of case studies that identify a range of pitfalls and insights. Opening up the topic further has shown the need for more empirical data, especially in relation to psychological testing, but also from the textual universe.

In sum, our approach to the debate of attention-drawing devices from linguistic, multimodal, comparative and historical perspectives highlights the relevance of the topic from a theoretical perspective and at the same time advocates empirical, data-driven analyses of metaphor marking.

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The role of co-text in the analysis of potentially deliberate metaphor

W. Gudrun Reijnierse[1], Christian Burgers[2],
Tina Krennmayr[2] & Gerard J. Steen[3]
[1]Centre for Language Studies, Radboud University Nijmegen /
[2]Vrije Universiteit Amsterdam / [3]University of Amsterdam

Taking Deliberate Metaphor Theory (Steen, 2015) as a starting point, this chapter investigates the way in which co-text influences the identification and analysis of potentially deliberate metaphor in discourse. While co-text plays a role in the identification and analysis of the linguistic and conceptual dimensions of metaphor, its role in the identification and analysis of metaphor *as* metaphor at the communicative dimension is more complex. In a series of analyses, we first examine metaphors in relative isolation (at utterance level), and subsequently take additional textual information into consideration. We demonstrate how co-text can play an indispensable role in the identification and further analysis of potentially deliberate metaphor, thereby providing important new insights into the complexity of deliberate-metaphor analysis.

Keywords: deliberate metaphor, Deliberate Metaphor Theory, figurative language, discourse analysis, co-text, qualitative analysis

1. Introduction

Metaphor is a frequently occurring phenomenon in natural language use (see e.g., Cameron & Low, 1999; Gibbs, 2008; Kövecses, 2002). In fact, metaphor has been identified as a powerful communicative device in a broad variety of contexts, including educational discourse (e.g., Cameron, 2003), political discourse (e.g., Charteris-Black, 2013; Musolff, 2016), business-media discourse (e.g., Koller, 2003a), financial-news reporting (e.g., O'Mara-Shimek, Guillén-Parra & Ortega-Larrea, 2015), doctor-patient conversations (e.g., Tay, 2013), and so on.

Since the 'cognitive turn' in metaphor studies at the beginning of the 1980s (Lakoff & Johnson, 1980, 1999; Ortony, 1993), linguistic research into metaphor has primarily been concerned with the analysis of metaphor in language as the manifestation of presumed metaphorical structures in thought (see Gibbs, 2011).

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Specifically, the cognitive-linguistic model of metaphor holds that we *talk* about one thing (the target domain) in terms of something else (the source domain) because we *think* about that one thing in terms of the other (Lakoff & Johnson, 1980). Consider the noun 'hunger' in the following two examples, which are both concerned with the desire to acquire knowledge:

(1) Snacks and slow food for intellectual hunger (Steketee, 2012)[1]

(2) Develop a hunger for knowledge (Redmond, 2016)

Metaphor researchers in the cognitive-linguistic tradition claim that 'hunger' in both (1) and (2) can be analysed as the linguistic expression of the same conceptual metaphor in which the concept DESIRE[2] is described in terms of the concept HUNGER.

Recently, however, researchers have argued that the strong focus on these two dimensions in the cognitive-linguistic approach to metaphor has left the special use of metaphor *as* metaphor at the level of communication undervalued (e.g., Caballero, 2003; Charteris-Black, 2004; Koller, 2003b; Semino, 2008; Steen, 2008, 2011; Wee, 2005). To account for this undervalued role of metaphor, Steen (2008, 2011) suggests to add a third dimension to the cognitive-linguistic model of metaphor, namely that of communication (see, e.g., Cameron, 1999, 2003; Charteris-Black & Musolff, 2003, for similar proposals). In the resulting three-dimensional model of metaphor, metaphors in *language* are still seen as the expressions of cross-domain mappings in *thought*. However, they are also seen as a matter of *communication* between language users. Specifically, in the dimension of communication, a distinction is made between metaphors that are used *as* metaphor between language users (deliberate metaphors), and metaphors that do not have such a function (non-deliberate metaphors).

The three-dimensional model of metaphor (language, thought, communication) is at the core of Deliberate Metaphor Theory (hereafter: DMT; Steen, 2015), which constitutes the theoretical framework of this study. Specifically, in this chapter, we take a semiotic approach to deliberate metaphor, which means that we investigate language use on the basis of texts, rather than on the basis of language users' processes (i.e., production, reception, or interaction). For this reason, we

1. This is the headline of a newspaper article that was published in the Dutch newspaper *NRC Handelsblad*. The original Dutch text runs as follows: "*Snacks en slow-food voor de intellectuele honger*".

2. Small capitals are conventionally used in cognitive linguistics to indicate conceptual domains (Lakoff, 1993).

use the term '*potentially* deliberate metaphor' in the analyses in the remainder of this chapter.

Consider Examples (1) and (2) again. As was pointed out above, in the two-dimensional model of metaphor the noun 'hunger' is analysed in the same way in (1) and (2), namely as the linguistic expression of the same conceptual metaphor DESIRE IS HUNGER. Yet, when analysing 'hunger' in terms of the third dimension of metaphor, that of communication, these two examples yield different outcomes. Example (1) is the headline of a newspaper article about the 4th TEDx Amsterdam conference. Here, the noun 'hunger' conventionally describes the desire for something abstract (in this case: knowledge) in terms of the desire for food. This example contains two other nouns that display the same contrast between the target domain of acquiring knowledge, and the food-related source domain. The TED talks that will satisfy the 'hunger' for knowledge are described, unconventionally, as 'snacks' and 'slow food'. These food-related terms present a novel perspective on the target domain of the utterance. As a result, the food-related source-domain meaning of 'hunger' is promoted as well, and these metaphors stand out *as* metaphors in the communicative dimension of metaphor. 'Hunger' in (1) consequently counts as a case of potentially deliberate metaphor.

In (2), 'hunger' also conventionally describes the desire for knowledge in terms of the desire for food, just as in (1). However, in (2) there is no indication that 'hunger' serves *as* a metaphor at the dimension of communication. That is, in contrast to what is the case in (1), there are no cues in (2) that make the desire-for-food source domain stand out. 'Hunger' in (2) thus constitutes a case of non-deliberate metaphor.

The addition of a third dimension to the model of metaphor raises the question of how deliberate versus non-deliberate metaphors can be analysed in language use. As the examples discussed in (1) and (2) above suggest, co-text (Catford, 1965) may play an important role in the analysis of potentially deliberate metaphor. Co-text plays a role in the analysis of the linguistic and conceptual dimension of metaphor as well (see e.g., Goatly, 1997; Heywood, Semino & Short, 2002; Pragglejaz Group, 2007; Steen, Dorst, Herrmann, Kaal, Krennmayr & Pasma, 2010). In much the same way as in (1), one needs to know that (2) is about knowledge rather than about the actual desire for food in order to identify 'hunger' as the linguistic expression of an underlying conceptual mapping between DESIRE and HUNGER. To establish that this is the case, it is necessary to look at the words surrounding the lexical unit under examination to get an idea of what the utterance, paragraph, or text in which the word is used is about.

However, the precise way in which co-text plays a role in the identification and analysis of metaphor at the dimensions of language and thought may differ from what it does at the dimension of communication. As Heywood et al. (2002), for instance, point out, co-text may not only be important for the general identification

of lexical units as metaphor, but also for cases in which authors are "clearly playing very purposefully with the literal/metaphorical distinction" (p. 47). Given the semiotic approach to deliberate metaphor adopted in this chapter, we cannot draw conclusions about the specific objectives of authors in our analyses. Instead, the aim of this chapter is to explore how co-text – i.e., additional textual information, either in the form of the immediate words surrounding a metaphor, or the surrounding phrases, sentences, or even the entire text – plays a role in both the *identification* of potentially deliberate metaphors, as well as in their further *analysis*.

Next to co-text, context may also play a role in the analysis of structures and functions of language use. Context is distinguished from co-text in that the latter is concerned with information that can be found in the text itself, while the former is concerned with information from outside the text, such as knowledge of the speaker, or the situation in which the text is used. With the exception of two brief excursions in the analysis of Example (6) below, we exclusively focus on the role of co-text in the identification and analysis of potentially deliberate metaphor in this chapter.

By first analysing metaphors within the utterances in which they are used (i.e., in relative isolation), and subsequently taking into account surrounding co-text, we are able to investigate how metaphor in communication develops in a number of different ways in natural discourse. Whereas the examples we present in this chapter allow the analysis of the linguistic and conceptual dimensions of metaphor when analysed 'in relative isolation', if shown without co-text they may not necessarily provide sufficient information for the analysis of the communicative dimension of metaphor. This chapter provides new insights into the communicative dimension of metaphor by exploring how co-text influences the identification of metaphors *as* metaphor, as well as their further analysis.

The data and method used for the analyses in this chapter are discussed in the next section. Then, we investigate the role of co-text in both the identification and further analysis of potentially deliberate metaphor in language use via three case studies based on a set of examples. Finally, the outcomes of these analyses are discussed in light of DMT (Steen, 2008, 2011, 2015).

2. Data and method

All qualitative analyses in this chapter are based on an annotated corpus of potentially deliberate metaphor in natural discourse.[3] This corpus consists of almost

3. The corpus with annotations for potentially deliberate metaphor is publicly accessible on the Open Science Framework (OSF) at: http://bit.ly/2lvPhjh.

190,000 lexical units[4] from four different registers (academic texts, fiction, newspaper articles, and face-to-face conversations). It was initially annotated for all metaphor-related words by means of the Metaphor Identification Procedure Vrije Universiteit (MIPVU; Steen et al., 2010) and published online as the VU Amsterdam Metaphor Corpus (VUAMC).[5] All 24,762 metaphors in the VUAMC were then coded for potentially deliberate versus non-deliberate metaphor by means of a newly developed, reliable method for the identification of potentially deliberate metaphor in language use (DMIP; see Figure 1; Reijnierse, Burgers, Krennmayr & Steen, 2018).

1. Read the entire text to get a general idea of what the text is about.
2. Apply the Metaphor Identification Procedure Vrije Universiteit (MIPVU) to find all metaphorical lexical units (metaphor-related words, or MRWs; see Steen et al., 2010, for detailed instructions).
3. Look at the first MRW.
4. Determine whether the source domain of the MRW is part of the referential meaning of the utterance in which the MRW is used.
    a. If 'yes', mark the MRW as potentially deliberate and proceed to step 5.
    b. If 'no', mark the MRW as non-deliberate and proceed to step 6.
    c. In case of doubt, mark the MRW as potentially deliberate, and add the code WIDLII (When In Doubt Leave It In; see Steen et al., 2010). Then, proceed to step 5.
5. If the MRW is coded as potentially deliberate in step 4, describe *how* the source domain of the MRW is part of the referential meaning of the utterance.
6. Look at the next MRW.

Figure 1. The steps of DMIP

In line with our semiotic approach to metaphor, DMIP identifies a metaphor as potentially deliberate "when the source domain of the metaphor is part of the referential meaning of the utterance in which it is used" (Reijnierse et al., 2018, p. 136). In contrast to non-deliberate metaphors, deliberate metaphors are not only identified as metaphors at the dimensions of linguistic and conceptual utterance meaning, but also at the dimension of communication (Steen, 2015).[6] 'Hunger' in (1), for example, is metaphorical at the level of *linguistic* utterance

4. In our analyses, we follow Steen et al. (2010) in taking the 'lexical unit', rather than the 'word' as the unit of analysis. Although a lexical unit typically consists of a single word, some lexical units contain more than one word (e.g., compounds, phrasal verbs, multiword expressions).

5. The VUAMC is available online at: http://ota.ahds.ac.uk/headers/2541.xml (Oxford Text Archive).

6. Compare the classical tripartite distinction between symbols, thoughts, and referents (e.g., Ogden & Richards, 1923; see also Reijnierse et al., 2018; Steen, 2017).

meaning because the contextual (target-domain) meaning of the *word* contrasts with, and can be compared to, a more basic (source-domain) meaning of it (Pragglejaz Group, 2007). Specifically, a desire for knowledge is described in terms of a desire for food. 'Hunger' is metaphorical at the level of *conceptual* utterance meaning because, as was discussed earlier, the *concept* DESIRE is described in terms of the concept HUNGER. Finally, hunger is metaphorical at the level of *communicative* utterance meaning because the source-domain meaning of a metaphor functions as a distinct *referent* in the state of affairs designated by the utterance. It is part of a "multiple metaphor" (Crisp, Heywood & Steen, 2002, p. 61) that introduces a different (source-domain) perspective on the target domain of acquiring knowledge.

By means of six separate steps, analysts applying DMIP determine for every lexical unit whether it can be identified as a potentially deliberate metaphor. To promote the systematic and reliable analysis of language use, and to prevent personal intuitions of the analyst from interfering in the process of identifying potentially deliberate metaphors, DMIP starts from an idealised contemporary native speaker of English. Consequently, a corpus-based dictionary (the *Macmillan English Dictionary*) is used to establish the various contemporary meanings of a lexical unit under consideration (cf. MIP; Pragglejaz Group, 2007; and MIPVU; Steen et al., 2010).

The outcomes of the application of DMIP yield results that can be further interpreted from both a quantitative and a qualitative perspective. In the qualitative analyses presented in the current chapter, we explore the role of co-text in the identification and analysis of potentially deliberate metaphor in discourse by means of a series of examples taken from the VUAMC.

3. The role of co-text in the identification and analysis of potentially deliberate metaphor

In this section, we explore the role of co-text in the analysis of potentially deliberate metaphor on the basis of three case studies, each consisting of two complementary examples from the VUAMC. The first of these case studies focuses on how co-text can influence the *analysis* of potentially deliberate metaphor in the case of two similes. The second case study shows how co-text is sometimes indispensable to *identify* a metaphor as potentially deliberate by discussing two cases of extended metaphor. Finally, the third case study focuses on how recurring metaphors in the co-text can influence the *identification* and *analysis* of potentially deliberate metaphor.

In the following examples, all metaphors – as previously identified by MIPVU – are followed by a superscript 'MRW' (for 'metaphor-related word'; see

Steen et al., 2010) tag. All lexical units that serve as a signal of metaphor – as previously identified by MIPVU – are followed by a superscript 'MFlag' (for 'metaphor flag') tag. For all metaphors that were subsequently identified as potentially deliberate by means of DMIP, a superscript 'delib' is added to the MRW tag.

3.1 The role of co-text in the analysis of similes

The first case study examines the role of co-text in the analysis of two similes. In both these cases, the *identification* of potentially deliberate metaphor is straightforward. However, in the further *analysis* of these two examples, co-text plays a special role. The two examples are first presented in relative isolation, after which they are discussed in detail by taking additional co-text into consideration.

The first simile, presented in (3), is taken from a newspaper article in the VUAMC that describes the French region of Poitou/Saintonge as an interesting tourist destination.

(3) [To] go to Poitou/Saintonge and not look at any of its churches would be like$^{\text{MFlag}}$ going$^{\text{MRW-delib}}$ to$^{\text{MRW-delib}}$ an African$^{\text{MRW-delib}}$ game-reserve$^{\text{MRW-delib}}$ and ignoring$^{\text{MRW-delib}}$ the animals$^{\text{MRW-delib}}$. (VUAMC-AHC-61)

The second simile, in Example (4), is taken from a fiction text in the VUAMC. It describes how Arlene, a model manager, perceives Paula, a young girl whom she has turned into a promising fashion model.

(4) [S]he looked on Paula as$^{\text{MFlag}}$ her very own creation$^{\text{MRW-delib}}$. (VUAMC-BMW-09)

Both (3) and (4) contain an explicit comparison between some situation in the target domain of the utterance, and an external source domain. This comparison is signalled by means of the prepositions 'like' in (3), and 'as' in (4). Because of this overt comparison, both examples are identified as potentially deliberate metaphors.

When analysing these two examples in isolation, the simile in (3) is more elaborate and much richer in terms of imagistic content than the simile in (4). In fact, (3) is a typical example of a one-shot image metaphor (see Lakoff & Turner, 1989), in which one image – a visit to an African game reserve, is mapped onto another image – a visit to a particular part of France. By contrast, the simile in (4) is limited to a single word ('creation'). It is much less rich in terms of imagistic content and less specific, because it compares a person to a newly made 'something', for instance a concrete object like a dress.

However, when examining these two examples in their surrounding co-text, a different picture emerges, in particular with respect to the analysis of the less elaborate, single-word comparison in (4). First, consider the co-text that precedes and follows the comparison in (3), presented below as (3′).

(3′) Even for France, the variety to be found[MRW] is enormous. My passion is for its [i.e., the region's] numerous Romanesque churches, in[MRW] most cases humbly[MRW] proportioned but elevated[MRW] into[MRW] unique works of art by the richness of their exquisitely-sculpted decoration; to go to Poitou/Saintonge and not look at any of its churches would be like[MFlag] going[MRW-delib] to[MRW-delib] an African[MRW-delib] game-reserve[MRW-delib] and ignoring[MRW-delib] the animals[MRW-delib]. For serious[MRW] drinkers there is the production of cognac to investigate around Cognac, plus the chance to sample pineau, the powerful[MRW] local aperitif made from young[MRW] wine laced[MRW] with cognac. (VUAMC-AHC-61)

When examining the simile introduced in (3) in its immediate co-text, the preceding and following discourse contains a series of lexical units that are identified as metaphors, including 'found', 'humbly', 'serious', and 'young'. These can be identified as metaphors at the dimensions of language and thought, each describing one thing in terms of something else. However, no cues are present that suggest that the source-domain referents of any of these metaphors are also present in the referential meaning of the utterances in which they are used. Put otherwise, there is no indication that these metaphors are used *as* metaphors in communication between language users, and they therefore count as cases of non-deliberate metaphor. Consequently, the referential meaning of the utterances in which these metaphors occur consists of target-domain referents only. In 'the chance to sample pineau, the powerful[MRW] local aperitif', for instance, the source-domain meaning of the adjective 'powerful', which is concerned with physical strength, is not part of the referential meaning of the utterance. Rather, the utterance only consists of target-domain referents, which, in the case of 'powerful', have to do with the effect or taste of the aperitif.

When analysing the simile in (3) in its surrounding co-text (i.e., (3′)), it becomes clear that the explicit comparison between the region of Poitou/Saintonge and a game reserve constitutes a deviation from the rest of the text. Because of this sudden (and signalled) introduction of referents from an external source domain, these metaphors stand out *as* metaphors in the dimension of communication. In this case, the safari source domain is part of the referential meaning of the utterance, and the metaphors count as potentially deliberate. Thus, although the co-text does not affect the actual identification of the lexical units in (3) as potentially deliberate, the analysis of additional co-text shows how such an explicit comparison can stand out from the rest of the discourse, even a discourse that has many other metaphorical expressions of mappings across conceptual domains. In this case, the safari-metaphor emphasises the importance of experiencing the cultural heritage of Poitou/Saintonge.

The analysis is different for the simile discussed in (4). Part of the co-text of (4) is presented as (4′) below.

(4′) Perfectly groomed[MRW] from head to toe and with[MRW] all that assurance, she was ready to take on the world[MRW], Arlene thought with[MRW] satisfaction, for she looked on Paula as[MFLAG] her very own creation[MRW-delib]. The raw[MRW] materials might have been there before[MRW] – indeed, hadn't it been she, Arlene, who had spotted[MRW] them? But the transformation of a leggy young filly[MRW-delib] into[MRW] a sleekly beautiful racehorse[MRW-delib] had been her doing. (VUAMC-BMW-09)

This extract describes model manager Arlene's mental state in terms of her interpretation and evaluation regarding the young girl (Paula) whom she has trained to become a model. As becomes clear from the addition of co-text in (4′), the simile that is used to describe Paula in terms of a non-human object (a 'creation') can be seen as reflective of Paula's (businesslike) attitude towards the models that she supports: she looks at them as animals, rather than as young girls with particular human qualities.

This characterisation of Arlene is also reflected in the final sentence of extract (4′). The sentence demonstrates how Arlene feels responsible for Paula's development from a young girl into a true model. This development is described in terms of a young female horse (a 'filly') that is transformed into a racehorse. For 'racehorse', the dictionary only contains a single sense description, which is that of an actual horse that is trained for races. Because no conventionalised target-domain meaning is available for this noun, 'racehorse' is a case of novel metaphor by means of which a new perspective on Paula is introduced into the discourse. Consequently, 'racehorse' counts as a case of potentially deliberate metaphor.

For 'filly', a horse-related source-domain meaning is also present in the dictionary, designating "a young female horse" (*Macmillan* sense description 1; hereafter: MM1, etc.). However, the dictionary entry for this noun also contains a second sense description that fits the target domain of the utterance, but contains the label 'old-fashioned': "a young woman" (MM2). In this sense description in the *Macmillan Dictionary*, it is furthermore indicated that "[m]en used to use this word, but people now consider it offensive". The fact that these qualifications are now attributed to the manager may be indicative of her paternalistic view of the young model. Moreover, both nouns are grammatically connected because of the (nominalised) attributive ditransitive construction in which an agent (model manager Arlene) transforms a patient (the 'old' Paula) into a different version of that same patient (the 'new' Paula). As a result, it can be argued that the source-domain

sense of 'filly' is promoted, making 'filly' a potentially deliberate metaphor. Eventually, the complete utterance stands out as a metaphorical comparison between a girl and an animal.

The explicit comparison between the model and the horse can also be interpreted as reflective of the way in which Arlene looks at her models. That is, one of the implications of the use of this particular metaphor may be that the manager is especially concerned with creating winning models, and not so much with the well-being of the models per se. In fact, if the metaphorical comparison between the model and the horse would not have been used, this attitude might have been less obvious. If the final sentence of (4′) simply read: 'But the transformation of a young girl into a beautiful model had been her doing', it would still be clear that Arlene felt responsible for this development, but her 'creations' would be talked about in terms of people, not animals. The use of the filly-to-racehorse metaphor thus contributes to the overall characterisation of a protagonist, which illustrates the specific communicative function that metaphor can have.[7]

Thus, the analysis of the simile in (4) in its surrounding co-text (i.e., (4′)) yields a more detailed view of Arlene's attitude towards her models. The explicit comparison between a girl and a 'creation' already suggests that Arlene has a particular view of her job. As becomes clear from the analysis of this direct comparison in co-text, the simile forms a deviation from the rest of the text: the utterances preceding and following the simile contain lexical units that can be identified as metaphors at the levels of language and thought, but that are not used *as* metaphors at the level of communication. Similar to the analysis of (3) versus (3′), the addition of co-text to the simile in (4) does not affect the identification of 'creation' as a potentially deliberate metaphor but it does affect the further analysis of the simile. That is, it shows how explicit metaphorical comparisons ('creation', in combination with 'filly' and 'racehorse') can stand out from the rest of the discourse to create and reinforce an image of a particular character in a story.

As our analyses in (3) and (4) show, metaphors may be identified as potentially deliberate metaphors in relative isolation – i.e., based solely on their analysis within the utterance in which they are used. However, we have also shown how considering co-text may provide further insight into the function of potentially deliberate metaphors in discourse. The simile in (3) stands out in the discourse

7. Please note that the lexical unit 'materials' in (4′) should have been identified as an MRW, and then could have also been identified as potentially deliberate, contributing to Arlene's dehumanising and function-oriented point of view. For reasons of consistency, we followed the codings from the VUAMC in our analyses. Although error has been minimised in the VUAMC (see Dorst, Reijnierse & Venhuizen, 2013; Steen et al., 2010), the corpus still contains some errors. The lexical unit 'materials' in (4′) is one such error.

because it is surrounded by non-deliberate metaphors that are not related to the safari-metaphor. By contrast, the simile in (4), which at first sight seems much less rich in terms of content than the simile in (3), shows to be part of a telling characterisation of one of the personages in a novel. This shows how co-text can serve as a valuable addition to the further *analysis* of metaphors that are identified as potentially deliberate in relative isolation.

3.2 Extended metaphor as co-text in the analysis of potentially deliberate metaphor

In the second case study, we investigate the role of co-text in extended metaphors that contain both conventional and novel metaphors. A metaphor is extended when "several metaphorical expressions evoking the same source domain and describing the same target domain [occur] in close proximity to one another in a text" (Semino, 2008, p. 227).[8] What 'close proximity' means typically differs from one study to the next (see Semino, 2008). In this chapter, we follow Crisp, Heywood and Steen's (2002) definition, which holds that metaphor is extended when two or more consecutive semi-independent clauses contain metaphors that display the same mapping between source and target domain.

Both examples discussed in this section show how taking co-text into account can be essential to the *identification* of metaphors as potentially deliberate. In fact, when analysed in isolation, the metaphors under consideration in the two examples can be analysed as metaphors at the dimensions of language and thought, but not at the dimension of communication. The first Example, (5), comes from a book review from the news part of the VUAMC.

(5) [It was] unfair of Auden to suggest, in^{MRW} his 'Letter to Lord Byron', that a poet's 'sense^{MRW} of other people's very hazy$^{MRW\text{-}delib}$'. (VUAMC–A36–07)

Example (6) is taken from a newspaper article that describes the miserable state of Welsh rugby.

(6) The selectors knew they were playing$^{MRW\text{-}delib}$ with$^{MRW\text{-}delib}$ fire$^{MRW\text{-}delib}$ when they decided to arrange^{MRW} a couple of club fixtures^{MRW}. (VUAMC-A1N-09)

8. Please note that Semino (2008) distinguishes between textual and conceptual extension. The latter case concerns "[t]he exploitation of normally unused elements of the source domain in the realisation of a conventional conceptual metaphor (see Lakoff & Turner, 1989)" (2008, p. 227). In this chapter, when we refer to extension, we mean textual extension.

Both (5) and (6) contain conventional metaphors that describe the target domain of the utterance in which they are used in terms of some other source domain. Several lexical units in both examples are identified as metaphors at the dimensions of language and thought. In the remainder of this subsection, though, we are only concerned with the analysis of those metaphors that DMIP identifies as potentially deliberate at the dimension of communication: 'hazy' in (5) and 'playing with fire' in (6).

When analysing these two examples in relative isolation only, no cues are present that suggest that the source-domain meanings of these metaphors are present in the referential meaning of the utterance in which they are used. That is, there is no indication that these lexical units – which can be identified as metaphors at the dimensions of language and thought – are used *as* metaphors in the dimension of communication (see also Krennmayr, 2011). The adjective 'hazy' in (5) has a conventionalised metaphorical meaning that fits the target domain of the impression or ideas that poets have of other people: "a hazy memory is one that you cannot remember well" (MM3). The idiom 'playing with fire' in (6) has a conventionalised meaning that matches the target domain of the utterance – which is concerned with "doing something dangerous or risky that could cause lots of problems" (*Macmillan*).

Yet, DMIP identifies both the adjective in (5) and the idiom in (6) as potentially deliberate metaphors. The following detailed analyses show the role of co-text in the *identification* of these metaphors in (5) and (6) as potentially deliberate metaphors. Extract (5′) shows the use of 'hazy' in its immediate co-text.

(5′) [It was] unfair of Auden to suggest, in^{MRW} his 'Letter to Lord Byron', that a poet's 'sense^{MRW} of other people's very hazy$^{MRW\text{-}delib}$'. But the vaporous$^{MRW\text{-}delib}$ presences^{MRW} that float$^{MRW\text{-}delib}$ through^{MRW} this^{MRW} slender$^{MRW\text{-}delib}$ and anaemic^{MRW} first novel by a notable poet would appear to support^{MRW} the claim. (VUAMC–A36–07)

Extract (5′) starts by characterising as 'unfair' a quote by the British poet W.H. Auden, which suggests that poets have an unclear sense of other people. The author then goes on to argue that the quote might nevertheless be true for the book he is reviewing, based on his first impression of it.

The extract in (5′) displays an extended metaphor in which the impression that poets have of other people is described in vapour-related terms.[9] That is, the first two sentences of the review, presented in (5′) above, contain a total of three

9. Extract (5′) contains another potentially deliberate metaphor ('slender'), but this metaphor is not part of the extended metaphor analysed in this subsection. Therefore, it will not be discussed further at this point.

lexical units that have a vapour-related source-domain meaning: 'hazy', 'vaporous', and 'float'. Of these, 'hazy' is part of the quotation from W.H. Auden who describes a characteristic of poets. As was pointed out above, the adjective 'hazy' in this first sentence is not identified as potentially deliberate if it is analysed exclusively within the utterance in which it is used. However, the second sentence of (5′) contains another adjective with a vapour-related source domain: 'vaporous'. This adjective is used to characterise the quality of the characters in the reviewed book. In contrast to 'hazy', no conventionalised sense description is available for 'vaporous' that matches the target domain of the utterance. In fact, only one sense description is available in the dictionary: "very small drops of water or other liquids in the air that make the air feel wet" (*Macmillan*).[10] This adjective thus presents a novel perspective onto the target domain, making 'vaporous' a potentially deliberate metaphor.

The reviewer moreover argues that the characters 'float' through the novel. Although a conventionalised meaning is available for this verb that matches the target domain of the utterance ("to behave in a way that shows you do not have a clear plan for what you want to do"; MM4), the combination with 'vaporous' creates an image of the characters in the book in which the metaphors are clearly used *as* metaphors at the dimension of communication. It presents the vague and aimlessly behaving characters as consisting of small drops of water ('vapour') that are "lighter than air, and [slowly] move through it" (MM2 for 'to float').[11]

When analysing (5) in its surrounding co-text, it becomes clear that the utterance is part of an extended metaphor that stretches over two consecutive sentences, and consists of three metaphors. This extended metaphor can be identified as a metaphor at the communicative dimension because of the novel use of 'vaporous' and the promotion of the vapour-related meanings of the two other metaphorical lexical units. The co-text of (5) thus consists of an extended metaphor that stands out *as* a metaphor at the dimension of communication, leading to the *identification* of a metaphor as potentially deliberate ('hazy') that would not be identified as potentially deliberate if co-text would not have been taken into account.

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10. Please note that there is no separate entry in *Macmillan* for the adjective 'vaporous', only for the noun 'vapour'. Following the MIPVU guidelines (Steen et al., 2010, p. 36), we use the sense description provided for the noun to analyse the adjective.

11. It might also be argued that MM1 is the basic sense of 'to float', but this would make for an inconsistent source-domain description, as drops of water do not typically "rest or move slowly on the surface of a liquid and not sink" (MM1). Rather, they move through the air – as is also indicated by the sense description of 'vapour'. Moreover, as the examples in the dictionary show, the MM1 sense of 'to float' typically collocates with 'on/in/by/along/towards', while MM2 collocates with 'in/through/across/over', which is also the case in (5′).

Furthermore, in the first sentence of the article, the reviewer argues that it was not fair of some author to claim that poets do not have a clear idea of other people.[12] In this sentence, the reviewer thus speaks in defence of poets. In the second sentence of the review, however, the reviewer has reconsidered this qualification when he argues that the characters in the reviewed book indeed show signs of such 'haziness' in the mind of the poet. The contrast between the evaluation of the quotation presented in the first sentence, and the evaluation of the novel presented in the second sentence may make the metaphor stand out even more.

We now turn to the analysis of Example (6). Extract (6′) presents the 'playing with fire'-example discussed in (6) in its surrounding co-text. Extract (6′) describes high officials in the Welsh national rugby team who took risks when they planned matches against Welsh club teams, because the national team lacks quality. It is pointed out how this has led to some very humiliating lost matches, and how the New Zealand team, which will now come to play against Wales, will finish this cycle by also winning the match against the Welsh.

(6′) Rugby Union: Welsh horizon[MRW-delib] all turns black[MRW-delib].
By STEVE BALE.
EACH new indignity in[MRW] the heap[MRW] visited[MRW] on[MRW] Welsh rugby seems worse than the last. The selectors knew they were playing[MRW-delib] with[MRW-delib] fire[MRW-delib] when they decided to arrange[MRW] a couple of club fixtures[MRW] and they have duly been consumed[MRW-delib] in[MRW] a conflagration[MRW-delib] of their own making[MRW]. The New Zealanders, appropriately garbed in funereal black, arrive next week to scatter[MRW-delib] the ashes[MRW-delib]. (VUAMC-A1N-09)

The extract in (6′) displays an extended metaphor in the form of a scenario (Musolff, 2004; see also Semino, 2008) in which the (near) future of Welsh rugby is described in terms of the emergence and results of a devastating fire. The extract contains several lexical units, each of which have a fire-related source-domain meaning: 'consumed', 'conflagration', and 'ashes', and which are now used to describe the target domain of rugby. The extract (6′) opens with a headline that summarises the fire-metaphor. This headline is discussed at the end of the analysis of this example. Although the first sentence of the core of the article contains lexical units that can be identified as metaphors ('in', 'visited', and 'on'), these are not part of the fire-metaphor, and are therefore not significant for this analysis.

The extended metaphor begins in the second sentence of the article, with the 'playing with fire' idiom. As was pointed out in the discussion of (6), this idiom

12. This can be considered an instance of echoic language use, in the sense that the author expresses his attitude to someone else's opinion (Wilson & Sperber, 2002).

contains a single sense description in the dictionary that matches the target domain of the utterance ("doing something dangerous or risky that could cause lots of problems for you"; *Macmillan*). Consequently, the idiom is not identified as a potentially deliberate metaphor when analysed in relative isolation. However, the source-domain meanings of the lexical units in the idiomatic expression become prominent when, in the second half of the sentence, the fire that the selectors were 'playing with' turns into a large fire that causes a lot of damage (a 'conflagration'). Whereas 'playing with fire' may still sound innocent, the consequences – i.e., being 'consumed' in a 'conflagration' – clearly are not. The novel use of 'conflagration' to describe the state of a national rugby team makes the fire-related source-domain meaning of the idiomatic expression prominent as well, causing the metaphors to stand out *as* metaphors in communication.

The fire-metaphor continues in the next sentence, in which the results of the fire are taken care of. That is, the New Zealand national team will come to 'scatter the ashes' of what is left of the Welsh team (see also Krennmayr, 2011). This scattering (in a funereal context) serves as a final part of the extended fire-metaphor. The extended metaphor thus describes three consecutive steps; it first describes the risks that the selectors took, then it describes the resulting consequences, and finally it describes a final stage in which nothing is left of Welsh rugby. Here, context (information from outside the text) contributes additional information for the analysis of this metaphor: 'the Ashes' refers to a series of three rugby matches that are played between Great Britain (note: not Wales) and Australia (note: not New Zealand; see Hickey, 2006, p. 13).

Given the above analysis, the title of the article, 'Welsh horizon all turns black', may be analysed as a summary of the extended metaphor that is developed in the first part of the article. In the source-domain sense, the horizon turns black as a result of the fire, while in the target-domain sense, the future of Welsh rugby looks bad. The title of the article may also be seen as a playful allusion to the phrase 'light on the horizon'. This phrase has one conventional meaning in the dictionary: "something that makes you think that a difficult situation will improve" (*Macmillan*). By adjusting the phrase in such a way that the light becomes something dark, the title of this newspaper article already suggests that things may still become worse instead of improve for Welsh rugby. In addition, context contributes to the analysis of the adjective 'black'. The New Zealand rugby team are known colloquially as the 'All Blacks', referring to their entirely black uniform. 'Black' in the title of the article may thus also metonymically stand for the New Zealanders. The nickname is referred to again in the final sentence in (6′), where the New Zealanders are said to arrive 'properly garbed in funereal black'.

The analyses in (5) and (6) show a different role of co-text than the examples discussed in (3) and (4). That is, the metaphors in (3) and (4) can be identified

as potentially deliberate in isolation because they display signalled comparisons between the target domain of the utterance and some explicitly mentioned source domain. By contrast, the metaphors in (5) and (6) are not identified as potentially deliberate metaphors when they are analysed in isolation. Thus, although the metaphors in isolation as presented in (5) and (6) can be identified as metaphors at the level of language and thought, additional information is needed to determine whether they also count as metaphors at the dimension of communication. Such additional information is provided by the co-text, which in both (5′) and (6′) proved to contain important information that made it possible to identify the metaphors in question as potentially deliberate. In the case of (5), the co-text contains several other potentially deliberate metaphors that express the same source-target domain mapping. The co-text of (6) displays a scenario in which different stages of a fire and a resulting funeral are used to describe developments in sport. This shows how co-text can serve as an essential aspect in the *identification* of potentially deliberate metaphor in language use.

3.3 Recurrent metaphor as co-text in the analysis of potentially deliberate metaphor

The third and final case study in this chapter is concerned with the role of co-text in the case of recurrent metaphors. Recurrent metaphor is defined as "the use of different expressions relating to the same broad source domain in different parts of a text" (Semino, 2008, p. 23; see also the notion of 'metaphor chains' in Koller, 2003b). It is different from extended metaphor (discussed earlier) for two reasons. Firstly, recurrent metaphor is broader than extended metaphor in that the different metaphors do not have to be positioned in consecutive semi-independent clauses (Crisp et al., 2002). Secondly, whereas the metaphors in an extended metaphor each all express the same source-target domain mapping, the metaphors in a recurrent metaphor share the same source domain, but not (necessarily) the same target domain.

In this case study, we discuss two examples from our corpus that contain recurrent metaphors. Similar to the previous two case studies, we first present the two examples in relative isolation (utterance level), followed by a detailed analysis of the examples and their co-text. Example (7) is taken from a newspaper article that describes the return of the western on television.

(7) the TV western is struggling[MRW-delib] back[MRW-delib] into[MRW-delib] the saddle[MRW-delib]. (VUAMC-A2D-05)

Example (8) is taken from a newspaper article about the establishment of a Palestinian state.

(8) First, it [i.e., an escalation of the Intifada] would consolidate[MRW] the structures[MRW-delib] of the developing[MRW] national authority. (VUAMC-A9J-01)

Both examples contain various conventional metaphors. In the remainder of this subsection, we focus on the cases that DMIP identifies as potentially deliberate metaphors.

Before we investigate the role of co-text in (7), let us first consider the utterance in isolation again. In this example, the verb 'to struggle', the adverb 'back', the preposition 'into', and the noun 'saddle' can be identified as metaphors at the dimensions of language and thought based on the presence of conventionalised target-domain sense descriptions in the dictionary. Moreover, the metaphors in this example can be identified as potentially deliberate without having to take additional co-text into account. The reason for this is that this example displays a case of topic-triggered metaphor in which the metaphors allude to the topic of the text (Koller, 2003a; Herrera Soler, White, Villacañas & Amengual, 2006; see also Krennmayr, 2011). Specifically, these lexical units are used to describe the revival of the western on television in terms of a person trying to get back on a horse. Because of the direct link with the topic of the text – the return of the western on television – both the target- and the source-domain meaning of the words are present in the referential meaning of the utterance. As a result, these metaphors stand out *as* metaphors at the dimension of communication. The fact that the western takes the grammatical position of the agent – metonymically representing the cowboy who is trying to get back on his horse – only strengthens this view.

Although (7) can thus be identified as containing potentially deliberate metaphors when analysing the example in isolation, the surrounding co-text also contributes to the overall analysis. In fact, (7′) contains multiple topic-triggered metaphors that all describe aspects related to the comeback of the western on television in terms of scenes and (clichéd) phrases that are characteristic of the genre of westerns (the suggested image of the cowboy appearing and disappearing on the horizon, his horse's hoofs leaving a puff of dust on the horizon, etc.). These metaphors are stacked across the entire text to produce a recurrent, topic-triggered, metaphor, every individual metaphor-related lexical unit of which is identified as potentially deliberate.

(7′) [B]ut a revival of the western looms[MRW-delib] on[MRW-delib] the horizon[MRW-delib] (…) The TV western seemed to fade[MRW-delib] into[MRW-delib] the sunset[MRW-delib] some time in[MRW] the mid-1970s (…) There are encouraging signs[MRW], however, that the TV western is struggling[MRW-delib] back[MRW-delib] into[MRW-delib] the saddle[MRW-delib]. (…) Will the western ride[MRW-delib] again? (…) It is premature[MRW], then, to say that the western has galloped[MRW-delib] back[MRW-delib] to[MRW-delib] centre[MRW] screen. But there is a puff[MRW-delib] of dust[MRW-delib] on[MRW-delib] the horizon[MRW-delib]. (VUAMC-A2D-05)

The various 'western scenes' all have different connotations and are used in different parts of the article. The very first instance of this chain of metaphors (Semino, 2008; see Koller, 2003b) deserves particular attention. The verb 'to loom' has a conventionalised meaning in the dictionary that matches the target domain of the text. At the same time, it is revealing of the author's opinion about the possible success of the revival of the western that he describes: "if something *unpleasant* or *difficult* looms, it seems likely to happen soon" (MM2; emphasis added). As this sense description points out, the agent that does the looming is typically something unpleasant or difficult – and in (7/7′), the western takes this position of agent. The author thus seems not fully confident that the comeback of the western is going to be a success (or, alternatively, that such a comeback is desirable).

The analysis of (7′) shows how the notion of 'co-text' can be stretched across an entire text in the case of recurrent metaphor. The first manifestation ('a revival looms…') of the recurrent western-metaphor in the newspaper article is found at the very beginning of the text, while the last manifestation ('there is a puff of dust') can be found in the final sentence of the article. As Koller (2003b) indicates, beginnings and endings are key points in a text, so the use of potentially deliberate metaphor may serve specific functions there, such as to express a standpoint that is intended to persuade the audience. In addition, metaphor in this example clearly also seems to be used for humourous purposes. All manifestations of the western metaphor in (7′) can be identified as potentially deliberate metaphors when analysed in isolation. However, the addition of co-text reveals a recurrent pattern of the same metaphor that provides further insight into the meaning of the struggle than was described in isolation in (7).

Example (8) also contains several lexical units that can be identified as metaphors at the dimensions of language and thought based on the presence of conventionalised target-domain sense descriptions in the dictionary ('consolidate', 'structures', 'developing'). In the remainder of this analysis, the focus is on the noun 'structures'. This noun conventionally describes the organisation of the Palestinian state in terms of a building. In terms of the analysis of the communicative status of the metaphor, no cues are present in (8) that suggest that 'structures' functions *as* a metaphor at the dimension of communication. Yet, DMIP *does* identify this noun as a potentially deliberate metaphor. To discuss why 'structures' in (8) is identified as a potentially deliberate metaphor by DMIP, we analyse the surrounding co-text, starting with the immediate co-text in (8′) below.

(8′) [An escalation] of the Intifada in[MRW] this[MRW] direction[MRW] would serve[MRW] two purposes at once. First, it would consolidate[MRW] the structures[MRW-delib] of the developing[MRW] national authority which is competing[MRW] to replace[MRW] the occupation authority. Second, it would consolidate[MRW] the image[MRW] and essence[MRW] of the Intifada as a constructive, not a destructive, force[MRW]. (VUAMC-A9J-01)

Extract (8′) contains several lexical units that are identified as metaphors at the dimensions of language and thought, among which 'in', 'direction', 'consolidate', and 'image'. However, none of these metaphors are identified as metaphors at the dimension of communication. No cues are present in this part of the co-text of (8) that suggest that the source-domain meanings of these lexical units are part of the referential meaning of the utterances in which they are used. Although (8′) thus contains a cluster of metaphors, in that it is rich in metaphors that express different mappings (Semino, 2008), these metaphors are not identified as potentially deliberate at the communicative dimension of metaphor.

As becomes clear from the analysis of (8′), it is not possible to identify the noun 'structures' in (8) as potentially deliberate based on its immediate co-text. This only becomes possible when taking into account even more co-text, which is presented in (8″) below. This extract displays part of the newspaper article that precedes (8).

(8″) The masses[MRW] are being engaged in[MRW] the craft[MRW-delib] of state-masonry[MRW-delib]. In[MRW] this[MRW] process of state building[MRW-delib], many stages[MRW] have been covered[MRW]. (VUAMC-A9J-01)

The extract in (8″) contains an extended metaphor that describes the contribution of the Palestinian people ('the masses') to the process of creating a Palestinian state in terms of skilfully building something out of bricks/stone. The novel compound 'state-masonry' in particular stands out *as* a metaphor because it combines a non-metaphorical target-domain word (state) with a source-domain word (masonry). Specifically, the noun 'masonry' contains a single sense description in the dictionary that is concerned with building/constructing: "the bricks or stones that make a building, wall, or other structure" (*Macmillan*). In (8″), this noun is used to describe the target-domain of creating a state, as such providing a new perspective on the topic of the text. The potentially deliberate status of 'masonry' makes the building-related source-domain meanings of two other metaphors – 'craft', and 'building' – in (8″) prominent, too. This, in turn, leads to the identification of these metaphors as potentially deliberate.

Although (8″) is situated about ten lines before 'structures' in (8) in this newspaper article, we argue that it is because of the extended potentially deliberate metaphor earlier in the article that 'structures' in (8) can count as a potentially deliberate metaphor as well (see also Beger, 2011). In fact, the building-metaphor is repeated several times in the intermediate text. For instance, the noun 'landmark' ("a famous building or object that you can see and recognise easily"; MM1) is used to describe the importance of the issuing of the Palestinian Declaration of Independence. The verb 'to build' ("to make a building or other large structure by putting its parts together"; MM1) is used (again) to describe the creation of the Palestinian state. It is because of this recurrent metaphor that 'structures' in (8) is identified as a potentially deliberate metaphor.

Thus, the analysis of (8–8″), shows how some metaphors can only be identified as potentially deliberate metaphors when larger stretches of co-text are taken into account. The recurrent 'building/construction metaphor' that constitutes a potentially deliberate (extended) metaphor in an earlier part of a text can promote the building source domain of metaphors that are used later on in the text. Example (8) is similar to examples (5) and (6) in that the co-text may be essential in the identification and further analysis of conventional metaphors as potentially deliberate. At the same time, (8) is different from the other two examples in that it illustrates how such conventional metaphors need not be part of an extended metaphor to be identified as potentially deliberate, but can also be part of a recurrent metaphor that is spread over larger parts of a text.

Compared to the analyses presented in the previous two case studies, the analysis of the role of co-text in (7) and (8) points out that potentially deliberate metaphors may be both *identified* and *further analysed* by taking into account an even broader co-text than the (semi-)independent clause (discussed in case study 1) or the immediate co-text (discussed in case study 2). In the third case study, we presented one example, (7), that can be identified as containing potentially deliberate metaphors when studied in isolation, and one example, (8), that cannot be identified as containing potentially deliberate metaphors when studied in isolation. The detailed analyses of the co-text surrounding these two examples showed how the recurrence of metaphor can either provide further insights into the ideas and intentions of an author (as in the western example), or enable the identification of potentially deliberate metaphor (as in the Palestine example). These analyses again show how co-text contributes in important ways to the identification and analysis of potentially deliberate metaphor in discourse.

4. Conclusion and discussion

In this chapter, we investigated the role of co-text in the identification and analysis of potentially deliberate metaphor in natural language. We took a semiotic approach to deliberate metaphor, studying language use on the basis of texts, and discussed a series of case studies from our annotated corpus of potentially deliberate metaphor. In these case studies, we showed how co-text can either be important in the *identification* and/or in the further *analysis* of potentially deliberate metaphor. Whereas lexical units may often be identified as metaphors at the dimensions of language and thought when they are presented in (relative) isolation – i.e., at utterance level – the analyses in this chapter show that this is not always sufficient to account for the communicative dimension of metaphor. To

analyse the status of metaphors *as* metaphors at the communicative dimension, analysts need to look beyond the utterance more frequently than when analysing metaphor at the other two dimensions. In fact, as the analyses in this chapter have shown, in the most 'extreme' case potentially deliberate metaphors can only be identified as such when additional co-text is taken into account.

This is not to say, though, that the addition of co-text causes a shift in what counts as the unit of analysis in the application of DMIP – the method for the identification of potentially deliberate metaphor on which our analyses are based. Rather, it evokes a distinction that is well-known in the social sciences between two types of units that are part of every content analysis: the 'recording/coding unit' on the one hand, and the 'context unit' on the other (Krippendorff, 2013). The 'recording/coding unit' is defined as the unit that is used for separate coding and description, and thus constitutes the unit of analysis. Recording/coding units are "the smallest units that bear all the information needed in the analysis" (Krippendorff, 2013, p. 101). In the analyses discussed in the current chapter, our recording/coding unit (i.e., the unit of analysis) is the lexical unit. Coding potentially deliberate metaphor at the level of the lexical unit provides the possibility to examine, for instance, the distribution of potentially deliberate versus non-deliberate metaphors in language use. 'Context units', by contrast, are defined as "units of textual matter that set limits on the information to be considered in the description of recording units" (Krippendorff, 2013, p. 101). For the identification of metaphor at the dimensions of language and thought, the context unit may most often (but not always) be the utterance. However, for the analysis of metaphor at the communicative dimension, the utterance is often (but not always) too small to count as the context unit. In fact, as the analyses in this chapter have shown, to determine whether a metaphor counts as a case of potentially deliberate metaphor at the dimension of communication, the context unit often needs to be extended beyond the utterance.

According to Krippendorff (2013), the ideal context unit is long enough to allow valid analyses, and short enough to yield reliable analyses. In the analysis of fiction, for instance, he suggests that the maximum length of the context unit may be the chapter. Along these lines, the maximum length of the context unit in the analysis of newspaper articles may be the entire article, for academic texts the entire chapter/paper, and for face-to-face conversations the entire conversation. The analyses discussed in the current chapter fit with this definition, as the maximum amount of co-text that we have taken into account is an entire newspaper article. At the same time, however, our analyses have also shown that it is not always necessary for the identification of metaphors as potentially deliberate to take the entire text into account.

The case studies discussed in this chapter illustrate the complexity of the analysis of metaphor in discourse, in particular when investigating the communicative dimension of metaphor. It is true that some of the armchair examples of metaphor studies, including Shakespeare's 'Juliet is the sun' and 'Shall I compare thee to a summer's day?', and Wordsworth's 'I wandered lonely as a cloud' can be identified *as* metaphors at the dimension of communication without taking additional co-text into account. However, as we have shown, the analysis of metaphor in communication can also be more complex, and potentially deliberate metaphors may even be overlooked if co-text is not taken into account. Moreover, investigating how co-text influences the identification of potentially deliberate metaphors provides more detailed insights into the way in which metaphors work *as* metaphor (i.e. as specific rhetorical devices) in communication.

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A typological framework of attention-drawing strategies for Ancient Egyptian metaphorical language

Camilla Di Biase-Dyson
Georg-August-Universität Göttingen

This contribution proposes a typology of attention-drawing strategies for Ancient Egyptian that is based on qualitative and quantitative analyses of texts from three genres: wisdom literature, letters and narrative. The focus is on the criteria for attention-drawing that may operate in a language like Egyptian, as compared, for example, to English. After outlining the means by which the Egyptian text corpus can be annotated, it is argued that metaphors can be marked at the graphemic level (where categorisation plays a role), the phonemic level (where word play can be important), the lexical-semantic level (which considers co-textual features), the syntactic level (where metaphors are signalled), the text-structure level (in which metaphor patterns are significant) and the pragmatic level (where the reader/hearer is involved). Many metaphors in the examples exemplify a number of these markings simultaneously, further emphasising their attention-drawing potential.

Keywords: metaphor, attention-drawing, Ancient Egyptian, typology, semantics, conceptual metaphor, text structure, pragmatics

1. The point of departure

This paper considers the means by which metaphorical language was marked using co-occurring features which often function as attention-drawing strategies in Ancient Egyptian texts of the pharaonic period (ca. 2055–1070 BC). This empirical identification and reconstruction of attention-drawing strategies is, to the best of my knowledge, the first attempt thus far to identify and typologise such strategies for an ancient language. Attention-drawing strategies, which "create the conditions for a metaphorical reading" (Wallington et al., 2003, p. 1; also Cameron & Deignan, 2003, p. 159), are also known broadly as "deliberate metaphor" (Shen

https://doi.org/10.1075/ftl.5.03dib

& Balaban 1999; Cameron 2008; Steen, 2008, 2011a/b),[1] or, relating to the accompanying markings, as "metaphor signals" (Goatly, 2011, pp. 178–209), and "tuning devices" (Cameron & Deignan, 2003, p. 150; Cameron, 2008, p. 202–203; Krennmayr, 2011, p. 157).

For the purpose of this paper I shall consider what kinds of criteria for this phenomenon exist in contemporary metaphor research (predominantly on the basis of research on texts in English). Subsequently, I shall compare these findings with the kinds of features we find in Ancient Egyptian texts. At the broadest level, we shall find great commonality between Ancient Egyptian and modern English: that both lexical and graphical collocations can be used to mark a metaphor (as identified for English by Wallington et al., 2003). If we look closer, however, we see that the discourse markers as well as the graphical markings often operate in completely different ways. Firstly, discourse markers, such as "literally" in "*literally* **working his fingers to the bone**"[2] (Wallington et al., 2003, p. 1), which can signal metaphors in English by "hedging", are not present in the same way in Egyptian. Moreover, whereas in English and other modern languages, punctuation, such as inverted commas ('…'), can be used as a metaphoricity signal, as we see in the passage "ie, should '**know the ropes**'" (Wallington et al., 2003, p. 1), the graphical marking of a metaphor in Egyptian texts is tied to the features Written Egyptian possesses as a "complex morphographic writing system" (Kammerzell, 1998, p. 22), in which hieroglyphic and hieratic (cursive) signs can have a number of different semantic and/or phonological functions.

Given that this research is qualitative in nature, it has an exploratory character and cannot be considered as providing an exhaustive list of all possible markers. Instead, it attempts to bring together and categorise a number of specific features in the language and script that can be employed as metaphoricity markers. For future work with these features I hope to move from the qualitative approach adopted here to a quantitative approach, when the data, which is currently being annotated (see § 3), reaches a critical mass. On this basis I will be able to firstly test the relative frequency of particular attention-drawing strategies, secondly measure the frequency of attention-drawing strategies in general in the corpus and thirdly

1. The term "deliberate" is criticised by Gibbs (2011) and Müller (2011) for implying too much about consciousness in communicative acts, but is defended by Steen (2011b) and Deignan (2011) as being a category which is nonetheless productive for linguistic and textual research. Steen (2017) maintains that the distinction between deliberate and non-deliberate metaphor hinges on attention, which is the scope followed in this book.

2. In this contribution, I follow the standard set by Wallington et al. (2003), in which metaphors are written in bold and attention-drawing devices, or 'signals' (either discourse markers or modifiers), are written in italics. Metonyms are underlined.

consider whether certain attention-drawing strategies are tied to a specific genre or register. I may also be able to test the extent to which the strategies are used for conventional as compared to novel metaphor (discussed in Semino, 2008, p. 19). Such quantitative analyses require significantly more annotated material from a broader range of genres than has heretofore been analysed (§ 3), but on the other hand, it has been proven to be analytically very useful to use a qualitative approach as a starting point for a quantitative analysis into metaphor signals (Cameron & Deignan, 2003, pp. 149, 151). The establishment of a preliminary typology early on in the research can outline the variety of strategies used and help us devise a means of systematising the annotation of metaphors and their signals.

A caveat for a study of this type is that any study of metaphors from ancient texts is coloured by the analyst's perspective: the categories thus reflect neither the cognition of the producer nor that of the receiver. Consequently, modern analyses and elicitation data for modern languages will be required to lend support to these categories.

2. Criteria

The dominant means of marking a metaphor (in English), according to current text-based studies of metaphor, is the use of discourse markers, like "like", but also "metaphorically", "literally", and so on. As Raymond Gibbs (2011, p. 34) rightly points out, such devices are also prevalent in non-metaphorical speech, which means, as noted in the corpus study of Alan M. Wallington et al. (2003, p. 3), that such signals cannot be used to automatise metaphor annotation. In fact, the signal can be a poor indicator of metaphoricity in general, as its fundamental purpose is to "signal some discourse effect that the speaker is negotiating with the listener", which may or may not be a metaphor (Wallington et al., 2003, p. 2).

Wallington et al. (2003, pp. 4–7), following the typology of Andrew Goatly (2011, pp. 182–205), identify the following 12 categories of phrase-based markers:

a. Explicit signals of metaphoricity, similarity, etc. (where the signals themselves are not (very) metaphorical): "metaphor[ical[ly]] [speaking]"
b. Explicit signals of metaphoricity, similarity, etc. (where the signals themselves are quite metaphorical): "an image of"
c. Explicit signals of thinking-of-as (where the signals themselves are not (very) metaphorical): "think of … as"
d. Explicit signals of thinking-of-as, etc. (where the signals themselves are quite metaphorical): "look/sound/feel/taste/smell/ [[very] much/somewhat] like"
e. Explicit signals of alternative or special sense being used: "in a/another sense"

f. Metalinguistic signals (incl. some that are themselves metaphorical): "so to speak/say"; "in a nutshell"
g. Bogus signals of reality: "[quite] literally"
h. Signals of (near-)equivalence: "same [thing] as"
i. Approximative categorizers "[a/some] kind/sort/type/form/class/case of"
j. Signals of (quasi-)extremity: "absolutely/thoroughly/utterly"
k. Contrasters: "not so much … as …"
l. Commonization of proper names: "he/a/an/another [((adjectives))] ((proper name)) {e.g.: the Beethoven of the twentieth century}".

Brdar et al. (2009, pp. 160–161) add to this list by making a case for what they call pre- and post-modifying elements that also signal the metaphor by drawing attention to the relationship between the source domain (in bold) and the target domain in a way that signals the source domain (in italics): "*immigration* **minefield**" (pre-modifying) and "**minefield** *of retirement issues*" (post-modifying). They also argue for different types of devices being used in English for metaphors and metonyms respectively, with metaphors favouring analytic devices (such as those in Wallington et al., 2003 and Brdar et al., 2009) and metonyms favouring synthetic ones (such as plurality: two coffees instead of cups of coffee, cf. Brdar et al., 2009, pp. 152, 161). Perhaps because linking between two domains takes more cognitive effort, there are also more explicit linking devices for metaphorical language than for metonymy (Brdar et al., 2009, p. 163).

A number of other scholars link attention-drawing or deliberate metaphors to broader text-based patterns, such as the accumulation of markers and their distribution across a text. Semino (2008, pp. 22–30), in her study of newspaper texts, considers the kinds of patterns created by individual metaphors across a text, whether they are recurring, mixing or repeating, and Krennmayr (2011, p. 174), with a similar corpus, points to topic-triggering (where the topic inspires the metaphor), clustering and extension of metaphors as well as personification. Cameron (2008, p. 200) focuses on the clustering of metaphors in specific parts of a text across a range of spoken and written genres. The same phenomenon of clustering is prevalent in the corpus of educational texts (university lectures in psychology) analysed by Anke Beger (2011, pp. 44–49): metaphor is found to be distributed unevenly, with large stretches of quite literal language being followed by clusters of metaphorical language. She concludes that: "despite their overarching abstract topics, there are several sub-units of the lectures that may or may not deal with abstract concepts" (Beger, 2011, pp. 44–45). Shen and Balaban (1999) argue that whether metaphors are extending in a deliberate manner across the text has to do with the *coherence* of metaphorical language in a text, which in turn has to do with the extent to which the discourse in question was planned. Cornelia Müller

(2008b, pp. 224, 236–7) and Alan Cienki (2013 and this volume) look at how gaze, gesture and speech work together to reinforce a metaphor and show in this way just how dynamic (and multimodal) metaphor can be. I am going to draw on these approaches for my study of ancient texts by considering all possible levels at which metaphors can occur (see also Chantrain & Di Biase-Dyson, 2018).

3. Method

Results from my ongoing annotation of figurative language in Egyptian texts dating from the New Kingdom and Third Intermediate Period (ca. 1550–712 BC) have helped me to establish a typology of metaphorical signals. In the process of annotation, attention has been paid to genre and register. The current corpus comprises five examples of wisdom literature (teachings), which in their current state of preservation comprise a total of 7,124 tokens,[3] 11 letters, containing a total of 7,037 tokens, and a narrative text, with a total of 2,987 tokens. Although examples for this study will be drawn from several genres, most are drawn from a long (3,352 tokens) and figuratively laden wisdom text, *The Teachings of Amenemope*.

3.1 Corpus annotation

With the help of a programmer I built a metaphor annotation tool into the already completed database of Projet Ramsès (Université de Liège, for which see Polis, Honnay & Winand, 2013), which is a corpus of texts dating to the Egyptian New Kingdom–Third Intermediate Period. It has over 510,000 tokens; more than 65,000 hieroglyphic spellings, over 10,000 lemmata and is comprised of more than 4,000 texts from a wide range of genres, from letters to reports, from narrative to poetry. The database is built in MYSQL with a Java interface and the texts – both the original files and the versions of the texts with metaphorical annotations – are saved as separate XML files.

My annotation schema has been developed to analyse figurative language – metaphor, metonymy, metaphtonymy (where metonyms form the basis of a metaphorical expression, for which see Goosens, 1990; also Mittelberg & Waugh, 2009) and personification – on three levels: the lexical level, the conceptual level and the textual level. These three levels are physically realised in the database via coloured sections: the LexicalGroup in yellow (white in Figure 1), the ConceptualGroup in green (here light grey) and the TextualGroup in blue (here dark grey). All these

3. For the *Teaching of Ani* and for the *Teaching of Amunnacht* this was done by adding missing sections from parallel texts to the most complete exemplar.

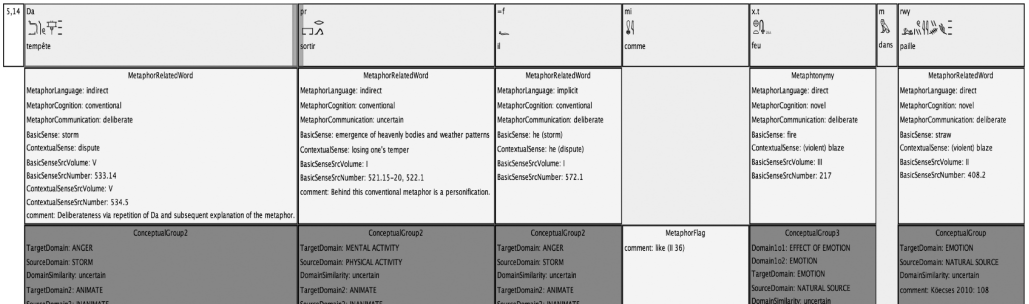


Figure 1. Marking indirect metaphor and MetaphorFlag + direct metaphor in the sentence "The storm, it emerges like a fire in straw" (The Teachings of Amenemope L, 5.14).

analytical perspectives have been adapted from procedures developed by contemporary metaphor analysts, but the adoption of a tripartite annotation schema that brings them together is unique to this project. The three levels, as we shall see in § 4, also contribute to the typology I propose, as attention-drawing strategies can be traced at both lexical and textual levels in direct relation to the source (and target) domains tracked at the conceptual level.

The lexical level of analysis (the LexicalGroup in the database) has its basis in the Metaphor Identification Procedure, VU University Amsterdam (MIPVU, see Steen et al., 2010a). It operationalises the analysis of a metaphor by analysing the meaning in context of lexical units, with reference to corpus-based dictionaries/thesauri. The structure I use is similar, but not identical, to the MIPVU system: it ensures that not only linguistic features (concerning the type of figuration) and cognitive features (concerning the degree of conventionality or novelty) are taken into perspective but also communicative features (for which see Steen, 2008, p. 228; 2011a, p. 87). In other words, I am explicitly attempting to tag attention-drawing strategies (for the development of MIPVU in this direction, see the contribution by Reijnierse et al., this volume).

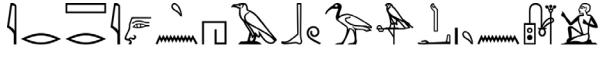
As we see in Figure 1, the LexicalGroup allows for the identification of the figurative language for each lexeme, be it a MetaphorRelatedWord, MetaphorFlag, Metonym, Metaphtonymy or Personification. Following this, the type of figuration is then further defined in reference to the dimensions of language, cognition and communication. The definition of MetaphorLanguage is particularly necessary in the case of a MetaphorRelatedWord (MRW), where an indirect metaphor (such as *d*ʳ 'storm' in Figure 1, where it is written without a transliteration font as *Da*) can be distinguished from a direct metaphor/simile like *ḫ.t* 'fire' (here *x.t*), via the latter's marking with a MetaphorFlag such as *mj* 'like' (here *mi*), or from an implicit metaphor (a pronoun), like *=f* 'he/it', which refers anaphorically to a preceding direct or indirect metaphor.

The next category, MetaphorCognition, considers the degree of conventionality (or novelty) of the lexeme or phrase in question. This consideration is based on consultation of text editions and one or more lexica, in this case principally (but not exclusively) the most extensive dictionary of Ancient Egyptian, the *Wörterbuch der Aegyptischen Sprache* (*Wb.*), its so-called *Belegstellen* (references) and the individual entries in card catalogues from which both the *Wörterbuch* and *Belegstellen* were built (the *Digitalisiertes Zettelarchiv*, or *DZA*). All of these materials have been made available in digital format by the *Thesaurus Linguae Aegyptiae* (*TLA*), an online platform that hosts its own major corpus of Egyptian texts.

Lastly, the category MetaphorCommunication is where attention-drawing strategies can be marked (deliberate, non-deliberate or uncertain); the motivation for tagging something as "deliberate" can be supplied in a comment (see Figure 1,

note on *ḏˁ* 'storm'). In order to adhere to the MIPVU method of annotating single lexical items (which facilitates corpus searches), I have developed strategies to accurately tag phrasal metaphors and compounds. Both elements are tagged and their interrelated meanings are indicated using a system of brackets at the lexical level. The phrase is then marked as a "compound" in a comment in the TextualGroup (discussed below).

The conceptual level (ConceptualGroup) applies categories from cognitive linguistic literature (the *Master Metaphor List* of the Cognitive Linguistics Group, 1991; Panther & Radden, 1999; Kövecses, 2010, pp. 281–285, all of which draw on Lakoff & Johnson, 1980) and supplies *ad hoc* categories only where necessary. This is predominantly the case for A is B metaphors (Example 1), which in my corpus can be notoriously culture-specific, to the point of being incomprehensible. For instance, what seems to be happening in Example 1 is that a shape-based similarity relation (of an ibis beak and a pen) is merged with the manifestation of the god Thoth, the god of scribes, as an ibis. It is thus plausible (from a religious perspective) that his beak should share a functional similarity with a scribe's pen:

(1) 

jr	*šrj*	*n*	*hꜣbw*	*ḏbˁ*	*n*	*zḫꜣ.w*
jr	*šr.t*	*n*	*hbj*	*ḏbˁ*	*n*	*zḫꜣ.w*
TOPZ	nose:F	of	ibis(M)	finger(M)	of	scribe:M

'As for the beak [lit. nose] of the ibis [Thoth]: (it is) the **finger of the scribe**'

(*The Teachings of Amenemope*, Papyrus BM EA 10474 (L), 17.7, in Laisney, 2007, pp. 162–163, 347)[4]

The textual level (TextualGroup) traces the kinds of patterns created by individual metaphors across a text, whether they are recurring, mixing or repeating. Where

4. The glossing abbreviations, adapted from the Leipzig Glossing Rules for Egyptian, can be found in Di Biase-Dyson, Kammerzell and Werning (2009). In this gloss, the gender of substantives is indicated where this information is secure. The philological commentary at the level of transliteration is transmitted via a series of brackets, following the Leiden system: [] for emendations of lacunae, () for elements missing that are often omitted and can be reconstructed, {} for elements that are considered incorrect by the analyst, <> for emendations on the part of the analyst. The transliteration (where necessary) is divided into two rows: the first represents the New Kingdom ('Late Egyptian') orthography, the second the more classical orthography that is accessible in dictionaries. If the scribe uses a more traditional orthography only one row of transliteration is provided. All transliterated letters represent consonant sounds in the text, with the exception of *V*, which shows vocalisation of a final /t/ sound before a suffix pronoun. Lastly, in the translation, words that cannot be more closely identified are represented as a compound of the Egyptian word with a substantive corresponding to a requisite superordinate category, such as '*tjeheset*-metal'.

clusters of metaphors appear they are labelled and numbered at the textual level. We shall see these kinds of annotations at work in § 4.5.

4. A multidimensional typology

The typology for attention-drawing markers is based on a bottom-up, data-driven process and draws on the inherent features of the Egyptian language and script. I have devised the typology on the basis of the kinds of "levels" at which metaphors can appear and be signalled: the graphemic level (where classifiers play a role), the phonemic level (where word play and repetition are key), the lexical-semantic level (where word meaning is important), the syntactic level (where signalling is significant), the level of text structure (where clusters, extension and text-structuring intertextuality can be tracked) and the pragmatic level (where decisions are made in the text with reference to the reader/hearer).

4.1 Graphemic strategies

Graphemic devices, as mentioned above (§ 2), can play a role in the marking of metaphors in English: orthographic devices, like quotation marks, but also layout decisions (like blank spaces), are employed for this purpose (Goatly, 2011, pp. 201–202). In Egyptian, we see particular hieroglyphic sign functions, so-called *classifiers*, being used in some cases to reflect (Chantrain, 2014), or even mark (Chantrain & Di Biase-Dyson, 2018), the metaphorical use of a lexeme. Classifiers are graphemes belonging only to Written (not Spoken) Egyptian that often appear at the end of many word classes (verbs, nouns, adjectives, even some prepositions) in order to supply semantic information,[5] which makes them ideal pointers for when semantic value changes, either over time or in an *ad-hoc* manner. Although not as such multimodal, since script and written language are considered to be one modality, the insights of variant categorisation strategies in hieroglyphic and hieratic (cursive) scripts, by evoking comprehension also at the visual level, may be the closest thing to what modern analysts gain from gesture studies or sign language studies.[6]

5. Allan (1977, p. 285) defines classifiers as bound morphemes that classify with respect to semantic features of the classified entity.

6. This is not an isolated finding: exciting research into the common properties of Egyptian hieroglyphs and sign language (DGS) has already been conducted by Lincke and Kutscher (2012).

In the following example, we see some unusual choices of classifiers in relation to an "active" (Goatly, 2011, p. 34), or "waking" (Müller, 2008a, p. 11) conventional nominal metaphor of "path" as "life path", which presumably reflects the conceptual metaphor LIFE IS A JOURNEY. This metaphor is particularly popular in wisdom texts (Vittmann, 1999; Di Biase-Dyson, 2016), but the text under analysis here, the satirical *Teaching of Menena* (Guglielmi, 1983, pp. 148–153), uses the metaphor in very creative ways. In the form of a letter to his son, the father Menena expresses his exasperation with his son's bad behaviour, who is presented as "my **sailor**, who is **unskilled in landing**" (rto 1–2). He has tried to teach his son about dangerous **paths** (rto 2–3) but sees him **going off without sandals** due to having never been **brought (back) by a thorn** (rto 3). In the passage under analysis, the father ties "life path" to his son's aimless seafaring by using a mixed metaphor, in which the path of life is submerged and the thorns of misfortune must somehow be anchored into the water (admittedly a physical impossibility) in order to catch out (and reform) wayward children:

(2) 

ptrj	*jn̰i-j*	*sïr*ʾ*.t*	*n*	*mḥ*	*1*
ptr	*jn̰i-j*	*sr.t*	*n*	*mḥ*	*1*
ATTN	bring:PFV-1SG	thorn:F	of	cubit(M)	1

ḫr	*mt*	*tȝḫ.w*
ḫr	*mṯ<n>*	*tȝḫ.w*
on	path(M)	plunge:RES

'Look, I have brought a **thorn** a cubit long onto the **submerged path**…'

(*The Teachings of Menena*, Ostracon Chicago OIC 12074 + Ostracon IFAO 2188, vso 5–6, in Guglielmi, 1983, pp. 149 and 152)

I want to draw attention here not only to the brilliant semantics of this mixed metaphor but also to its linking via a number of repeated and extended metaphors (of path, thorn, water, etc.). Such features also highlight explicit metaphorical marking at the textual level (cf. § 4.5 and, in general, Lakoff & Turner, 1989, 70–71, on the "composition" of metaphorical complexes). What is just as fascinating is that the mixed metaphor involving travel over land and sea also seems to be activated at the graphemic level. Firstly, 'path' is written with an unusual spelling, in which the classifier Gardiner Sign D54  ,[7] which is routinely used for verbs of motion, accompanies the far more commonplace N31  , a path lined with bushes in bird's eye view. Secondly, the (pseudo-)participle 'submerged' is written

7. The sign list referred to is to be found in Gardiner (1957).

with a unique spelling, in which a leg combination portraying movement, D56-D54  , is used instead of the conventional waves of water, N35A  , which conventionally categorise all things connected with water and fluids. The classifiers (perhaps because repetition signals intensification) seem to suggest an extreme degree of *movement* entailed in the problematic 'path' the son is pursuing and may also indicate that 'submerged' is not being used literally.

4.2 Phonemic strategies

To attempt any kind of reconstructive phonology for the Egyptian language is problematic, due to the fact that Egyptian of the pharaonic period is written using root-pattern, in other words, discontinuous, morphology which makes no use of vowels (Reintges, 1994; Loprieno, 1995, p. 1). This being said, it is certainly possible to trace cases of word play, especially when such cases are embedded in otherwise eye-catching parallel metaphorical constructions. Below, for instance, in a description of an aggressive person, there seems to be consonantal assonance (consonance), perhaps even homophony, in the words *sn.nw* 'second, pair' and *sn.w* 'brother', which may be etymologically linked (*Wb*. IV, 148).[8] Each word occurs in one of two linked phrases, which form a complex analogy about the destructive potential of the aggressor by moving (perhaps metonymically) from the specific (eyes) to the general (people). The first phrase is about 'conflicting' – or, humourously, crossed – eyes (a THE SOCIAL WORLD IS THE PHYSICAL WORLD metaphor) and the second expands upon the former by describing siblings fighting (possibly a FAMILY IS SOCIETY metaphor but possibly also simply a part of the broader analogy):

(3) 

sw	*msnw*	*jr.t*	*r*	*2:nw-s*
sw	*msnḫ*	*jr.t*	*r*	*2:nw-s*
PRS:3SG.M	turn:INF	eye:F	against	2:ORD-3SG.F

'He [the aggressor] **turns one eye against the other** [lit. its **second**]

sw	*ḏi.t*	*sn:w*	*ṯṯṯï*
sw	*ḏi.t*	*sn:w*	*ṯṯṯ*
PRS:3SG.M	cause:INF	sibling:(M)PL	fight:INF

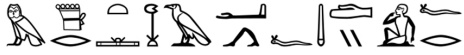
(and) he **causes siblings to fight**.'

(*The Teachings of Amenemope* L, 12.19–13.1, in Laisney, 2007, pp. 119–120, 341)

8. For a similar case in the (auto)biography of Irtysen, involving *sn.t* 'sister' and the number two, see Stauder (2018, p. 259).

4.3 Semantic strategies

At the lexical level, a number of strategies for drawing attention to metaphors are possible. One such method is to use a pair of antonymic or contrasting metaphors from the same source domain, in this case a SOCIAL WORLD IS THE PHYSICAL WORLD metaphor of a particular type (concerning tying and untying):

(4) 

m:dr.t *ḫ3ʿ-f* *mdï-f* *r*
m:dï *ḫ3ʿ-f* *mdw.t-f* *r*
PROH:CAUS throw:SBJV-3SG.M word[:F]-3SG.M to
'Don't allow that he [the antagonist] **throw** his words (about) in order to

spḫw-k *mtw-k* *ntfjw* *n* *wšbw.t.V-k*
spḫ-k *mtw-k* *nft* *m* *wšb.t-k*
lasso:INF-2SG.M CNSV-2SG.M loosen:INF in answer:F-2SG.M
catch you **out** [lit. **lasso** you] and don't be **unrestrained** [lit. **loose**] in your answer!'

(*The Teachings of Amenemope* L, 11.17–18, in Laisney, 2007, pp. 119–120, 339).[9]

Another strategy is to lay out a series of disparate, but, from the perspective of the target domain, synonymous metaphors, such as the case of stolen goods disappearing in a number of fantastic ways in *The Teaching of Amenemope*: a personified ground swallowing stolen goods, these goods disappearing into the underworld, sinking into a hole in the ground and lastly, and most picturesquely, growing wings and flying off (*Amenemope* L, 9.20–10.5, in Laisney, 2007, pp. 102–103, 336–337). Here the "deliberateness" emerges not only through the conscious development of different depictions of disappearance but also through the contradictory source domains, such as movement down and up as well as passive and active movement. In its cohesiveness, the extension of these terms for 'disappearance' also works as a textual strategy (cf. § 4.5).

One can additionally have a series of parallel hyponyms of a more general lexeme, which are used in a contrasting fashion, as we see here with the alternate fates of the different boats of greedy and modest people:

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9. Another similar case of antonymous metaphors is of the *šmm* 'hot man' *whn* 'knocking down' and *qd* 'building up' with his words, in *The Teachings of Amenemope* L, 12.3, cf. Laisney (2007, pp. 119–120, 340).

(5) 

*skt*ï *n ꜥwnwtï*ꜣ
*skt*ï *n ꜥwnt*ï
sekti-boat of greedy_man(M)
'The ***sekti*-boat** of the greedy man[10]

*ḫ*ꜣꜥ*.wt* <*m*> *ḥ*ꜣ*y*
*ḫ*ꜣꜥ*.tw* <*m*> *ḥ*ꜣ*y.t*
abandon:RES [in] mud[:F]
lies **abandoned** <in> the mud,

jw kꜣrꜣ n gr mꜣꜥ.w
jw kr n gr(.w) mꜣꜥ.w
SBRD *ker*-boat of silent_man(M) sail:RES
whereas the ***ker*-boat** of the **modest** [lit. **silent**] man **sails on**.'[11]
(*The Teachings of Amenemope* L, 10.10–11, in Laisney, 2007, pp. 102–103, 337)

4.4 Syntactic strategies

Key syntactic strategies involve explicit marking, such as with *m* 'as' (*Amenemope* L 13.5 in Laisney, 2007, pp. 119–120, 345), *mj* 'like' (*Amenemope* L 16.8 in Laisney, 2007, pp. 153–154, 346), *jrṯ (m)* 'making (as)' (*Amenemope* L 12.9 in Laisney, 2007, pp. 119–120, 340), or *m sḫr n* 'in the manner of' (Merenptah's Lybian War Inscription, *KRI* IV, 5.1). The use of such markings is sometimes due to the metaphor being less apt, as seen by the fact that such metaphors are often explicated via modifiers, as is the case with the analogy of the aggressive (hot) man in the temple:

(6) 

sw mj šꜣ.t rd m ḫnt.ï
sw mj šꜣ rd m ḫnt.ï
PRS:3SG.M like tree(M) grow:PTCP.ACT in outer_chamber(M)
'He [the aggressor] is *like* **a tree that grows in the outer chamber** [i.e. **indoors**].'
(*The Teachings of Amenemope* L, 6.1–2, in Laisney, 2007, pp. 72–73, 331)

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10. Another reading could be *ꜥwn.w*, 'the liar', since the reading presented here, following Laisney (2007, p. 103) seems to be a *hapax* (*Wb*. I, 172.19). It is nonetheless a reasonable interpretation, given that 'to be greedy' is realised in Egyptian via the composite *ꜥwn-jb*, literally '(to be) deceiving of heart/understanding' (*Wb*. I, 172.12–13).

11. For the orthography and usage of the term *mꜣꜥ*, see Di Biase-Dyson (2017a, pp. 359–361).

The statement is followed by an extended analogy explaining the sad fate of such trees, leading to lack of nourishment and eventually destruction by burning.

Disambiguation might also be necessary in the case of a mixed metaphor, as we see in Example 7 below. When the sage Amenemope describes the aggressor, he firstly describes his tantrum metaphorically as a 'storm', then employs *mj* 'like' for a direct metaphor, followed by yet another clause explaining the target domain. This may be to facilitate the change from a weather metaphor to a fire metaphor, the latter of which reflects the metaphorical description of the aggressor as 'the hot man':

(7) 

ḏʿw	*prị̂-f*	*mj*	*ḥ.t*	*m*	*rwïyï*
ḏʿ	*prị̂-f*	*mj*	*ḥ.t*	*m*	*rwy.t*
storm(M)	come_forth:PFV-3SG.M	like	fire:F	in	straw[:F]

'The storm – it emerges *like* **fire in straw**:

pꜣ	*šmm*	*m*	*wnw.t.V-f*
pꜣ	*šmm*	*m*	*wnw.t-f*
DEF.ART:M.SG	hot_one(M)	in	hour:F-3SG.M

(namely) the **hot man** having a (bad) moment [lit. in his hour].'

(*The Teachings of Amenemope* L, 5.14–15, in Laisney, 2007, pp. 67, 331)

In addition to this, in Examples 8 and 9, we can observe the active use of post-modifying elements, like 'verbal storm,' that then highlight the target domain, as we see in English (c.f. Brdar et al., 2009, pp. 160–161, discussed in § 2):

(8) 

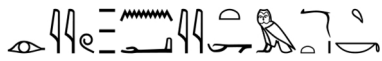
jmị̂	*ḥtp-w*	<*m*>	*mhnw*	*n*	*ḥ.t-k*
jmị̂	*ḥtp-w*	<*m*>	*mhn*	*n*	*ḥ.t-k*
cause:IMP	rest:SBJV-3PL	[in]	box	of	belly:F-2SG.M

'Let them [the teachings] repose <in> the **container** [lit. **box**] *of your belly/body*' (*The Teachings of Amenemope* L, 3.13 in Laisney, 2007, pp. 46, 328)

(9) 

ḫr-rʾ-ʿ	*wnw*	*ḏʿw*	*n*	*mdï*
ḫr-rʾ-ʿ	*wn*	*ḏʿ*	*n*	*mdw.t*
still	exist	storm(M)	of	word[:F]

'And even if there is a *verbal* **storm**,



jry-w *nʿy.t* *m* *ns.t-k*
jry-w *nʿy.t* *m* *ns-k*
make:SBJV-3PL mooring_post:F in tongue(M)-2SG.M
they [the teachings] will establish a **mooring-post** *in/out of your tongue*'
(*The Teachings of Amenemope* L, 3.15–16, in Laisney, 2007, pp. 46, 328)

4.5 Text structure strategies

The structure of the analysis has its basis in the typology of metaphorical language patterns in newspaper texts by Elena Semino (2008, pp. 22–30) and makes reference to the in-depth textual analyses of Andrew Goatly (2011, pp. 172–174). We will consider here just some of the more prominent phenomena that seem to play a key role in marking metaphors. Firstly, we can observe the clustering of metaphors and metonyms into coherent groups, such as we see in Example 8. Here, a MENTAL ACTIVITY IS PHYSICAL ACTIVITY metaphor, like 'to **hanker after** (something) [lit. to be **greedy/gluttonous**]', frames two MATERIAL FOR PRODUCT metonyms ('*tjeheset*-metal' to stand for expensive items and 'fine linen' for clothes) and one CAUSE FOR EFFECT metonym ('to hate' for 'to avoid'):

(10) 

m-jr *[snk]tï* *n* *ṯḥs.tï*
m-jr *skn* *n* *ṯḥs.t*
PROH be_greedy:INF for *tjeheset*-metal:F
'Don't **hanker** after [lit. be **greedy** for] expensive items [lit. *tjeheset*-metal]

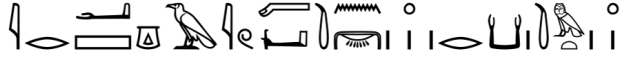
msḏi *šmʿ.t* *nfr*
msḏi *šmʿ.t* *nfr.t*
hate:IMP fine_linen:F beautiful[:F]
and avoid [lit. hate] beautiful clothes [lit. fine linen]!'
(*Amenemope* L, 18.8–9, in Laisney, 2007, pp. 165–166, 349)

This cluster is subsequently extended: the domain of "fine things" develops into a case of analogy to explain how the corrupt are eventually punished for their behaviour, which underlines the metaphorical marking of what could have been a fairly conventional expression:

(11) 

jw-f *n-jḫ̈ï* *swḥ.w* <m> *mk*
jw-f *m-jḫ̈* *swḥ.w* <m> *mk*
SBRD-3SG.M why vest:RES [in] *mek*-fabric(M)
'And why is he vested <in> fine clothes [lit. *mek*-fabric],

jw-f *sḫ3i̯* *m-b3ḥ* *p3* *nṯr*
jw-f *sḫ3i̯* *m-b3ḥ* *p3* *nṯr*
SBRD-3SG.M turn_around:INF before DEF.ART:M.SG god(M)
when he **defrauds** [lit. **turns around**] before the god?

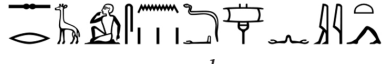


jr *ʿšg3jw.tj* *nbw* *r* *k3tjm.t*
jr *ʿšq.tj* *nbw* *r* *ktm.t*
TOPZ oppress:RES gold(M) to *ketemet*-gold:F
If **gold** is **tampered with** [lit. **oppressed**] (to make) ***ketemet*-gold**,

ḥḏ *t3* *jw-f* *n* *dḥdï*
ḥḏ *t3* *jw-f* *m* *dḥtï*
be_bright:SBJV land(M) SBRD-3SG.M as lead(M)
once dawn breaks, it will be (merely) **lead**.'
(*Amenemope* L, 18.10–13, in Laisney, 2007, pp. 165–166, 349)

The key textual marker of repetition is also featured in the text, as seen in the repetition of *whi̯* (written as *wh3*) in *The Teachings of Amenemope* L 14.12 and 14.13 (in Laisney, 2007, pp. 140–141, 344). In both cases, *whi̯*, whose basic sense is 'to escape', is used metaphorically to describe 'failing': in the former case with abstract arguments: "the bad **failing** [lit. escaping] the good / the bad causing the good to **fail**" (Laisney, 2007, p. 145) and in the latter case in a more concrete sense: "you **failing** [lit. escaping] before your superior".

Another marker of metaphoricity is the use of intertextuality, whereby a (not originally metaphorical) passage from another literary work is cited and used (and expanded) in a metaphorical manner. In Example 13, Menena's letter to his son Pai-iri, there is a citation of an earlier narrative about real sailors and their capabilities (Example 12), which is embedded into the text in such a way as to frame the subsequent discourse: the brave sailors of the narrative *The Shipwreched Sailor* are placed in sharp contrast to the 'unskilled sailor' (cf. § 4.1) that is Menena's badly behaved son (cf. Di Biase-Dyson, 2017b):

(12) 

sr-sn *ḏ*ʿ *n* *jy.t<-f>*
foretell:SBJV-3PL storm(M) NEG come:COMPL[-3SG.M]
'They [the sailors] could foretell a storm before <it> arrived.'
The Shipwrecked Sailor, Papyrus Petersburg 1115, 30–31, in Blackman, 1932/1972, p. 42.10)

(13) 

sr *n-k* *pꜣ* *ḏꜥ*
sr *n-k* *pꜣ* *ḏꜥ*
foretell:PFV.PASS to-2SG.M DEF.ART:M.SG storm(M)
'The **storm** [i.e. **problem**] was foretold for you

bw *jy.t.V-f*
bw *jy.t-f*
NEG come:COMPL-3SG.M
before it arrived!' (*The Teachings of Menena*, Ostracon Chicago OIC 12074 + Ostracon IFAO 2188, rto 1, in Guglielmi, 1983, pp. 149, 151)

Example 13, considering that it exemplifies not only the text-structuring role but also the interreferential, discursive role of this passage, also takes us into the next section, which considers pragmatic or discursive strategies by which means the speaker attempts to actively involve the hearer in the figurative expression. The intertextual citation of foretelling a storm, here used metaphorically to outline all the mistakes Menena's son has made to date, are then highlighted by a key addition to the original, that the foretelling was done *for him*, presumably by Menena himself.

4.6 Pragmatic strategies

Pragmatic marking of metaphorical expressions is limited to genres where there is a discursive context, like letters, where one can draw on the opinion of an addressee. In Example 14, this is done by means of the phrase *m-ḏi-k* 'according to you', which introduces an original simile:

(14) 

tw-j *m-ḏi-k* *mj* *pꜣ* *ꜥꜣtj*
tw-j *m-ḏi-k* *mj* *pꜣ* *(j)ꜥꜣ*
PRS-1SG with-2SG.M like DEF.ART:M.SG donkey(M)
'*According to you*, I'm *like* a **donkey**.

jr *wn* *bꜣk.w* *jnj* *pꜣ* *ꜥꜣtj*
jr *wn* *bꜣk.w* *jnj* *pꜣ* *(j)ꜥꜣ*
TOPZ exist work:M bring:IMP DEF.ART:M.SG donkey(M)
If there is work (to do), bring the **donkey**!

ḫr	*jr*	*wn*	*wnm.w*	*jnị*	*pȝ*	*jḥ*
ḫr	*jr*	*wn*	*wnm.w*	*jnị*	*pȝ*	*jḥ*
now	TOPZ	exist	food:M	bring:IMP	DEF.ART:M.SG	OX(M)

But if there is eating (to do), bring the **ox**!'

(Ostracon Deir el-Medina 303, 3–4, in K*RI* III, 534.9–11)

5. The role of genre

Some types of figuration are particularly prone to being used in a quite marked fashion. Steen et al. (2010a, pp. 38–39; also Steen, 2015, p. 5) have suggested that attention is often drawn to direct metaphors (similes), because they by default have a marking. Such forms, but also the related copula A is B metaphors, are also means of marking metaphors in Egyptian texts. However, in Egyptian, the usage of A is like B (i.e., direct) metaphors is quite rare. A corpus study in the Projet Ramsès database of over 510,000 tokens yielded the collocation *mj* 'like' + substantive (*status absolutus*) 767 times (0.15% of the total Ramsès corpus). 292 (38%) of these were in simile constructions, of which 72 (9.3%) – a mere 0.01% of the Ramsès corpus – were nominal similes. What was particularly interesting was that these 72 cases were limited to three genres: royal monumental inscriptions (rhetorical, normative texts), scribal and wisdom texts (educational, normative texts) and love poetry (*belles lettres*). In the future we hope to be able to conduct such large-scale quantitative analyses with the already annotated data to assess how all kinds of figuration compare across the corpus.

6. Other quantitative approaches

Though the steady augmentation of annotated corpus data will have a great impact on the kinds of queries we can pose of the texts, a great deal can already be ascertained about the metaphorical language in the texts annotated to date. We can note, for instance, that the frequency of clearly marked metaphorical language, in my corpus marked as "deliberate", is significantly higher in educational literature, in which rhetoric and affect plays a key role, than in any other genre studied to date. The London manuscript of *The Teachings of Amenemope*, for instance, a long text with 3,352 total tokens, has 712 cases of figurative language, which accounts for a substantial 21% of the total token count. The total number of figurative language in other wisdom texts, like *The Teachings of Hori*[12] or *The Teachings*

12. Ostracon Gardiner 2, in Černý & Gardiner (1957).

of Menena,[13] number 17% and 26% respectively. This high percentage of figurative language in an edifying, educational genre like the wisdom texts corresponds to the work of Steen et al. (2010b, p. 781), in whose corpus the analogue genre of English academic discourse has the highest proportion of metaphor related words (namely, 17.5%) of all genres, including news and literature.[14]

These figures from the wisdom texts contrast sharply with the other genres. In the five annotated letters the total metaphoricity fluctuates between 3% and 10% and the metaphorical language in the single narrative annotated to date, *The Misfortunes of Wenamun*,[15] founders at 4%.

If we return now to the wisdom corpus and consider the amount of "deliberate" metaphors in relation to the total amount of metaphorical language, we see a greater degree of fluctuation. In the long and rhetorical *Teaching of Amenemope* L, these cases comprise 250 cases, or 35%, of all cases of figurative language. The very conventional and quite short *Teaching of Hori* (87 total tokens, 15 cases of figurative language) has a single case, in other words, a meagre 7% of metaphorical language marked "deliberate", whereas the wildly creative rhetoric in the somewhat longer *Teaching of Menena* (408 total tokens, 108 cases of figurative language) has an astonishing 52% of metaphors marked as "deliberate".

The marking of metaphor in the epistolary corpus also presents a more varied picture. Two highly rhetorical letters, the satirical epistle of Hori to Amenemope (also known by its most complete manuscript, Papyrus Anastasi I)[16] and the letter of Prehotep to Qenherkhepeshef[17] have "deliberateness" tags of 18% and 20% respectively of the total figurative language (for Papyrus Anastasi I that is 58/320 cases, for Ostracon Deir el-Medina 303 that amounts to 2/9 cases), whereas all other letters and the narrative have amounts between 0% and 7%.[18]

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13. Ostracon Chicago OIC 12074 + Ostracon IFAO Inv. 2188, in Guglielmi (1983).

14. A similar study by Goatly (2011, pp. 333–340) does not take educational texts into consideration (the six genres included in his study are converstation, national news reports, popular science, magazine advertising, modern novels and modern lyric poetry), but his data also provides a fruitful basis for future analyses.

15. Papyrus Moscow 120, in Gardiner (1932).

16. Papyrus BM EA 10247, in Fischer-Elfert (1983; 1986).

17. Ostracon Deir el Medina 303 (K*RI* III, 534–535).

18. Figures from July 2018.

7. Looking outwards

In the future, with more texts annotated to allow for a quantitative basis of the typology, a revision of the typology will be possible. Moreover, it is hoped that scholars of metaphorical language in ancient texts may be able to use this typology to establish their own. It may even be the case that typologies of attention-drawing devices in ancient texts may inform those of modern analysts. As the corpus grows and more genres are included it will also be more possible to see the link between metaphor marking and genre in sharper relief. It would, for instance, be interesting to test the thesis of Dedre Gentner (1982, p. 123), who distinguished literary metaphors, "in which a rich collection of associations is valued" from scientific metaphors, in which "an abstract, well-clarified, coherent system of relations is valued". This would mean, perhaps, that only some (literary) genres use most types of the typology proposed here and that others do not, which is indeed a compelling hypothesis. The comprehensive tagging of the Ancient Egyptian medical corpus, for instance, would make this possible. At the very least, the typology proposed here establishes a point of reference for metaphor marking in a very distinct and ancient, as well as figuratively rich, language.

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A multimodal perspective on MCA

Cues of (possible) metacommunicative awareness

Alan Cienki
Vrije Universiteit Amsterdam & Moscow State Linguistic University

Metacommunicative awareness (MCA) is proposed as a scalar phenomenon of being aware, to different possible degrees, that the form and/or content of how you are acting could communicate something to someone else. Observable signals of possible MCA that are based on greater use of effort are discussed on the verbal, prosodic, gestural, and other levels. Dynamicity in intensity is proposed as an important property of its nature, even if the quality of potential MCA differs between different registers and genres. The degree to which an expression, metaphoric or otherwise, is highlighted in a given instance by signals of possible MCA thus falls along a scale of saliency. This can be researched without delving into claims about supposed "deliberateness" of expression.

Keywords: attention, dynamicity, effort, gesture, metacommunicative awareness, metaphor, metaphoricity, English

1. Introduction

When using video recordings of people talking as data for linguistic research for the first time, one quickly becomes aware, if not even overwhelmed, by the complexity of what is involved in language use in face-to-face interaction. Whether it is spoken or signed language, multiple forms of behaviour are being used simultaneously and sequentially, and competent addressees are expected to be able to pick up a sufficient amount of these fleeting signals in real time in order to be able to understand them and respond with their own stream of audio and/or visual signals. Yet, despite the behavioural complexity of face-to-face communication, spoken and signed languages are primary, and written forms of them are derived – in terms of any individual's developmental experience with them as well as in terms of their historical development. In addition, live or video-recorded talk, whether spoken or signed, is contextually tied to the producer in a way that written language is not: speakers or signers can use their own body, its immediately

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seen vicinity, and knowledge about space that becomes shared with the viewer, for purposes of visual reference, e.g. through depictive gesturing, pointing, object manipulation, or eye gaze direction. In written language, especially in more formal genres, making reference and showing one's perspective must normally be accomplished in the context of the text itself, using the (static) means of expression that it allows. With these points in mind, we see that new light can be shed on communicative phenomena from the realm of written language (in whatever form it takes) if they are also examined in the realm of spoken communication.

Through the examination of video data in this chapter, the notion of metacommunicative awareness is presented, with special attention being given to it in connection with the use of spoken words and gestures in metaphoric ways. The chapter begins with a justification of the choice to focus on a multimodal perspective in this investigation. The concept of metacommunicative awareness is explicated, and signals of greater use of effort in the production of communicative action are argued as being key for researching it empirically. While MCA is a general phenomenon, its relevance in relation to metaphor use (and to the study of metaphor) is discussed, with particular attention to how it relates to metaphoricity as a graded property. Examples of metaphor use in speakers' words and gestures illustrate how they can relate to the use of signals of possible MCA. This leads to consideration of how MCA can operate in terms of different temporal perspectives, as anticipatory, emergent, or retroactive with respect to one's communicative behaviour(s). In conclusion, MCA is shown to be free of assumptions about the ability to determine speakers' or writers' intentions, which are a problem inherent with claims about possible "deliberateness" of metaphor use.

2. Background: Why begin with a multimodal perspective?

We will begin with what has been argued to be the most basic context of communication between people: the face-to-face encounter. As Clark (1973) characterises it, this situation is the canonical encounter for most human interaction. Nowadays, many aspects of the canonical encounter also are in place for certain contexts of mediated communication, such as in video chats ("many", but not all, due to factors such as lack of shared physical surroundings). For people who can see and hear, communication in the canonical encounter is variably bimodal or multimodal and polysemiotic.[1] Nevertheless, there is a predominant, implicit bias

1. *Modality* refers here to different media of production (oral, manual, or other) and means of perception (audio, visual, or other) and *semiotic* refers here to different modes or codes of communication (lexico-grammar, intonation, gesture, etc.).

(in linguistics, but also in academia more generally) towards viewing language as a written entity, as opposed to considering it in terms of ways of thinking and behaviours we engage in to express them (Linell, 2005).

However, one estimate is that 1/6 of the world's people do not use a written language (Clark, 1996, p. 8). This amounts to more than a billion people worldwide. In light of that, it is important to acknowledge the multimodal grounding of language in its most fundamental context of use (face to face talk) and to realise that written language is a derivative from this and entails a good deal of abstraction from that context (Chafe, 1994). Indeed, the development of easily portable forms of technology in recent decades has made it more feasible to capture the visual side of audio-visual communication. Digital video allows researchers not only to record data more flexibly and less conspicuously in different settings of language use than was possible with large movie cameras, but also to more easily edit and analyse the material afterwards through the use of various kinds of software. Some make the analogy that just as the microscope allowed for great leaps in research in biology, as it revealed previously unknown forms of life on a small scale not visible to the naked eye, so has digital video revolutionised the field of gesture studies (and arguably linguistics along with it) by helping make visible those forms of behaviour by humans as they speak which were previously difficult or impossible to research due to the rapidity with which they occur, often at a rate impossible for the human eye and brain to process on a conscious level.

Taking a multimodal perspective in one's research on spoken language use is justified by some important points. A fundamental one is that there is no known culture in which speakers never gesture. Another is that there is largely a consensus now among gesture researchers that gestures are produced not solely for communicative goals, but also can play a role in formulating one's thoughts. On the communicative side, studies have shown that listeners who see the person speaking can gain information from their gestures which is not even expressed in the accompanying speech (Beattie & Shovelton, 1999 and other studies). This could be information about the size, shape, or location of referents, or of the manner in which manual actions took place. On the cognitive side, McNeill (1992) has made the argument that speech and gesture arise from the same idea units, or "growth points" of ideas, as we are formulating utterances; the growth points get "unpacked" in the form of spoken lexico-grammatical forms and (sometimes, but not every time) gestures as we talk.

It is worth specifying what we will focus on as "gesture". We will follow Kendon's (2004) characterisation of it as visible, distinct, effortful movement of part of the body. Our prime concern will be outward oriented gestures, as opposed to self-touching actions, such as scratching one's head or adjusting one's hair; known as self-adaptors (Ekman & Friesen, 1969), these movements normally are

not considered part of one's utterance, but rather serve other functions, such as helping one focus one's attention, reduce anxiety, etc. (Freedman, 1977).

It is also worth noting that the claims being made here about analyses of audio-video recordings of people talking are based on the perspective of the researcher. This should be acknowledged as a perspective different from the one of the speakers themselves (we are not pretending to read minds) and different from that of anyone who was paying attention to the speaker in the same context, what I will call an "attender" (following Clark's [1996, p. 21] use of the term), a category broader than just the intended addressee. The researcher analysing video data is an after-the-fact attender from a different context.

3. (Possible) metacommunicative awareness: Signals of greater use of effort

The main phenomenon to be discussed in this chapter is what will be called (possible) metacommunicative awareness. As a preliminary to this, a category to be distinguished is that of *communicative* awareness. For our purposes, communicative awareness will be considered a graded and variable phenomenon (in line with Cleeremans, 1994), a scale of being aware that you are acting in a way that could communicate something to someone else (Goffman's [1963] "giving information", as opposed to "giving off information"). Examples would be speaking when one is awake and conscious, as opposed to talking in one's sleep or babbling when one is extremely intoxicated. Observable cues of communicative awareness could include coordination of eye gaze movement patterns with speech with eye gaze (see, for example, Goodwin, 1981) and the speaker's degree of carefulness of articulation (contrast the babbling mentioned above).

By contrast, *metacommunicative* awareness (MCA) is proposed as a condition that is scalar in nature, of being aware that the form and/or content of the way in which you are acting could communicate something to someone else. The observable signals for analysing it will be explicated below. It is worth noting at the beginning that signals of possible MCA are not claimed to be necessary indicators of intentionality to say/do something in a certain way. The proposal is that the signals are observable indicators in the realm of action that the producer may have been more aware of how they were expressing themselves (before doing, while doing and/or after having done so, as discussed below), and which an attender could also pick up on, and thereby give greater attention to the ideas so expressed.

I will argue that an observable signal of this by someone who is speaking, writing, or signing a given language is the exertion of greater effort in the

production of a given communicative action. An important starting point here is the work on effort by Rudolf Laban in relation to dance (Laban & Lawrence, 1947/1974), which, as will become evident, has important relations to the study of speakers' gestures. But in general, the idea is that if someone produces a communicative signal (spoken words or other sounds, written signs or images, signs of a sign language or gestures, etc.) that involves a greater use of effort, then they are more likely to be aware of having produced that communicative behaviour itself. Research in cognitive psychology and neuroscience has pointed out experientially qualitative differences and differences in neural activation in the brain between participants' awareness when exerting effort versus their effortless awareness (e.g., Demanet et al., 2013; Garrison et al., 2013). What kinds of cues of more effortful communicative signal production might we consider in this regard?

We will focus on spoken language use, but some connections to the written and signed modes will be pointed out as well. To illustrate, let us consider an example with several kinds of cues of the use of more effortful communicative signal production. Example 1 comes from a US American TV talk show,[2] in which the host (H) asks the guest (G) where a new talk show, that they will be co-hosting, will be broadcast from. In the speech transcription, each line indicates a new intonation unit, in keeping with the guidelines of Chafe (1994) and Du Bois et al. (1993). A period/full stop indicates utterance final ending of an intonation unit (with voice dropping), a comma marks an intonation unit with continuing transitional continuity (with a forward slash [/] noting a marked final rising continuing intonation), and a double hyphen mark (--) indicates a truncated intonation unit. A colon (:) marks lengthening of the vowel that precedes it, while bold face font indicates syllables with relatively louder volume of speech for that speaker. Longer pauses are marked with three dots (…) and shorter pauses with two (..). Overlapping utterances are marked in square brackets [ ], aligned vertically.

Example 1a: Speech example

01	H:	Are we doing it **here**/,
02		or in-- in New **York**.
03		What have we de**cid**ed.
04	G:	We haven't de**cid**ed yet.
05	H:	Alright.
06	G:	**We:** … [have]n't decided.
07	H:	[Yeah.]
08		Alright.

2. The example is courtesy of Suwei Wu and comes from a YouTube broadcast of the interview: https://www.youtube.com/watch?v=sM1yINb5ClU beginning at time code 2:15.

09 G: [**We:** .. didn't--]
10 H: [Cuz I--
11 I] **have**n't .. heard the **lat**est.
12 G: I **know**,
13 we haven't de**cid**ed yet.
14 H: Alright.

On the verbal level, we see an A-B-B-A utterance pattern with variations of the clause "we haven't decided yet" in lines 04, 06, 09, and 13. The "Bs" (lines 06 and 09) are reduced in terms of word length (omitting "yet"), but if we take into consideration the prosodic features with which they were uttered, they are noticeably marked: In both cases, the stress with greater volume moves to the pronoun ("we"), in which the vowel is also lengthened, followed by a pause.

To add another layer of analysis, we can consider the use of co-verbal behaviours. Gesture units are marked with curly brackets { } below the words they co-occurred with. Following Kendon (2004), the duration of a gesture stroke is marked by a variable number of asterisks "***" underneath it, and the retraction of the hand with interleaving dashes and dots "-.-.-.". (The gestures marked in 1b went immediately into stroke movement, without any hand preparation phase.)

Example 1b: Gesture examples added

01 H: Are we doing it **here**/,
02 or in-- in New **York**.
03 What have we de**cid**ed.
04 G: We haven't de**cid**ed yet.
{small head shake}
05 H: Alright.
06 G: **We:** … [have]n't decided.

{*****-.-.-.-.-.-.-.-.-.}
(left hand makes one circular rotation in the horizontal plane)
{*****}
(raising of both eyebrows)
07 H: [Yeah.]
08 Alright.
09 G: [**We:** .. didn't--]

{***-.-.**-.-.}
(left hand opens out, palm up, makes small movement downward; repeats it once)

10 H: [Cuz I--
11 I] **haven**'t .. heard the **lat**est.
12 G: I **know**,
13 we haven't de**cid**ed yet.
{small head shake }
14 H: Alright.

The guest (G) makes the statement "we haven't decided yet" first with a small head shake (line 03); then with prosodic stress and lengthening of the syllable "we" along with a large circular hand movement outwards toward the host and back, almost at shoulder height (line 06), as if tracing a circle to include both the addressee and the speaker; then as a partial reformulation in line 09 with a palm-up open hand toward the host, a gesture known to serve as a highlighter of discourse content (Müller, 2004); then in line 13 repeating both the prosody, speed, and head shake produced in line 03.

In this regard, including relevant factors with respect to bodily movement, we can draw upon Laban and Lawrence's (1947/1974) characterisation of bodily effort in terms of four factors of exertion:

- weight (overcoming the body part's own weight)
- space (exertion according to the path of motion followed, e.g., flexible or direct)
- time (speed of motion), and
- flow (control of movement, as fluid versus bound).

The use of more space in producing gestures, and particularly of more peripheral space (such as at or beyond the height or width of the shoulders (as characterised in McNeill's [1992, p. 378] grid of gesture space), with greater dynamism, in conjunction with eye gaze, are the very factors that have been discussed in previous research as ones which entail greater attention by the producer, and which may also attract greater attention on the part of those attending to the producer (Cienki & Mittelberg, 2013; Müller, 2008b; Streeck, 2009). For example, if the

speaker-gesturer's eye gaze is directed at their own gestural behaviour, it means that it is then in the focus of their visual attention; if the gesture is in the line of sight with an interlocutor, and/or the producer's gaze follows a gesture's movement, this can also entail direction of the attender's attention to the gesture (Müller, 2008b; Streeck, 2009). In Example 1, an additional indicator of extra effort that can be noted is eyebrow raising, co-occurring with the "we" uttered in line 06. This combination is reminiscent of how Iverson and Thelen (1999) discuss gesture and speech production as the movement of coupled oscillators in the exertion of effort, that is: eyebrow raise going along with the use of louder volume and lengthening of the vowel in speech. Overall, in Example 1, we see a temporary increase in the speaker's use of several cues of more effortful communicative signal production that potentially signal metacommunicative awareness, then going back to a more neutral baseline level from which she began.

Though not found in Example 1, another potential signal of MCA found in some contexts is physical touch of the viewer/listener by the speaker. Touch is a unique sensory phenomenon in that it is the only sense that is shared to some degree between producer and receiver: the toucher and touchee share some form of tactile perception. This gives touch between producer and attender immediate relevance for transferring MCA. By contrast, you do not see someone else by virtue of them looking at you, and the same applies with the other senses (hearing, smell, and taste).

In terms of written language, the devices that can signal MCA are perhaps more familiar to readers, given the written language bias in academia mentioned above, and because use of these devices is taught as part of learning how to write or how to use text processing software. When reading, we are only left with the cues that the writer left in the text. We normally do not have access to cues from the writer that were either edited out, or which took non-written form (e.g., his exclaiming "Aha!" before writing a brilliant idea). In the age in which handwritten personal letters were the norm for long-distance communication, there were more options for variability in the ways and degrees to which such cues could be expressed. Digitised writing, reducing the process to discrete pressing of keys, results in options of a different nature, such as the use of emoticons and emojis in more informal genres of communication. But the use of italics, underlining, bold face, quotation marks, brackets, unusual spacing between or within words, or switching temporarily to a noticeably larger or smaller font size are all typographical conventions that mark greater attention being given to certain parts of a text. The nature of potential MCA also differs qualitatively between different genres; the use of italics in carefully prepared instructions for customers about dosages on an insert in a box of medicine, having been read and possibly edited by several authors of such texts, is different to the spontaneous use of smiling emojis around

some words in a text message, quickly sent off by one individual to another known individual. Even with written texts, MCA is inherently dynamic in nature, both on the part of the producer and the attender, varying in degree on different temporal scales, and varying qualitatively in experience across different types of genres.

The most encompassing view on the phenomenon that one could take would really be to talk about metabehavioural awareness – being aware of oneself and of what one is doing in the flow of a given period of time, including consideration of one's felt experience, as in proprioception. If metabehavioural awareness can be said to characterise the broader phenomenological category concerned here, MCA can be seen as a sub-category of that, concerning metabehavioural awareness when one is engaged in the activity of communication. We can also consider the use of cues of possible MCA when one is communicating and expressing elements of one domain of experience to refer to a topic from a different domain, making some comparison between them. This brings us to MCA in relation to the use of metaphoric expression.

4. The relation to metaphor

Let us begin the turn to metaphor by examining some of the claims made within what is arguably the most dominant approach to studying metaphor today, namely conceptual metaphor theory (CMT), which crystalised with Lakoff and Johnson (1980), even though the ideas therein have roots which go back much earlier (as discussed in Jäkel, 1999). Lakoff (1993, p. 207) characterises one of the basic premises of the theory, using the following example: "The LOVE-AS-JOURNEY mapping is a set of ontological correspondences that characterise epistemic correspondences by mapping knowledge about journeys onto knowledge about love." In answer to the question as to whether there is a general principle governing how linguistic expressions about journeys are used to characterise love and to reason about love, Lakoff (1993, p. 206) answers, "Indeed, there is a single general principle that answers both questions, but it is a general principle that is neither part of the grammar of English, nor the English lexicon. Rather, it is part of the conceptual system underlying English. It is a principle for understanding the domain of love in terms of the domain of journeys."

This suggests that there are different ways in which we can theorise about metaphoric mappings as being conceptual in nature. One is in terms of a conventional conceptual mapping pattern in a given culture. This would be a common way of thinking of one domain in terms of another among members of that culture. Whereas LIFE IS A JOURNEY appears from many studies to be a mapping common across many cultures and many eras, one also finds mappings become

conventionalised in the time frame of a given usage event (Langacker, 1988) of a genre, what can be called a genre event (Steen, 2011). For example, one could think up various potential ways of thinking/talking about LIFE in terms of a BANANA as a source domain. If used by the discourse community in question several times, it could become temporarily conventional among members of that group, or it could spread beyond them (think of the rapid means by which memes can become disseminated via social media). Kyratzis (1999) discusses a conversation between friends about sex and relationships in which one introduces the feeling of wanting to try out relations with new partners as being like that of wanting to try out different kinds of biscuits (cookies) for sale in a supermarket. The sustained talk within the source domain of biscuits in reference to potential partners becomes so conventionalised in the moment that it leads the originator of the metaphor to create the term "monobiscuitous" to refer to someone who is monogamous. (The original conversation was in Modern Greek, but the key words here were quite similar in the original, with Greek *biskóto* for 'biscuit'.) This can be seen as a kind of ad hoc conventionality in the use of mapping patterns.

However, another way in which we can theorise about metaphoric mappings as conceptual is in terms of neurological co-activation of brain regions associated with two concepts (Source and Target) in a particular moment. Such neural co-activation need not entail conscious awareness; experimental research also supports the view that metaphors can work on a sub-conscious level, thereby helping structure our reasoning implicitly (Gibbs, 2011; Gibbs & Matlock, 2008; Matlock, 2004, 2010; Matlock et al., 2011).

Some recent dynamic approaches involve theorising about metaphoric expressions and concepts as moving on various scales: not only from the creative (novel) to the conventional (entrenched), but also possibly from being used unwittingly to being used with greater awareness (Bowdle & Gentner, 2005; Kyratzis, 1997; Müller, 2008b). In light of this, we can rethink the two ways of theorising, mentioned above in terms of the issue of gradedness of metaphoricity.

1. There are different degrees of conventionality of a conceptual mapping pattern in a given culture, genre event, or context of use. Whereas LIFE IS A JOURNEY is a more conventional pattern for speakers of English (and many other languages), LIFE IS A BANANA is generally much less conventional, but can become more conventional among those taking part in a given context of use (such as readers of this chapter who have now invented possible expressions that would correspond to this mapping pattern). See Kyratzis' POTENTIAL PARTNERS ARE BISCUITS example above.
2. There are different degrees of possible neurological co-activation of brain regions associated with two concepts (Source and Target) in a particular moment. Whatever brain regions that are responsible for our thinking of LIFE

and JOURNEY can be more or less co-activated in a given context, and the same is true of whatever brain regions that are responsible for our thinking of LIFE and BANANA.

3. There are different degrees of conventionality of a metaphoric expression in a given culture or genre event. A phrase like 'he passed away' is a conventional metaphoric expression in English to say that someone died, whereas giving advice on how to live one's life by saying "peel it and savour every bite" (as with a banana) is less conventional for most speakers of English, but can be more conventional for the small number of people who (perhaps jokingly) have come to use this expression and perhaps other LIFE-AS-BANANA metaphoric expressions among themselves.

This overview can be summed up as in Table 1.

Table 1. Ways in which metaphoricity can be viewed as graded in nature

Degree of conventionality of a conceptual **mapping pattern** in a given culture, genre event, or…	LIFE IS A JOURNEY (more conventional)	LIFE IS A BANANA (less conventional, but could become more conventional)
Degree of neurological **co-activation of brain regions** associated with two concepts (Source and Target) in a particular moment	LIFE & JOURNEY (could be more or less co-activated)	LIFE & BANANA (could be more or less co-activated)
Degree of conventionality of a **metaphoric expression*** in a given culture, genre event, or…	"the end of the road" (more conventional)	"peel it and savour every bite" (less conventional, but could become more conventional)

*words, gestures, art, design, dreams, …

All of the above has just focused on metaphor as a matter of words. However, it is worth realising that this can be seen as a reflection of the written-language bias mentioned earlier: focusing on metaphor as it is objectified in verbal expressions, as opposed to how it appears in other behaviours we engage in. A more behavioural view of metaphor would perhaps be even more true to the basic tenet of conceptual metaphor theory, that "*The essence of metaphor is understanding and experiencing one kind of thing in terms of another*" (Lakoff & Johnson, 1980, p. 5, italics in original). This will be pursued in the following section.

5. A look at metaphoric expression in words and in gestures

This brings us to the expression of metaphor by speakers in ways other than just in the words they are uttering. We will focus here on metaphor in speakers' gestures, with a primary focus on their manual gestures. The topic actually has early roots,

e.g., Wundt's (1904, p. 157) consideration of pointing to indicate time in spatial terms (see Cienki & Müller, 2008b, for an historical overview). However, it was the work of McNeill (1985, 1992) and McNeill and Levy (1982) which first picked up on the relevance of Lakoff and Johnson's claims for the study of gestures as potentially revealing manifestations of speakers' metaphoric ways of thinking. This idea was subsequently developed in Calbris (1990), Cienki (1998, 2008, 2017a), Cienki and Müller (2008a, 2008b, 2014), Müller (1998b, 2008a), Sweetser (1998), and many other works since.

It is important to consider how gestures can be considered to constitute metaphoric expressions to begin with. First, we need to consider how gestures have been interpreted as representing concepts. The grammatical clause is often taken as the limiting scope of analysis for the relation between gesture and co-gesture speech, and indeed, the relevant verbal expression is often found within the same intonation unit with which the gesture unit was produced (see Kendon, 1972, 1980 and McNeill, 1992, on the alignment of speech and gesture units). Gestures can also represent ideas not explicitly verbalised in speech, as when gestures are made in two different spaces, usually left and right (Calbris, 2008), which can indicate the difference between the ideas themselves, even if the difference was not verbalised per se, e.g., "we can do X, or we can do Y". For simplicity, we will focus in this chapter on gestures that relate to the accompanying ideas that the speaker verbalised – even when the verbalisation occurs in clauses before or after the gesture.

The method of interpretation followed here (adapted from Bressem et al., 2013) involves identifying the form of the gesture and seeing if the form of the gesture bears an iconic relation to one or more ideas being expressed in the accompanying speech. The category of "accompanying" is taken here as one with the more protoypical centre being within the clause uttered during which the gesture was produced, but the boundary of which is flexible, and in more extreme cases extends to even more than one turn at talk. The forms of gestures are commonly analysed in terms of the parameters of hand shape, orientation of the palm of the hand, the manner and path of motion with which the gesture was produced, and the location in space in which the gesture was produced, in relation to the speaker (e.g., in front of the torso, to the speaker's left or right, in a more central or peripheral space). These parameters were originally developed for sign language research (Stokoe, 1960) and were later adopted in research on speakers' gestures (McNeill, 1992; Bressem, 2013). The determination of an iconic relation between a gesture's form and some element(s) in the accompanying speech can be made using the modes of gestural representation (Müller, 1998a, 1998b, 2014) or means of depiction (Streeck, 2009, Chapter 6). These help establish how the imagery in the gesture is to be understood as having come about, e.g., if the hands

– embody,
– appear to hold or touch an imaginary entity or space,
– trace a form or a path of movement, or
– act as if they are performing an action mentioned.

Gestures representing concepts of physical entities, relations, or actions can be represented partially in an iconic way through the forms and movements of manual (and other) gestures, that is: both in the hand shapes themselves, but also via the movements of the hands, which (via the modes of representation discussed above) are often to be understood as leaving traces in space whose form or movement contour constitutes the representation. The representation is always partial, due to the inherent nature of the limitations and affordances of manual representation. In this regard, all representational gestures necessarily employ metonymy (more technically, synecdoche), via part-for-whole depiction (Cienki, 2017b, Chapter 4; Mittelberg & Waugh, 2009; Müller, 1998b). The gestural representation is part of the same domain as that of the concept represented. However, if the idea being expressed is from one domain (for example, the process of THINKING) and the form represented with the gesture is from a different domain (e.g., CIRCULAR ROTATION of one's extended index finger), and the context of the expression affords comparison between the two domains, one has grounds for metaphorical interpretation of the target-domain idea in terms of the source-domain concept being iconically represented in gesture (here: THINKING IS LIKE SOMETHING IN CIRCULAR MOTION).

The context of expression includes background knowledge from the context in which the discourse is being produced and the previous co-text, particularly the speech accompanying the gesture either simultaneously or in temporal proximity, whose relevance is cued by factors such as the direction of eye gaze with speech. See Cienki (2017a) for detailed guidelines for the identification of potential metaphoric use of gestures (metaphor identification guidelines for gesture, or MIG-G). We will limit ourselves to cases here in which the target domain concerns concepts of the abstract (rather than the physical), as they are by far the most common in the literature on metaphoric use of gesture. These also provide the clearest examples for consideration here, with the abstract idea constituting a Topic being expressed by the Vehicle (to use terms from Richards' [1936/1965] approach to metaphor analysis) of a physical gesture.

We can return and add to the signals of possible MCA, discussed above, but can note now, in Table 2, that any of them that can be used with metaphoric expressions. Note here, in particular, the extant body of research pointing out the verbal cues that can highlight metaphor use.

Table 2. Signals of possible MCA with respect to metaphoric expression

- Verbal:
  - repetition, diversification, modification, extension, mixing, compounding of metaphors, literalisation, overdescription
  - "tuning devices/activation devices" highlighting metaphor use (Cameron, 2003; Cameron & Deignan, 2003; Goatley, 1997; Kyratzis, 1997, 1999; Müller, 2008a, 2008b; Stibbe, 1996, 1997)
- Prosodic:
  - stress, marked intonation, use of pauses
- Gestural:
  - use of more peripheral space, more space, more dynamism, in line of sight, gaze following gestures (discussed with respect to metaphor highlighting in Cienki & Mittelberg, 2013; Müller, 2008b; Müller & Tag, 2010; Streeck, 2009)
- Touch
- Typographical:
  - accompaniment of text with italics, bold, underlining, differing font size, brackets, quotation marks, extra spacing, emojis

Adding on to Table 1, we can note how the gradedness of metaphoricity can also be highlighted to different degrees by MCA cues, as in Table 1a.

Table 1a. Ways in which a producer's awareness of metaphoricity can be signalled to varying degrees

Degree to which a (metaphoric) expression is **highlighted** in a given instance of use	unstressed, no gesture, etc. (less salient)	with signals of MCA (more salient)

As noted in Cienki (1998, 2008) and in later literature, the speech accompanying the gestures may or may not be metaphoric itself. In my earlier research (Cienki, 1998), I found examples a speaker talking of engaging in morally questionable behaviour as "pushing moral limits" while gesturing with a fist moving forward, followed by use of a flat hand with the palm in the vertical plane moving away from the speaker, as if having been pushed by the previous fist gesture; but also speakers talking about abstract ideals, such as honesty or truth, while making illustrative gestures, such as a tense, flat hand in the vertical plane making a chopping motion downward, which can be interpreted as demonstrating something about the metaphorical solidity or severity of the nature of the truth or honesty being mentioned.

Cornelissen et al. (2012) presents an example that illustrates how a metaphorical way of characterising a Topic can move back and forth between expression in gesture and speech. The speaker, a British entrepreneur, verbally summarises how he understands a business developing by metonymically listing four stages in terms

of single words – "products, opportunities, invoices, cash" (which are themselves non-metaphorical expressions) – then repeating the list with a big circular gesture, then later mentioning "cycle" with a small rotating finger gesture, and ultimately explaining the steps of the cycle with conventional verbal metaphoric expressions of movement along a path ("from…", "to…"), spoken with marked prosodic emphasis, accompanied by exaggerated hand gestures moving and stopping around parts of a large circle. Not only does his expression of inter-related metaphors vacillate between expression in words and in gestures over time, it is also variably accompanied by more or fewer cues of MCA over time, which can be interpreted as dynamic variation in the degrees of highlighting of metaphoricity as the discourse plays out. Kolter et al. (2012) describe similar phenomena in their analysis of participants' verbal production and bodily movements in a dance/movement therapy context. Reflecting on the findings, Müller (2017, p. 301) writes,

> In an ongoing face-to-face conversation, metaphoric meaning appears anything but fixed to a lexical item: it may first show up in a gesture, then disappear in gesture and reappear in speech and eventually merge to a verbo-gestural metaphoric expression.

These points bring us to the issue that MCA, like metaphoricity itself, is not a property for language users that exists in an on-or-off, yes-or-no, dimension, but rather it has a graded quality, and even more, a dynamically variably graded quality, as discussed in the following section.

6. MCA as a dynamic phenomenon: Possible MCA in different time relations, with special attention to metaphor

The following temporal characteristics of MCA are offered here as observations of dynamic patterns found in the author's analysis of metaphor use in video data. These await confirmation from further follow-up research, but they suggest another parameter along which MCA appears to vary dynamically: it appears that the metacommunicative awareness itself can be anticipatory, emergent, or retroactive (these are not intended as mutually exclusive categories). Anticipatory MCA can be characterised as a plan of action, a strategy. The strategy can be more or less detailed – formulated in greater detail or more schematic in nature. The strategy can be planned well in advance (prepared, as with a speech written down in anticipation of delivery in a "speech genre event") or can come to the speaker's mind immediately before delivery ("oh, I will say it like *this*!"). Emergent MCA can be seen as a realisation and exploitation of what one is doing in the moment ("oh, given that I've just said/done that, I can now say/do the following"). Retroactive MCA involves an after-the-fact realisation of how one has said/done something;

this can emergently lead to new utterances that pick up on and highlight the behaviours that one has just used – from having done them without great forethought to indeed using them with greater attention to them. Emergent MCA may be seen as retroactive MCA on a very short time scale. Some examples of the use of MCA cues will serve to illustrate how these types may play out with respect to metaphor use.

In Example 2,[3] the speaker (Kenneth Branagh) is discussing decision-making processes during a talk show. He begins on line 02 with his two hands clasped together facing his stomach, fingers interlaced. He then separates his hands and produces a series of alternating hand movements, hands open but relaxed, palms facing each other and sometimes slightly turned upwards. He raises the right hand while lowering his left hand, then does the opposite, and repeats this. "RH" and "LH" thus indicate the points each time when the right or the left hand is being raised. Starting points of new strokes in the complex gesture sequence are indicated with a vertical line "|". Preparation movement of the hands leading to strokes are marked with tildes "~~~". Post-stroke holds, where the hands are held in position after a gesture stroke, are indicated by underlined asterisks "***".

Example 2

01 But on the **in**side,
02 **what is** it,
03 that al**lows** you to make--

{~~~~~|****
RH LH

04 <inbreath> **ba**- **ba**lanced/,
|RH**LH*****|RH******

05 if **that**'s what you think they should be,
|********
(beat downward, with both hands open and ¾ turned upward)

3. The example is courtesy of Eve Sweetser, who located it using tools from the Distributed Little Red Hen Lab (http://redhenlab.org/) to search the NewsScape Library of International Television News.

06 **judg**ments/,
|********
(beat downward, with both hands open and ¾ turned upward)

07 and dec**is**ions/,
~~~~~**-.-.-.}
(hands move towards each other and stroke once outward slightly before returning to rest position of hands together, fingers interlaced)

Using the form-based analysis of gesture (Bressem et al., 2013) and the metaphor identification guidelines for gesture (Cienki, 2017a), the combination of the hand forms and motions (two open hands, partly turned up, moving up and down in alternation) can be interpreted in terms of the metaphor CONSIDERING IS WEIGHING (Cienki, 1998; Grady, 1997; Johnson, 1987). In this example, the speaker also utters (what can be identified with the MIP procedure of the Pragglejaz Group [2007] as) a metaphorically used word, "balanced", in relation to the quality of judgments or decisions. But the metaphorically used gesture relating to this idea is already starting to be produced before this temporally, in line 03 in the transcript. The restart in speech on the metaphorically used word and the re-articulation of the gesture timed with utterance of the fully formed word after the restart can also be seen as signals of possible MCA, particularly given that post-stroke position of the hands in the air is then held after the utterance of the word, followed by an emphatic beat with both open hands during the subsequent parenthetical phrase that qualifies the meaning of the metaphor just spoken and gestured.

Sometimes the anticipation of a metaphorically used word through gesture production is even more conspicuous. Gestures during pauses before metaphorically used words can sometimes presage them, indicating through imagery the source domain that is about to be uttered verbally. It remains an open question as to whether the gesture may even prompt imagery that the speaker may exploit in subsequent verbal expression. In an example from a study I conducted on metaphors American university students use related to the notion of honesty in the context of taking exams (reported in Cienki, 1999), one student makes the observation in Example 3. The macron (¯) indicates a level, high-pitch intonation; the "at" symbol "@" represents a burst of laughter; the question mark (?) stands for a high rising final intonation. Parts not annotated for the right hand gestures are where that hand is not visible in the video, being hidden beyond the speaker's right leg, as she is seated. The speech transcription will be presented by itself first for easier reading.

Example 3
Transcription of speech alone:

01 Umm ¯, ..
02 See there's such a wi=de variation/ @,
~~~~~

03 of ho=w people,
04 y'know,
05 prepare for exams?
06 I -- ..
07 For example I know that I've, ..
08 y'know I'm –
09 **huge**ly dra=wn to procrastina=tion of any ty=pe,
10 and…

Transcription with gesture:

01 Umm ¯, ..
02 See there's such a wi=de variation/ @,
{|LH**|LH**|LH*******
{|RH**********-.-.-.-.-.-.
(both hands move out to sides, palm up)
(left hand stroke is repeated two times, smaller)
(right hand slowly retracts down on right side)

03 of ho=w people,
~~|LH**|LH****
-.-.-.-.-.-.-RH-.-.-.
(left hand, palm towards self, moves outward once, repeats)
(right hand, makes small stroke upward)

04 y'know,
******
******

05 prepare for exams?
~~|LH****|LH***
~~|RH**-.-.-.-.-.-.-.
(left hand, palm up, open, moves downward twice, further each time)
(right hand, palm up, makes small stroke out to right and down)

06 I -- ..
|LH*|LH***
|RH*-.-.
(left hand moves toward self, palm toward self, then back out, palm up)
(right hand makes small, low stroke up and out to right)

07 For example I know that I've, ..
~~~~~|LH*********~~~~~~~
|RH**-.-.-.-.
(left hand retracts towards self and moves back out to left, then towards self)
(right hand makes small, low stroke up and out to right)
~~~~~

08 y'know I'm –
|LH****-.-.-.
|RH****-.-.-.
(both hands, relaxed, simultaneously move up and out to the sides)

09 **hug**ely dra=wn to procrastina=tion of any ty=pe,

|LH**-.-.-.-.-.-.~~~~~~~~~~|LH-.-.-.-.~~~~|LH-.-.
|RH**-.-.-.-.-.-.
(both hands move out to sides, left hand opening, palm up, left hand moves to centre space, open, palm up, small repeat)

10 and…

The transcription illustrates how the gestural movement of the two hands began in a rather asynchronous manner in relation to each other, and then came into alignment just before the speaker uttered what (according to the MIP procedure) can be considered two metaphorically used words ("hugely", meaning very much, and "drawn", meaning tending to do something). The gestures of the two hands synchronise in their movement out to the sides of the body,[4] crescendoing in intensity of effort in line 08 as the left hand opens up completely with the fingers extended. The repeated spreading of the hands in front of the body, directly in front of the addressee, can be interpreted (using MIG-G) in light of the subsequent speech as displaying a large ("huge") space in front of the speaker, leading up to the speaker's utterance of "hugely". Perhaps the effort involved in the gestural production goes along with the speaker's growing (emergent) awareness of the imagery she was producing; perhaps this even led to the metaphoric expression of the idea "really drawn to" in terms of the more hyperbolic, and metaphorical wording, "hugely drawn to".

Restarts and repairs in speech (about which there is an extensive literature in the field of Conversation Analysis) can be a cue of the speaker's awareness of their

4. Note the foreshadowing of this arrangement with the movement of the hands to the sides in line 2 when saying "wide", which is also metaphorically used here in reference to how extreme the range of variation can be.

own "trouble" in utterance production. But such repairs are not limited to speech, and can also occur in gesture, something known since at least McNeill's (1992) discussion of this phenomenon. Example 4, from the student data, shows restarting in both speech and gesture around the use of metaphoric imagery, illustrating MCA signals in both modes. The speaker is characterising how in analysing texts as part of an exam, for example for a literature course, students need to demonstrate that they can "process and apply theories and critiques from outside the text onto the text".

Example 4
Speech transcription:

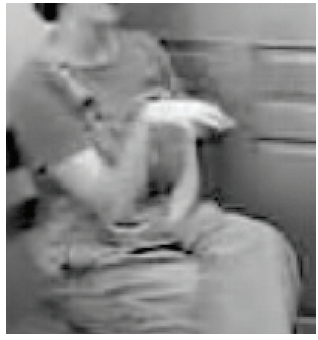
01 uh=m,
02 seeing how you can process and,
03 apply --
04 ap**ply** uh=m,
05 theories and

Transcription with gesture (all gestures were made with the right hand, loosely open):

01 uh=m,
(hand resting on leg)

02 seeing how **you** can process and,
{|******** |******* |*******-.-.-.}
(|palm toward self, move toward self |palm up, move forward |palm turned down, move down)

03 apply --
{|****-.-.
(|palm toward self, hand in claw shape, move toward chest; retraction with palm turning down, hand turning to point away from body, held at chest height



04 ap**ply** uh=m,
|**********
palm-down hand raises to shoulder level and back down, flat hand held at chest height

05 theories and
|******~~~
hand raises slightly and moves to right

The application of theory becomes visualised in the gesture in terms of the loosely open hand and its relative orientation. Though starting with a hand facing herself and moving towards herself, the speaker reorients the gesture outward with a downward facing hand along with a restart in speech – a signal that, in retrospect, the first gesture needed reformulation. The new gesture correlates with one she repeats later (with the hand moving downward) when talking about applying theories onto a text to analyse it. The loosely open hand and direction of movement, as if pushing or placing something held in the palm of the hand, fits Müller's (1998a) description of the mode of representation whereby the hand moves as if acting in a certain way, possibly with an object, as here the hand might move to place something somewhere (as in applying one thing to the surface of another). Signals of possible MCA can be seen in the more effortful, relatively high position of the gesture in front of her body, the stopping and reorganising of the hand orientation, and the concomitant restart of the metaphoric expression in speech (regarding applying a theory), which becomes visualised in the gesture as the placing (palm down) of something (here, a theory) onto something even lower in front of the speaker (the imaginary text being analysed).

The above examples bring out another point, which is that cues of MCA sometimes require a researcher's sequential perspective on the discourse in order to determine their existence. A restart is only a restart with respect to an utterance that the same speaker produced just before the given one, probably in a

truncated form. A repeated reference, even cross-modally from gesture to word or vice versa, is only a repeat from a retrospective point of view. In general terms, speakers formulate their utterances against the background of what has been said by themselves and their interlocutors, with the built-up knowledge of what is in their environment and what topics have been engaged already in the interaction, etc. The degree of effort put into the production of the verbal or gestural part of an utterance is relative to what has recently been produced. Furthermore, from the researcher's point of view, seeing a single gesture or hearing a single word uttered from some data, we cannot determine whether, for that speaker at that time, the gesture involved the use of more or less space than usual, or whether the volume with which a word was spoken was greater or lesser, etc. MCA, probably like most phenomena related to consciousness, is dynamic in nature, and this has consequences for how it could be researched empirically.

7. Metacommunicative awareness is not necessarily deliberateness of expression

To sum up, we can say that possible MCA by a producer of communicative signals (a speaker, signer, or writer) can be cued when communicative actions involve the exertion of relatively greater effort on their part. The more effortful behaviour can be taken as a cue that the producer is/was more likely to be aware of that communicative behaviour itself, as compared to other preceding communicative behaviours produced in less perceptibly effortful ways. In turn, listeners/viewers (those attending to the producer, whether they were the intended addressees or not) could pick up on the use of these signals, thereby cuing them to be more aware of how the communication was produced and the possible implications of that; but the degree to which this is likely to happen depends upon many factors, such as the conditions in the environment for communication, the attender's degree of attention to the producer (in general and at a given moment), the cognitive load the attender is handling at the moment, etc. Furthermore, as researchers, we can only make inferences with varying degrees of certainty about a producer's MCA or an attender's perception of their MCA signals.

We can contrast this with the characterisation of deliberate metaphor given in Steen (2013, p. 180) as "an instruction for addressees to adopt an 'alien' perspective on a target referent so as to formulate specific thoughts about that target from the standpoint of the alien perspective". Whereas an MCA signal is argued to be a possible indication that the producer may have been more likely to have been aware of the production of the communicative behaviour, deliberate metaphor is presented as "an instruction", presumably by the producer of the communication. While in

the discussion of MCA above, it is noted that such a signal could be picked up by an attender, deliberate metaphor is claimed to be an instruction specifically for addressees to do something, namely "for addressees to adopt an 'alien' perspective on a target referent so as to formulate specific thoughts" (Steen, 2013, p. 180). Thus while metaphor use that is claimed to be deliberate entails an intention that someone else do something, no such entailment is claimed to be involved with possible signals of MCA: producers of such signals may or not have had some degree of MCA (though the argument here is that the greater effort involved in producing them makes it more likely that MCA would be connected with such moments), and if they did, it is a separate question as to whether they exploited it for the purpose of trying to get someone attending to them to think in a certain way – a question which may be impossible to answer empirically, since we cannot read other people's minds to know their intentions at any given moment, to the degree to which they are even aware of them themselves.

8. Conclusions

In conclusion, signals of possible MCA are observable phenomena that can be encoded in empirical research and do not entail attributing intentions to the producer about how others are to use these signals. In relation to the use of metaphor, metonymy, or other tropes, the use of accompanying MCA signals could be interpreted as cues that mark such expressions in a more salient way. But MCA is a broad phenomenon, and is not just related to metaphor use. In theory, any form of communication can be produced with more or less MCA and more or less signals of potential MCA.

It is conceivable that the use of some kinds of expressions, and the expression of some kinds of concepts, may inherently involve greater MCA than the use/expression of others. For example, in any given language, some grammatical categories are used less frequently than others, and some are used less frequently in spoken language than others. The employment of such a category in spontaneous talk may occur with a higher degree of awareness on the part of speakers, as they try to capture a particular framing of a concept that is at their linguistic disposal. Examples in English might be hypothetical constructions (e.g., "were it possible to do that, …") or the future perfect tense ("we will have already seen that by the time that…"). It is an interesting empirical question as to whether such grammatical forms are more likely to be produced with signals of MCA than other grammatical categories would be (one can imagine the use of marked intonation contours, increased volume of speech, accompanying raised eyebrows, etc. as possibilities).

It is also worth emphasising how central dynamicity is to MCA; MCA varies in degree and it varies in time. In terms of degree, producers of communication move in and out of degrees of greater and lesser awareness of how they are communicating what they are communicating. Any signals of possible MCA that they produce also vary in the degree of effort involved and in the degree of salience they may have relative to the ongoing discourse. MCA also varies dynamically in time, and indeed, along different possible time scales. Most of the examples above involved micro-analysis of talk that took place within a few seconds. But variations in MCA also appear to occur across longer stretches of discourse, or to be more precise: with moments of greater frequency over some stretches of discourse than others. For example, a dramatically-inclined stand-up comedian might be more prone to lapse into spells of MCA than someone engaged in a routine, low-energy interaction. It should be noted here that the central role of dynamicity has implications in relation to metaphor. It reminds us of the importance of studying metaphor (on the level of expression and as a pattern of conceptualising domains) in terms of its dynamic properties, rather than as a property that is present or not, in terms of binary categorisation.

In terms of the big picture of why one might study possible signals of MCA, it remains a question as to how useful it will be found to be in future research. One area of research could be the study of attention phenomena in communication. This could have relevance in the realm of human-computer interaction, such as in the production of more human-like conversational agents, particularly if they are embodied as avatars or robots. There could also be clinical applications, both in terms of diagnosis of attentional and communicative disorders and in contexts of communication therapy, for example, helping those at different points on the autism spectrum learn to become aware of and employ signals of MCA according to more culturally normative expectations in order to facilitate their engagement in interaction.

With respect to research on written texts, the study of MCA faces particular challenges worth acknowledging when it comes to texts in ancient languages. While some signals of possible MCA in writing may be found to be more widely spread cross-culturally (one possibility might be the use of more elaborate versus simpler verbal formulation for a given concept), others may be more culture specific. For languages without living speakers, it is much more difficult to know what some of those signals might be. In terms of the use of such signals connected with metaphoric expression, the task faces additional challenges. We may be able to identify cues of possible MCA, but it may often be very difficult, if not impossible, to ascertain when some of these actually related (for language users at the time) to metaphor, given lacunae we may have in relation to language users' target domain knowledge. This is especially true in the case of reference to specialised

knowledge, such as medicine. For example, is sickness as a manifestation of a god or dead person entering the body a metaphor or not if writers at the time may have believed that this was the cause of illness (Di Biase-Dyson, 2016)? These and related issues are the subject of a number of the chapters in the present volume.

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Deliberate use of metaphor and metonymy as mnemonic devices for identification in a non-linguistic modality

The case of Deir el-Medina (Egypt)

Kyra van der Moezel
Johannes Gutenberg-Universität Mainz

The paper concerns a non-linguistic marking system from ancient Egypt in which metaphor was used as a means of communication to specifically refer to identity. The degree to which metaphor was deliberately used, however, differed, depending on the history of the marks in the system (a diachronic dimension) and individual usages by members of the system with various degrees of contextual knowledge (an individual dimension). The use of metaphor is considered in the light of CMT and DMT.

Keywords: metaphorical construct, metonymy, identification, non-linguistic, mnemonic device, ancient perspective, cultural specificity, connectionism, individual dimension, diachronic dimension

1. Introduction

One of the concerns in the present volume are the strengths and limitations of Conceptual Metaphor Theory (CMT) as opposed to the strengths and limitations of Deliberate Metaphor Theory (DMT). CMT represents mainstream metaphor research, which emphasises that metaphor is conventional, automatic and unconscious (Lakoff & Johnson, 1980). Although metaphors are often used in such a way, this is not true for all metaphor use. DMT argues that some metaphors are created for the explicit purpose of being recognised as such: their use is targeted and deliberate, they intentionally evoke a separate "conceptual domain which functions as a basis for metaphorical comparison regarding the dominant conceptual domain that is the relevant topic in the discourse" (Steen, 2014, p. 56). Steen argues that the main communicative motive for deliberate metaphor is to instruct the addressee to change perspective, which may have various rhetorical

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goals such as entertainment, providing information, persuasion, instruction, and so on (Steen, 2014, p. 59).

In this paper, deliberate and non-deliberate metaphor use is considered within the context of an ancient Egyptian non-linguistic marking system. The marks in question are metaphorical and metonymic constructs that were used as identity markers to identify individual people. The underlying metaphorical and metonymic processes served as mnemonic aids to remember which mark referred to which individual, and as such assured efficient use of the system. The system was in use for ca. 500 years between approximately 1550 and 1070 BC. Although it concerns a dead communication system from a culture that has equally died out, and we have limited possibility to retrieve the native perspective as to what was considered metaphorical in Egyptian culture in general and in the system in particular, we can in fact say something about the deliberate or the conventional and perhaps unconscious use of the metaphorical and metonymic marks. The marks were at least deliberate metaphors at the time of their creation, but in their further lifetime they did not simply become automatically and unconsciously used. DMT allows us to consider the situation in a more nuanced and sophisticated way. The degree to which the marks were used in a deliberate or non-deliberate metaphorical sense varied through time, depending on the context in which they were used, but also among others on their history in the system (a diachronic dimension) and a degree of literacy and contextual knowledge on the part of the producers (an individual dimension), as will be explained in the paper.

Since the material for this paper derives from the field of Egyptology, it is necessary to start off with an introduction to the archaeological finds: what kind of non-linguistic marks are we speaking about, what do they look like, and how are they different from the ancient Egyptian linguistic system? In the second paragraph, the functioning of the marks is explained: how do they evoke and convey meaning, when not as linguistic signs? What are the underlying metaphorical and metonymic processes? In the final paragraph the role and the nature of metaphor in the system over time are discussed: how deliberate is the use of metaphor, and how (un)conscious is the use of metaphors that have become conventional in the system? We take the diachronic and individual dimensions into account.

2. The archaeological material

The non-linguistic system of visual communication that is central to this paper was used in a specific village, the ancient Egyptian village of Deir el-Medina, and within a specific time-frame, from approximately 1550 to 1070 BC. Deir el-Medina (Figure 1) is situated on the West Bank of the Nile near modern Luxor

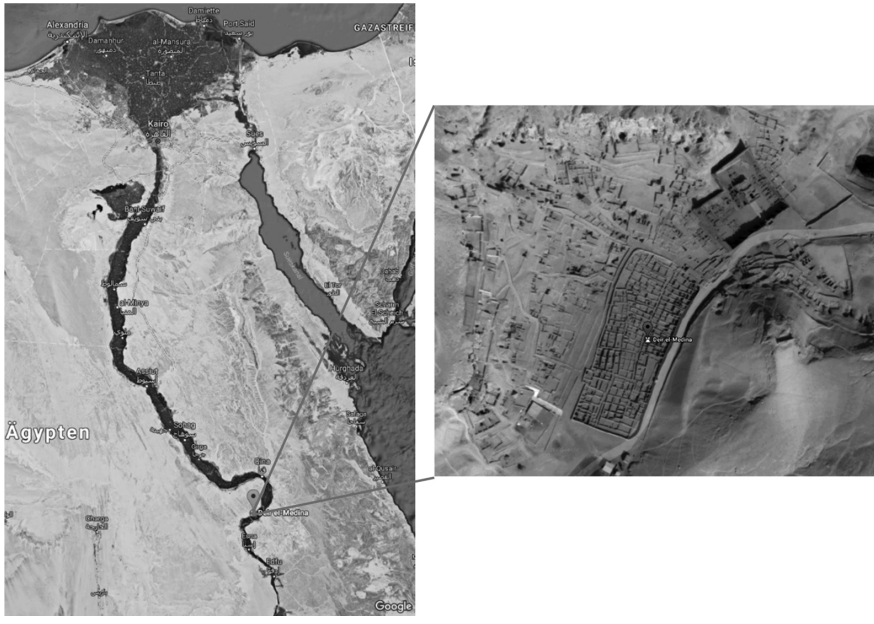


Figure 1. The village of Deir el-Medina (Google Maps)

in close proximity to the Valley of the Kings and the Valley of the Queens, and was founded specifically for the workmen who built and decorated the royal tombs. The village has a special status in Egyptology, firstly because the life and work of the workmen is so well documented and secondly because much of this documentation has come down to us, thanks to the fact that Deir el-Medina lay isolated in the desert, protected from the more humid conditions of the Nile Valley. Moreover, the village was left untouched after abandonment and therefore remained well-preserved. The documents from this site were written on papyrus, but much more often on ostraca, i.e. potsherds and limestone flakes that served a second use as cheap writing material (Figure 2). They cover all sorts of topics and genres, including private business, legal matters, religious and literary texts as well as administration of the work in the necropoleis. Contracts were set up and letters were written not only by professional scribes serving the government, but also by the inhabitants themselves, a relatively large percentage of whom was literate (Janssen, 1992, pp. 81–90: concerning the timeframe 1187–1070 BC). Together with a wealth of archaeological finds, the documentation provides us with a great deal of knowledge about the daily life and activities in and around the village, and about the workmen personally.

Yet, during the time-span of habitation, the inhabitants and officials related to Deir el-Medina did not only write. In fact, from the early years of the village

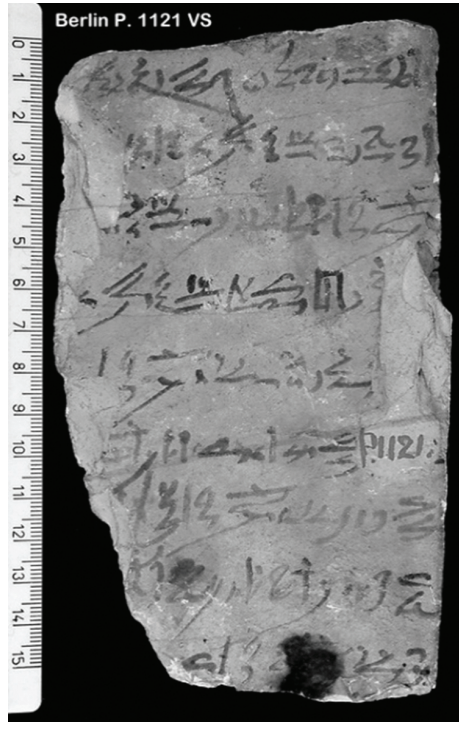


Figure 2. Ostracon Berlin P.1121 vs from the reign of Ramesses III (dynasty 20), recording a fight over the loan of a donkey (http://dem-online.gwi.uni-muenchen.de)

(the time Egyptologists call dynasty 18, ca. 1550 to 1298 BC), we have no written documentation at all. Writing had been in use for over 1500 years, but in the village we only find sources with markings that cannot be read as linguistic writing. They appear especially on ostraca, but also on pots and bowls, tools and various kinds of domestic and funerary objects, as well as in graffiti scratched into the mountains surrounding the village (Figure 3).[1] Similar markings we sporadically find elsewhere (in Deir el-Bahari and Tell el-Amarna), but there they were not as intensively and systematically used as in Deir el-Medina. Moreover, we do not see them in as many contexts as in Deir el-Medina. In later times, especially in dynasty 20 (ca. 1187 to 1070 BC), we find the marks in Deir el-Medina incorporated into written administrative records using the conventional linguistic system, where they now have a single, clear goal: to identify the workmen of the village in relation to their work in the royal necropoleis.

1. Only the marks on the ostraca will be discussed in this paper.

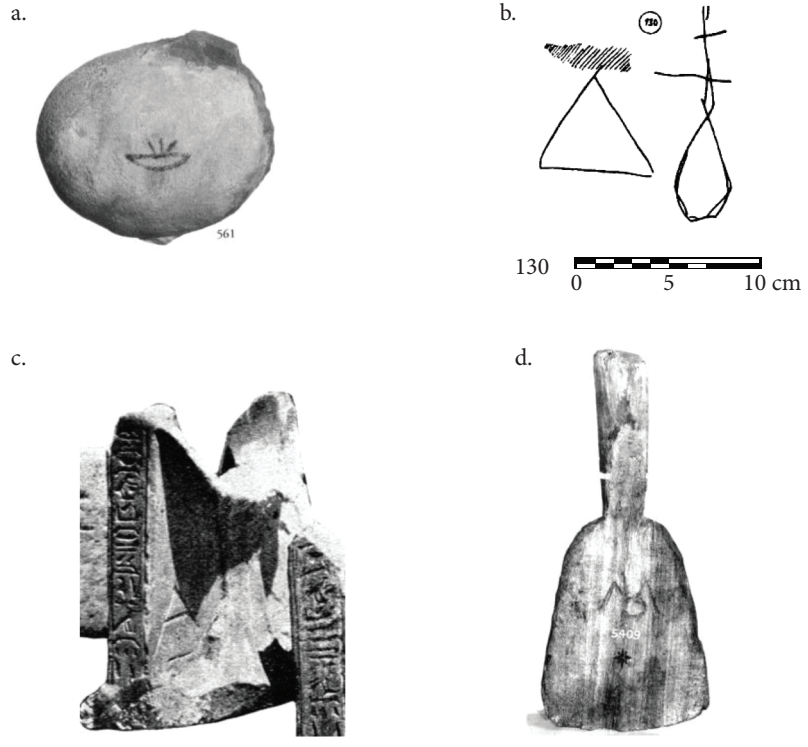


Figure 3. Examples of marks: a. Mark from Theban graffito 130 (Spiegelberg, 1921, II, p. 15) – b. Silex stone with one mark (Dorn, 2011, p. 376) – c. Neckrest with a mark (Bruyère, 1953, p. 49) – d. Trowel with mark (De Jong, 1992, p. 60)

Between 2011 and 2015 the marks were studied by a team of Egyptologists from Leiden University,[2] who concluded that they represented a non-linguistic system of personal identity marks (one mark for each workman) that was locally used between 1550–1070 BC. It was theorised that writing in the early years of the village was not widespread among the inhabitants, who may therefore have come up with a system of visual notation themselves to communicate identity and accountability. At first, the marks were used in various contexts, e.g. on personal items to mark property, on items and temple floors as a votive gesture, in lists of items to mark artistry, on ostraca to mark presence or accountability and as graffiti

2. The project *Symbolizing Identity. Identity marks and their relation to writing in New Kingdom Egypt* was initiated by Dr. B. J. J. Haring, who received funding from *The Netherlands Organisation for Scientific Research* (NWO). Two PhD candidates have in the meantime finished their dissertations on the subject: Dr. D. M. Soliman and the author of the present paper.

to mark presence. Later, the system was adopted and used also by administrative scribes. Under the influence of an ever greater presence of script and scribes in the village from the end of dynasty 18 onwards, the marks began to show a playful interaction with writing. Writing gained influence, but did not suppress or replace the marks. Instead, the marks and writing were used next to and in addition to each other. This observation led to the question of why: if you have writing and you can write names, why would you bother to also learn and use a system of marks? We can speculate on the reasons. First, both tradition and identity were important concepts in ancient Egypt. To get rid of precisely those longstanding and intensively used marks that expressed identity in an otherwise changing and developing community could perhaps have been considered too radical, especially since there was still a considerate level of illiteracy in the village; the marking system simply remained more universally understood and applicable also in the absence of writing.[3] A second possible reason will be highlighted in the paper: the marking system was an efficient system, which, by means of one single mark, could express a rich, multifarious meaning. As such, the marks were time- and space-efficient (which is especially practical when you only have small surfaces such as ostraca to write on), yet still rich in meaning. One could thus reverse the question: if in addition to the more elaborate writing system the longstanding and intensively used marks were available, why not use them?

The marks have been known since the first systematic excavations at Deir el-Medina at the start of the 20th century. They have, however, until recently, been called "enigmatic", "cryptic" or even "funny signs", because nobody could read or otherwise interpret them. When we take a closer look at the marks, we understand why. The kinds of marks we find are mainly three in number:

1. Most clearly we can recognise marks that appear to represent a concrete object or being (Figure 4a);
2. Because of the fact that Egyptian script is a picture script, showing in fact concrete objects and beings, some of these marks could be marks borrowed from writing (Figure 4b). If only the form, or perhaps also the phonetic value and/or (part of) the meaning was borrowed, we cannot say in all cases. At least for the later phase of the system we know that some marks used phonetic value to convey meaning, but for the early period this is doubtful.[4] The marks could

3. Moezel, 2016, p. 292.

4. For the sources from dynasty 20 we have contextual material in writing, which gives us the names and characteristics of many workmen: lists in writing with names and the days on which the workmen worked sometimes coincide with lists of marks on the ostraca, as we shall

to some degree have been *inspired* by writing, *moulded* on a sign of writing, or have been *completely taken* from writing. Trying to read the marks altogether as writing makes, however, no sense. This shows that, despite the possible relation between single marks and writing, all marks together formed a different, non-linguistic system.

3. Last, we have marks that seem to have been geometric in form (Figure 4c). Yet, even this is not always certain, for what to us seems geometric may have been the clear representation of an object or being to the ancient Egyptians. Indeed, from the graphic development of some marks we could derive that some of those initially interpreted as geometric were rather abstractly represented objects or beings, or forms from writing (Figure 5).

Despite the ambiguities, the three classes of marks have been discerned by researchers for marking systems world-wide.[5]

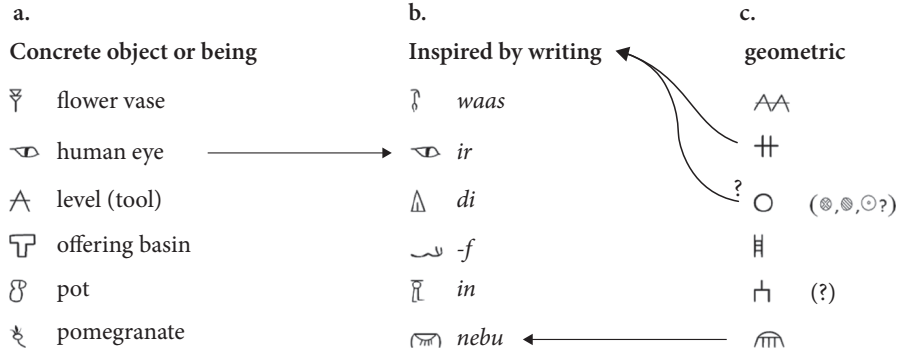


Figure 4. The three kinds of marks seen in Deir el-Medina and some ambiguities among them: a. Marks depicting concrete objects or beings – b. Marks inspired by writing – c. Marks with a geometric appearance (K. van der Moezel)

see in this paper. On the basis of this context we can in several cases link a mark to a particular workman. For the earlier periods, at least dynasty 18 and to a large degree dynasty 19 as well, we lack such contextual information. Some names of individuals are known, but we lack the written material to which we can compare the sources with marks.

5. Haring, 2009a, p. 3; Haring, 2009b, pp. 123–124; Evans Pim, Yatsenko & Perrin, 2010; Janse & De Vries, 1991, pp. 51–56; Van Belle, Peetroons & Warroux, 1984, pp. xiii–xv; Boone, 1994, pp. 3–26. For ancient Egyptian marking systems, the classification has also been proposed for marks other than those from Deir el-Medina: Verner, 1992, pp. 163–176; Andrássy, 2009, pp. 5, 17; Ditze, 2007, p. 286.

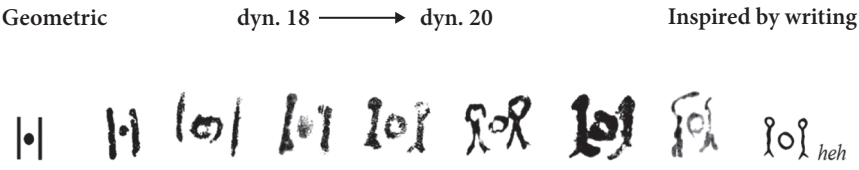


Figure 5. Development from a geometric appearance to a "written" form in the period between dynasty 18 and dynasty 20 (K. van der Moezel)

Over the years, a conspicuous shift can be seen in the composition of the marks on the ostraca. In dynasty 18 almost half of the approximately 40 to 45 marks encountered have a geometric appearance (Figure 6). The other half seems to show concrete objects and beings for which writing may have been a source of inspiration. By dynasty 20 almost 80% of the marks has a form that is known from script and is moreover often, though not in all cases, written with a scribal ductus (Figure 7). This development was presumably related to the growing presence and influence of writing and professional scribes in the village: the marking system and writing started to interact more intensively, as a result of which the marks grew closer to writing in form and appearance. Yet, this development must be further explained, for two scripts were in use in ancient Egypt: hieroglyphic and hieratic script. The former is the well-known picture script seen mainly on stone monuments throughout the country; the latter is a cursive shorthand that from the first uses of writing onwards followed its own developments and was especially used for administration, letters, receipts and other daily records. The marks for which writing may have been an inspiration in dynasty 18 only show hieroglyphic forms. This is perhaps to be related to the theory that suggests a lack of literacy at that time: instead of consciously using signs from writing as identity marks, the early inhabitants may have merely selected pictures they saw in the hieroglyphic inscriptions on monuments. The hypothesis, then, is that these selected hieroglyphic pictures carried no further linguistic meaning and were merely copied for their graphic appearance. Unfortunately, it is impossible to test this hypothesis, since we have no documentation and hardly other hints as to who were the owners of the marks, and as such to the concrete meaning of the marks in this early period. In dynasty 20 most marks show a form from the hieratic script, and from comparison with the numerous written sources that allow us to determine the owners of the marks, we know that they in fact made use of the phonetic value of the written signs. We thus not only see a shift towards the inclusion of more marks inspired by writing, but also a shift from the inclusion of the more graphic hieroglyphic forms to the handwritten, hieratic forms, the latter of which could at least keep their phonetic value in the transmission of meaning. The marks from the period between dynasties 18 and 20 (dynasty 19, from ca. 1298 to 1187 BC) seem to fit this shift, in that

they show less hieroglyphic and more cursive, although – exceptions aside – not entirely hieratic, forms.

Figure 6. Ostracon Cairo CG 24105, dynasty 18 (Daressy, 1902, pl. XVIII)

Figure 7. Facsimiles of ostracon Turin CG 57393, dynasty 20 (López, 1982, pl. 127)

In addition to this shift, a further change in the marking system over time can be noted, viz., in the layout and the inclusion of information in addition to the marks (cf. Figures 6 and 7). The ostraca from dynasty 18 mainly show marks in horizontal lines. The marks with hieroglyphic forms can be orientated from left to right or from right to left, suggesting that the lines must be interpreted from left to right, or right to left, and sometimes even in boustrophedon, that is, one line must be interpreted one direction, the next line in the reverse direction. The only other information on the ostraca may consist of dots or short strokes accompanying all or some of the marks. It presumably represented a counting system, perhaps to record the absence or presence of workmen (lists of absent and present workmen are known from later times). In the course of dynasty 19 we see in addition ostraca with columns of marks and the inclusion of more information in the form of pseudo-hieratic numerals and marks for products such as food, wood or beer. Finally, in dynasty 20, we see marks in columns as well as in horizontal lines, but often in a fixed format that shows in a more abbreviated manner the following information:

1. Day + number
2. Mark of a workman
3. Marks for products and hieratic numerals

Here, we are clearly dealing with administrative lists that in each day-entry record a workman who was responsible for receiving a certain amount of one or more products. These lists coincide with hieratic lists, which give the same information in written form. They are the so-called duty rosters. The workman on duty received rations for the villagers who, because of the isolated location of Deir el-Medina, had to be provided with victuals. Some of these lists we have in writing, others we have in marks, again others we have in both communication systems, where it is theorised that the lists in marks served an inner administration for the village itself, and the lists in writing perhaps an outer administration for the officials of Pharaoh.

All in all, with some first observations we can already clarify something about the nature and the use of the data. We see that the marking system consists of different kinds of marks and we know that over the years the interaction with writing becomes more intense without, however, making the marking system obsolete. Yet, we still know little about how the marks functioned when not as linguistic signs. How and why were the marks that we encounter selected or developed to function in the system? What was their exact meaning and how did they convey that meaning? How did they function as a system so that to all users, it was clear which mark referred to which workman? Did the selected marks have to apply to

underlying conditions? In order to answer these questions, we need to conduct further semiotic and cognitive analysis.

3. The workings of the system

From the foregoing paragraph, it is clear that the archaeological finds with marks from dynasty 20 are most rich and elaborate in information. Moreover, they can be compared to contextual material in writing: the lists with the names and days on which the workmen were on duty. Therefore, the material from dynasty 20 is most fruitful to conduct further analysis on with regard to the question of how the marks functioned to convey meaning. By comparing lists with marks and lists with written names and dates from dynasty 20 we have been able to identify the meaning of several marks and to analyse how they evoked and communicated this meaning. Semiotic and cognitive analysis led to their designation as complex constructs of metaphor and metonymy. While studying these marks, we had especially three central questions in mind:

1. What makes a mark a particular man's personal mark, i.e., how is mark connected to man?
2. Is this connection always the same, or are there different kinds of connections between mark and man (e.g. connections based on personal relations or on aspects of personality, origin, occupation)?
3. Although we are dealing with marks with different degrees of iconicity, do they really form a system with an underlying non-linguistic grammar in the manner of linguistic grammar in writing systems?

In order to answer these questions, a study of especially the semiotic theories of Ferdinand de Saussure, Roland Barthes, Roman Jakobson and Charles Peirce was combined with the semiotic theories of the Egyptologist Orly Goldwasser and with current cognitive theories (De Saussure, 1983; Elkins, 1999). This led to a visualisation of the marks and their paths of meaning in semiotic and cognitive models. In the following, Questions 1 and 2 are addressed. First, five individual examples are explained with reference to a simple semiotic model, after which cognitive considerations are provided in the context of a family-mark.

Examples of connections between mark and man

Example 1

When analysing the meaning of the marks, the first thing that must be taken into account is the fact that the marks can deliberately include several interpretations

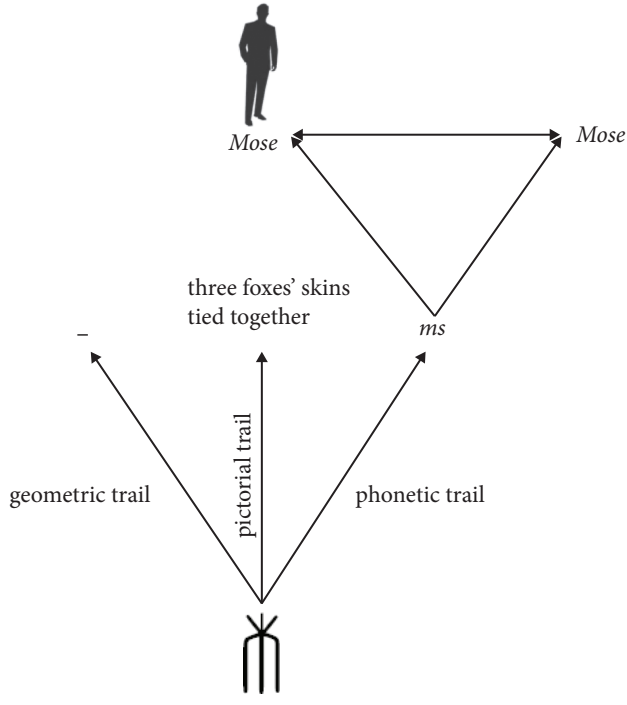


Figure 8. The connection between the mark and the workman Mose, dynasty 20 (K. van der Moezel)

of meaning (or: mental representations). The ultimate meaning of the marks has at least one basic and a further interpretation (i.e. a further interpretation of the first mental representation), but can have as many as four to five interpretations. In the example of Figure 8, the first, basic interpretation is represented as a first layer in a model, which is based on the semiotic theories of Goldwasser (1995, pp. 26–53). She argued that the signs of hieroglyphic script (a pictorial as well as a phonetic script) could have a pictorial interpretation along a pictorial trail and/or a phonetic interpretation along a phonetic trail. We have seen that we have three kinds of marks in which a geometric aspect may be included as well. Thus, in Figure 8 we have positioned one of the identity marks from our system at the bottom angle of the triangle; that is our starting point. Its first interpretation is a geometric, a pictorial and/or a phonetic one. For this particular mark, the interpretation is easy. We know this form from the writing system: it also occurs as a hieroglyphic and as a hieratic sign. It has a pictorial interpretation in that it depicts an apron consisting of three foxes' tails tied together. When interpreted as a sign of writing, it has the phonetic value *ms*; that is its phonetic interpretation. A geometric interpretation is irrelevant in this case, and is therefore left out.

Once we have defined these trails of interpretation, we can consider, in a further step, how they relate to the workman in question. This further interpretation is represented by the tripartite semiotic model developed by Peirce, which we place on top of the first triangle. Peirce's theory of "infinite semiosis" allows us to do this, i.e. to build a further interpretation of meaning on the first interpretation (Figure 9): the theory states that an interpretation can, in the mind of an interpreter, become a sign anew that can again lead to an interpretation. In other words, any initial interpretation (or mental representation) can be reinterpreted (Chandler, 2007, pp. 31–32). We can thus reinterpret our first pictorial and phonetic interpretations for the mark 𓋴 by means of Peirce's model. This model includes three elements:

1. a *representamen*, which is the first interpretation that becomes a representamen anew;
2. an *interpretant*, which is the interpretation of the new representamen (i.e. the former interpretation);
3. an *object*, a being or a specific occurrence to which the representamen and the interpretant refer.

All three elements are equally essential and interact to form a sign. In the words of Chandler, "To qualify as a sign, all three elements are essential. The sign is a unity of what is represented (the object), how it is represented (the representamen) and how it is interpreted (the interpretant)" (2007, p. 29). The elements are to be seen as three nodes between which relations exist, for instance of metaphorical or metonymic nature. The relations between the nodes determine the nature of the sign as a whole. The arrows in Figure 9 indicate the interaction: the representamen evokes an interpretant that relates to the object represented through the representamen. In order to find out how a sign works, we thus need to find out how the three elements interact and are related to one another.

Going back to Figure 8, we start our second interpretation with the new representamen, which in the case of 𓋴 is the pictorial and/or phonetic first interpretation. Considering the fact that the workman to whom this mark was connected was in fact called *Mose*, we can dismiss the pictorial interpretation and continue from the phonetic interpretation *ms*. As the sound-pattern *ms* this phonetic interpretation becomes the new representamen which, in the context of Deir el-Medina and at the time the mark was in use, might well have evoked in the mind of the members of the system the name *Mose*. The sound-pattern *ms* as the representamen and the name *Mose* as the interpretant in the second interpretation could then have referred to the workman *Mose* as a being in real life, to whom the mark as a whole relates. Thus, via a first phonetic interpretation that as a sound-pattern

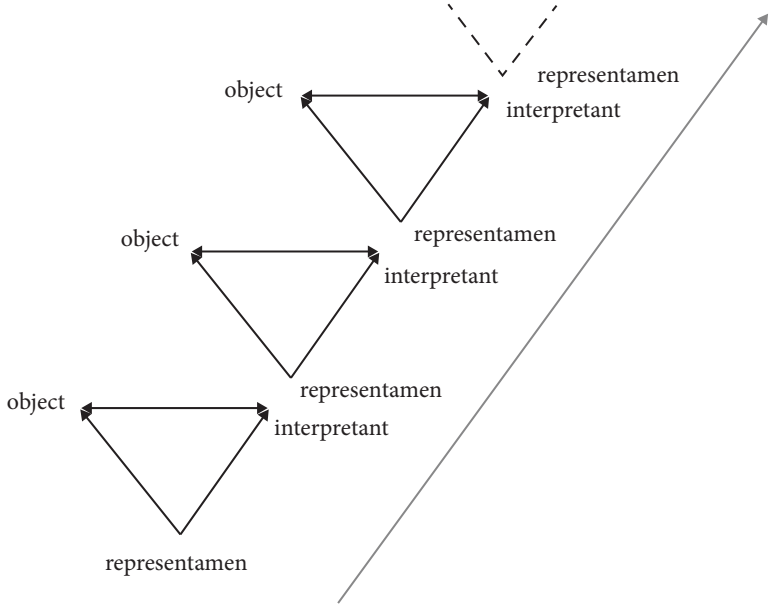


Figure 9. Representation of Peirce's infinite semiosis (adapted from Chandler, 2007, p. 32)

is interpreted anew as the name of an actual Deir el-Medina workman we arrive from mark to man.

But what kind of process do we have here? To answer this question, we need more information on the ancient Egyptian script. Whether in hieroglyphic or hieratic script, the signs can have an iconic reading, in other words, the sign stands for what the sign actually depicts. But they can also have a purely phonetic reading, in which the iconic meaning is disregarded. In semiotic terms, the signs are *pictorial signifiers* with two *signifieds*: the iconic reading is the pictorial signified and the phonetic reading is the phonetic signified (Goldwasser, 1995, pp. 40–53). In the case of 𓋴, the pictorial signified is the apron of three foxes' tails, whereas the phonetic signified is the sound-pattern *ms*, the Egyptian designation for this apron (Figure 10).

What happens is the following: the combination of the pictorial signifier 𓋴 with its pictorial signified of the apron and its phonetic signified *ms* is taken out of its linguistic context and transferred to the marking system. There, the pictorial *signifier* (i.e. the pictorial form of 𓋴) is retained, but the pictorial *signified* (i.e. the apron that 𓋴 depicts) is completely discarded: the apron does no longer play a role in the meaning.

The *phonetic signified* is separated from the apron as its object, and transposed onto a completely new signified, i.e. the workman *Mose*, who is the ultimate

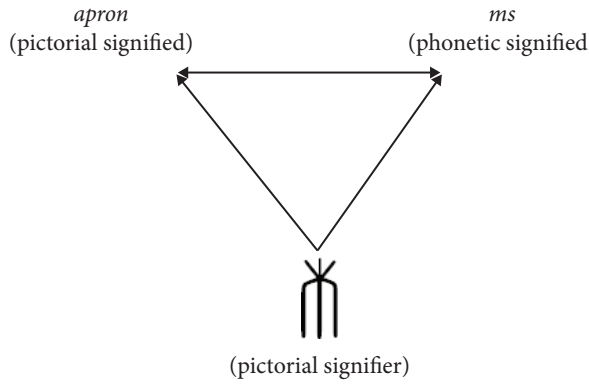
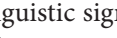


Figure 10. In Ancient Egypt a sign could be understood iconically or be read phonetically. It is therefore a signifier with two signifieds (K. van der Moezel)

signified of 𓌙 as an identity mark. In other words, part of the linguistic compound 𓌙-apron-*ms*, namely the phonetic signified, is selected and carried over onto the workman who is introduced as a completely new signified. This trick, which occurs in writing as well as in non-linguistic usages of hieroglyphic and hieratic signs, is what makes Egyptian script so versatile. It is elsewhere called the rebus principle, but Goldwasser calls it a process of *phonetic metaphor* (1995, pp. 17–18, 42, 71–74). Phonetic metaphor in her eyes is metaphor which is built on the similarity between two different *phonetic* signifieds that otherwise have nothing to do with one another: in our case, the phonetic signified of the apron 𓌙 (*ms*) and the phonetic signified of the workman (*Mose*). Although the workman normally has no relation to an apron as an object and *vice versa*, the *phonetic designation* of the apron is in this case transposed onto the workman by using 𓌙 as a mark to refer to him. The process is metaphorical, Goldwasser says, because "the cognitive quality which … enables the transference from one signified [the phonetic signified *ms*] to another [the workman] is metaphor" (Goldwasser, 1995, p. 42).[6] There are in fact two domains of the pictorial signifier 𓌙 that are being compared on the basis of phonetics: the domain of the apron and the domain of the individual person, the workman. In other words, the contextual meaning of 𓌙 as an identity mark is distinct from its basic meaning 'apron' as a linguistic sign, but it can be understood

6. See also p. 71, where she writes: "… I propose to regard this phenomenon as merely another type of *meta-pherein*, "whereby aspects of one object are carried over or transferred to another object"."

by comparison with its phonetic designation.[7] Since the property extracted and transferred is only the phonetic signified *ms* (leaving the pictorial signified apron behind) the metaphorical movement is phonetic. The same process occurs with many other marks from dynasty 20 that have been borrowed from linguistic writing: they are all cut loose from their linguistic context, their literal iconic readings are discarded, while the phonetic properties are extracted and transferred onto completely new signifieds, i.e. the workmen.

One may ask whether indeed we may speak of metaphor here: despite the transference of selected qualities on the basis of similarity, the purported metaphor is of a different type than most analysed in metaphor research. An alternative would be perhaps to speak of "symbolism". Symbolism in a semiotic sense is a mode that is based on convention instead of similarity: a designation refers to an object purely on the basis of a convention that must be learned, and there is no underlying or explanatory relation between the two (Chandler, 2007, p. 262). However, it was precisely similarity between a sign of writing and the name of a workman that was first and foremost the reason for using signs of writing as identity marks. Thus the choice for  is to be explained on the basis of similarity between the designation *ms* for 'apron' and the name of the workman *Mose*, and the transference of the first onto the latter. One might also ask whether we are not simply dealing with abbreviated writing. Yet, here it is important to mention that, as soon as signs of writing were adopted in the marking system, they stopped behaving as linguistic signs in that they could freely change orientation and size, occur upside down or in different order, be placed in lines or columns but just as well in groups or clusters spread over the surface seemingly without order, or they could adopt additional strokes, yet still be recognisable as identity marks. Examples for the mark  are:  . Linearity, a fixed (linguistic) order of the characters, their relative size, and their unambiguous appearance are crucial rules in writing that are all disregarded here (Goldwasser, 1995, p. 24; Jackson, 2008, p. 84), and thus the marks are of a different order than abbreviated writing. A loss of linguistic aspects and a transference into a different system on the basis of similarity with a completely new phonetic signified thus takes place. We therefore decided it is most suitable to stick to Goldwasser's theory and the term "phonetic metaphor" as long as no appropriate alternative is found.

Regardless of the discussion of how precisely to define the process, the function of the mark  , as well as of similar marks in dynasty 20 that by means of a sound-pattern refer to workmen, is actually quite straightforward. Luckily,

7. For linguistic words, at least, this is considered a premise for metaphorical use, whether deliberate or non-deliberate (cf. Steen, 2014, p. 44).

however, there are more exciting cases: for some marks we can assume that their meaning was much richer.

Example 2

The mark in Figure 11 also has an equivalent in writing. As a sign of writing, the mark at the bottom angle of the triangle had the value *bi.t* or *bi.ti*: that is its phonetic interpretation, or the phonetic signified in semiotic terms. The mark also has a pictorial interpretation: it depicts a bee. A geometric interpretation is again not relevant and is therefore not involved. The question is: how do the pictorial and phonetic trails lead to the workman? The workman who used the mark was called *Nakhu-em-mut*, a name without phonetic similarity to the phonetic values *bi.t* and *bi.ti*. It seems we have to dig a little deeper.

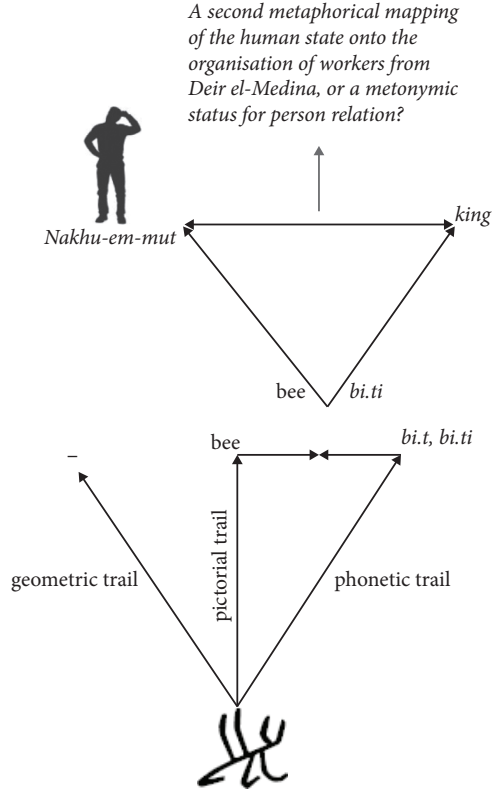


Figure 11. The connection between the mark 𓆑 and the foreman Nakhu-em-mut, dynasty 20 (K. van der Moezel). The arrows between the pictorial signified bee and the phonetic signifieds *bi.t* and *bi.ti* indicate that the further layer of interpretation is built on both of them, that is, the new representamen consists of the bee as an animal with the phonetics *bi.ti*

If we continue from the phonetic interpretation, the values *bi.t* and *bi.ti* can refer to Egyptian words:  *bi.t* means 'bee' and  *bi.ti* means 'king'. Bees had already been domesticated in Egypt by the mid-third millennium BC (Feierabend, 2006, pp. 90–91). Therefore, we can suggest that the Egyptians knew that bees naturally live in colonies and that worker bees are headed by one large specimen.[8] The word *bi.ti* is a *nisbah*, which literally means 'he of the bees'. Perhaps the word *bi.ti* for 'king' relates to this literal meaning in the sense that we could read 'head of the hive'.[9] Here it is interesting to know that *Nakhu-em-mut* began to use the mark of the bee at precisely the time that he was promoted: from a workman in the crew to foreman of the crew. The following can be suggested:

1. The bee as an animal could have been an inspiration for the sound and meaning of the Egyptian word *bi.ti*, 'king';
2. Both the pictorial and phonetic trails in the first interpretation of the mark lead to a new representamen that consists of the graphic representation of a bee and the sound-pattern *bi.ti*;
3. This new representamen could have led to the interpretation *king = head of the hive* in referring to *Nakhu-em-mut* as head of the workmen's crew.

If this process from mark to man is correct, it is metaphorical in nature. The pictorial interpretation as well as the phonetic interpretation *bi.t* evoke the idea of the bee as an animal, the behaviour of which is used to refer to a hierarchical status among men, which is explicit in the second phonetic interpretation *bi.ti*. The metaphor lies in the similarity between animal and human hierarchical behaviour that is evoked by selecting  from the system of writing.

We thus have a metaphorical mapping from the bee state to the human state. From the viewpoint of CMT, the metaphorical mapping affects status and person simultaneously. Thus, when the structure of the bee state is mapped onto the human hierarchy, the corresponding status bearers are related simultaneously. We could say, then, that we have a second metaphorical mapping when this human state in which a king rules his subjects is projected onto the organisation of workmen in Deir el-Medina. The final link between *king* and *Nakhu-em-mut* would then

8. To what extent it was known or to what extent it mattered that this chief animal was actually a female with the sole function to serve as reproducer is unclear (Feierabend, 2006, pp. 90–91).

9. The same phonetic value *bi.ti*, but written with a different classifier (instead of), also relates to this reading in that it is the word for 'beekeeper'. For classifiers, non-vocalised signs used to mark semantic features of lexemes in the Egyptian language, see Goldwasser, 2002; Goldwasser 2006.

be a second metaphorical mapping and the mark 𓌳 entails a double metaphorical mapping to function in the marking system. However, when mapping affects status and person simultaneously, this would, with regard to Deir el-Medina, mean that theoretically each head of the crew could be identified with the mark 𓌳. We know that is not the case. A status can be shared by individuals, but this personal identity mark was used by one individual only: it occurs within a specific time-frame and refers to *Nakhu-em-mut* in particular. With respect to the identity marks, we thus need the actual, individual persons to whom the identity marks ultimately refer. In the semiotic theory of Peirce, the individual object, in this case the individual person, remains an important and active element in the semiosis, i.e. the creation of meaning through signs (Chandler, 2007, pp. 30–35). Since the hierarchical status is not the ultimate meaning of the mark 𓌳, but the individual *Nakhu-em-mut* is, one could, instead of a second metaphorical mapping, consider a different final step to get to *Nakhu-em-mut in particular*. In the second layer of interpretation, the human hierarchical status of *king, head of the hive* is projected onto this individual. Designating an individual by his or her status is a metonymic reference. We would then have a case in which metaphor and metonymy work together in the consecutive interpretations of the mark.[10] Further examples of a similar cooperation we see when marks refer to a profession or to a place name, and this profession or place name is used to designate a particular workman who executes that profession or who originates from that place. As such, the marks are efficient and rich in meaning in that they identify an individual by providing also information on his origin or professional status, that is, by providing additional relevant meaning: having 𓌳 referring to *Nakhu-em-mut* takes a lot less space than writing out 'the foreman of the crew *Nakhu-em-mut*'.

Example 3

An example of a mark that may refer to a workman via geographic origin is shown in Figure 12. The mark was used by a man named *Pen-men-nefer*. His name literally means 'the one from Memphis'. Whereas some names were omnipresent throughout the life of Deir el-Medina, the name *Pen-men-nefer* is relatively infrequent, and occurs only within a specific time-frame: precisely the period in which our man was active (Davies, 1999, pp. 197–198). The name might have been a nickname. Another name for the man is not known, but the use of nicknames was general

10. They do in general work together. Metaphor is even preceded by metonymy in that metaphor usually concerns *selected* qualities of an object or being that are considered similar to selected qualities of another object or being. See also Mittelberg & Waugh, 2009, pp. 329–356.

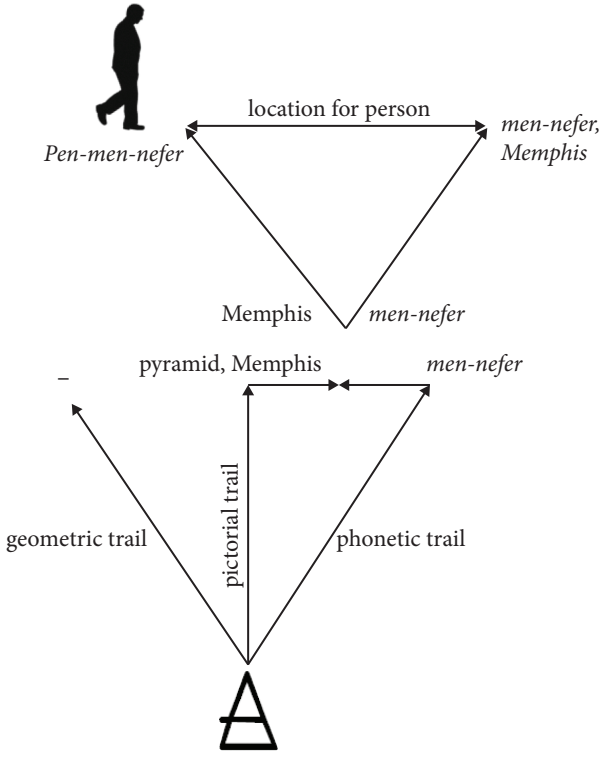


Figure 12. The connection between the mark 𓊪 and the workman Pen-men-nefer, dynasty 20 (K. van der Moezel). The arrows between the pictorial signified Memphis and the phonetic signified men-nefer indicate that the further layer of interpretation is built on both of them, that is, the new representamen consists of the capital Memphis with the phonetics men-nefer

practice in Deir el-Medina. As a nickname, it would designate this man, who worked as a guardian,[11] as coming from Memphis. Unfortunately, we do not know whether indeed *Pen-men-nefer* came from Memphis. We do know that geographic origin, even when it went back generations, was important to the Egyptians and

11. He perhaps also worked as a doorkeeper and a workman, see Davies, 1999, pp. 197–198. Davies mentions several occurrences of the name *Pen-men-nefer* and says that we cannot be certain that it concerns the same man every time. He is right, yet there is also nothing that speaks against identifying the three as one and the same man. All occurrences of the name are dated between year 16 of Ramesses III and year six of Ramesses IV, a time-span that could well be covered by one man. Of course, if the occurrences of the name *Pen-men-nefer* would refer to different men, the theory on the nickname indicating origin would make less sense, as the nickname would no longer be characteristic of one man only.

was often mentioned. If we accept the idea of the nickname referring to *Pen-men-nefer*'s origin as a possibility, the mark he used makes sense. Along the pictorial trail it depicts a pyramid. Along the phonetic trail it does not have a phonetic value itself, since it does not occur as a consonantal sign in writing. It does, however, occur as a classifier in the word *men-nefer* for 'Memphis'. The mark could therefore evoke this value along the phonetic trail. Memphis was the capital of Egypt. As a pyramid, the mark may be representative for the capital in a metonymic monument for capital relation, since many pyramid fields are localised in this part of northern Egypt. In the first interpretation of the mark we thus arrive at the graphic representation of a pyramid (the pictorial interpretation) evoking the capital Memphis, which is also the interpretation of *men-nefer* along the phonetic trail. The combination 𓉐-*men-nefer*-Memphis as the new representamen then leads further to *Pen-men-nefer* in the second interpretation in two possible ways:

1. Either on the basis of phonetic similarity with the name of the man, in which case Goldwasser's phonetic metaphor applies again, because the sound-pattern *men-nefer* is extracted from its linguistic context and connected to a completely new signified: *Pen-men-nefer*;
2. Or on the basis of a further metonymy, in which the new representamen *men-nefer* leads to the interpretation *Memphis*, which as a locality designates the man.

In this case, there is no phonetic metaphor, because the sound-pattern *men-nefer* remains connected to its linguistic signified Memphis throughout the process. The mark might be considered a double metonymy that via monument refers to locality and then via locality to person, where it should be noted that the mark only refers to part of the man's name: the possessive prefix *pen* was not referred to by the mark. Possibly, *men-nefer* was considered the more informative and characteristic part of the name, and the link between the depiction of a pyramid 𓉐 and the element *men-nefer* was clear enough to do the trick, especially in a community in which the men knew each other well and the linguistic shift to incorporate the prefix *pen* to get from *men-nefer* to the man *Pen-men-nefer* was easily made. This entails that the marks of the system may have been selected to refer only to a crucial or essential element of the person's name they referred to.

Example 4

There are, of course, examples in which the connection between mark and man is uncertain. Yet, on the basis of the mechanisms we see in the system, we can make educated guesses. The mark in Figure 13 is an example of that. It occurs throughout dynasties 18 to 20, but we only know the identity of its user around

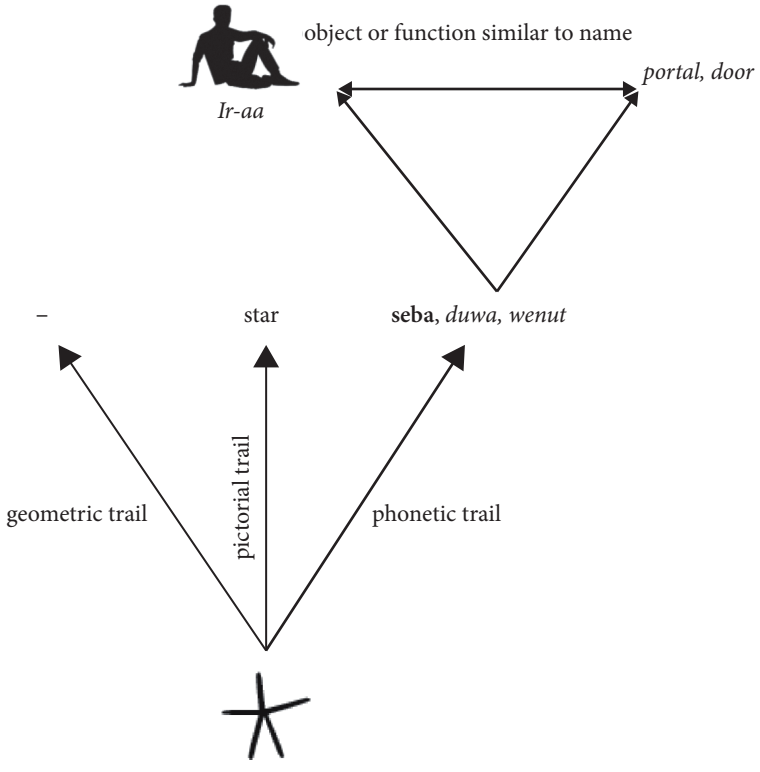


Figure 13. The hypothetical connection between the mark ⟙ and the workman Ir-aa, dynasty 20 (K. van der Moezel)

the beginning of the reign of Ramesses IV (dynasty 20): a man called *Ir-aa*. Along the pictorial trail, the mark probably represents a star.[12] Along the phonetic trail, as the counterpart to the hieroglyphic sign ⟙, the mark may evoke the phonetic values *seba*, *duwa* or *wenut*. In the first triangle, meaning may be found along the phonetic trail especially through the phonetic value *seba*. This value of ⟙ brings us to a further interpretation: the sound-pattern *seba* may have evoked in the mind of a contemporary the interpretation *portal*, because the hieroglyph ⟙ was used for its phonetic value in the writing of the ancient Egyptian word 𓉐⟙𓊃 *seba* 'portal'. In turn, the interpretation *portal* can be directly connected to the name *Ir-aa*, since this name in translation means 'doorkeeper' (lit. 'one, who tends a

12. Either as an astronomical phenomenon or as the depiction of a starfish. Alan Gardiner, who in 1927 composed the hieroglyphic sign list that has been the standard up to this day, considered the form to be the star as a heavenly body: Gardiner, 1957, p. 487 (N14). For the starfish, see Beaux, 1988, pp. 197–204.

door'). This would be a metonymic connection between the interpretation 'door', 'portal' and the object referred to by the mark  (i.e. the workman *Ir-aa*) in that the former is being used to evoke a title or profession, the designation of which was similar to the name by which the workman was known.[13]

There is no phonetic metaphor in the sense that Goldwasser intends: during the entire process, the phonetic signified *seba* remains connected to the signified 'door', as it does as a linguistic sign. The phonetic value is thus not extracted from the hieroglyph and subsequently linked to a new signified. Rather, the linguistic sign *seba* referring to the word *seba* 'portal' is merely used to arrive at the metonymy, which through the interpretation *portal* leads to the phrase *ir-aa* as the title or name of the workman.

This path of semiosis remains merely a suggestion, since we know little of *Ir-aa*. We furthermore do not know who used the mark in the earlier dynasties 18 and 19, but it is clear that another person named *Ir-aa* has not been identified. The semiosis of in dynasties 18 and 19 must therefore have followed (a) different path(s) that remain(s) unknown to us at present.

Example 5

The final example of a connection between mark and man differs from the foregoing examples in that it suggests loss of signification between mark and man. The mark  in Figure 14a does not have an equivalent in writing. The phonetic interpretation is therefore excluded. A geometric and pictorial interpretation remain. Since we are outsiders to the culture and the marking system is no longer in use, we cannot be certain how to interpret the mark: either as a geometric configuration or as depicting an object or being. We initially interpreted the form as being geometric in nature and we described the lines of its composition as 'diagonal 4 – horizontal 1' (d4h1). The form as such has no further interpretation or meaning, it does not depict anything, it is simply a geometric assembly of lines, which brings us no further as to the connection of the mark to any workman in particular. However, this was precisely the mark that *Nakhu-em-mut*, who was mentioned in Example 2 above, used before he became foreman of the crew. Yet, he used it interchangeably with a mark of the form , which may be pictorially interpreted as a level, a tool used by workmen during construction work. In its turn, this mark that may depict a level was used by a foreman almost 150 years earlier, in fact, the

13. We do not know whether *Ir-aa*, 'doorkeeper', was the man's (nick)name or actually his title. We do know that he fulfilled the regular workmen's tasks in the crew and that if *Ir-aa* was a title or a nickname referring to his profession, it was at least not his only task to guard and open doors. Cf. Collier, 2014, pp. 14–15.

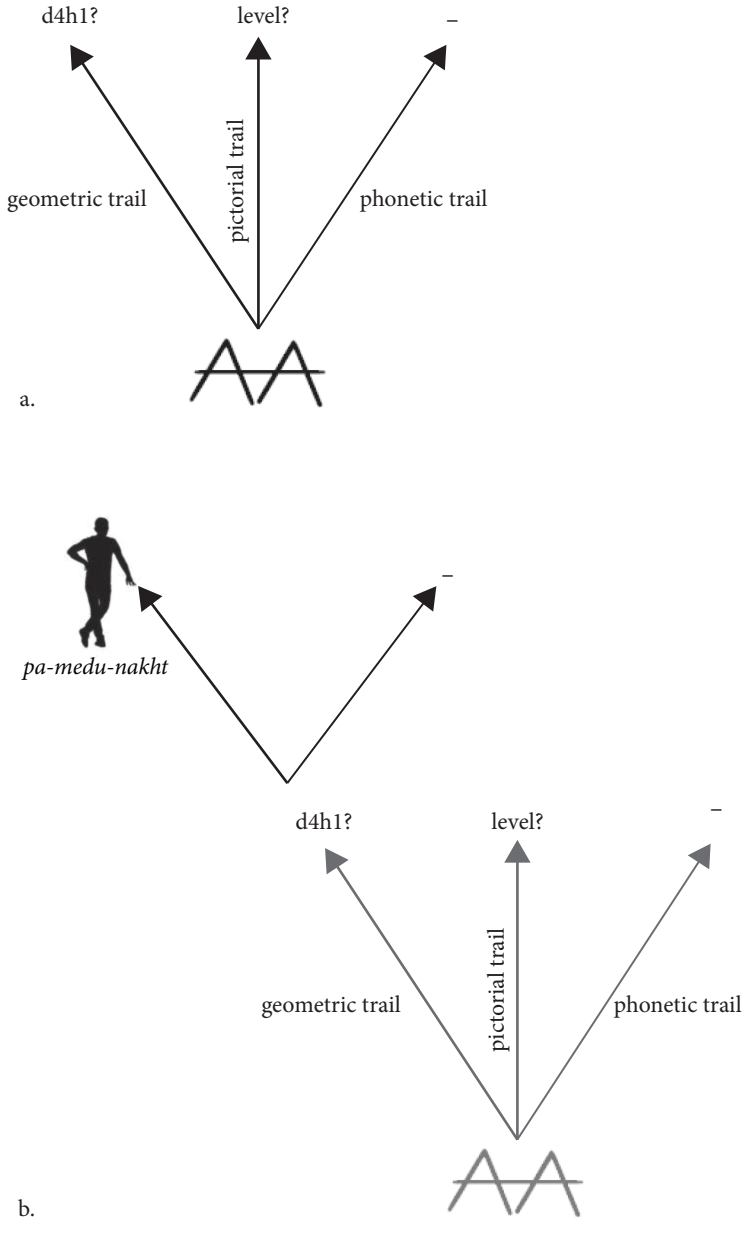


Figure 14. The connection between the mark and the workman Pa-medu-nakht, dynasty 20: a. first interpretation as a geometric pattern or a level – b. loss of signification in an arbitrary connection to Pa-medu-nakht? When considered a geometric assembly of lines, the form is directly connected to the object (i.e. the workman), without further interpretation or mapping to a pictorial domain. Therefore, in the upper triangle, a link between the interpretant and the object is lacking (K. van der Moezel)

great-great-grandfather of *Nakhu-em-mut* called *Sennedjem*. One might say that a level, as such a crucial tool, could well have served as a mark for the office of foreman. *Sennedjem* was, in fact, even buried with a level (Desroches-Noblecourt, 1976, pp. 174–175) and it may be no coincidence that the mark  was encountered frequently in his tomb. In dynasty 20, and apparently its variant can be linked to *Nakhu-em-mut* as being the mark used by a prominent forefather of his. Yet, it was apparently not prominent enough for *Nakhu-em-mut* to keep using it after he had become foreman, since he replaced it with the mark of a bee.

After his promotion, the man who took over *Nakhu-em-mut*'s position as workman in the crew was *Pa-medu-nakht* (Figure 14b). He was not related to *Nakhu-em-mut* and *Sennedjem* in any known way. He seems to have been just another workman filling an empty spot in the crew, and he took over the mark as if the empty spot came hand in hand with this mark, or as if he was nothing more than merely 'the new *Nakhu-em-mut*'. That suggests that any personal signification the mark had for *Sennedjem* and the marks and had for *Nakhu-em-mut*, was now lost, and the mark was arbitrarily passed on, either as the representation of a level or as nothing more than a geometric assembly of lines.

The examples above serve to give some insight into how the marking system works. In several cases we see that the marks are complex constructs of metaphorical and metonymic processes, whereas in other cases there may be no further signification, or at least no cross-domain mapping that we can retrieve. The semiotic model as presented allows us to analyse and visualise the possible paths and successive layers of meaning that for each mark could (but did not have to!) be followed.

3.1 A family mark: Semiosis over the passage of time

However, there soon appeared to be a problem with the idea of "infinite semiosis" and thus the building of layer upon layer in the semiotic model above: the visualisation is far too static and linear. In Figure 15 we present one last example, this time of a family mark that was passed on from generation to generation and that, on the basis of the linear visualisation, poses further questions about the cognitive processes behind the generation of meaning. This example also leads to the question of to what extent the metaphorical processes in the marking system are deliberate or conventional and unconscious.

Example 6

The mark is attested over at least four generations. In Peirce's theory of "infinite semiosis" every generation is a further layer of meaning. We start with the representation of the mark at the bottom. Since we soon realised that it was the phonetic

interpretation from which we had to move on to further layers of meaning, and since both the pictorial and geometric interpretations are irrelevant here, we can leave out the first layer of pictorial, geometric and/or phonetic interpretation(s) as it was represented in Figures 8, 11–14 above. We thus start directly with Peirce's model including a representamen, interpretation and an object or being to which the representamen and interpretation refer.

The representamen is the graphic image of  . The interpretation is the phonetic value *in*. The object in the first layer is a particular occurrence of the mark, for instance on a specific ostracon in a specific context. The graphic image, the phonetic value *in* and the occurrence itself are the level we depart from. In a further interpretation the phonetic value *in* becomes the new representamen in the form of a sound-pattern *in* that, in the context of the system and its users, could have evoked the name *In-her-khau* as a further interpretation. Several men in Deir el-Medina were called *In-her-khau*. Depending on the date and context of the occurrence of the mark, the interpretation *In-her-khau* could have referred to *In-her-khau* I, the earliest man attested with the mark in dynasty 19, who serves as the object being referred to in the second interpretation.

In a third interpretation, the name *In-her-khau* (the former interpretation) becomes the new representamen. On the basis of a father-for-son metonymy it may have evoked the name *Hay* and may have referred to *Hay* IV, a son of *In-her-khau*, who took a job in the crew as well. Further interpretations can be built on these first interpretations, and they are all father-for-son metonymies: the name of the father evokes the name of the son, and the mark of father refers to son in the next generation. The semiosis of the mark is then built on Goldwasser's phonetic metaphor for *In-her-khau* I, but on metonymy for all the sons following him, with the exception of *In-her-khau* II in the third generation, where phonetic metaphor may play a role again. In the end, the connection between the mark and the man in the fourth generation, *Kenna*, can be traced back through all foregoing generations. Why did *Kenna* use this specific mark? Because his forefathers used it.

But Figure 15 is in fact a very bad visualisation. First, *Hay* IV in the second generation was indeed a son of *In-her-khau* I, but he is actually not attested with the mark . He used a different mark (), which means a break in the semiotic chain. Second, Figure 15 may be a semiotic representation, but it is too static and linear to be able to visualise the existence of synchronic, but different, individual cognitive paths that may lead from mark to man.[14] Different individuals from

14. Semiotics does not relate the generation of meaning to its actual origin in the human brain. Whether signs of writing or the marks of a marking system, they are all products of human communicative behaviour and are thus processed in the brain.

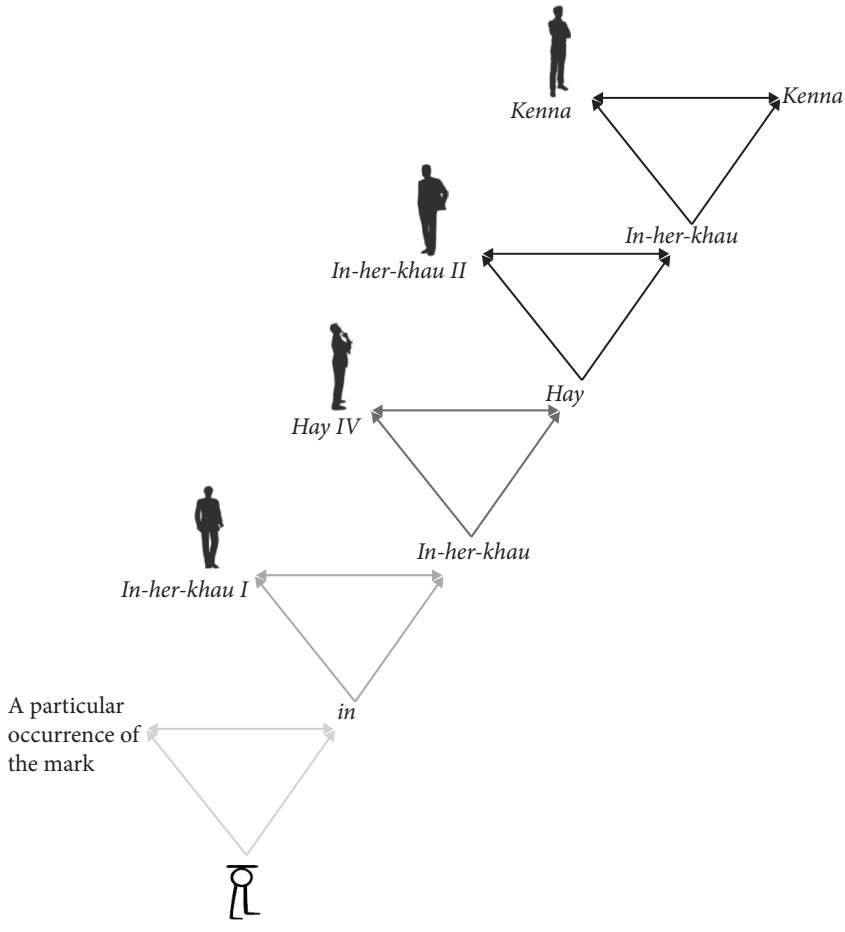


Figure 15. The connection between the mark 𓋴 and four generations of workmen in the family of In-her-khau I, dynasties 19–20 (K. van der Moezel)

the same or from different generations need only have been aware of parts of the structure in Figure 15. It is, for instance, to be questioned whether the contemporaries of *Kenna* in the fourth generation really went through all previous steps to remember which mark he used. Did the phonetic interpretation *in* really still play an active role, or did *Kenna*'s generation relate the mark to him without paying attention to such deeper underlying connection?

There is not one answer to this question. The paths leading from the mark to any of its users were presumably different for every individual, depending on their age, acquaintance with the workman and his family, and on knowledge of script: what did the value *in* mean to someone without knowledge of script? In other words, the question of meaning behind the mark and the role which phonetic

metaphor in Goldwasser's interpretation plays is a matter of *degree*. We therefore need a visualisation that is not linear, but which allows different but simultaneous paths from mark to man, i.e. different ways in which an individual could link the mark to any of the men, who made use of it throughout the generations. Such a visualisation would be a connectionist network, which better represents the processing of different sorts of information in the brain. Whereas semiotics was helpful in analysing how meaning was generated, a connectionist network helps to consider the results as patterns of thought. A network for the present topic has not been made: we would need to know exactly how individuals from Deir el-Medina made the connection between  and any of its users throughout the generations and how often one specific connection between and one of its users was made. If we would have such data, we could put the mark and the names of its users as the nodes in a network between which different but synchronic connections exist, each occurring a specific number of times, hence being a more or a less common form of semiosis. We could, for instance, show whether indeed there were people who connected *In-her-khau* I to the mark by thinking of the phonetic value *in* and the name *In-her-khau*, a connection that would look like → *in* → *In-her-khau* → *In-her-khau* I (an indirect connection between and *In-her-khau* I); and whether there were people who were not conscious and aware of the intermediate steps of *in* and *In-her-khau* and skipped them by linking directly to *In-her-khau* I, a connection that would look like → *In-her-khau* I (a direct connection between and *In-her-khau* I). In the first case, the metaphorical steps taken to get from mark to man may have been deliberate or non-deliberate, depending on the extent to which the producer was consciously aware of the metaphor and purposefully used the value *in* to remind fellow scribes and administrators that this was the mark of *In-her-khau* I. In the second case, the metaphor is more likely to have been non-deliberate, as in skipping the intermediate steps, the producer was presumably not consciously aware of it.

However, since we are not part of the culture and cannot speak to the members of the marking system, we do not have secure data on the exact connections that were made and how frequently they were consciously or unconsciously made. We can only speculate on the synchronic connections that could have existed between and its users, that is, on the ways contemporaneous individuals as well as individuals throughout the generations could have made the connection between and the workmen, and on the degree to which they were conscious and aware of the connection.[15] The draft in Figure 16 at least sets out the possible paths leading

15. For connectionism and connectionist networks, see Harley, 2008, pp. 485–489. The mathematics that underlie a true connectionist network need data that we cannot retrieve for Deir el-Medina anymore, such as the frequency of a given connection that gives the connections between the nodes in the networks weight and importance.

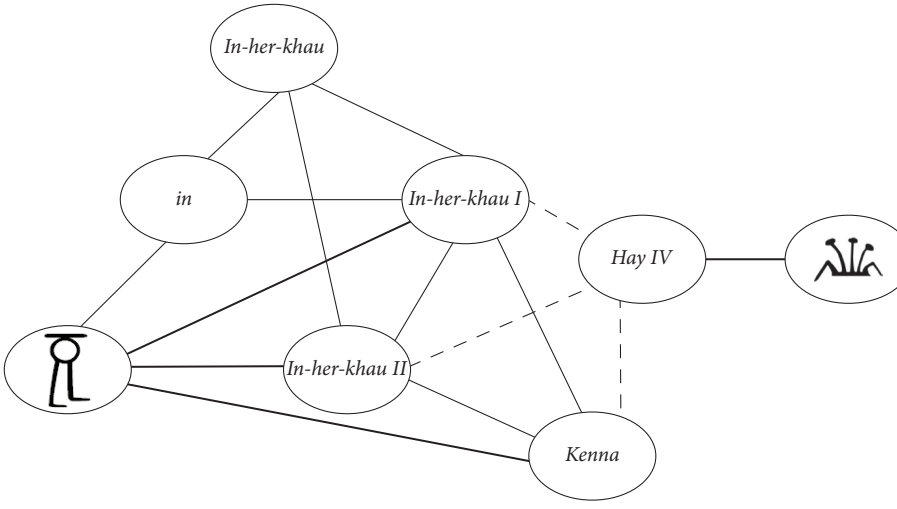


Figure 16. Draft for a connectionist network in much simplified form for the mark 𓂝. Bold connections are direct connections between the mark and one of its users, all other connections are indirect, i.e. showing intermediate steps to get from mark to user. Both direct and indirect connections are speculative but possible paths leading from the mark to one of its users. Indirect connections take intermediate steps that can be of metaphorical or of metonymic nature (e.g. going via the phonetic value in or a father to son relation); they may point to deliberate or non-deliberate use of the metaphorical nature of the marks. Direct connections from mark to man skip such metaphorical and metonymic steps and may point to a more conventional, automatic and unconscious (i.e. non-deliberate) connection between mark and man, i.e. one based on agreement rather than underlying meaning (K. van der Moezel)

from mark to man and shows that an individual could have made the connection between the mark 𓂝 and its first user, *In-her-khau* I:

1. either indirect via phonetic metaphor (*in* → *In-her-khau* → *In-her-khau* I)
2. or directly: any existence of phonetic metaphor may have been irrelevant to the person following the direct path. He was not aware of it or, if the mark had been in use for some time already, the metaphor had become conventional and he made the connection automatically and unconsciously.

With regard to the second generation, it has been mentioned that *Hay* IV is not attested with 𓂝. Therefore, he has no direct connection to the mark. There are also no metaphorical connections between him and the intermediate steps *in* and the name *In-her-khau*. Theoretically, one could make a metonymic connection between 𓂝 and *Hay* through his family members: *In-her-khau* I, *In-her-khau* II and *Kenna*, who all do have direct and indirect connections to 𓂝 and the intermediate steps *in* and the name *In-her-khau*. However, since 𓂝 in our records is not once used to identify *Hay*, these connections are given as dotted lines,

meaning that they apparently did not function in the grammar of the system. The mark 𓄡 does have a direct link to *Hay* IV, but not to the other men, since it was not used by any one of them. Theoretically, however, the other men could be linked to 𓄡 on the basis of metonymic family relations through *Hay* (the dotted lines again), but here as well, since 𓄡 in our records does not once identify the other men, we can assume that these indirect connections were not part of the system.

For *In-her-khau* II, the situation is similar to that of *In-her-khau* I: we can get there directly or indirectly via the phonetic metaphor *in* → *In-her-khau* → *In-her-khau* II. Those following the indirect path are more likely to have been consciously aware of the metaphor, and thus to have used it deliberately. In addition, there is a path from 𓇋 to *In-her-khau* II via *In-her-khau* I, in which case we have a phonetic metaphor leading to *In-her-khau* I and subsequently a metonymy in that grandfather evokes grandson. This path as well may have been followed deliberately by those who were well acquainted with *In-her-khau* II and his family.

For *Kenna*, finally, we lose the phonetic metaphor. Perhaps those people who knew his father well still made a phonetic connection to *In-her-khau* II and then made a metonymic father to son connection to *Kenna*. This indirect connection and with it the possibility for a deliberate use of the metaphor therefore remain to exist. Yet, others could well have made the connection more directly, either thinking of 𓇋 as the mark, which *Kenna* inherited from his father (a metonymic connection via *In-her-khau* II that could still have been deliberately put to use), or considering a completely arbitrary connection between 𓇋 and *Kenna*, without being consciously aware of any underlying meaningful connection or cross-domain mapping between the original meaning and value of 𓇋 as a linguistic sign and the workmen from Deir el-Medina as its new referents. In the latter connection, 𓇋 is more likely to have been used as a non-deliberate metaphor.

As was mentioned, the connections in Figure 16 are speculative, but at least they show that metaphor and metonymy may be present in the meaning of the mark to various degrees, depending on the paths taken by individual members of the system. Those taking indirect paths may have been consciously aware of the phonetic value *in* or family relations that linked mark to man and they may have intentionally put this metaphor to use; for those taking direct paths, the mark may have been much more conventional, simply an agreement without further meaning. The system was much more efficient to those who were aware of the metaphors, since they could use them as mnemonic aids, whereas those who were unaware had to learn seemingly arbitrary combinations of marks and men.

4. The role and nature of metaphor and metonymy in the system over time

In the examples above we have seen the transposition of a phonetic signified from a linguistic sign onto a new signified in a non-linguistic system ("phonetic metaphor") as well as the use of animalistic metaphor in combination with various metonymic relations (family, status, place name, occupation). We have seen that the number and the nature of the connections between the workmen and their identity marks may change over time and per individual usage. How should the above be seen in the context of CMT and DMT, and how can the concept of deliberateness give nuance to our conclusions about the use of metaphor in the marking system?

The debate around deliberate metaphor includes the dichotomies deliberate versus non-deliberate and novel versus conventional metaphor, as well as a dimension of consciousness: to what extent are metaphors consciously or automatically and unconsciously used? For one thing, the metaphors that underlie the mark-to-man connections are deliberate at least at the time that the marking system was developed and every time that a new mark was created or selected in order to identify a new workman in the crew. The marks are deliberate metaphors, precisely because they function as mnemonic devices. They aid in remembering which mark belonged to which workman, so that using the system was quicker and more efficient than would be the case if some mark were arbitrarily linked to some workman. We speak of dozens of marks, with a minimum of 45 up to presumably 60, having been simultaneously used, with regular changes to the system taking place: the disappearance of old and the introduction of new marks. Mnemonic aids are helpful in keeping an overview: as metaphorical and metonymic constructs the marks offer additional relevant information and familiar aspects of a workman such as name, status, or profession in order to remember who was identified through which mark.

As to being novel or conventional, the metaphors underlying the mark-to-man connections were novel at the time the marks were created specifically to identify the workmen – that was the purpose for them to come into being. But they became conventional over time, the longer the marks were used and the more generations they identified. They became common in the system, presumably without all members of the crew being aware of, or being familiar with, the metaphorical and/or metonymic origin and nature of the mark. What happens with the deliberate metaphor when the marks become conventional? To what extent did they still highlight certain aspects of the workmen to facilitate the use of the system? To what extent were they still deliberately put to use?

That question does not merely have a diachronic dimension. Taking  as an example again, it is not a case of being a novel, deliberate metaphor in the first generation, and a conventional non-deliberate metaphor in the fourth, losing some of its deliberate nature and origin along the way. First of all, the mark may become conventional over time, but each time it gets taken on by the next generation it is done with deliberate intent. Second, conventional and non-deliberate connections between mark and man could already have been made in the generation of *In-her-khau* I by those who were illiterate or completely ignorant of any further signification: they could simply have considered to have been arbitrarily linked to *In-her-khau* I without further meaning, not recognising it as originally a linguistic sign or not knowing its phonetic value *in*. They may have considered in relation to the workmen who were identified by it in the same way the sign discussed above may have stood for *Pa-medu-nakht*: as simply a form without further meaning. Vice versa, someone living in the time of *Kenna*, who *was* literate or who knew *Kenna*'s father *In-her-khau* II well, could have made the connection going back to the phonetic metaphor.

A case in point are scribes and administrators who worked on the administrative duty lists with marks. Scribes in training may at a certain point in their education have realised that there was a phonetic connection between the mark and the name of *Kenna*'s father on the basis of the sound-pattern *in*: they learned that it was a sign from writing with a phonetic connection to *In-her-khau*. They may no longer have considered it a conventional sign, but a phonetic metaphor, and they may have used as such to make clear to themselves and to fellow scribes and administrators that this was the mark of *Kenna* son of *In-her-khau*. We know, however, that there were also people working on the lists with marks who were not literate or only semi-literate: their handwriting shows no scribal ductus and they wrote many marks with an origin in writing wrong with regard to orientation as well as form. Whether they used the mark as a deliberate metaphor is, then, questionable.

We are thus dealing with the dimension of the individual as well. The original deliberate metaphor is still there, but it depends on the individual whether it revives or remains unrecognised. To take one of the other examples that were discussed: whereas the mark was intentionally metaphorical in origin, since it did not refer to a bee but to *Nakhu-em-mut*, it depended on the individual whether the separate source domains were recognised and purposefully used to refer not only to *Nakhu-em-mut*, but to the *foreman of the crew, Nakhu-em-mut*. And whereas the mark was intentionally metaphorical in origin, since it did not refer to a pyramid or even the capital Memphis, but to the person *Pen-men-nefer*, it depended on the individual whether he used the mark to intentionally highlight the part men-nefer, as potentially the place where *Pen-men-nefer* was from.

In the draft of Figure 16 we can visualise that the original metaphorical links remain, but that in addition and over time, the network grows and new connections are established, which to greater or lesser degree make use of the original deliberate metaphorical and/or metonymic nature of the marks.

If the degree to which a mark is understood and used as a deliberate metaphor differs per individual, and if different degrees of deliberateness, consciousness and conventionality are mixed in the overall signification of the marks, then the question is how deliberate metaphor actually is when it depends on (1) whether we speak of its origin and original purpose as against single occurrences; (2) the individual user; (3) their degree of literacy and knowledge of sound-patterns; (4) their acquaintance with the respective workman and/or his family; and (5) the age of the marks, their history in the marking system. In other words, the question is how the diachronic and individual dimensions intervene with deliberate metaphor. Unfortunately, especially the question regarding the individual can no longer be answered for the marking system from Deir el-Medina. As with all ancient systems, we lack the competence and awareness of the native speaker. Moreover, we must deal with a discrepancy between what is metaphorical or metonymic from the perspective of the analyst and his or her cultural background and what was regarded as such by the original individual members of the system. Nevertheless, with regard to Deir el-Medina, we are not left empty-handed. A brief conclusion can be drawn from what we know and can say about the identity marks and the deliberate or non-deliberate use of their underlying metaphors:

1. The system from Deir el-Medina consisted of identity marks that are constructs of metaphor and metonymy, which identify individual workmen on the basis of additional relevant information and familiar aspects that are highlighted as mnemonic aids to establish an efficient use of the system;
2. These familiar aspects refer to the respective workmen on the basis of deliberate metaphor at least at the time the marks were created and each time a new workman in the crew adopted a mark;
3. In the further existence of the marks, the original deliberate metaphor appears to recede into the background, but can revive again in individual usages, because that first connection between mark and man always remains underlying. As such, we are not talking about a changing nature of the metaphorical and/or metonymic connection between mark and man (from novel and deliberate to conventional, non-deliberate usage), but rather of an accumulation of connections with various degrees of figurative meaning, an expansion of the network in which the meaning of the marks is accommodated.

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Early Greek medical metaphors and the question of deliberateness

Chiara Ferella
Johannes Gutenberg-Universität Mainz

This paper analyses deliberate metaphor use in three Hippocratic treatises and in Empedocles' two famous similes. By exclusively examining direct metaphors and their textual markers, I first investigate the communicative function metaphors have in ancient Greek anatomical and physiological argumentation. These are illustrative tools, items of evidence and/or elements that demonstrate a given hypothesis, as well as instruments of a heuristic method of enquiry. Second, I show that there are explicit claims by both authors to deliberate metaphor use: they claim to use metaphors as metaphors and leave their addressees no option but to recognise the source domain *as such*, as this represents the field in which both theoretical construction and the demonstration of a given hypothesis take place.

Keywords: deliberate metaphor use, Hippocratic author, Empedocles, direct metaphors, textual signals, communicative function, illustrative tools, heuristic method

1. Introduction

The main aim of this paper is to analyse deliberate metaphor use in ancient Greek medical metaphors. Some clarifications are in order. First, the notion of metaphor used in this study follows Conceptual Metaphor Theory (CMT), which was proposed by Lakoff and Johnson (1980), whereby metaphor is cognitive-linguistically defined as a conceptual mapping (e.g. LIFE IS A JOURNEY), a set of correspondences between two distinct conceptual domains, the source domain (JOURNEY) and the target domain (LIFE).[1] The sets of correspondences include single elements (e.g.,

1. Cf. esp. Lakoff and Johnson (1980) and Lakoff & Turner (1989). For further discussion of the theory and recent developments within the field of cognitive linguistics, see Gibbs (1994) and Kövecses (2002). Conceptual metaphors typically employ a more abstract concept as target and a more concrete concept as their source. Moreover, they are always found to abide by the so-called principle of unidirectionality, that is, metaphorical processes typically

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LIVING BEING VS. TRAVELLER; CHOICES VS. CROSSROADS), as well as relations between these elements (e.g., *LEAD* A CERTAIN LIFE VS. *GOING* ALONG A PATH). The basic view of metaphor in cognitive linguistics is that "the essence of metaphor is understanding and experiencing one kind of thing in terms of another" (Lakoff & Johnson, 1980, p. 5; italics in original). From CMT onwards, metaphor theorists have been showing that, as metaphorical mapping favours analogical reasoning, metaphor plays a fundamental role in our conceptual and epistemological upbringing, being a powerful tool by which we interpret the world. Consequently, scholars have demonstrated that, in various disciplines, metaphor supports, and even produces, reasoning: in physics (Pulaczewska, 1999); biology (De Donato Rodríguez & Arroyo-Santos, 2015); medicine (Semino et al., 2017) and philosophy (Lakoff & Turner, 1999; Al-Karaki, 2012). The issue of the productive use of metaphor in reasoning, raised by modern metaphor theories and investigated within modern genres, has not yet been applied pervasively to the study of ancient medical and philosophical texts. The present paper represents a first and modest attempt in this direction.

Second, the expression "medical metaphors" concerns the evidence I use in this study, which comprises three Hippocratic treatises that are likely to be the work of one and the same author[2] and two famous comparisons of Empedocles of Agrigento.[3] In these texts, the metaphors under analysis describe physiological or anatomical processes within the human body.

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go from the more concrete to the more abstract, and not the other way around. Text in small caps depicts conceptual domains (see Kövecses, 2002, p. 4).

2. The Hippocratic treatises I will analyse are *On Generation*, *On the Nature of the Child* and *Disease IV* (= VII, 470–485; 486–542; 542–614 Littré). Quotations of passages and their translation follow the 1981 edition by Lonie. E. Littré was the first modern author to bring these texts together, considering them the work of one and the same author. Yet the issue concerning the authorial identity of the three treatises is the subject of debate among scholars: see above all the discussion in Lonie, 1981, pp. 43–51. However, the remarkable similarity of style and method as well as the resemblance of language among them are reasons to consider them together in the present study. Lonie (1981, p. 71) dates them to around 420 BCE.

3. Empedocles of Agrigento is an early Greek philosopher who was active in Agrigento in Sicily in the fifth century BCE. He wrote a poem on natural philosophy in the verse of the epic poetry, entitled *Physika* or *Peri Physeos*, of which only fragments are extant. From them we know that Empedocles postulated four principles of the physical world – air, earth, water and fire – which are periodically united and separated, within a cosmic cycle, by the two forces of Love and Strife.

Third, the notion of deliberate metaphor use has been receiving more and more attention recently.[4] Gerard J. Steen, the promoter of this theory, defines deliberate metaphor theory (DMT) as follows:

> According to DMT, deliberate metaphor concerns the intentional use of metaphors as metaphors between sender and addressee. This definition minimally implies that language users, in production or reception, pay distinct attention to the source domain as a separate domain of reference. (Steen, 2017a, pp. 1–2)

This definition highlights two essential features in deliberate metaphor use: intention (from the side of the sender) and attention (from the side of the addressee).[5] More precisely, Steen points out that: (1) deliberate metaphor gets represented as metaphor in the situation model or textbase, that is, with distinct attention to the source domain as a separate referential aspect of the meaning of the utterance; (2) deliberate metaphors require online cross-domain mapping, involving attention to the source domain as a conceptual and referential domain in its own right; (3) deliberate metaphors can be experienced as metaphors by ordinary language users because of the attention to the source domain in the textbase; and (4) in deliberate metaphor, metaphor acquires a communicative function as metaphor between language users.[6] The last point – the communicative function of metaphor as metaphor – will receive particular attention in this paper.

However, how can we determine if a certain author or language user at a given time uses a metaphor in a deliberate way? Above all, how can we mark deliberate metaphor use in the case of ancient authors? In fact, the identification of deliberate metaphor use in ancient texts in particular brings with it its own specific problems, related to the lack of cultural background and proximity to the spoken language. Yet, one of the clearest features indicating deliberate metaphor use is a lexical signal, such as the word "like" in a simile. For instance, in the expression "Martha sings like a nightingale", the word "like" is meant to indicate a direct comparison (or an explicit cross-domain mapping) between Martha and the nightingale. Expressions of these kinds are direct metaphors, and leave "the addressee

4. Cf. Steen (2008, 2011a, 2011b, 2017a, 2017b); Beger (2011).

5. The controversial nature of notions of intentional and deliberate metaphor use have been discussed by Gibbs (2011).

6. See Steen (2017b).

no option but to pay explicit attention to the source domain as a source domain. Direct metaphor is deliberately metaphorical" (Steen, 2011a, p. 13).[7]

In this paper, I will focus on direct metaphors and show that there are remarkable examples of deliberate metaphor use employed in anatomical and physiological argumentation by the Hippocratic author and by Empedocles.[8] In the first part of this paper I will concentrate on the analysis of single metaphors used in the Hippocratic treatises and the fragments of Empedocles, as well as on their function in the medical (that is, mostly anatomical and physiological) argumentation. As we shall see, most of the comparisons I analyse are inspired by familiar situations and common processes that can be observed both in nature and in one's own kitchen. The main purpose behind these metaphors is illustration: the source domain provides the field of observation for the otherwise-invisible processes occurring in the body.[9]

There are cases, however, in which metaphor seems to lose its illustrative and explanatory function. However, the idea of metaphors presenting a model from the seen in order to "illuminate" the unseen (Regenbogen, 1930, p. 131; see n. 8) does not apply to every case under analysis. In particular, comparisons with the plant kingdom, which animate a considerable number of the Hippocratic author's theories on embryological formation and growth, derive several points 'from the unseen' (Lonie, 1981, p. 213). As we will see, metaphor use in these contexts rests on a precise methodological claim. Comparisons are taken as cases presenting evidence of universal principles or a general physical law applicable to all similar

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7. Beside direct metaphors, the creation of novel metaphors is also a feature of deliberate metaphor use. Nevertheless, while direct and novel metaphors are typical examples of deliberate metaphors, Steen (2011a, p. 14) argues that people can also use conventional and indirect metaphor in highly deliberate ways. For an example of conventional and indirect metaphors used in a deliberate way (according to Steen's definition) by another early Greek author, Parmenides, see Ferella, 2017.

8. In particular, in the texts under analysis we will observe a recurrent use of similes in physiological and anatomical argumentation. This is one of the most striking differences with regard to contemporary scientific and academic prose, where the use of metaphor is pervasive, but that of similes (more precisely of direct metaphors) is rare (Herrmann, 2013, pp. 158–162). However, Herrmann (2015; see also Herrmann 2013, pp. 166–168), by exploring metaphor use in several academic sub-registers – humanities-arts, natural science, politics, law, education and social science – discovers that direct metaphors occur more frequently in natural science and humanities-arts than in all other registers.

9. Cf. Regenbogen (1930, p. 131): in similes "ein Vorgang nicht anschaulicher Art einem zweiten anschaulichen verglichen wird dergestalt, daß der erste durch den zweiten eine besondere Beleuchtung empfängt".

instances.[10] They are, therefore, more familiar and concrete situations from which the author infers or/and corroborates his theories on more abstract and obscure processes. This often leads the author to reproduce the process that, according to him, governs the physiological system, by means of an *ad hoc* homemade mechanism comparable to a rudimentary experiment. In these cases, medical metaphors become part of a heuristic method of enquiry in which the comparison is taken both/either as an item of evidence from which we can infer a general theory, and/or as a demonstration of the assumed hypothesis.

In the last part of this paper, by tackling more closely the question of deliberateness in metaphor use, I will show that there are explicit claims by both the Hippocratic author and Empedocles about their intentional use of metaphor as a heuristic method of enquiry. In fact, both the Hippocratic author and Empedocles consider that, by collecting resemblances in different things, reflecting on the comparable items and reasoning by induction, the one who wishes to know can gain insights on fundamental principles governing all aspects of the physical world. This is an indication, indeed a declaration, of the author's intention to use metaphor as metaphor. In parallel, both the Hippocratic author and Empedocles require that their addressees pay attention to the source domain as a source domain. For the source domain *as such* is not only an essential part of their theoretical argumentation, but constitutes the crucial element of their enquiry: the source domain is the field in which both inference and demonstration of a given hypothesis take place.

2. Hippocratic comparisons

The use of direct metaphors in physiological and anatomical argumentation is one of the most remarkable characteristics of the Hippocratic treatises under analysis. In these texts, signals pointing to direct metaphor use are stereotypical. As I will

10. Regenbogen (1930, p. 131) speaks of a "Methode naturwissenschaftlicher Hypothesenbildung durch Analogieschlüsse" and Diller (1932, p. 14) specifies it as an "Induktionsverfahren" through analogy, which works according to the schema "Fall a b c ergeben ein analoges Resultat – alle Fälle mit analogen Voraussetzungen ergeben dasselbe Resultat." Moreover, Diller distinguishes medical and philosophical metaphors according to whether their function is analogic or semiotic. The distinction rests upon the difference between "Parallelen (Analogien)" and "Zeichen", which Diller (1932, pp. 19–20) explains as follows: "Den Unterschied zwischen Analogon und Zeichen fasse ich dabei so, daß jenes eine ausgeführte Parallele gibt, die das Sosein eines unbekannten Vorgangs oder Zustandes an einem sichtbaren klarmacht, während das Zeichen das Dasein eines unbekannten Vorgangs oder Zustandes anzeigt (‚indiziert')."

indicate in the footnotes for each metaphor instance I examine, the Hippocratic author usually constructs his comparisons in three steps: (a) an initial claim stating the general hypothesis; (b) the description of the source domain; and (c) a conclusion that makes explicit the elements of the target domain and their cross-domain mapping with the corresponding elements of the source domain. The source domain is often introduced by lexical signals, such as *hōsper* ('like' or 'as'), either alone or in expressions such as *hōsper ei…* and *hōsper kai…* ('as if…') and *echei houtōs hōsper ei…* ('it is as if…'). The target domain is usually marked by expressions that sum up and make explicit the comparison. These include the term *houtō*, either in the compound word *hōsautōs* ('in the same way'), or in expressions such as *houtō kai*, *houtō dē kai* ('so, in the same way') and *houtō de echei kai…* or the analogous *houtōs de echei kai* ('and this is how it is with … too').[11] Clearly these textual signals are markers of direct metaphors and, according to DMT, of deliberate metaphor use, as direct metaphors are always deliberate (Steen, 2011a, p. 13).

There are altogether 29 comparisons distributed along the three treatises. Some are very short, comprised of just a clause; for instance, a membrane takes a shape like a crust upon a bread when heated (*On the Nature of the Child* 12.6 = VII 488.15 Li.) or the bones branch like trees (*On the Nature of the Child* 17.2 = VII 498.3 Li.). In most cases, these comparisons are further elaborated, while in one case the analogy covers several chapters (see the botanical excursus in *On the Nature of the Child* 22–27 = VII 514–529 Li.). Objects of comparison employed by the Hippocratic author are very common items or processes belonging to everyday experiences. We can say that, as a rule, the first aim of these kinds of metaphors is to bring things vividly and concretely before the eyes of the listeners or readers (Regenbogen, 1930; Diller, 1932; Lonie, 1981). However, there is much more than just illustration in the metaphoric use of the Hippocratic author.

For instance, in Chapter 4.2 of *On Generation* (VII 475–476 Li.), the author claims that female pleasure ceases when the man ejaculates into her womb as the result of a process of cooling down. In order to explain the principles regulating female pleasure during ejaculation, the author recurs to a comparison with a more concrete and familiar process, which anyone could experience in a kitchen: if into boiling water you pour another quantity of cold water, the water stops boiling. In the same way,[12] the man's sperm, when it reaches the female womb, extinguishes

11. The stylistic formulation of the Hippocratic comparison can be traced back to the Homeric similes: see Diller (1932, pp. 14–15 n. 2 and pp. 48–49) and Lloyd (1966, pp. 190–192).

12. *echei houtōs hōsper ei…* ('it is as if…'): VII, 475 Li. The formula is later picked up by the expression *houtō kai* ('so, in the same way'), which sums up the analogy and makes clear what each element in the comparisons corresponds to in the physiological claim.

both the heat and the pleasure of the woman. The validity of this comparison rests on the assumption that the female womb is heated during intercourse and that (male) semen is a liquid substance. Accordingly, sperm is mapped with cold water, whereas the inside of the female womb, where the female pleasure takes place, is mapped with boiling water.

Analogously, immediately after this comparison and in order to depict a process akin to this, the author compares the male's sperm to another liquid, wine (cf. VII 476 Li). Here the author claims that the woman's pleasure during intercourse reaches its climax simultaneously with the arrival of the sperm in her womb and then it ceases. Another comparison follows in order to illustrate this general claim. If you pour wine on a flame, the flame first flares up and increases for a short period before it dies away. In the same way,[13] the woman's heat flares up in response to the man's sperm, and then dies away. Thus, whereas sperm is here mapped to another liquid substance, wine, woman's pleasure is mapped to a flame, presumably on the assumption that pleasure during intercourse causes heat in the womb. As we can see, both comparisons are presented in order to illustrate an invisible process taking place in the interior of the body. Accordingly, the source domain is presented as the situation that makes the process in the body visible. The mapping between the source and the target domains rests upon some apparently comparable elements, such as the liquid form of both water and sperm, as well as the hot nature of boiling water and the womb. However, I would contend that the comparison is also justified by the belief that source and target domains are governed by the same natural principles and work according to the same natural laws. In this respect, the same principles that cool down a hot liquid substance or cause a source of heat to flare up (e.g. fire) work in the same way in every situation in which there are comparable conditions.

In *On the Nature of the Child* 12.6 (= VII, 488 Li.), the author compares the membranes encompassing the seed with the crust of bread. Accordingly, the female womb is here compared to an oven in which the seed is heated. What happens to the seed in the womb, consequently, is analogous to baking. Specifically, it is claimed that the seed forms a membrane around itself when it inflates with air

> in the same way (*hōsper*) as a thin membrane[14] is formed on the surface of bread when it is being baked: the bread rises as it grows warm and inflates, and as it is inflated, so the membranous surface forms. In the case of the seed, as it becomes heated and inflated, the membrane forms over the whole of its surface. (VII, 488 Li.)

13. *hōsper ei* (476) introduces the source domain and is picked up by *hōsautōs* ('in the same way') in the final summary introducing the target domain.

14. The word is *hymenoeides*, which literally means 'like (-*eides*) a membrane'.

The mapping of an oven to the female womb rests upon the belief that the maternal uterus is hot. Moreover, the analogy between the crust of a baked loaf of bread and the membrane of the seed conveys a vivid illustration that uses familiar images to represent invisible phenomena. However, in this specific case the metaphor is not mere illustration: the conditions that enable an oven to work (the quantitative relationship between heat and inflated air) are similarly reproduced in the womb, as here too, according to our author, we can find heat and inflated air. Because of this, the cases of the bread's crust and the seed's membrane are not merely comparable, but yield evidence of the same natural principles.

In Chapter 9 of *On Generation* (VII, 482–483 Li.), the author claims that the space in the womb determines the size of the embryo. Specifically, children may be born undersized if the space in the female womb is narrow, as small wombs do not give the embryo enough space to develop. To elucidate this claim, the author provides the first of a great number of botanical analogies. The embryo is compared to a cucumber that grows in a narrow vessel. As anyone could see, the cucumber will grow to a size and shape equal to the inside of the vessel. Yet if the cucumber is put in a larger container, it will grow to a size and shape equal to the interior of this new vessel. From this observation, the author infers a general law: in its growth the cucumber attempts to rival the space in which it grows. "It is the same with the child:[15] if he has plenty of space during his period of growth, he becomes larger; whereas if the space is confined, he will be smaller".[16]

In the following Chapter (VII, 484 Li.), deformity of the newborn is clarified through a cognate botanical simile. Specifically, deformity is explained as the result of the embryo's movement in the womb, impeded by constrictions in the region of the womb that corresponds to the part in which the embryo is deformed. An analogous thing happens to trees that are obstructed by a stone or similar impediments in the earth. "They grow up twisted, or thick in some places and slender in others, and this is what happens to the child too, if one part of the womb constricts some part of the child's body more than another".[17]

The comparison between embryological and plant growth rests upon a conceptual mapping that was entrenched in ancient cultures. Traditionally, the first human beings were thought to emerge from the earth, like plants, a *topos* for earlier agricultural communities, among which early Greece was no exception.

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15. *Houtō de echei kai tōi paidiōi* (VII, 483 Li.).

16. *echei de houtōs hōsper ei…* ('it is as if…') in the source domain, picked up by *houtō de echei kai* in the target domain.

17. *hōsper kai…* ('as if…') in the source domain; *houtō de echei kai…* ('the same happens also…') in the target domain.

Indeed, Greek mythology describes the very first ancestors of humanity arising from the earth, for instance in the myth of Cadmus and the *spartoi* or in the belief that the earlier inhabitants of Greece were called Pelasgi, who sprang from the soil. The Giants too were believed to have been born from the earth.[18] Subsequent development of this traditional belief may have resulted in the conceptual mapping between the female womb and the earth.[19] This mapping is at work here and, above all, in the botanical excursus the author proposes in *On the Nature of the Child* 24–27 (= VII, 514–529 Li). This is a remarkable example of the author's tendency to use comparison in physiological argumentation and, consequently, to implement deliberate metaphor. What encourages the botanical comparison here is the question of how the embryo receives nourishment from the mother. Given that the maternal womb is for the embryo what the earth is for a plant and that, subsequently, botanical and embryological growth are comparable, the embryo receives nourishment from the womb just as a plant does from the earth.[20] Subsequently,

> nutrition and growth depend on what arrives from the mother into her womb; and the health or disease of the child is relative to that of the mother. In just the same way,[21] plants growing out of the earth receive their nutriment from the earth and the condition of the plant depends on the condition of the earth in which it grows. (VII, 514 Li.)

Note that, in *Diseases* IV. 33.3ff. (VII, 545ff. Li.), the same botanical comparison is employed to explain the very provision of nourishment to the (adult) body. Specifically, the author illustrates that each of the four humours attracts its like, that is,

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18. Eur. *Phoen*. 638 ff. and Ovid, *Met*. 3. 106 ff. For the Giants born from the earth, cf. Hes. *Theog*. 185. See Guthrie (1957, pp. 11–28).

19. Aetius (5.26.4 = DK 31 A 70) reports that Empedocles related the female uterus to the earth because both are the sources of life for living beings: the earth for trees, plants and for the first animals and the uterus for the embryo.

20. See also Aristotle, *GA* 2.4.740a 24–27: the embryo makes use of the uterus, that is, of the mother who retains it, just as a plant makes use of the earth, in order to get nourishment. Later on, in 740b 8–10, the embryo is described as drawing its nourishment through the umbilicus, as a plant does through its roots.

21. *hōsper kai…* introduces the source domain. In Chapter 27 (VII, 529 Li.) the author sums up the long comparison by saying: "Now I shall return to the point in my account for the sake of which I have explained these things". Subsequently, he introduces the target domain by the standard expression *houtō kai* ('in the same way'), then he concludes his discourse by claiming that "If anyone wishes to reflect upon what I have said concerning these topics from beginning to end, he will discover that the growth of things out of the earth and human growth *are nearly resembling* (*paraplēsiēn*)".

homologous substances from food in the stomach, and distributes them, through the veins, to the body. The author clarifies that it occurs

> just as (*hōsper*) in the case of plants each kind of humour attracts its like. For the earth contains innumerable virtues of all kinds, for it provides every individual plant which grows in it with a humour similar to the humour which each plant possesses congenitally and which is akin to that plant – so that plant draws from the earth nutriment such as the plant itself. (VII, 545ff. Li.)

It follows that the rose draws from the earth only that which is akin to its rose-humour, the garlic that which is akin to its garlic-humour and so on, "and each and every plant draws from the earth according to its own nature." Thus, the human stomach is compared to earth on the basis that it gathers nutriment for the body just like the earth gathers nutrition for plants. The inference is that, given that the four humours are congenital to human nature and the body (since, according to our author, our body contains the four humours), each draws from nutriment in the stomach according to its nature (as the rose draws from the earth only the rose-humour). For instance, phlegm will draw phlegmatic substances from the food, whereas blood will draw sanguineous substances, etc.[22]

However, in the botanical excursus in *On the Nature of the Child* and above all in Chapters 24 and 25 (VII, 519–526 Li.), the comparison between plants and humans is not confined to nutrition and to what pertains to nutrition, but extends to the whole process of growth (*tēn physin pāsan*: cf. Chapter 27). This suggests that "the author has a more comprehensive analogy in mind than the particular one from which he begins" (Lonie, 1981, p. 212). Yet it is not clear how each detail concerning the plant's growth corresponds to the embryo's growth and the excursus, therefore, is to be taken, ultimately, in general terms. Moreover,

> The plant excursus is not analogical in the sense of the argument from the seen to the unseen: the botanical processes are in any cases themselves "unseen". But these chapters are not merely a decorative illustration either. They are included because of their tendency to confirm: they show that the same sort of explanation can be successfully applied in different provinces of nature. (Lonie, 1981, p. 213)

Thus, these chapters are an indication of one of the ways in which analogy was used in scientific argumentation. Besides being illustrations of obscure processes, comparisons yield evidence of more general and universal natural principles

22. Note that the author, at the end of the Chapter (VII, 548 Li.), also explains that this is possible because food, in particular that of vegetable origin, contains substances akin to the four bodily humours. In fact, food draws such substances from the earth. This entails that the comparison between plants' and human beings' nutrition also rests on the same origin of nutriment from the earth.

governing comparable cases and phenomena. In virtue of this, they can be collected in order to corroborate the initial hypothesis. For this reason, "the analogy as an argument from the unseen to the seen tends to lose its force in proportion as both processes can be explained by the same principles" (Lonie, 1981, p. 213).

To summarise, anatomical parts of the body or physiological processes can be compared with observable and familiar things and processes by virtue of the resemblance of some or all of their characteristics. This is part of a particular "Untersuchungsmethode" (Regenbogen, 1930, p. 138), a methodological tendency of the author to gain insight, by means of observable phenomena, into the "unseen" processes of the body. As internal body parts and invisible physiological processes cannot be directly observed, the comparison with concrete and familiar things is a way to illuminate the invisible process and make it comprehensible. Yet, all comparisons analysed in this section are more than examples of illustration. Conceptual mappings underlying the medical analogies rest upon the general assumption that the physical universe is ultimately governed by the same natural principles. For this reason, once we explain the principles governing a visible phenomenon, we obtain in parallel a model that is able to explain all comparable cases. Therefore, the observation of different yet comparable cases provides us with evidence from which we can infer hypotheses about the functioning of the body. In parallel, the resemblance between invisible and visible processes is also a sign of universal principles governing both processes.

2.1 Borderline cases

The difference between the examples analysed in the previous sections and those I will present here rests on the fact that in the latter the source domain has the aspect of a rudimentary experiment, created *ad hoc* in order to reproduce artificially a certain process and demonstrate, thereby, the assumed hypothesis. In other words, in the examples in this section, resemblance between elements is not only observed but also 'unnaturally' replicated. I would argue that they can be taken as examples of deliberate use – that is, they display to a certain extent both the author's intention to use, indeed to create, a source domain in order to explain his target, and the addressee's attention to it as a source domain. However, I will leave open the question of whether they can be analysed as instantiations of direct metaphor use.[23] Be that as it may, it is worth noting that the main communicative

23. In other words, I am not sure to what extent these "experiments" can be considered as metaphors in the first place. Whereas I do not endorse a clear position on this, Cameron (2003, p. 74) suggests that we should include any comparison that is not obviously non-metaphorical. As Herrmann (2013, p. 105) emphasises, "Whenever two concepts are compared and they can be constructed, in context, as somehow belonging to two distinct and contrasted domains, the

purpose they display is not only to illustrate, but also, and above all, "to confirm the consequent hypothesis (if A, then B; but B, therefore A)" (Lonie, 1981, p. 72). They function, therefore, as demonstrations of a given theory: they are meant "to emphasise the *possibility* of a process occurring as well as to illustrate the nature of the occurrence. It is something between an illustration and a *historion, evidence*".[24]

In Chapter 21.2–3 of *On the Nature of the Child* (VII, 512 Li.), the author claims that lactation is the consequence of the pressure of the womb against the woman's stomach, which squeezes out the fattiest part in or of the stomach into the omentum and the flesh. This eventually becomes milk. In order to illustrate this process, the author puts forward an easily reproducible procedure. He asserts that

> [T]he process is the same as when you smear a hide with large quantities of oil and, after giving the hide time to absorb the oil, you squeeze it, and the oil oozes out again under pressure. In exactly the same way, the stomach, containing the fatty portions of food and drink, percolates the fat into the omentum and the flesh, under the pressure of the womb.[25]

The analogy works on the assumption that milk is a residual substance deriving from the fattiest part of food and drink. In the comparison, therefore: the hide maps to the stomach, or more precisely, to its outermost part, the omentum; the "you" squeezing the hide maps to the womb squeezing the stomach; and the oil maps to the residual and fattiest part of food and drink (milk) that passes into the stomach. Thus, the author argues that lactation occurs by means of a pressure on fatty substances and claims to illustrate his hypothesis by a rudimentary procedure: as oil oozes out under pressure, for the same reason, milk will eventually ooze out too from the woman.

In Chapter 6 of *On Generation* (VII, 478 Li.), the author deals with the sexual differentiation of the newborn. Given that the seed has both male and female forms – the male form being stronger than the female form – the sex of the newborn is the result of the prevalence of one form over the other in the womb. This means that, if the weak sperm is much greater in quantity than the stronger sperm,

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comparison should be seen as expressing a cross-domain mapping." Moreover, as has long been noted, the ancestor of these "experiments" is the Homeric simile (see above all Lloyd, 1966, pp. 183–92). Also, as I have indicated for each case in the footnotes, the stereotyped terminology employed to introduce both the source and the target domain in the various cases of "experiments" resembles that used by the Hippocratic author in other more unambiguous cases of metaphor use analysed above.

24. See Lonie (1981, p. 135; author's emphasis).

25. In the Greek text, the source domain of the comparison is introduced by the standard expression *hōsper … ei* while the target domain is introduced by *houtō dē kai*.

the stronger sperm is overwhelmed and results in a female. If, on the contrary, the stronger sperm is greater in quantity than the weaker sperm, and the weak sperm is overwhelmed, it results in a male. At this point, the author adds a comparison with the process of mixing beeswax with suet, using a larger quantity of suet than beeswax. When melted together over a fire and the mixture is still fluid, we see that the prevailing character of the mixture is not apparent. After it solidifies, however, we can see that the suet prevails over the wax. Just the same occurs – the author concludes – with the male and female forms of sperm.[26]

It is noteworthy that the source domain of the comparison coincides with a process created *ad hoc* by the author in order to artificially reproduce the supposed condition of the maternal womb. Beeswax and suet represent the two forms of sperm. Fire serves to recreate the heat in the womb. The solidified product represents the newborn. The observation of the *ad-hoc*-made process renders evident that, even though in the hot cauldron one substance prevails over the other from the beginning, differentiation between the two substances is imperceptible in the hot and fluid mixture, and only shows itself in the solid form. Analogously, we may infer that the sex of the newborn is a sign of the prevalence of a certain form of sperm over the other from the very beginning of conception. Thus, as the author claims to have recreated the condition of the maternal womb in his cauldron, he can conclude that each inference from the physical process occurring in the cauldron applies to the process of sexual differentiation in the maternal womb.

In *Disease IV* 49.3 (VII, 581 Li.), the author aims to explain fever as a departure from the body of a certain amount of watery humour. The enounced theory rests on the fundamental and unanimously accepted premise that health results from a balance among the bodily humours. Disease, consequently, is caused by lack of balance in the humoral mixture. Accordingly, the particular imbalance caused by fever results from evaporation, hence from the departure of a certain amount of watery humour from the body. Evaporation occurs because fever is taken as a kind of burning for the body, as the Greek word indicates. The Greek word for 'fever' is *pyr*, which means 'fire'. In the chapter under discussion, the author explains that during a fever the watery humour evaporates from the body, which is then left unbalanced by the oily and light substance remaining.

In order to illustrate what happens to a feverish body, the author suggests the reproduction of a homemade apparatus, by pouring water and oil into a bronze

26. The source domain of the comparison is introduced by the formula *hōsper ei* ('it is just as if') and concluded by the expression *houtōs de echei kai* ('and this is how it is with … too'), which introduces the target domain. These kinds of expressions resemble those mentioned in all other cases of metaphor use already analysed.

cauldron and burning a large fire under it for a long time. The amount of the water decreases considerably, by evaporating from the vessel, while the oil decreases by only a small amount.[27] "So it is with man too".[28] The apparatus is presented as a source domain mapping to the feverish body in order to explain the process of imbalance caused by fever. Indeed, it is made *with the purpose to reproduce* the condition of the target domain, the feverish body. The mapping between single elements in the two domains is precise enough: the cauldron maps to the body, fire maps to fever, water in the cauldron maps to the watery humour in the body and oil in the cauldron maps to the oily humours in the body. However, despite his effort to reproduce the body artificially in order to explain fever, the author does not aim to be accurate. In fact, a more exact experiment would have benefited from putting four different liquids in the cauldron, rather than the two used, as there are four humours in the body. This shows that the author does not want to lead a "scientific" experiment, but just aims to establish general, superficial resemblances that can somehow demonstrate his initial hypothesis.

However, a homemade mechanism that aims to artificially reproduce the condition of the body in a more accurate way is presented in Chapter 17 of *On the Nature of the Child* (VII, 499 Li.). This chapter focuses on how the embryo grows organically, by virtue of respiration, as breath is able to separate and distinguish limbs from the growing flesh. In fact, as soon as flesh becomes filled with air, limbs separate "according to their various affinities"; that is, according to the principle of like to like.[29] In order to illustrate how this could happen, the author puts forward a sort of experiment, which consists in a particular use of a simple apparatus.[30]

> Suppose you were to tie a bladder on to the end of a pipe, and insert through the pipe earth, sand and fine filings of lead. Now pour in water, and blow through the pipe. First of all, the ingredients will be thoroughly mixed up with the water, but after you have blown for a time, the lead will move towards the lead, the sand towards the sand, and the earth towards the earth. Now allow the ingredients to dry out and examine them by cutting around the bladder: you will find that like ingredients have gone to join like. Now the seed, or rather the flesh, is separated into members by precisely the same process, with like going to join like.[31]

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27. In the Greek text the source domain of the comparison is introduced by *hōsper ei tis*.

28. *Houtō de kai en tōi anthropōi…* (VII, 580 Li.)

29. On the principle of like to like see Müller (1965).

30. According to Lonie 1981: 184, the apparatus corresponds to a douche or enema, such as is described in *Mul.* II 131 = VIII 278.16 Li., used in gynaecological practice.

31. The comparison is introduced by a *gar*, in the expression *kai gar ei thelois* ('for if you wanted…'), which indicates that the analogy is given as explanation of the theory. In

In this particular case, we can appreciate the close correspondence of theory and demonstration and the accuracy of the author in the construction of the rudimentary apparatus. The mapping between elements of the source domain to corresponding elements of the target domain is striking. The bladder represents the membrane of the embryo, the pipe the umbilicus; water corresponds to the fluid form of the semen in the womb, whereas the three ingredients represent different particles of the semen. Blowing reproduces embryonic respiration, whereas the process of drying represents the solidification of the embryo. Moreover, as in the embryo, in the homemade apparatus, the movement of like to like is not spontaneous but results from the action of blowing, hence by means of breath (Müller, 1965, pp. 117–118). Thus, the author creates in his own laboratory an artificial mechanism with the intention of replicating the same condition he supposes for an embryo in the womb. Thereby, he aims to reproduce (and make visible) the process of like to like, which, in his view, brings about organic growth of the embryo. It is fair to say that we are not that far from more modern forms of experiment.

A different category of experiment is represented by the author's comparison between a human and a chick embryo in Chapter 29 of *On the Nature of the Child* (VII, 530–531 Li.). The experiment itself became famous. In fact, it was subsequently carried out by Aristotle (GA 3.2 and HA 6.3) and by modern observers from the 16th century onwards (Needham, 1959, pp. 83–90 and pp. 113–122). It involves the observation of twenty or more eggs over a period of twenty or more days: every day the physician breaks one egg and observes its content. In this way, the development of the chick embryo can be observed during the whole period of its incubation.

The rationale behind this experiment rests upon the assumption that the development of a chick embryo can give us insight into the development of a human embryo. In fact, the chick embryo is believed to be comparable to a human embryo. This belief rests upon the author's fortuitous observation of an aborted six-day old embryo (VII, 490–492 Li.). Specifically, he observed that the aborted embryo was like a raw egg from which someone had removed the shell "so that the fluid inside showed through the inner membrane". In other words, the author establishes a deliberate comparison (and a conceptual cross-domain mapping) on the basis of observed resemblances: a human embryo is like a raw egg or, which is the same, like a chick embryo.[32] It is this resemblance, hence this

conclusion, the target domain is directly introduced by the usual wording *houtō dē kai*…, that is, 'in this same way (the seed and flesh are articulated…)'.

32. Lonie (1981, p. 159). At pp. 160–161 Lonie raises the question of how honest this claim to observation was. Actually, there are similar passages in other Hippocratic treatises in which

direct comparison, that permits the chick and human embryo to be compared in all phases of their development. It is a direct metaphor (the aborted six-day-old embryo is like a raw egg deprived of its shell), therefore, that lays the foundation of, and bestows validity to, the experiment.

Are these cases of metaphor use? I must admit that I cannot clearly answer this question.[33] On the one hand, the mapping between, for instance, the feverish body and the cauldron or the female womb and the bladder with a pipe, or even the chick and the human embryo may be taken as cases in which the source domain is used in a literal, if comparative, sense.[34] In other words, organs' differentiation in the embryo by means of breath is not really talked about in terms of a bladder filled with water and inflated by blowing. Rather, the bladder is the place in which the process of like to like, which is at work in organs' differentiation in the embryo, is reproduced, observed and then applied to a physiological phenomenon.

On the other hand, it is worth noting that these 'borderline' cases of comparison are astonishingly similar to the other, less controversial, examples of direct metaphor use analysed in the previous section. First, like the previous metaphors, the borderline cases can also be described in terms of a conceptual cross-domain mapping of a more familiar, concrete and visible source domain with a less familiar, abstract and obscure target domain. Second, lexical signals introducing the borderline cases match those introducing less difficult metaphors. In fact, the syntactical construction of the borderline examples is as stereotypical as in the metaphors analysed in the previous section: the source domains are introduced by formulae such as *hōsper ei*, *hōsper ei tis* ('it is just as if') and *kai gar ei thelois* ('for if you wanted…'), whereas the target domains are picked up by formulae such as *houtōs de echei kai* ('and this is how it is with … too') and *houtō dē kai*. These kinds of expressions resemble those already mentioned in all other cases of metaphor use previously analysed (Regenbogen, 1930, pp. 176–178; Diller, 1932, p. 15 n. 2). There, we considered them as lexical signals marking direct, and therefore, deliberate, metaphor use. Third, as we shall see hereafter, these borderline examples

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the author is surely lying (such as *Carn*. 19.1; 20.3–18 De. = VIII, 608.22–610.16 Li.). Moreover, whatever the author may have seen, what he describes cannot be a human embryo at the end of six days. As Lonie (1981, 161) wrote, "The most important point, however, is that we allow the author to have seen something, and to have made an honest attempt at describing it. If this is in fact so – and the passage gives one the impression of honesty – then the relation between theory and observation in Chapter 12–29 is of great significance for early Greek science".

33. But see n. 23 above.

34. I thank the editors of this volume for having suggested this reflection.

do not seem to differ that much from Empedocles' similes, whose metaphorical character has never been questioned.

3. Two famous comparisons by Empedocles

The first Empedoclean simile runs as follows:[35]

> Just as when, thinking of setting forth, someone builds a lamp
> A gleam of bright fire across the stormy night,
> Assembling a lamp-case to protect it against all kinds of winds,
> Which scatters the breath of blowing winds
> While the light, leaping outward as far as possible,
> Shines beyond the threshold with its unyielding rays –
> In the same way, the ancient fire, confined in membranes and delicate linens,
> Lay in wait for the round-eyed maiden (i.e. the pupil):
> These protected it against the depth of water flowing around,
> While the fire gushed through outward as far as possible.
> (transl. Laks & Most 2016, slightly modified)

In order to illustrate the composition and probably also the functioning of the eye, Empedocles recurs to a direct metaphor, indeed to a simile involving a lamp that someone prepares when thinking of setting forth on a stormy night. The cross-domain mapping between the lamp and the eye is emphasised by the formal structure of the fragment (Lloyd, 1966, p. 326). The source domain (the lamp) is introduced by the expression *hōs d' hote* in l.1 ('as when') and is picked up by the expression *hōs de tot(e)* ('in the same way') in l.7, which introduces the target domain (the eye). The style is, as has been noted, Homeric in the main: indeed, there are many elaborated comparisons in Homer that are constructed in the same way (Diller, 1932, pp. 14–15 n. 2 and pp. 48–49; Lloyd, 1966, pp. 190–192).

Prima facie, the comparison with the lamp draws our attention especially to the element of fire, which is essential for the functioning of the lamp and, as

35. In the edition of the pre-Socratics by Diels-Kranz (1951), which is still the edition of reference for pre-Socratic philosophy, the fragment is classified as DK 31 B 84. Here, I have transcribed the translation of the fragment given by Laks and Most in their edition of early Greek philosophy (2016) (except for minor variations), intending thereby to endorse the various interpretations of lexical choices implied therein. For a discussion of the fragment, see Lloyd (1966, pp. 325–327) and O'Brien (1970, esp. pp. 140–146; 157–159 for an earlier bibliography on Empedocles' theory of vision and pp. 160–166 for doxographical evidence for Empedocles' theory of vision and for the composition and function of membranes). See also Sedley (1992) and Wright (1995, pp. 244–248). More recently, see Rashed (2018, Chapter 4).

Empedocles argues, constitutive of the eye.[36] Empedocles' words highlight that fire works in the same way both in the lamp and in the eye: at l.5 it is said that from the lamp a "light" shines beyond the threshold, "leaping *outward as far as possible*". In l.10, analogously, "fire" in the eye "gushed through *outward as far as possible*". This may suggest that Empedocles had a theory of vision according to which fire in the eye works in a way comparable to fire in the lamp, namely as a light escaping the body to illuminate the environment.[37] The ocular light may in theory have an active function in vision, as Plato's theory of vision demonstrates.[38] Accordingly, it could be argued that, in Empedocles' theory of vision, just like in Plato's, the visual light functions as a ray which collects the information radiating from the object and then returns through the pupil into the sensitive part of the eye, where it forms an image in the mind.[39]

However, Theophrastus ascribes to Empedocles a theory of vision according to which effluences from the outside enter the eye through channels. In fact, it is the processing of those effluences entering the eye-channels that provides vision. In this context, no hint is made to internal fire irradiating from the eye in order to obtain vision.[40] For this reason, scholars argue that the analogy with the lamp is only provided to illustrate the composition of the eye, and specifically the role of membranes in it, rather than the working of fire in vision.[41] Accordingly, membranes in the eye function in the same way as the lamp-case. The lamp-case

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36. That the eye contains fire is a traditional belief, see O'Brien (1970, pp. 144–145).

37. Several scholars have advocated this interpretation of Empedocles' theory of vision: cf. the extensive and accurate bibliography quoted by O'Brien (1970, pp. 157–159). This paper (p. 146), however, convincingly rejects this reconstruction: "My conclusion therefore is that flowing from the eye is explicable as the product of a chance conjunction of circumstances: first, Aristotle's polemical absorption with the notion of fire leaving the eye; secondly, a highly elaborated simile in Empedocles describing *inter alia* outward-flowing fire, and, from Aristotle's point of view, somewhat loosely applied to its purpose; and, finally, Plato's extension of Empedocles' theory, precisely to include outward-flowing fire as an integral factor in the act of vision. The true purpose of Empedocles' image, I suggest, is simply to describe the composition and structure of the eye." To the question of why fire should flow out of the eye if not for enabling vision, O'Brien apparently gives no answer.

38. According to Plato, vision occurs when fire that leaves the eye joins fire outside and forms with it a compacted body, along which movements from the visible object are communicated as sensations to the eye; see *Tim*. 45b–46c, cf. 31b and 67c–68d.

39. See David Park, as cited by Rudolph (2015, p. 45), who summarises the general consensus of scholars advocating a function of the visual ray in Empedocles' theory of vision.

40. On Empedocles' theory of effluences and *poroi* responsible for vision see Theophr. *Sens*. 7.

41. See above all O'Brien (1970, p. 146).

protects the contents of the lamp – fire – in the same way that eye membranes protect fire from water. It is worth noting that this interpretation is supported by the image of the stormy night, as we construct a lamp-case only when we need to protect our lamp from stormy winds. Thus, the image of stormy winds in the night highlights the protective function of the lamp-case, and emphasises that the membranes of the eye have the same function.

Yet Empedocles uses the repetition of an almost identical line in l.5 (source domain) and in l.10 (target domain): as the lamp-case allows light to gush outward (l.5), in the same way eye membranes allow fire to gush outward (l.10). This particular element of comparison suggests that Empedocles' simile aims to emphasise not only the function of the membranes in the eye, but also that of fire in vision. It is worth noting that the repetition of almost identical words in the source and in the target domain is a signal drawing attention to the element of light in the source domain, which maps to fire in the eye.

For this reason, I would argue that Empedocles emphasises the correspondence between light in the lamp and fire in the eye. However, their respective "gushing outward" may not indicate (either in the source or target domain) an illuminating ray necessary to acquire vision. In the Empedoclean description of the source domain there is no explicit reference to the subject's acquired possibility to see the environment thanks to the lamp, although this aspect could be easily inferred from the situation depicted – why should someone need a lamp at night if not to see the environment? Yet the only element on which Empedocles focuses in the text is the ability of light to leap outward and *shine*. In other words, Empedocles concentrates on the bright nature of light. Nothing is said about the purpose of light to actively illuminate things. Accordingly, we might suppose that fire in the eye functions not as an illuminating ray, but as a principle that enables vision as long as it shines. Shining means, in Empedoclean terms, gushing outward as far as possible[42] and bestows to the eyes their bright, sparkling character – a character that is visibly lost when eyes are blind.

To sum up, the elements of comparison highlighted by Empedocles' simile of the lamp are intended to illustrate two essential aspects of the composition of the eye: the protective function of ocular membranes and shining fire as essential in vision. On the one hand, the description of the stormy night in the source domain

42. In 1992, D. Sedley proposed a way to reconcile the idea of ocular fire gushing outward, suggested by the Empedoclean comparison with the lamp, with the theory of *poroi* and effluences, reported by Theophrastus. Sedley argued that Empedocles located the seeing process at the surface of the eye, where the lachrymal fluid (that is, water) outside the eye, and fire inside the eye, by gushing outward, coalesce.

emphasises the need to construct a lamp-case in order to protect the lamp's fire from winds. Analogously in the target domain, ocular membranes are necessary to protect the internal fire from water. On the other hand, Empedocles focuses on the similar behaviour of fire in both the source and target domain. In both the lamp and the eye, fire "leaps outward as far as possible". Here the emphasis is not on the illuminating force of the lamp's fire, which enables vision in the night. Rather, the focus is on the shining nature of fire, which bestows to the eyes their sparkling character – a character that enables vision and is visibly lost when eyes are blind.

The second Empedoclean metaphor is constituted of a comparison between the process of breathing and another familiar object, the clepsydra (DK 31 B 100).[43] The fragment is quoted in its entirety by Aristotle in his work *On Breath* 473a15–474a6 and is introduced by Aristotle's summary of Empedocles' theory on breathing:

> Empedocles says that inhalation and exhalation are due to the existence of certain veins which contain blood, but which are not full of blood, and have pores which reach the external air, smaller than the parts of blood but larger than those of air. Hence, since blood is naturally disposed to move up and down, when it goes down air flows in and inhalation occurs, but when it goes up air is expelled and exhalation occurs.

Thus, respiration is due to the opposite movement of blood and air through channels in the body or "veins". When blood goes down to reach the most internal part of the body, air can come into the body from outside (inhalation). When blood goes up to reach the periphery of the body, air rushes outside (exhalation). In order to elucidate this theory, Empedocles establishes a vivid comparison:

> Just as when a child
> Plays with a clepsydra of handy copper:
> When she places the opening of the pipe against her well-formed hand
> And dips it into the delicate body of silvery water,
> Liquid no longer enters in the container, but it is prevented from doing so
> By the mass of air falling from inside upon the dense holes,
> As long as she restrains the thick flow [of air, C.F.]; but then,
> When the breath is lacking water enters in the predetermined amount.
> In the same way, when she keeps the water in the depths of the copper vessel,
> Blocking with her mortal skin the opening and the passage,

43. The clepsydra is, according to the definition by Wright (1995, p. 247), "a common household contrivance used for transferring small amounts of liquid from one container to another, and perhaps for measuring. It had a narrow opening at the top, which could be plugged by hand, and a perforated base".

The air outside, desiring to come inside, repels the liquid
Around the gates of the dull-sounding sieve, dominating the surface,
Until she lets go with her hand, then again inversely, in reverse of earlier,
The breath now falling into it, the water runs out in the destined amount.
In the same way the delicate blood, trembling through the limbs,
When, turning back, it leaps toward the nooks inside,
At once the flow of air pursues it, rushing in its surge,
But when it leaps back, it exhales again, in the same amount, backward.

Like in the simile of the lamp, in this comparison too, the cross-domain mapping between the clepsydra and the process of respiration is emphasised by the formal structure of the fragment. Like in the simile of the lamp, moreover, here as well, syntactic structure, style and language of the comparison are Homeric in the main.[44] The source domain is introduced by *hōsper hotan* ('just as when') at l.8. The target domain is indicated through the lexical signal *hōs d'autōs* ('in the same way'). Moreover, the whole description displays textual resemblances between lines depicting the source domain and lines belonging to the target domain, emphasising the comparison between the two domains. Thus, for example, *eute de* at l.25 (and already in l.7: target domain) resembles *eute men* at l.10 (source domain) and *hōs d'autōs* at l.16 (source domain) parallels the same expression in l.22 (target domain). Furthermore, the use of analogous terms in the source and the target domain is meant to emphasise the comparison and clarify the mapping between specific elements of the two domains.[45]

Despite the several textual markers stressing elements of comparison, the interpretation of this simile is highly controversial and has been the subject of

44. Note that the structure of this particular simile is also very similar to the Hippocratic comparisons. As we have seen in Section 2, the structure of the Hippocratic comparisons is stereotypical: there is an initial claim introducing the general hypothesis, followed by the description of the source domain. The hypothesis is picked up once more at the last part of the passage, in which the cross-domain mapping between elements of the source and the target domain are made explicit. Analogously, in the comparison of the clepsydra, Empedocles first presents his general theory of respiration (through ll.1–8, which I have not quoted here). After this, the description of the source domain follows (the girl playing with the clepsydra) and, finally, through the last four lines, Empedocles returns to the account of the target domain by picking up the initial hypothesis.

45. For instance, the same neutral form of the adjective *terēn*, *-eina*, *-en* ('delicate') is employed in the fragment to depict both the "delicate shape of water" at l.11 (*hudatos … teren demas*) and the "delicate blood" at l.22 (*teren haima*). This is a strong indication that "water" in the simile parallels "blood" in respiration, and speaks against several scholarly attempts to reconstruct the cross-domain mapping and the whole sense of the simile in a different way, see n. 47 below.

much scholarly discussion.[46] In particular, scholars generally tend to emphasise that the comparison does not hold in every respect. On the one hand, Empedocles' description of respiration is clear enough: as Aristotle reports, it consists of two processes depending on the movement of blood: (I) blood moves backwards and inwards, air enters the body from outside (inhalation); (II) blood leaps back and up, air escapes outside (exhalation). On the other hand, what happens in the clepsydra is more complex: (a) the clepsydra is dipped into water with the vent covered – water cannot enter, as it is prevented from doing so by air in the clepsydra (ll. 8–14); (b) when the vent is uncovered, air escapes from the vent, whereas water enters the clepsydra from the holes at its bottom (ll. 14–5); (c) the clepsydra is held up full of water and with the vent covered – air cannot enter it, prevented by water that is held in (ll. 16–9); and (d) when the vent is uncovered, water runs out from below the clepsydra and air enters from the vent above (ll. 20–1).

A further element causing much puzzlement is the fact that, while in respiration air comes into the body from outside and blood never leaves the body, in the clepsydra both water and air come respectively into the clepsydra from outside, and mutually leave it. Moreover, whereas in respiration it is the pressure and movement of blood that regulate the entrance and exit of air, in (a) and (c) it is the pressure exerted by air in the clepsydra that regulates the entry of water. In (b) and (d), moreover, it is the release of that pressure that determines the behaviour of the water.[47]

However, although blood does not enter or exit the body, it enters and exits the respiratory channels, which are in fact depicted as "empty of blood" at ll.1–2.[48] Through those channels, which extend from the nostrils to an inner region of the body (ll.2–4), blood (and inspired air), with an oscillatory movement, can regularly fill up and leave all organs of the respiratory system. Given that, we could assume that the clepsydra in the comparison is meant to illustrate the respiratory system, rather than the whole body. In this way, the difficulty of water/blood entering from outside or leaving the body is solved, as blood and air can be said to enter and exit the respiratory organs.

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46. See esp. Furley (1957); Timpanaro Cardini (1957, pp. 250–270); Booth (1960, pp. 10–15); Lloyd (1966, pp. 328–333); O'Brien (1970, pp. 146–154) and for an extensive bibliographical survey Wright (1995, pp. 244–248).

47. Cf. Lloyd (1966, p. 330). This has led some scholars to postulate that water in the clepsydra corresponds to air in the body, rather than to blood, which would consequently correspond to air in the comparison (see esp. Furley, Booth and Lloyd). For a criticism of this interpretation see O'Brien (1970, esp. pp. 150–154).

48. Literally, "channels empty of blood" (*liphaimoi … syrigges*).

Moreover, even though Empedocles describes inhalation and exhalation as processes resting on the pressure of blood inside the respiratory channels, common experience suggests that air can also exert a certain pressure in the lungs with consequences for normal respiration; for instance, when we hold our breath. Furthermore, even an external condition can influence normal respiration; for example, during suffocation.[49] Surely, these are conditions that contrast with the regular process of breathing. Yet, they permit us to evaluate the regular process in its entirety, since this is observed from 'original' angles: in fact, it is precisely when observing these anomalous cases that we are led to reflect on the fact that air exerts the same pressure upon blood as blood upon air and conclude, consequently, that air and blood influence their movements in a mutual way.

Moreover, in the description of the source domain, the girl playing with the clepsydra employs it abnormally. "The little girl holds the clepsydra full of air, under water, with the upper vent blocked … There would be no need to do this, if one were simply transferring liquids from one container to another" (O'Brien, 1970, p. 153). Yet this exceptional use of the clepsydra helps us observe and reflect on how far the mutual pressure of two different substances influence their behaviour. The incorrect use of the clepsydra by the girl could be an indication that Empedocles is intentionally focusing on anomalous cases both in the source and in the target domain.

I would argue that the simile of the clepsydra is meant not merely to illustrate the process of inhalation and exhalation, but rather to *reproduce* artificially the way in which two substances, mutually exerting a pressure on each other, influence their behaviours and movements in a reciprocal way. To a certain extent, we may say that the comparison describes respiration only indirectly, as its first aim is to depict the mechanical process upon which respiration rests: the mutual pressure of two substances resulting in their reciprocal and oscillatory movement.

The comparison can be divided into two parts. (I) ll.10–5 focus on the movement of water. This is not only an outside-inside movement, but also a bottom-up movement: water "climbs up" into the clepsydra, and rushes out from the holes at its bottom. This bottom-up movement and back of water reproduces the movement of blood in the respiratory organs: from the chest to the nose and from the nose to the chest. In particular ll.10–13, depicting the behaviour of water when the clepsydra is full of air (hence, water under the pressure of air), map to the behaviour of blood in the respiratory system when the chest is full of air (for instance, immediately after inhalation). As water under the pressure of air cannot climb

49. It is worth noting that the depiction of the girl blocking the upper vent of the clepsydra could suggest the image of a human mouth that is forcibly shut, as when we hold our breath.

up the clepsydra from its holes at the bottom, analogously under the pressure of inspired air blood cannot climb up the respiratory channels from the chest to the nose. However, just as air leaving the clepsydra permits the gradual entering of water ("in the predetermined amount", l.15), blood can gradually pass through the innermost holes of the respiratory channels and thereby wet all breathing organs (in an analogously predetermined amount).

On the other hand, (II) ll.16–21 focus on the outside-inside movement of air, which is also an up-down movement, since air enters and leaves the clepsydra through the upper vent. Clearly, this maps to the inside-outside and up-down movement of air during breathing: air enters through the nose or mouth and reaches the chest through the respiratory channels. In particular, ll.16-19 depict the impossibility of air entering the clepsydra when it is full of water (air under the pressure of water). In the same way, no inhalation occurs when the respiratory organs are full of blood (for instance, immediately after exhalation). The pressure of blood in the respiratory organs impedes air from entering the breathing channels through the mouth or nose. Ll.20–21, finally, depict air gradually entering the clepsydra from the vent ("in the destined amount", l. 21) when water is left to pour from the holes at the bottom of the clepsydra. In a comparable way, air enters the breathing channels through the mouth or nose and gradually reaches the chest to the degree that blood leaps backwards. Empedocles highlights that this process is mutual to the other – "then again inversely, in reverse of earlier" (l.20) – and thereby describes an oscillatory and regular movement of substances governing respiration.

It is fair to say that the general theory that two substances mutually exerting a pressure on each other influence their movements in a reciprocal and oscillatory way is *reproduced and demonstrated* by the clepsydra. It is the same case, therefore, as in the Hippocratic rudimentary experiments we analysed in the previous section. There the construction, for instance, of a homemade pipe was meant to replicate artificially the condition of the female womb and the process that, through breath, affects the embryo. Analogously, the clepsydra serves as a demonstration, and not only as a simple illustration, of the hypothesised process: the clepsydra works because two substances can exert a pressure that is able to influence the movement of those substances in a mutual way. Analogously, respiration works according to the same principle. The comparison with the clepsydra, in other words, demonstrates the *possibility* of a process occurring as well as the nature of the occurrence itself. As with the Hippocratic pipe, "it is something between an illustration and a *historion, evidence*" (Lonie, 1981, p. 135; author's emphasis). Thus, once Empedocles proved that the principle holds in the case of the clepsydra, he knew that it could hold in all other comparable cases.

4. The question of deliberateness in the Hippocratic author and in Empedocles

As we have seen in the introduction to this study, according to DMT, deliberate metaphor concerns the intentional use of metaphors as metaphors between sender and addressee. This definition implies that language users, in production or reception, draw or pay distinct attention to the source domain as a separate domain of reference (Steen, 2017a, pp. 1–2). Moreover, according to DMT, direct metaphors are always deliberate metaphors. All comparisons analysed above are cases of direct metaphors, which ensures that they are deliberate.

In the present section, I will argue that, beside the use of direct metaphors, deliberate metaphor use is also highlighted by the author's explicit statement of his methodological recourse to analogy. Specifically, in Chapter 13 of *On the Nature of the Child* (VII, 490 Li.), the Hippocratic author makes a claim to a proven theory and to a truthful account in virtue of his personal observation: "as a matter of fact I myself have seen an embryo which was aborted after remaining in the womb for six days". He then continues: "It is upon its nature (i.e. the nature of the aborted embryo), as I observed it then, that I base the rest of my inferences". Yet, the rest of his inferences are made on the basis of his observation to the extent that this suggests to our author a comparison, hence a direct cross-domain mapping between the aborted embryo and the content of an egg deprived of its shell. At the end of the Chapter, the author resumes his methodological remarks:

> Such then was the six-day embryo that I saw, and a little further on I intend to describe another observation which will give a clear insight into the subject. It will also serve as evidence for the truth of my whole argument.

The evidence is the experiment with the clutch of eggs described in Chapter 29 (VII, 530 Li.). When depicting this experiment later on, the author refers back to the promise he made in Chapter 13; that is, to describe an observation "which will make the matter as clear as is humanly possible to anyone who wishes to know." But the description of the observation coincides with the description of the chick embryo, which is then compared to the human embryo. In fact, by observing the content of the twenty or more eggs, "you will discover that the further development of the (human) foetus right through the end is just as I have revealed in my account of the protocol which I am now to expound".

To sum up, the author can say something valid about the process of growth of a human foetus by observing the development of a chick embryo. In fact, since by observation the author has previously discovered that they *resemble*, he can now conclude that what holds in the case of the chick embryo holds in the case of the human embryo too. The author's method of enquiry, in other words, rests upon a

direct and explicitly deliberate cross-domain mapping based on observed resemblances between source and target domain. However, after the description of the experiment with the twenty eggs, the author concludes by recognising the limits of his method. He declares that, once the experiment is carried out, "you will find that everything is as I have described – making allowance of course for the degree to which one can compare (*symballein*) the growth of a chicken with that of a human being". There is a reflection, therefore, on the value of direct metaphor use as a method to look into invisible things and discover natural principles.

As we can see, in Chapter 13, the author makes an explicit appeal to observation as a criterion both to develop a theory – he claims that the rest of his inferences are based on observation – and to corroborate the theory: observation is evidence for the truth of his account. In Chapter 29 the author reaffirms that observation is a criterion to gain general knowledge about a certain topic (that observation will make the growth of the foetus clear), and to bestow reliability upon the account of the theory (about the further development of the foetus and, more generally, that everything is just as described).

This particular appeal to observation is linked with analogy and, specifically, with a very particular case of comparison with an *ad hoc* homemade experiment. Thus, the experiment (the source domain) is explicitly taken as the field of observation of the invisible embryological physiology (the target domain). Moreover, the author explicitly invites the addressee to draw attention to the source domain, the clutch of eggs, if he wants to gain insight into the target domain, the development of the human embryo. In fact, there is no other possibility to gain knowledge of the target domain but to focus on the source domain. Thereby, the author clearly indicates that the source domain *as such* represents the essential model for his theoretical construction. Following DMT we may say that we find here an explicit statement of deliberate metaphor use: the author not only declares his *intention* to use a metaphor as a metaphor, but also *draws* his audience's *attention* to do the same. In fact, he leaves his addressee "no option but to pay attention to the source domain as a source domain".

To sum up, we are faced here with the creation of an experiment as a developed form of traditional comparison, with the use of this comparison in theoretical construction, and with a conscious reflection on this use. In other words, we are faced with a conscious reflection on the author's heuristic method of enquiry, which intentionally uses the source domain in order to infer general laws and universal principles applicable to all comparable items. In conclusion, we can say that the Hippocratic author reflects on the necessity of analogy and on deliberate metaphor use in theoretical construction and argumentation.

Like the Hippocratic author, Empedocles uses a method of enquiry that works by analogy as follows: we start observing things in the environment and

acknowledge possible similarities among them. Then, we collect those that resemble each other and, by isolating them from the rest, we reflect on the comparable items shared by apparently different things. Finally, by reasoning on them, we formulate the abstract principle or general physical law, which is able to explain all comparable items. By doing so, we can not only understand comparable items better, but also grasp abstract principles and processes within all areas of the cosmos.

Empedocles makes an explicit claim concerning the usefulness and validity of such a method in order to understand things that cannot be seen. Specifically, he invites his addressee Pausanias to reason by analogy in order to infer one particular principle of the physical world: Love (DK 31 B 17, 16–26; Kamtekar, 2009). In fact, Empedocles first claims that Love is a principle that cannot be observed or known directly through sensation, as "no mortal men have seen her whirling/ among them". Yet "she is considered to be inborn in mortal limbs/and by her they think friendly things and accomplish deeds of friendship/calling her rightly Joy and Aphrodite" (DK 31 B 17. 21–6). This means that, even though Love cannot be seen in the same way we see visible objects and phenomena, she can nonetheless be experienced as a power inborn in mortal limbs every time we think friendly thoughts, feel fondness and love, accomplish deeds of friendship, feel joy and sexual desire.[50]

Empedocles then encourages Pausanias to observe Love "with his mind" (*noōi derkeu*). What does this mean? Seeing with the mind likely indicates a method whereby one infers general inferences and universal principles (such as Love) from particular and familiar comparable cases (such as cases of joy, friendship, sexual desire and the like). As Kamtekar argues, "*noticing similarities* between the cases of sexual desire, friendly thoughts, and peaceful relations; *reasoning from similar effects to single cause* – these activities constitute *seeing with the mind* rather than with the eyes" (author's emphasis). Thus, by reflecting on similarities in apparently different things, and by reasoning by analogy, we can infer, via abstraction, universal principles governing those similarities, as well as all aspects of the physical world.

In conclusion, we can say that, according to Empedocles, 'seeing with the mind' involves deliberate metaphor use. In fact, (direct) metaphor is, for Empedocles, not only a mode of argumentation (as it is in the case of the lamp depicting the eye and the clepsydra illustrating respiration), but also a heuristic method of enquiry that enables us to gain knowledge of unseen things and abstract notions, such as physical principles, from different areas of nature. As with the Hippocratic

50. The name Aphrodite (DK 31 B 17.22) suggests that Empedocles' force of Love is the principle responsible for sexual desire. See Inwood (2001, p. 63 n. 154).

author, Empedocles' inferences of abstract notions and physical principles ultimately rest upon his observation (or sensory experience more generally) of familiar things and phenomena to the extent that they suggest to him comparisons, hence direct cross-domain mappings, among apparently different things. In this context, attention must be paid to the source domain as such in order to both gain knowledge of obscure processes and to infer abstract universal principles. Just like for the Hippocratic author, for Empedocles' comparisons too, the source domain *as such* is an essential part of the argumentation, corroboration and demonstration of a given general theory. Thus, the Hippocratic author's and Empedocles' appeal to observation and to inductive reasoning can also be seen, accordingly, as their appeal to deliberate metaphor use.

5. Conclusion

Throughout this paper, I have investigated the question of deliberate metaphor use in three Hippocratic treatises and in two famous comparisons by Empedocles. In the first part of this paper, we have seen that there are clear textual signals indicating deliberate metaphor use. As the source domain is essential for the core of the argumentation, the Hippocratic author and Empedocles cannot avoid drawing attention to it and, at the same time, they leave the addressee no option but to pay attention to the source domain as a source domain. In fact, the source domain is the field of observation for the occurrence of an otherwise invisible process. The majority of the metaphors we have examined are motivated by the author's recourse to comparisons as ways to illustrate an unseen activity in the body, indeed, as explanatory models. Yet, there are cases in which comparisons are presented as items of evidence and/or demonstrations of a given hypothesis. Furthermore, in several (borderline) cases the author recurs to *ad hoc* homemade mechanisms, to rudimentary "experiments" that are meant to reproduce artificially the invisible workings of the body. Thus, as we saw, comparisons become part of a heuristic method of enquiry in which the comparable instances are taken either/both as items from which we can infer a general theory, and/or as a demonstration of the assumed hypothesis. Therefore, metaphor as a tool by which we illustrate obscure things by means of visible ones now rests upon the assumption that both invisible and visible things are governed by the same principles. Thus, observing analogies between things in nature is a way of extrapolating more general principles governing all areas of the physical world. As I have shown in the paper's fourth section, there are explicit claims by both the Hippocratic author and Empedocles to this inductive reasoning and, therefore, to their deliberate use of metaphor.

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"Entering the house of Hades"

The formulaic language for metaphors of death and the question of deliberateness in Early Greek poetry

Fabian Horn
Ludwig-Maximilians-Universität Munich

This paper considers the possibility of metaphors being used in a deliberate manner in Early Greek poetry and particularly Homer's *Iliad*: the epic poems of Homer are shaped by a tradition of oral composition and formulaic language which contains a wealth of metonyms and metaphors. By focusing on the copious formulaic metaphors and metonyms of death in battle, it will be argued that the communicative purpose of metaphors, which is essential for philological interpretation, can be independent of deliberate usage and that deliberateness constitutes no reliable requirement for poetic purpose and effect.

Keywords: conceptual metaphor theory, deliberate metaphor, metaphors of death, Early Greek poetry, Ancient Greek epic, *Iliad*, *Odyssey*, Tyrtaeus

1. Introduction: Figurative language, deliberateness and death

Research in cognitive linguistics has established metaphor as a fundamental and pervasive principle of human thought and language rather than a rhetorical or stylistic device: metaphors are not merely stylistic embellishment, but a fundamental process of cognition by which we can think, speak, and make sense of our environment and our existence (cf. Lakoff & Johnson, 1980; Lakoff & Turner, 1989; Lakoff, 1993; also see Steen, 2011a). In other words, the human conceptual system relies on metaphors:

> Metaphor is for most people a device of the poetic imagination and the rhetorical flourish – a matter of extraordinary rather than ordinary language. Moreover, metaphor is typically viewed as characteristic of language alone, a matter of words rather than thought or action. For this reason, most people think they can get along perfectly well without metaphor. We have found, on the contrary, that metaphor is pervasive in everyday life, not just in language but in thought and

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> action. Our ordinary conceptual system, in terms of which we both think and act, is fundamentally metaphorical in nature.
>
> (Lakoff & Johnson, 1980, p. 3; also cf. Cairns, 2015, pp. 2–8)

Thus, metaphor is not only *speaking* about something in terms of something else, but also *thinking* about something in terms of something else (cf. Lakoff & Johnson, 1980; Gibbs, 1994, esp. pp. 120–264; Gibbs, 1996). With metaphors being ubiquitous and used consciously as well as unconsciously, the range of metaphors which can sensibly be interpreted in literary studies needs to be re-evaluated, since conventional metaphors might provide little value for literary interpretation. One solution proposed in current research following the cognitive linguistic approach to metaphors favours the classification of metaphors as "deliberate" or "non-deliberate" (Steen, 2008; 2011a, esp. pp. 38–43), with a focus on deliberate metaphors as meaningful for interpretive purposes: since metaphors are a fundamental (and unavoidable) feature of all language, not all instances of metaphorical phrasings necessarily afford a deeper contextual meaning,[1] and the classification as "deliberate" might be a way to assign a particular significance to metaphors beyond the mere possibility of expressing an abstract concept. However, the validity of the criterion of "deliberateness" has not been generally accepted and it has been doubted whether deliberate metaphors were really created "deliberately" and if they are essentially different from other forms of metaphorical language (Gibbs, 2011).

This paper presents an attempt to discuss the category of deliberateness with regard to Early Greek epic poetry and particularly Homer's *Iliad*: the authorship of the epic poetry ascribed to "Homer" is a matter of debate and the poems are shaped by a tradition of oral composition and formulaic language which contains a wealth of metaphors. The Homeric poems are the earliest extant examples of Greek epic poetry and were likely composed under the influence of the availability of the alphabet and the possibility to write, but in both form and content they draw on a much older tradition of oral poetry which enabled poets to compose *extempore* using an intricate system of formulae (cf. esp. Parry, 1971). Even though the poems constitute the beginning of Greek literature, they present the culmination and conclusion of the tradition of oral epic poetry rather than its starting point. The poet was not creating the formulaic language of the epics, but working with an existing system of formulae, and his audience was likely familiar with many

1. Following the cognitive linguistic approach, all metaphors provide information about the conceptual system of a speaker community and can be analysed accordingly, but philological interpretation is more interested in contextual meaning, i.e. significance in a particular author, text, or moment of a narrative.

of his phrasings. Consequently, metaphors which occur in formulae can reasonably be expected to be conventional[2] and have therefore only low metaphoricity.[3] Even though it is difficult, if not impossible, to determine the degree of formulaic character of the Homeric epics (cf. Hainsworth, 1968; Finkelberg, 1989, esp. pp. 179–180), it can reasonably be assumed that whole lines or collocations of several words which are either repeated *verbatim* or with only minor variations must be considered formulaic[4] and their metaphors conventional and likely non-deliberate. Thus, the formulaic diction of Homeric epic presents an additional obstacle when it comes to ascertaining the deliberateness of metaphorical language. Positing deliberate usage of metaphors is always difficult in written discourse and even more so in a dead language far removed in time, since it can only be suggested on the basis of contextual cues. In case of the Homeric poems, the language is highly formulaic and as a result, many metaphors appear to be traditional insofar as they draw on familiar conceptualisations and must hence be considered conventional even despite their poetic phrasing. The formulaic character of Ancient Greek epic poetry entails the assumption that phrasings which can be shown to be formulae or variations of known formulae are most likely conventional and employed automatically, i.e. non-deliberately, which is also why metaphors in general have largely been neglected by Homeric scholarship.[5] On the other hand, the non-formulaic

2. According to the terminology recently proposed by Steen (2011a), metaphors which can be shown to be formulaic and have low metaphoricity would be classified as conventional and are unlikely to be novel.

3. For a theoretical approach to distinguishing varying degrees of metaphoricity (as opposed to applying the obsolete "dead" – "alive" distinction, which was already criticised by Richards (1936, pp. 101–102)) vide Hanks (2006) and Müller (2008, esp. pp. 178–209). Müller defines metaphoricity as a continuum starting with expressions whose original metaphorical character is entirely obscured by semantic opacity and poetic novel metaphors with high metaphoricity forming the other end of the spectrum.

4. Following Finkelberg (1989, p. 181): "I count as formulaic any expression that occurs at least twice in Homer or any unique expression that represents a modification of a recognisable formulaic pattern." Most of the metaphors discussed below are formulaic or variants of formulaic pattern, with very few isolated expressions; to illustrate the formulaic nature of most expressions, I have quoted variations or comparable instantiations of the same underlying idea in footnotes.

5. In the wake of Milman Parry's influential and important assertion that Homeric language is formulaic and traditional, metaphors were dismissed as formulaic phrases serving as mere substitutions for more literal expressions and thus lacking in content and devoid of a deeper meaning, cf. Parry (1931) (= Parry 1971, p. 419) and Parry (1933) (= Parry 1971, pp. 365–375). Despite predating the oral poetry theory and the work of M. Parry, this sentiment is already expressed in the introductory sentence to the disappointingly short section on metaphors in

nature of a metaphorical phrasing (as far as we can tell from the extant material) is also not necessarily sufficient to posit deliberateness unless there are additional cues or markers present to suggest a particular relationship between the metaphor, its conceptualisation, and the surrounding context.

In light of the conceptual nature of metaphors and the formulaity of the Homeric poems, the conventionality and deliberateness of individual textual metaphors cannot be assessed in isolation, but always requires comparison with similar passages. Since the *Iliad* is a poem of battle and exerted great influence on both the *Odyssey* and other Early Greek poets, this study will focus on one particular complex of metaphors common in this tradition, the copious metaphors of death. For while battle can be narrated in a straightforward fashion, death is an abstract concept and therefore difficult to grasp and describe. Recent research in cognitive poetics has ascertained that when coping with difficult and abstract concepts, such as emotions, the human mind is likely to resort to figurative language, and particularly to metaphors (cf. Gibbs, 1996).[6] It will be argued that the communicative purpose of metaphors, which is essential for philological interpretation, can be independent of deliberate usage and that deliberateness constitutes no reliable requirement for poetic purpose and effect.

2. Death and figurative language in the *Iliad*[7]

Homer's *Iliad* is an epic poem of war and large stretches consist entirely of battles, but scholars have noted that "[t]he Homeric poems are interested in death far more than they are in fighting." (Griffin, 1980, p. 94; also cf. Griffin, 2011). Even though long passages of the poem, particularly the so-called 'battle books'

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the *Iliad* in Keith (1914, pp. 33–37): "The most striking difference that the metaphors of the *Iliad* present as distinguished from the similes is the almost universal lack of deep feeling." Similarly Stanford (1936, p. 120): "But in quality, emphasis, vividness and imagination, the similes heavily outweigh the more frequent metaphors." Stanford disregards Homeric metaphor on the basis of his hypothesis that epic diction was not developed enough to allow imaginative figurative language for the sake of clarity (1936, pp. 122–127). Despite this claim, he cites a considerable wealth of metaphors in Homer (1936, pp. 129–139).

6. On emotions and their dependence on metaphors cf. esp. Kövecses (1986, 2000, 2008), also in Ancient Greek cf. Theodoropoulou (2012). The similarities of some metaphors for emotions and metaphors for death in Ancient Greek has recently been pointed out by Cairns (2016, pp. 30–32).

7. The following sections on metonyms and metaphors of death in the *Iliad* are a summary; for the full argument with exhaustive treatment of all Iliadic battle deaths cf. Horn (2018).

(*Iliad* books 5–8; 11–17; 20–22), contain little else other than fighting, individual battles are often very short with hardly ever a longer exchange of blows. Usually, one strike is all it takes for the superior warrior to dispatch his opponent and death occurs swiftly:

> The brevity of fights is as remarkable as their lack of chivalry. From a total of 170 battlefield encounters described and a further 130 referred to, only 18 involve more than one blow, and a mere 6 of these involve more than a single exchange of blows. The only fight to go beyond a second exchange of blows is not part of a battle, but a specially arranged formal duel. (van Wees, 1996, p. 38)

Thus, the *Iliad* provides an ideal basis for examining expressions used for death in Early Greek poetry and thought, not only because the poem contains more than 240 named deaths in its battle scenes (Armstrong, 1969) and affords ample material for such a study, but also because the structure of Homeric fighting and death scenes is uniform and standardised. A Homeric battle scene comprises a series of individual encounters between two heroes, whose sequence and phrasing are highly formulaic. The minimal form of such a duel is the naming of the slayer and the slain with a brief reference either to the act of killing or the act of dying. The event of death is the core of every duel between two heroes, but battle encounters might be extended with some or all of the following elements (cf. Fenik, 1968, pp. 4–8, 16–19; Niens, 1987, pp. iv–xvi; Kirk, 1990, pp. 23–25; Morrison, 1999, esp. pp. 129, 130, 135–136).

1. the heroes may engage in flyting (i.e. a contest consisting of an exchange of insults), prior to their fight;
2. the battle can be described in detail: often the weapon and the mode of attack is given as well as the location of the wound;
3. the last moment of the dying warriors may be embellished with a simile or a glimpse at his life or his family and their loss as a short obituary, but only major heroes are given the honour to speak again before their death;
4. death occurs, since most of the Iliadic battles end with the death of one of the opponents;
5. the victorious hero takes his victim's weapons and armour as spoils and trophies; sometimes he mocks his fallen opponent.

There is a certain poetic flexibility to this schema: the order of elements (3) and (4) may be reversed, or the simile/obituary (3) may even be inserted into the death description (4). However, the fixture of individual epic battles is the event of death, and the inferior hero is only rarely merely wounded and able to escape death. The phrases occurring in the description of battle deaths in position (4) will form the core of the material of the following study.

The formulae employed in position (4) offer ample evidence for metaphorical conceptualisations, for the verbs which might be expected in descriptions of dying, (ἀπο-/κατα-)θνῄσκω '(to) die' and (ἀπ-)ὄλλυμαι '(to) perish', are never used in battle scenes to describe the actual act of dying, even though both are part of the epic vocabulary (cf. θνῄσκω in *Il.* 1.243, 383; 2.106, 642; 4.170; 11.455; 12.13; 21.106, 610; 15.289; 18.121; 19.228; 22.55, 426; 24.743; ὄλλυμαι in *Il.* 6.223; 7.27; 9.413, 415; 13.772; 16.489). The related noun θάνατος 'death' occurs occasionally (*Il.* 5.68, 83, 553; 13.544, 602; 16.334, 414, 502, 580, 855; 20.477), but not so much as an internal bodily event as something external that envelops the body from the outside. Thus, death in battle in Homer's *Iliad* is usually described figuratively, either metaphorically or metonymically.

An example for a more extensive and elaborate individual battle encounter is provided by the killing of Echepolus by the hand of Antilochus, the first named death of the poem at the beginning of battle in *Iliad* 4:

(1) *Il.* 4.457–462: πρῶτος δ᾽ Ἀντίλοχος Τρώων ἕλεν ἄνδρα κορυστήν,
ἐσθλὸν ἐνὶ προμάχοισι, Θαλυσιάδην᾽Εχέπωλον·
τόν ῥ᾽ ἔβαλε πρῶτος κόρυθος φάλον ἱπποδασείης,
ἐν δὲ μετώπῳ πῆξε, πέρησε δ᾽ ἄρ᾽ ὀστέον εἴσω
αἰχμὴ χαλκείη· τὸν δὲ σκότος ὄσσ᾽ ἐκάλυψεν,
ἤριπε δ᾽ ὡς ὅτε πύργος ἐνὶ κρατερῇ ὑσμίνῃ.

'Antilochus was first to kill a Trojan chieftain,
a fine man fighting in the front rank, Thalysias' son, Echepolus.
Throwing first, he hit the plate of his horsehair-crested helmet;
the bronze spear-point struck him on the forehead and pierced
right through the bone, and darkness covered his eyes, and he toppled like a tower in the fierce conflict.'

(Greek text of the *Iliad*: van Thiel, 2010; English translations, with minor adaptations: Verity, 2011)

The encounter is extended with details about the battle and the wound before death occurs. In this case, death is indicated by the metaphor of darkness taking the sight of the fallen warrior (*Il.* 4.461) and his fall, which is illustrated by the simile of the falling tower (*Il.* 4.462). Dying is not mentioned directly, but indicated only by means of figurative language: the death of Echepolus is expressed by the image of darkness and falling, both of which are formulaic ways to mark the moment of death in Homeric poetry.

2.1 Metonymic expressions for death in the *Iliad*

Example (1) already provided an example for the first non-literal category of formulae found at the conclusion of individual battle encounters. In such cases,

death is not conceived of in terms of an entirely different conceptual domain, but expressed metonymically through an image from the same conceptual domain. Metonymic descriptions of death mostly stem from the common conceptual metonymy EFFECT FOR CAUSE, with a co-present subevent representing the whole complex event. There are numerous formulae, all indicating the death of a fighter, but focusing only on an action or event co-occurrent with his dying. These formulae may be combined with metaphorical phrases indicating death, but even on their own they are sufficient to indicate and represent death. By far the most common metonymic formulae for death refer to the vanquished warrior falling down, lying in the dust, or letting his head droop. This conceptual metonymy DYING IS FALLING is possibly influenced by the orientational metaphor DOWN IS INACTIVE/DEAD (with the coordinate conceptualisation UP IS ACTIVE/ALIVE):[8]

(2) *Il.* 4.522–523; 13.548–549: (…) ὃ δ' ὕπτιος ἐν κονίῃσι
κάππεσεν, ἄμφω χεῖρε φίλοις ἑτάροισι πετάσσας.[9]
'(…) and backwards in the dust
he fell, stretching out both hands towards his dear companions.'

Sometimes, it is particularly the head whose fall to the ground is pointed out (cf. *Il.* 8.308; 10.457; 13.543–544; 14.467–468) and often the element of the clashing of arms is added to descriptions of death. Both falling to the ground and the

8. On the theoretical basis of orientational metaphors cf. Lakoff and Johnson (1980, pp. 14–21). On the general coordinate conceptualisations UP IS GOOD/DOWN IS BAD cf. Meier and Robinson (2005, esp. pp. 244–247).

9. The metonym of falling for dying is very common with many different instantiations, cf. *Il.* 4.482: ὃ δ' ἐν κονίῃσι χαμαὶ πέσεν 'he fell to earth in the dust'; *Il.* 4.493; 16.319; 20.456: ἤριπε 'he collapsed'; *Il.* 5.68; 20.417: γνὺξ δ' ἔριπ' οἰμώξας 'he fell to his knees, screaming'; *Il.* 5.75: ἤριπε δ' ἐν κονίῃ 'he collapsed in the dust'; *Il.* 5.47; 8.122, 314; 15.452; 16.344; 17.619; 20.487: ἤριπε δ' ἐξ ὀχέων 'he tumbled from his chariot'; *Il.* 5.585–586: αὐτὰρ ὅ γ' ἀσθμαίνων εὐεργέος ἔκπεσε δίφρου | κύμβαχος ἐν κονίῃσιν ἐπὶ βρεχμόν τε καὶ ὤμους 'he fell from the well-made chariot, gasping for breath, | head-first in the dust, buried up to his head and shoulders'; *Il.* 7.16: ὃ δ' ἐξ ἵππων χαμάδις πέσε 'he fell from his chariot to the ground'; *Il.* 11.144; 12.192: ὃ δ' ὕπτιος οὔδει ἐρείσθη 'he lay flat on his back on the earth'; *Il.* 13.399: αὐτὰρ ὃ ἀσθμαίνων εὐεργέος ἔκπεσε δίφρου 'he fell gasping from the well-made chariot'; *Il.* 13.618: ἰδνώθη δὲ πεσών 'he collapsed and fell'; *Il.* 14.447: ὃ δ' ἀνετράπετ' 'he fell on his back'; *Il.* 15.543: ὃ δ' ἄρα πρηνὴς ἐλιάσθη 'he lay sprawled on the ground'; *Il.* 16.289–290: ὃ δ' ὕπτιος ἐν κονίῃσι | κάππεσεν οἰμώξας 'and backwards in the dust | he fell, screaming'; *Il.* 16.310–311/413–414: (…) ὃ δὲ πρηνὴς ἐπὶ γαίῃ | κάππεσ'/κάππεσεν 'and he fell face-forward on the earth'; *Il.* 16.469: κὰδ δ' ἔπεσ' ἐν κονίῃσι μακών 'he fell in the dust, bellowing'; *Il.* 20.483: ὃ δ' ἐπὶ χθονὶ κεῖτο τανυσθείς 'he lay sprawled on the ground'; *Il.* 21.118–119: ὁ δ' ἄρα πρηνὴς ἐπὶ γαίῃ | κεῖτο ταθείς, ἐκ δ' αἷμα μέλαν ῥέε, δεῦε δὲ γαῖαν 'he fell forward on to the earth | and lay there sprawled, and his dark blood flowed out and wet the ground'.

clattering of the armour resulting from the fall are associated with dying to such an extent that no further details are needed to mark the moment of death:

(3) *Il.* 4.504; 5.42, 540; 13.187; 17.50, 311: δούπησεν δὲ πεσών,
ἀράβησε δὲ τεύχε' ἐπ' αὐτῷ.[10]
'he fell with a thud, and his armour clattered about him'.

Accordingly, there are several phrases metonymically denoting the act of killing as making one's opponent fall down from his chariot, constituting a corresponding causative variant of the conceptual metonymy DYING IS FALLING, in the form of KILLING IS THROWING DOWN. In these instantiations, the fall, which metonymically denotes death, is caused by being struck the mortal blow:

(4) a. *Il.* 11.143, 320; 20.461: ἀφ'/ἐξ ἵππων ὦσε χαμᾶζε.[11]
'he toppled him from his horses to the ground'.

b. *Il.* 8.277; 12.194; 16.418: πέλασε χθονὶ πουλυβοτείρῃ.
'he brought them down to the earth that nourishes many'.

In addition to these "ground-related" metonyms, there are several verbs commonly translated as '(to) kill', which have only acquired this meaning through metonymic processes of transfer, such as βάλλω, lit. '(to) hit, strike' (*Il.* 12.189; 15.341; 16.585), νύσσω, lit. '(to) stab, pierce' (*Il.* 5.579; 11.96; 20.489), or οὐτάω, lit. '(to) wound' (*Il.* 6.64; 11.421, 426, 490, 491; 14.476, 511; 17.344; 20.472).[12] Even the verbs most commonly translated as '(to) kill', θείνω (*Il.* 6.29; 15.329: ἔπεφνε) and (κατα-)κτείνω (*Il.* 5.608; 14.514; 17.60) can be traced back to roots which

10. Also cf. *Il.* 5.617; 11.449; 13.373, 442; 15.524, 578; 16.325, 401, 599; 17.580: δούπησεν δὲ πεσών 'and he fell with a thud'; *Il.* 5.58: ἤριπε δὲ πρηνής, ἀράβησε δὲ τεύχε' ἐπ' αὐτῷ 'he collapsed on his face, and his armour clattered about him'; *Il.* 5.294; 8.260: ἤριπε δ' ἐξ ὀχέων, ἀράβησε δὲ τεύχε' ἐπ' αὐτῷ 'he tumbled from the chariot and his armour clattered about him'; *Il.* 15.647–648: πέσεν ὕπτιος, ἀμφὶ δὲ πήληξ | σμερδαλέον κονάβησε περὶ κροτάφοισι πεσόντος 'he fell on his back, and as he fell to the ground his helmet rang mightily about his temples'.

11. Also cf. *Il.* 5.19: ὦσε δ' ἀφ' ἵππων 'he toppled him from his horses'; *Il.* 5.163–164: τοὺς ἀμφοτέρους ἐξ ἵππων Τυδέος υἱὸς | βῆσε κακῶς ἀέκοντας 'so the son of Tydeus thrust them both from their chariot | brutally, though they resisted'; *Il.* 11.109: ἐκ δ' ἔβαλ' ἵππων 'he threw him from his horses'; *Il.* 20.489: νύξ', ἀπὸ δ' ἅρματος ὦσε 'he struck him and toppled him from his chariot'.

12. For the basic meanings of these verbs cf. their etymologies in Frisk (1960–1970, I.215–7 s.v. βάλλω, II.329 s.v. νύσσω, II.449–450 s.v. οὐτάω) as well as Beekes (2010, pp. 197–198 s.v. βάλλω, p. 1028 s.v. νύσσω, pp. 1131–1132 s.v. οὐτάω).

originally meant '(to) strike' and '(to) wound' respectively.[13] All these verbs make use of the conceptual metonymy CAUSE FOR EFFECT insofar as the event which leads to the death of the warrior, i.e. being struck or being wounded, is used figuratively to denote the result: they are conventionally used to "indicate a fatal wound except where there is an explicit statement to the contrary" (Garland, 1981, p. 53).

Similarly, the subsequent event of despoliation serves as a way to denote death by means of metonyms: ἐναίρω (*Il.* 6.32; 14.515 and (ἐξ-)ἐναρίζω (*Il.* 4.488; 5.151, 155, 703; 6.20, 30, 36; 11.145, 335, 422, 425; 12.187; 14.513; 15.332, 518), which both originally meant '(to) despoil, take the opponent's armaments' and have come to take on the generic meaning '(to) kill' in the *Iliad*.[14] The same conception of the act of killing as taking possession of the opponent's body and weapons may also underlie the use of the verb αἱρέω, lit. '(to) take (possession of) sth.' (*Il.* 5.144, 677; 6.35; 7.8; 8.273; 11.92, 304, 489; 15.339, 340, 515, 516; 16.697; 21.209). In these instances it is very unlikely that the verb denotes anything but the act of killing, especially since it is used several times in catalogue killings (i.e. the killing of multiple opponents in quick succession, so that the names of the slain are listed in a form of catalogue, also cf. fn. 15), where despoliation can hardly be accomplished; thus, it seems likely that the verb αἱρέω acquired the meaning '(to) kill' only through the metonymical conception that killing facilitates the subsequent act of despoliation.

Another event which occurs at the moment of death is the loss of sight, the most important mode of sensory perception (Moreux, 1967, pp. 238–239). However, since this experience is always conceptualised in terms of the advent of darkness or night, these phrases are discussed below as metaphorical rather than metonymical.

2.2 Metaphorical conceptualisations of death in the *Iliad*

In the case of 'small fighters', whose killing is merely a means to give glory to the superior "big heroes",[15] the phrasing of death is usually curt and metonymical, while the more elaborate killings finish with a metaphorical formula to mark

13. Cf. Frisk (1960–1970, I.657–658 s.v. θείνω and II.33 s.v. κτείνω) as well as Beekes (2010, pp. 536–537 s.v. θείνω and pp. 789–790 s.v. κτείνω). Both Frisk and Beekes denote this usage of θείνω and κτείνω in the sense of '(to) kill' as originally euphemistic.

14. Cf. Beekes (2010, p. 420 s.v. ἔναρα) who states that verbs originally meaning '(to) despoil' are "euphemistic for kill".

15. On the distinction between "small fighters" and "big heroes" vide Strasburger (1954). The success and glory of "big heroes" is measured in both the quality and quantity of slain opponents and in the case of the deaths of minor warriors which provide quantity, only the act

death. In this section, the metaphorical expressions employed in the battle scenes to denote the moment of death are grouped together according to their underlying conceptualisations.

2.2.1 *Death is darkness*

The notion of a loss of vision in death likely has its experiential basis in the loss of vision occurring at the moment of loss of consciousness, which is described with the same formulae (cf. *Il.* 5.310; 11.356; 14.438–439; 22.466).[16] The sensation of a "blackout" afflicts the vision, and several formulaic and thus conventional phrases marking the moment of death refer to the eyes of the dying hero. Drawing on the experience of loss of consciousness, death is imagined as a nebulous darkness or night covering the eyes and taking the vision of the dying warrior. The underlying conceptual metaphor DEATH IS DARKNESS/NIGHT seems to originate from the primeval experience of darkness/night as something terrible to be feared (Moreux, 1967, pp. 242–244):[17]

(5) a. *Il.* 4.461, 503, 526; 6.11; 13.575; 14.519; 15.578; 16.316; 20.393, 471; 21.181: τὸν δὲ σκότος ὄσσε κάλυψεν.[18]
'and darkness covered his eyes'.

b. *Il.* 16.344: κατὰ δ' ὀφθαλμῶν κέχυτ' ἀχλύς.
'a mist spread over his eyes'.

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of killing is noted, cf. particularly the killing catalogues in *Il.* 5.677–679, 704–707; 8.273–277; 11.301–304; 16.415–418, 694–697; 21.209–210.

16. On the analogy between fainting and death cf. Clarke (1999, pp. 139–143); however, it is commonly assumed that the poet applied formulae usually associated with death to fainting and not vice versa, cf. Morrison (1999, pp. 138–144). Onians (1953, p. 182) suggested that the image of death as darkness originated with the experience of fainting: "The 'darkness' perhaps originated in the mist that darkens the eyes in faintness".

17. On the common metaphorical use of light/darkness imagery to represent affect originating from the fundamental coordinate conceptualisations LIGHT IS GOOD/DARK IS BAD cf. Meier and Robinson (2005, esp. 242–244). For a more general discussion of metaphors of light in Ancient Greek, see Tarrant (1960).

18. Also cf. the related examples, which use not only the same conceptualisation but also formulaic variations of the same vocabulary: *Il.* 5.47; 13.672; 16.607: στυγερὸς δ' ἄρα μιν σκότος εἷλε(ν) 'the hateful darkness took him'; *Il.* 5.659; 13.580: τὸν δὲ κατ' ὀφθαλμῶν ἐρεβεννὴ νὺξ ἐκάλυψεν 'dark night came down and covered his eyes'; *Il.* 16.325: κατὰ δὲ σκότος ὄσσε κάλυψεν 'darkness came down over his eyes'; *Il.* 16.350: θανάτου δὲ μέλαν νέφος ἀμφεκάλυψεν 'a black cloud of death enveloped him'; *Il.* 20.417–418: νεφέλη δέ μιν ἀμφεκάλυψε | κυανέη 'a dark cloud covered him'.

In all these instantiations, the immaterial concept of darkness/night is envisioned as a kind of substance by means of an ontological metaphor (cf. Dyer, 1974, pp. 32–33): darkness/night is reified and conceptualised as a physical entity which can "cover" or "be poured" over the eyes or the whole body of the dying (Dyer, 1964, pp. 29, 33). The underlying notion of the use of the verb (ἀμφι-)καλύπτω '(to) shroud, cover', which is most commonly employed in these instantiations, can be attributed to the more specific ancient conceptualisation of darkness/night as a kind of garment.[19] It has been proposed that Latin *uesper* 'evening' and Greek ἔσπερος 'evening' were originally derived from a root meaning '(to) be clothed' and there is evidence that Greeks, Romans, and speakers of other Indo-European languages would have imagined Night as a personification wearing a shroud or garment (Katz, 2000). However, in light of conceptual metaphor theory and the experiential basis of metaphors, I would suggest that the onset of night would have been conceptualised as putting a shroud-like garment over the land and this notion is transferred to death through the conceptual metaphor DEATH IS DARKNESS. Darkness was thought to be vapour (Onians, 1953, p. 95), but while this notion accounts for the image of the cloud, the verbs used in the instantiations suggest that as a substance, darkness was imagined as some kind of cloth rather than vapour. This conceptualisation can also account for the image of darkness being 'poured' over the eyes of the dying Acamas (*Il.* 16.344: κέχυτ' ἀχλύς, cf. 13.544; 16.414, 580), since the metaphor of pouring is also used with real garments (Cairns, 2016, p. 28 n. 17). The ritual of shrouding the corpse or the remains and the analogous gesture of mourners to cover their own head in grief are based on the same conceptualisation and provide an experiential cultural basis, or grounding, for the metaphor (Cairns, 2009, esp. pp. 46–53 and Cairns, 2016, esp. p. 31 with n. 27, p. 32 n. 34, p. 35 n. 53).

The image of death as darkness also occurs implicitly in phrases where death is said to cover or to take hold of the eyes (and, in *Il.* 16.502–503, also the nostrils) or to be poured over the fallen warrior, using the same verbs, (ἀμφι-)καλύπτω '(to) cover, shroud' and χέω '(to) pour' as the examples above. In these phrases, θάνατος 'death' (Examples 6a, c) (i.e. the experience of dying), and the epic periphrasis τέλος θανάτοιο 'the end of life which is death' (Example 6b) is reified as the covering which brings darkness to the dying heroes by means of ontological metaphor:

19. The editors of this volume offered the interesting observation that the instantiations of DEATH IS DARKNESS seem to be related to LIGHT IS A FLUID. However, I have found no clear examples that light/darkness were imagined as fluids in Early Greek poetry (also cf. Tarrant, 1960) and the evidence from etymology points to the contrary (cf. Katz, 2000). The cluster of metaphors of light and darkness might need further investigation.

(6) a. *Il.* 5.82–83; 16.333–334; 20.476–477: (…) τὸν δὲ κατ᾽ ὄσσε ἔλλαβε πορφύρεος θάνατος καὶ μοῖρα κραταιή. (…) on his eyes 'came down dark death and his cruel destiny'.

b. *Il.* 5.553: τὼ δ᾽ αὖθι τέλος θανάτοιο κάλυψεν.[20] 'and there the end of death covered them both'.

c. *Il.* 13.544/16.414, 580: ἀμφὶ δέ οἱ/μιν θάνατος χύτο θυμοραϊστής. 'and life-breaking death poured round him'.

Darkness is not mentioned directly in these formulae, but they all employ implicitly the underlying metaphorical conceptualisations of DEATH AS DARKNESS/NIGHT and DEATH/DARKNESS AS A COVERING GARMENT (cf. Cairns, 2016, pp. 30–32). The colour adjective πορφύρεος 'purple'/'dark', which is attributed to death (*Il.* 5.83; 16.334; 20.477: πορφύρεος θάνατος), clearly relates to the blood being spilt on the battlefield, but may also be associated with the image of death as a garment and denote the colour of the metaphorical garment of death. Thus, this metaphorical conceptualisation corresponds to the literal covering that corpses received in funerary ritual not only in the form of shrouds, but also by burying under the earth in a grave mound (cf. *Il.* 6.464/14.114: χυτὴ κατὰ γαῖα καλύπτοι/-ει 'a heaped mound of earth now covers [me/him]').

2.2.2 *Death is departure*

The conceptualisation DEATH IS DARKNESS/NIGHT described above is possibly related to the fact that the realm of Hades, the place where the dead dwell, is imagined as ζόφος ἠερόεις, 'murky darkness' (*Il.* 15.191; 21.56; 23.51) (cf. Sourvinou-Inwood, 1981; Morrison, 1999, p. 136). The orientational metaphor DOWN IS INACTIVE/DEAD is also detectable here, since the underworld was imagined to be located in the depths of the earth and therefore not accessible to the rays of the sun (cf. *Il.* 22.482),[21] so that another metaphor for dying is "leaving the light of the sun"

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20. Cf. the related formulaic expressions: *Il.* 5.68: θάνατος δέ μιν ἀμφεκάλυψε 'death enveloped him'; *Il.* 16.502–503: ὣς ἄρα μιν (…) τέλος θανάτοιο κάλυψεν | ὀφθαλμοὺς ῥῖνάς θ᾽ 'and the end of death covered | his eyes and nostrils'; *Il.* 16.855; 22.361: ὣς ἄρα μιν (…) τέλος θανάτοιο κάλυψε 'the end of death enveloped him'.

21. Cf. esp. Morrison (1999, pp. 136–138); Morrison only notes the metaphorical character of death descriptions and the associations of the image of darkness, but does not analyse the underlying conceptualisations. Also cf. Sourvinou-Inwood (1981, p. 21) who notes the experiential basis of the conceptualisation: "Hades (the place) is characterised by murky darkness and lack of sun; it is joyless, terrible and dank, and even the gods hate it. This representation depends clearly on a definition of life in terms of light and sun, so that death is their absence; but it has other dimensions: the darkness inside the earth, projected from the experience of caves, and the unseeability of death. The mental attitude behind the representation is love of

(*Il.* 18.11: λείψειν φάος ἠελίοιο 'leave the sun's light') (cf. Tarrant, 1960), which, however, is never used in descriptions of battle deaths. In any case, another metaphorical conceptualisation in Iliadic battle deaths is the image of the dying warrior descending into the underworld, which is represented by instantiations of the conceptual metaphor DEATH IS DEPARTURE. This idea is still familiar to us from such conventional phrases as e.g. "the dearly departed", etc. However, in battle scenes there is no simple use of verbs meaning '(to) go away', such as e.g. οἰχομαι, functioning as a synonym for dying, which is probably the most common instantiation of this conceptual metaphor in modern languages. The Homeric images are more specific, and death is variously viewed as a journey into the earth, into the house of Hades, or to Erebos:

(7) a. *Il.* 6.19: τὼ δ' ἄμφω γαῖαν ἐδύτην.
'both sank below the earth'.

b. *Il.* 11.263: ἔδυν δόμον Ἄιδος εἴσω.
'they went down into the house of Hades'.

c. *Il.* 16.326–327: ὣς τὼ μὲν δοιοῖσι κασιγνήτοισι δαμέντε
βήτην εἰς Ἔρεβος.
'so these two were beaten down by the two brothers
and went to Erebos'.

However, in all the battle deaths of the *Iliad*, the three instances cited as Examples (7a–c) are the only instantiations of the simple conceptualisation DEATH IS DEPARTURE, where the warrior is envisioned as physically departing the mortal world (other instantiations, e.g. *Il.* 3.322; 5.646; 6.411, 422; 22.482–483, occur in different contexts). Taken literally, this image seems to contradict phrases expressing the idea that only the life-force departs the body, while the corpse is left behind. However, these are also based on the same underlying metaphorical conceptualisation that the moment of death constitutes a form of departure.

In battle scenes, the more common conceptual metaphor is the related, but more specific variation DEATH IS THE DEPARTURE/LOSS/DESTRUCTION OF LIFE-FORCE.[22] However, it is impossible to combine all instantiations of DEATH IS THE DEPARTURE/LOSS/DESTRUCTION OF LIFE-FORCE into a coherent image of the

life." Note also that the 'helmet of Hades' is associated with darkness ([Hes.] *Sc.* 227) and invisibility (*Il.* 5.845) and that an etymology of Hades as ἀ-ιδ- 'un/not-see-' has been suggested in Plat. *Phd.* 80d, *Cratyl.* 403a, *Gorg.* 493b, also cf. Moreux (1967, p. 241) and Beekes (2010, p. 34).

22. "Life-force" is used here in the sense of "what which animates the body and is responsible for life", with the reduction and compression of the complex concept "life" into one single entity, to which the animation of the body is ascribed as another case of metonymy.

human body (cf. Horn, 2018, pp. 375–377), and thus they are discussed as metaphorical rather than metonymical (or even biological) expressions:

(8) a. *Il.* 4.524; 13.654: θυμὸν ἀποπνείων
'gasping out his life'.[23]

b. *Il.* 14.518–519: (…) ψυχὴ δὲ κατ' οὐταμένην ὠτειλὴν
ἔσσυτ' ἐπειγονένη.
'(…) his life rushed hastily through the gaping wound'.

c. *Il.* 16.856–857; 22.362–363: ψυχὴ δ' ἐκ ῥεθέων πταμένη Ἄιδος δὲ
βεβήκει
ὃν πότμον γοόωσα λιποῦσ' ἀνδροτῆτα καὶ ἥβην.
'his shade winged its way from his limbs and went down
to the house of Hades,
lamenting its doom and leaving behind manliness and youth'.

When death is conceptualised as the loss of life-force, the departure is not always "impersonal", as if the life-force were leaving on its own accord, but the killer can be explicitly mentioned as the agent by means of the coordinate conceptualisation KILLING IS THE TAKING OF LIFE-FORCE which refers to the act of killing in metaphorical terms. This presupposes the conceptualisation LIFE/THE LIFE-FORCE IS A PHYSICAL OBJECT by means of ontological metaphor:

(9) a. *Il.* 10.495: τὸν (…) μελιηδέα θυμὸν ἀπηύρα.[24]
'he plundered his sweet life'.

b. *Il.* 16.332: λῦσε μένος.
'he loosened his fury'.

c. *Il.* 16.505: τοῖο δ' ἅμα ψυχήν τε καὶ ἔγχεος ἐξέρυσ' αἰχμήν.
'he pulled out the spear's point and the life together'.

Several inconsistencies become apparent in this overview of individual instantiations of this conceptualisation, most conspicuously in the fact there is no single term used to denote the life-force which leaves upon death. It is called θυμός (*thymós*), ψυχή (*psychē*), or μένος (*ménos*) with the precise translation and

23. Also cf. other examples of this conceptualisation: *Il.* 4.470: τὸν μὲν λίπε θυμός 'so his breath left him'; *Il.* 11.342: φίλον ὄλεσε θυμόν 'he lost his dear life'; *Il.* 12.386; 16.743; 20.406: λίπε δ' ὀστέα θυμός 'the breath abandoned his bones'; *Il.* 13.671–672; 16.606–607: ὦκα δὲ θυμὸς | ᾤχετ' ἀπὸ μελέων 'swiftly his life's breath | abandoned his limbs'; *Il.* 16.410: πεσόντα δέ μιν λίπε θυμός 'and his life left him where he fell'.

24. For this idea of killing as a taking away of some "life-force" also cf. the varying phrasings in *Il.* 4.531: ἐκ δ' αἴνυτο θυμόν 'he robbed him of his life'; *Il.* 11.334: θυμοῦ καὶ ψυχῆς κεκαδών 'robbing them of their life and breath'; *Il.* 20.459: ἐξαίνυτο θυμόν 'he took away his life'.

meaning of each term being debated.[25] Even though these three terms appear to be very different things in other contexts, in battle scenes they are used synonymously insofar as their loss usually denotes death (cf. Onians, 1953, pp. 93–95; Caswell, 1990, p. 12). There are further inconsistencies regarding the location of the life-force in the human body from which it departs, as well as its further fate once it leaves the mortal body in death. These inconsistencies underline the fact that the original Homeric phrases cannot be treated as biological or eschatological descriptions, but need to be analysed as metaphors. This is apparently the case because all these individual linguistic metaphors, which vary greatly in detail, are not based on a coherent idea of the human body and its workings. It is reasonable to assume that these apparent inconsistencies are not the result of a general conflation of originally distinct ideas or competing theories about the human body (for which we have no indications): these expressions are based on a coherent metaphorical conceptualisation and all formulaic phrases discussed above are held together by the experiential observation that "something" ("life") is felt to exist before death which is no longer present thereafter. This fundamental experience originally would have given rise to the notion DEATH IS THE DEPARTURE/LOSS/DESTRUCTION OF LIFE-FORCE.

2.2.3 *Other conceptualisations of death in the* Iliad

The vast majority of phrases employed to denote death in battle in the *Iliad* are either metonymical or make use of the two metaphorical conceptualisations discussed above. The conceptualisation HUMANS ARE PLANTS, by means of which human life is imagined in terms of the existence of a plant, occurs only in similes as well as the conceptual metaphor HUMANS ARE ANIMALS, when humans are compared to different kinds of animals. The general conceptualisation of humans as animals appears to be an ancient notion and also occurs in other Indo-European languages (Campanile, 1974, pp. 251–254), and this conceptualisation apparently also underlies an otherwise rather inconspicuous metaphor for killing in battle:

(10) *Il.* 12.186; 20.400: δάμασσε δέ μιν μεμαῶτα.
'he dominated the man in his frenzied charge'.

25. The uncertainties of the precise meaning of such terms as θυμός and ψυχή result in various translations for each term; in the examples quoted I have opted to follow the translations of Verity (2011), who often translates both terms interchangeably as "life". On the problems of translation which also reflect the uncertainty and flexibility of our own conceptual system cf. Horn (2018, p. 377, fn. 75).

The basic meaning of the verb δαμνάζω and its cognate forms δάμνημι and δαμνάω, lit. '(to) tame', originally referred to the breaking in of animals, particularly horses (cf. e.g. *Il.* 23.655),[26] but they also function in the *Iliad* as common and conventional ways to denote killing and dying (cf. e.g. *Il.* 3.352; 11.309; 21.208; 22.55 et passim). Vermeule (1979, p. 101) suggests that this use of δαμνάζω might have erotic overtones, since δαμνάζω and δάμνημι are used in Homeric language "in three related spheres of action: taming an animal, raping a woman, killing a man." However, in light of conceptual metaphor theory, it seems reasonable to assume that the three meanings are not equal, but the taming of an animal was the basic, literal meaning, while the two other usages are metaphorical and based on the general conceptualisation HUMANS ARE ANIMALS, with the important aspect of the animals being their impotence to resist being dominated by man. In these instances, the collocations ὑπὸ δουρί 'under the spear (of)' (e.g. *Il.* 4.479; 5.653; 11.444, 749; 17.303) or ὑπὸ χερσί(ν)/χείρεσσι(ν) 'under the hands (of)' (e.g. *Il.* 5.559, 654; 10.310, 397; 20.143) are frequently added: both the spear and the hands metonymically denote the strength and destructive force of the superior warrior and the preposition ὑπὸ/ὕπο 'under' adds an orientational component which compounds the notion of the "inferiority" of the vanquished. The common notion appears to be that killing constitutes a form of asserting one's dominance over an opponent, which might also be associated with the idea that it is the victor's right to take possession of, despoil, or even mutilate the corpses of his slain enemies.

Another conceptual metaphor other than DEATH IS DARKNESS and DEATH IS DEPARTURE, which occurs directly in a description of a battle death, is the familiar image of death as a sleep from which there is no awakening, although other instantiations in early epic poetry do not occur in battle contexts.[27] The conceptualisation underlies the famous, and significantly isolated, Iliadic phrase of the 'sleep of bronze' (for a more detailed examination of this unique metaphor cf. Horn, 2015):

(11) *Il.* 11.241: ὣς ὃ μὲν αὖθι πεσὼν κοιμήσατο χάλκεον ὕπνον.
'there he fell, and slept the sleep of bronze.'

The precise meaning and implications of the adjective χάλκεος 'brazen', 'of bronze' are debated (cf. Horn 2015, pp. 201–203), but in the case of this isolated and probably non-formulaic metaphor there are contextual cues which might suggest

26. Cf. Frisk (1960–1970), I.346, and Beekes (2010), p. 301 s.v. δάμνημι.

27. Cf. *Il.* 14.482: ὡς ὑμῖν Πρόμαχος δεδμημένος εὕδει ἔγχει ἐμῷ 'your companion Promachus sleeps, beaten down by my spear'; *Od.* 13.79–80: τῷ νήδυμος ὕπνος ἐπὶ βλεφάροισιν ἔπιπτε, | νήγρετος ἥδιστος, θανάτῳ ἄγχιστα ἐοικώς 'sweet sleep fell upon his eyelids, an unawakening sleep, most sweet, and lost like to death'; Hes. Frg. 278.12 M.-W.: Κάλχανθ' ὕπνος θανάτοιο κάλυψεν 'the sleep of death covered Calchas'.

deliberate usage: the metaphor resonates which the following obituary which adds that death prevented Iphidamas from returning home to his young wife, leaving it implicit that he did not get to enjoy a more gentle slumber. Thus, the metaphor is well suited to its context and was clearly inserted to add pathos to the death of Iphidamas (cf. Moulton, 1979, pp. 283–284; Horn, 2015). However, the conceptualisation of DEATH AS SLEEP as such is unique in Iliadic battle scenes, which makes this instantiation even more meaningful. There is only one other instantiation of this conceptualisation in the *Iliad* (*Il.* 14.482) which also has contextual significance and was likely employed deliberately, since it occurs in a vaunting speech over a fallen opponent where the phrasing presumably hinted insultingly and provocatively at the victim's lack of warlike qualities and was meant as a taunt to his comrades-in-arms (Janko 1994, p. 220 ad loc.). We might surmise that the conceptualisation death is sleep was familiar to the audience, but the image of death as sleep occurs rarely and its two instantiations in the *Iliad* both appear to be deliberate with contextual significance. The paucity of instantiations of this particular conceptual metaphor in the *Iliad* is presumably due to the fact that the rather tranquil conceptualisation of DEATH AS SLEEP is not in tune with the Iliadic image of violent heroic death (cf. Sourvinou-Inwood, 1981, p. 19), but the poet did not wholly refrain from the notion, if the metaphorical instantiation of DEATH IS SLEEP could be imbued with additional contextual meaning.

2.3 Preliminary conclusions

To sum up the findings of this study so far, death and dying in the battles scenes of the *Iliad* are never described literally, but always metaphorically or with other forms of circumlocution (cf. Garland, 1981, p. 43). Resorting to metaphors when referring to death is a common and predictable occurrence, which in itself corroborates the claim of cognitive linguistics and conceptual metaphor theory that metaphor is a fundamental and indispensable feature of human thought and a means to come to terms with difficult, abstract, or otherwise phenomenologically inaccessible concepts. It is possible to describe objectively what happens to the body of the dying warrior, which accounts for metonymical expressions of death. The ultimate impossibility of knowing and describing the subjective experience of death leads to intersubjective, phenomenological metaphors of what death might be like, based on perceived similarities to related, less elusive human experiences, such as grief (note the relations to DEATH IS DARKNESS), loss of consciousness (DEATH IS THE DEPARTURE OF LIFE-FORCE), or sleep (DEATH IS SLEEP). The *Iliad* shows that there were ways to refer to death and dying literally, but these are never used in battle narrative where metaphors and metonyms are used to mark the moment of death.

The metaphors and metonyms employed in battle scenes are predominantly formulaic and thus conventional: according to my count, in the cases of the 241 named deaths (cf. Garland 1981, pp. 52–53) there are approx. 74 formulaic instances of the common metonym DEATH IN FALLING/KILLING IS THROWING DOWN, 30 formulaic instantiations of DEATH IS DARKNESS, and 25 formulae making use of the conceptualisation DEATH IS THE DEPARTURE OF LIFE-FORCE/KILLING IS THE TAKING OF LIFE-FORCE,[28] leaving only about 10 instances of figurative language describing death in the *Iliad* which might be non-formulaic. However, all of these, with the exception of the conspicuous unique and isolated instantiation of DEATH IS SLEEP in *Il.* 10.241, employ the same conceptualisations. In the absence of contextual cues, which might suggest otherwise, it is therefore likely that these metonymical and metaphorical formulae were used non-deliberately, since it also appears to be an epic convention that death in battle is always described figuratively. In any case, we will test this claim in the later sections of this study.

However, even though the figurative ways to refer to death in battle are likely conventional and non-deliberate, the formulaic nature of Homeric poetry makes it possible to consider their cumulative effect in the *Iliad* and their interpretation in context. The numerous figurative phrases used to describe the death of a defeated warrior in Early Greek epic diction clearly have an effect on the audience's perception of heroic death. In the case of battle descriptions in Early Greek epic poetry, the motivation for the regular use of metonyms and metaphors is certainly not a religious or cultural reluctance to mention death and not merely the general difficulty of talking about the end of life literally, but rather the epic view of fighting and dying. The life of Homer's heroes consists of war and fighting, and a glorious death on the battlefield honours both the victor as the superior warrior and the vanquished as a worthy opponent. Ultimately, death, dying, and mortality are of particular importance for the *Iliad*'s conception of heroism and glory, since only by dying can an Iliadic hero attain κλέος ἄφθιτον 'unwilting glory' (cf. Renehan, 1987, esp. pp. 105–107; Vernant, 1991). Despite the gruesome graphic details of the slayings on the field of honour, which often precede death in the more elaborate battle deaths, the harsh reality and realism of Homeric battle descriptions is suspended at the moment of death by a shift to metaphorical language, also cf. Example (1) above:

(12) a. *Il.* 5.79–83: τὸν μὲν ἄρ' Εὐρύπυλος, Εὐαίμονος ἀγλαὸς υἱός,
πρόσθεν ἔθεν φεύγοντα μεταδρομάδην ἔλασ' ὦμον
φασγάνῳ ἀΐξας, ἀπὸ δ' ἔξεσε χεῖρα βαρεῖαν·
αἱματόεσσα δὲ χεὶρ πεδίῳ πέσε· τὸν δὲ κατ' ὄσσε

28. Note that some death descriptions employ more than one formula and different conceptualisation, while others summarily use a single metonym for killing to cover several slayings opponents in quick succession ("catalogue killing").

ἔλλαβε πορφύρεος θάνατος καὶ μοῖρα κραταιή.
'As he fled before him Eurypylus, Euaimon's splendid son,
ran him down and lunging forward he drove his sword through
Hypsenor's shoulder, and sheared off his heavy arm.
The bloody arm fell to the ground, and dark death and his cruel destiny
came down and fastened on his eyes'.

b. *Il.* 13.671–672: τὸν βάλ' ὑπὸ γναθμοῖο καὶ οὔατος· ὦκα δὲ θυμὸς
ᾤχετ' ἀπὸ μελέων, στυγερὸς δ' ἄρα μιν σκότος εἷλεν.
'(Paris) hit him under the jaw, by his ear, and swiftly his life's breath
abandoned his limbs, and hateful darkness seized him'.

c. *Il.* 16.345–350: Ἰδομενεὺς δ' Ἐρύμαντα κατὰ στόμα νηλέι χαλκῷ
νύξε· τὸ δ' ἀντικρὺ δόρυ χάλκεον ἐξεπέρησε
νέρθεν ὑπ' ἐγκεφάλοιο, κέασσε δ' ἄρ' ὀστέα λευκά·
ἐκ δ' ἐτίναχθεν ὀδόντες, ἐνέπλησθεν δέ οἱ ἄμφω
αἵματος ὀφθαλμοί· τὸ δ' ἀνὰ στόμα καὶ κατὰ ῥῖνας
πρῆσε χανών· θανάτου δὲ μέλαν νέφος ἀμφεκάλυψεν.
'Idomeneus stabbed Erymas in the mouth with the pitiless bronze,
and the bronze-tipped spear passed clean through,
underneath his brain, and smashed the bones;
his teeth were shaken out, and both eyes were filled
with blood; gaping, he blew blood up through his mouth and nostrils,
and a black cloud of death enveloped him'.

Descriptions of wounds in the *Iliad* are always vivid and lifelike, even if some of them are not realistic and medically implausible (cf. esp. Saunders, 1999, pp. 361–362; Saunders, 2000), but after the gruesome details of the mortal blow the moment when death finally occurs is marked by a certain aloofness and detachment brought about by the switch to metaphorical language in the end.[29] This avoidance of literal references to dying in the battle scenes of the poem, likely resulting from the conventions of the epic genre and its formulaic language, is in tune with the *Iliad*'s ideology of heroism and the epic preference for metaphorical

29. As has been perceptively pointed out to me by Camilla Di Biase-Dyson, in case of the particularly vivid description of Erymas' head wound in Example (12c), there appears to be metaphorical language before the moment of death in the battle scene, in the formulaic epithet-noun combination "pitiless bronze" (*Il.* 16.345: νηλέι χαλκῷ), which might be seen as an ontological metaphor ascribing human emotional properties to the weapon. However, rather than a metaphorical transfer from animate to inanimate, I am more inclined to see the formula as a case of poetic enallage with the adjective changing its reference from the wielder to the weapon, which is usually considered a case of metonymy. Still, even if the initial hit is seen as a metaphor, most of the scene (*Il.* 16.346–349) is a gruesome, literal description of the mortal wounding finally concluding with a metaphorical phrasing for the moment of death (*Il.* 16.350).

descriptions of battle death in the *Iliad* functions as a means to create gravitas and preserve the dignity of fallen heroes (cf. esp. Griffin, 1980, pp. 103–143).

3. Figurative language and death in the *Odyssey*

In order to test this assessment of Iliadic death metaphors, this section presents expressions used for death in the second Homeric poem, the *Odyssey*. Even though the *Odyssey* is part of the same tradition of heroic epic poetry, it is not a poem of war and contains less fighting. Focusing on the phrasings for battle deaths, only Book 22 of the *Odyssey* offers a basis for direct comparison, since it contains the slaughter of Penelope's suiters at the hands of Odysseus and Telemachus, arguably the most Iliadic passage of the *Odyssey* and the only extended sequence of fighting and battle scenes in the poem. In this book, as with the *Iliad*, it appears that the literal verb θνήσκω '(to) die' was avoided, which is also not usually used for death in battle in the rare cases in the rest of the poem:[30] it appears as if the avoidance of literal expressions for dying in battle during fighting sequences is indeed a convention of Homeric epic poetry.

However, the battle of Book 22 of the *Odyssey* does not take place on the battlefield, but rather in the dining hall of the palace of Odysseus on Ithaca. These circumstances already become evident in the killing of Antinous, the first suitor to be shot by Odysseus, whose death uses an elaboration of the familiar metonymy of falling, but transposed into a domestic setting:

(13) *Od.* 22.17–20: ἐκλίνθη δ᾽ ἑτέρωσε, δέπας δέ οἱ ἔκπεσε χειρὸς
βλημένου, αὐτίκα δ᾽ αὐλὸς ἀνὰ ῥῖνας παχὺς ἦλθεν
αἵματος ἀνδρομέοιο· θοῶς δ᾽ ἀπὸ εἶο τράπεζαν
ὦσε ποδὶ πλήξας, ἀπὸ δ᾽ εἴδατα χεῦεν ἔραζε.
'He sank to one side, and the cup fell from his hand
as he was struck, and at once up through his nostrils there came a thick jet
of the blood of man; and quickly he thrust the table from him
with a kick of his foot, and spilled all the food on the floor'.
(Greek text of the *Odyssey*: van Thiel, 1991, English translations, with minor adaptations: Murray & Dimock, 1998)

Throughout the following slaughter, the metonym of falling is used repeatedly with other suitors, both individually and collectively:

30. Note, however, that usage of the verb θνήσκω '(to) die' is not confined to non-violent contexts, but can indeed also refer to violent death, even though it does so only rarely and not in actual battle narrative, e.g. *Od.* 9.66: death of Odysseus' companions at the hands of the Kikones, 11.389, 412, 24.22: death of Agamemnon at the hands of Aigisthos, 24.37: death of Achilles at Troy.

(14) a. *Od*. 22.94: δούπησεν δὲ πεσών, χθόνα δ᾽ ἤλασε παντὶ μετώπῳ.
'and he fell with a thud, and struck the ground full with his forehead'.

b. *Od*. 22.296: ἤριπε δὲ πρηνής, χθόνα δ᾽ ἤλασε παντὶ μετώπῳ.
'he fell headlong, and struck the ground full with his forehead'.

c. *Od*. 22.329: φθεγγομένου δ᾽ ἄρα τοῦ γε κάρη κονίῃσιν ἐμίχθη. (=*Il*. 10.457)
'and even while he was still speaking his head was mingled with the dust'.

d. *Od*. 22.118: τοὶ δ᾽ ἀγχιστῖνοι ἔπιπτον.
'and they fell thick and fast'.

Similarly, in the last book of the *Odyssey*, the death of Eupeithes, the father of Antinous, who sought vengeance for the killing of his son together with the relatives of the other suitors, is described like an Iliadic battle death with the common metonymical formula of falling and the clashing of arms:

(15) *Od*. 24.525: δούπησεν δὲ πεσών, ἀράβησε δὲ τεύχε᾽ ἐπ᾽ αὐτῷ. (= *Il*. 4.504; 5.42, 540; 13.187; 17.50, 311)
'he fell with a thud, and his armour clanged about him'.

In the killing of the suitors in *Od*. 22 as well as in the final battle in *Od*. 24, which consists of only one death, particular emphasis is given to the metonymical element of falling and lying on the ground (also cf. the fish simile in *Od*. 22.383–388). An element which does not occur in the *Iliad*, but is mentioned twice in the battle of the *Odyssey*, is the added detail that the slain fall face down (*Od*. 22.94, 296: χθόνα δ᾽ ἤλασε παντὶ μετώπῳ), which also fits with the similar metonymical expressions of the killed collectively "biting the dust":

(16) *Od*. 22.269: οἱ μὲν ἔπειθ᾽ ἅμα πάντες ὀδὰξ ἕλον ἄσπετον οὖδας. (cf. *Il*. 19.61; 24.738)
'so these all together bit the vast earth with their teeth'.

Even though the instantiations of the conceptual metonymy DYING IS FALLING in the *Odyssey* vary slightly, they generally employ the same phrasings and adapt formulae which also occur in Iliadic battle scenes.[31] These lines are clearly formulaic and conventional stock-phrases of the epic tradition.

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31. *Od*. 22.94; 24.525: δούπησεν δὲ πεσών 'he fell with a thud' = *Il*. 4.504; 5.42, 540; 13.187; 17.50, 311; *Od*. 22.296: ἤριπε δὲ πρηνής 'he collapsed on his face' = *Il*. 5.58; *Od*. 22.329: φθεγγομένου δ᾽ ἄρα τοῦ γε κάρη κονίῃσιν ἐμίχθη 'and his head rolled in the dust while he was still speaking' = *Il*. 10.457 (Note that in the *Iliad*, this line is unique, and thus possibly non-formulaic; since it is unlikely that this instance is an allusion to the *Iliad*, its repetition in this *Odyssey* rather indicates the formulaic quality of the verse.); *Od*. 22.269: ὀδὰξ ἕλον ἄσπετον οὖδας 'they bit the vast earth with their teeth' = *Il*. 19.61; 24.738; for the motif also cf. *Il*. 2.418; 11.749; 22.16–17.

However, while the *Iliad* also employs metaphors with different underlying conceptualisations, in the battle passages of the *Odyssey* there is hardly any variation and the suitors' deaths are almost uniformly marked by instantiations of the conceptual metonymy FALLING IS DYING. As has been suggested above, this particular metonym is likely informed by the conceptual orientational metaphor DOWN IS DEAD/DEFEATED/INFERIOR, which in the present context compounds the notion that through the killing of the suitors Odysseus manages to reassert his superiority as a hero and his authority as rightful ruler of Ithaca. The only death which also receives a metaphorical expression is the death of Eurymachus which does not only recount the suitor's fall, but also draws on the metaphor of darkness:

(17) *Od.* 22.83–88: ἐν δέ οἱ ἥπατι πῆξε θοὸν βέλος. ἐκ δ᾽ ἄρα χειρὸς
φάσγανον ἧκε χαμᾶζε, περιρρηδὴς δὲ τραπέζῃ
κάππεσεν ἰδνωθείς, ἀπὸ δ᾽ εἴδατα χεῦεν ἔραζε
καὶ δέπας ἀμφικύπελλον ὃ δὲ χθόνα τύπτε μετώπῳ
θυμῷ ἀνιάζων, ποσὶ δὲ θρόνον ἀμφοτέροισι
λακτίζων ἐτίνασσε· κατ᾽ ὀφθαλῶν δ᾽ ἔχυτ᾽ ἀχλύς.
(Odysseus) fixed the swift shaft in his liver. And (Eurymachus)
let the sword fall from his hand to the ground, and writhing over the table
he doubled up and fell, and spilled upon the floor the food
and the two-handled cup. With his brow he beat the earth
in agony of spirit, and with both feet he kicked the chair
and shook it, and over his eyes the mist poured down.

Just like in case of the death of Antinous (*Od*. 22.17–20), attention is drawn to the domestic setting of the battle: Eurymachus also falls on his face (cf. *Od*. 22.94, 296) and in his tumble to the ground he kicks over furniture, almost as if in a mocking reversal of the conventional image of the clashing of the arms in Iliadic battle deaths. However, the death of Eurymachus is also the only death of a suitor credited with a metaphor, probably because he was one of the leaders of the suitors and is therefore granted a certain degree of dignity. Indeed, honouring the fallen is also an important element of Homeric battle descriptions, for the strength of a fighter is measured not only by the quantity but also by the quality of the opponents he dispatches. Thus, the more dignified, metaphorical phrasing of the death of Eurymachus also reflects the prowess of Odysseus. The metaphor employed for his death is formulaic and familiar from the *Iliad*, drawing on the conceptual metaphor DEATH IS DARKNESS (cf. *Il*. 16.344: κατὰ δ᾽ ὀφθαλμῶν κέχυτ᾽ ἀχλύς 'a mist spread over his eyes').

As becomes evident in the phrasings, the depiction of death in the killing of the suitors does not differ from Iliadic battles with regard to the formulae employed. However, the conceptualisations employed for these deaths as well as the details the poet chose to focus on certainly do: the suitors do not die on the

field of honour, but in the dining hall where they dishonoured Odysseus, and their deaths – with the notable exception of Eurymachus – are not dignified, but presented in metonymical expressions which stress their humiliation and inferiority. While in Iliadic battle scenes, the victims are also honoured as warriors through the distance of metaphorical language, the deaths of the suitors are merely a requisite for Odysseus to regain his status and serve as a means for him to demonstrate his superior prowess as seasoned warrior and sacker of Troy.

While the poet (or poets) of the *Iliad* employed conventional and formulaic metaphors of death likely non-deliberately but no less effectively to honour fallen warriors according the epic tradition, the poet (or poets) of the *Odyssey* aims for and achieves the opposite effect by limiting the expressions used for the deaths of the suitors to metonyms of falling. The postulated epic convention that death in battle is marked figuratively is thus observed, but has been adapted to the context of the *Odyssey*.

It is generally difficult to identify deliberate metaphor by linguistic analysis, as has been acknowledged by Steen (2011b). Considering the supposed implicit traditional epic convention of describing death in battle figuratively, the conventionality and formulaic nature of the occurring expressions (compared to the material from the *Iliad*) and the absence of contextual cues to suggest deliberateness of these instances of figurative language in the *Odyssey*, non-deliberateness must be assumed by default. However, for interpretive purposes it is sufficient to state that against the background of the epic tradition as found in the corpus-based investigation of expressions for battle death in the *Iliad*, the use of metaphors and metonyms in the slaying of the suitors in the second Homeric poem achieves a certain effect which is in tune with the presentation of the narrative of the *Odyssey* and augments the heroic depiction of Odysseus in his return to Ithaca.

4. The treatment of battle death in the battle exhortations of Tyrtaeus and Callinus

A further, albeit much smaller, corpus of comparison is Early Greek paraenetic battle poetry which draws heavily on Homeric epic and its formulaic language and phrasings. Callinus of Ephesus (middle 7th century BCE) and the Spartan poet Tyrtaeus (late 7th century BCE) both composed elegies about the ideal warrior and the glory or disgrace that attends his actions, clearly drawing on and emulating heroic epic formulae and phrasings (cf. Snell, 1969; Verdenius, 1972; Krischer, 1979).

However, regarding the treatment referring to death in battle, they differ from the conventions of Homeric poetry: both poets confront their audience with the stark reality of death in battle, as is evident in the repeated usage of literal

expressions for death and dying, θνῄσκω '(to) die'.[32] A famous elegy of Tyrtaeus begins emphatically with death and exhorts fighters to die for their country (cf. Verdenius, 1969, p. 337):

(18) Tyrt. 10.1–2, 13–14 West: τεθνάμεναι γὰρ καλὸν ἐνὶ
προμάχοισι πεσόντα
ἄνδρ' ἀγαθὸν περὶ ᾗ πατρίδι μαρνάμενον.
(…)
θυμῷ γῆς πέρι τῆσδε μαχώμεθα καὶ περὶ παίδων
θνήσκωμεν ψυχέων μηκέτι φειδόμενοι.
'To die is a fine thing for a brave man when he has fallen
among the front rank
while fighting for his homeland.
(…)
let us fight with spirit for this land and for our children
let us die, no longer sparing our lives'.
(Greek text from Tyrtaeus: West, 1998; English translations: Gerber, 1999)

However, even though Tyrtaeus advertises death in drastic and undisguised terms, he also switched to metaphorical expressions in the Homeric style and made use of Homeric formulae depending on the context. Drawing on a familiar conceptualisation of epic poetry, the collocation θυμὸν ἀποπνείω '(to) breathe out one's spirit' in example (19) is an Iliadic phrasing (see example 8a above) (cf. Verdenius, 1969, p. 351). Thus, even though he describes the death of an old man in battle as shameful in this passage, Tyrtaeus dignifies the description of the sacrifice of the aged warrior for his polity with an instantiation of the conceptual metaphor DEATH IS THE DEPARTURE OF LIFE-FORCE:

(19) Tyrt. 10.23–24 West: ἤδη λευκὸν ἔχοντα κάρη πολιόν τε γένειον,
θυμὸν ἀποπνείοντ' ἄλκιμον ἐν κονίῃ.
'with head already white and grey beard,
breathing out his valiant spirit in the dust'.

Similarly in Tyrtaeus' poem 12 West, the honourable death of the warrior in service for his homeland is expressed not only metonymically but also metaphorically with an instantiation of the familiar Homeric conceptualisations of DYING IS FALLING and DEATH IS THE DEPARTURE/DESTRUCTION OF LIFE-FORCE:

32. Cf. θνῄσκω '(to) die' in Callin. frg. 1.5, 19; Tyrt. frg. 10.1, 14; 11.13 as well as the occurrence of θάνατος 'death' in Callin. frg. 1.8, 12, 15; Tyrt. Frg. 11.5; 12.35. Considering the scarcity of extant material from the elegies of Callinus and Tyrtaeus (the four major fragments of both poets together comprise only 134 lines) and the conventions of the Homeric epics discussed above, this frequency of occurrences of θνῄσκω '(to) die' and θάνατος 'death' is unexpected and striking.

(20) Tyrt. 12.23–24, 27–28 West: αὐτὸς δ' ἐν προμάχοισι πεσὼν φίλον ὤλεσε θυμόν,
ἄστυ τε καὶ λαοὺς καὶ πατέρ' εὐκλεΐσας,
(…)
τὸν δ' ὀλοφύρονται μὲν ὁμῶς νέοι ἠδὲ γέροντες,
ἀργαλέῳ δὲ πόθῳ πᾶσα κέκηδε πόλις,
'And if he falls among the front ranks (…), he loses his own dear life
but brings glory to his city, to his people, and to his father.
Young and old alike mourn him,
all the city is distressed by the painful loss'.

Only a few lines later, the death of the victorious warrior after a fulfilled life of honour and pride is described with the metaphor DEATH IS DEPARTURE:

(21) Tyrt. 12.37–38 West: πάντές μιν τιμῶσιν, ὁμῶς νέοι ἠδὲ παλαιοί,
πολλὰ δὲ τερπνὰ παθὼν ἔρχεται εἰς Ἀΐδην.
He is honoured by all, young and old alike,
many are the joys he experiences before he goes to Hades.

To conclude this brief consideration of the extant poems of early Greek paraenetic elegy, the elegies of Callinus and Tyrtaeus provide further support for the discussion of the conventions for narrating death in the Homeric epics outlined above. Even though the works of Callinus and Tyrtaeus were obviously influenced by Homeric epic with regard to language and the conceptualisations underlying phrases and formulae, the remaining fragments of their work exhibit a more nuanced attitude towards death compared to the idealising treatment of heroic battle death in the *Iliad*. Courage and the willingness to fight and die have taken on a social function in the poems of Callinus and Tyrtaeus, insofar as the warrior does not fight for his own interests and for his own honour, glory, and wealth, as the Homeric heroes did, but for his fatherland and his city (cf. Shey, 1976, esp. p. 16; Müller, 1989). The tone of their elegies is realistic, grim, and sober regarding the fate and prospect of the warrior: if he shows cowardice in battle, he is shunned by his people and driven into exile, if he stands his ground on the battlefield, as he is expected to, there is a high chance that he will die (cf. the major fragments, Callin. frg. 1 West; Tyrt. frgg. 10, 11, and 12 West). Death and the willingness to lay down one's life are given a prominent position in their poetry and the variation between referring to death literally and with metaphorical phrasings is employed to demonstrate both the finality of death and the honour of the deceased.

5. Conclusion

My initial examination of the descriptions used for battle death in the *Iliad* concluded that their phrasing is always figurative and (with very few possible

exceptions) always formulaic, which suggests an epic convention that death in battle is never narrated literally but always figuratively. Despite the often graphic details of the descriptions of killings, the avoidance of literal reference to death and dying at the final moments detracts from the grim finality of death, with metaphorical phrases being more elevated and dignified than metonyms. The *Odyssey* as well as the few extant fragments of the elegiac poetry of Tyrtaeus employ the same formulaic phrasings of metaphorical and metonymic conceptualisations of death and dying in battle scenes or in reference to dying on the battlefield as the *Iliad*. As an epic poem, the *Odyssey* also observes the convention that death in battle is not described literally, while the poems of Callinus and Tyrtaeus also encompass instances of literal description which presumably are meant to bring out the stark and drastic finality of death (and thereby the value of the warriors' sacrifice).

In the case of the *Iliad*, a poem of war, it seems unlikely that these metaphors of death are deliberate, but their consistent usage can be ascribed to the poet's (or poets') adherence to epic convention and tradition. In the *Odyssey*, the poet (or poets) might have adapted this formulaic convention to deliberately work with the contrast between metonymical and metaphorical figurative expressions in order to exalt the poem's eponymous hero. The extant examples from the elegies of Tyrtaeus similarly suggest that the poet was aware of the distinctions between literal and figurative phrasings and viewed metaphorical descriptions of death as a deliberate means of dignification of the fallen warrior and chose to use or avoid metaphorical formulae according to his poetic intentions. Despite the conventionality of epic formulaic language, apparent non-formulaic nature of a metaphorical phrasing in conjunction with contextual cues can point towards deliberate usage, as has been argued for example (11) above. On the other hand, in some cases it may not be possible to mark the phrasing of a metaphor or metonym as deliberate on account of its conventionality and formulaic nature, but it still appears reasonable to assume an element of deliberateness in the choice for either metonymic or metaphorical language or in the avoidance of figurative language of death to achieve a certain effect in context, as has been suggested for the instantiations in the *Odyssey* and the works of Tyrtaeus.

It is generally difficult to identify deliberate metaphors through linguistic analysis with certainty (cf. Steen, 2011b) and well-nigh impossible in the case of Early Greek poetry, which originated from techniques of oral composition and consequently predominantly employs formulaic and traditional, conventional phrasings. However, as the examples compiled in this study show, for philological and interpretive purposes deliberateness is not a necessary criterion for communicative purpose. The question of deliberateness ultimately does not affect the interpretation of the metaphors discussed in this paper and the assessment of their poetic effect does not depend on their deliberate creation.

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In search of deliberateness in Maya glyphic texts

Agnieszka Hamann
University of Warsaw

The extant Maya glyphic texts provide a unique window into Classic Mayan – a grapholect used by the ancient Maya people. Research has shown that Classic Mayan made frequent use of metaphoric and metonymic language and iconography (see Hamann, 2014; 2016; 2017). This paper discusses a number of conceptual metaphors and metonymies identified in Maya glyphic texts and accompanying iconography. It also investigates if any of the non-literal expressions (plus accompanying iconography) found in monumental inscriptions may be potentially interpreted as cases of deliberate metaphor as defined by Steen (2010; 2013; 2015).

Keywords: Classic Mayan, cognitive linguistics, metaphor and metonymy, deliberate metaphor

1. Introduction

The paper first of all aims to demonstrate that metaphoricity and metonymy are inherent features of Classic Mayan, the language represented in glyphic inscription of the Classic Period. It discusses a number of examples, such as *ilaj* 's/he saw/witnessed', *ochbih* 's/he enters the road/dies', *uchokow chaaj* 's/he scatters incense', *chum tzam* 's/he sits on the throne' and *umek'jiiy* 's/he embraced the throne', as well as *nabaj u ch'ich'il witzaj u jolil* 'their blood pools, their skulls mountain'. Such cases of figurative language seem to appear in all modalities, which indicates that they are not only linguistic, but also cognitive phenomena.

The paper further investigates if any of the discussed linguistic units may be seen as examples of deliberate metaphor as defined by Steen (2010; 2015). Are they used in a way that is not only motivated, but also that focuses attention on both the source and target domain, to encourage the addressee to adopt another perspective on the subject matter, or to understand it in a novel way?

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Finally, the paper discusses the applicability of deliberate metaphor theory to ancient Maya texts, given their specific genre and the fragmentariness of the extant corpus. In particular, it attempts to offer arguments in favour of the hypothesis that none of the discussed examples may be considered instances of deliberate metaphor.

The Maya civilisation is the longest-standing civilisation in the Americas. It is assessed that Common Mayan was spoken around 2200 BC and then diversified into several groups, however, at the moment in which writing appears in the general cultural area of Mesoamerica the diversification does not seem to be as high as today, when 30 different Mayan languages are spoken (Campbell, Kaufman & Smith-Stark, 1986; Kaufman & Justeson, 2003). The language of inscriptions of the Classic Period (called Classic Mayan, Hieroglyphic Mayan or Cholt'ian by various scholars) is probably most closely related to the Ch'olan family (Houston, Robertson & Stuart, 2000), though in some texts some vernacular influences are visible as well (Gronemeyer, 2014; Hruby & Child, 2004). By the Classic Period, the language was in all probability a grapholect – a prestige-laden written language (Macri & Looper, 2003), since the glyphic texts produced over several centuries and over a vast geographical area exhibit a surprising uniformity in regard to lexicon, grammar and discourse organisation.

Writing appeared in Mesoamerica in the first millennium BC (Houston, 2004), and the oldest currently known Maya inscriptions come from around 250 BC (Saturno, Stuart & Beltrán, 2006), though the majority of available glyphic texts are dated to the Classic Period, that is 250-950 AD (Tedlock, 2010). What survives of Maya written production until today is mainly texts on non-perishable materials – i.e., that have been carved in stone or wood or painted on ceramics. The huge libraries the first European visitors wrote about at the beginning of the 16th century are now gone, destroyed by the tropical climate and Spanish *auto-da-fés* (see, e.g., Coe & Houston, 2015, p. 237). Thus, the corpus of extant glyphic texts is limited both in terms of quantity and quality – we are left with about 15,000 texts (Coe & Houston, 2015, p. 237) which describe mainly dynastical histories, ownership of objects, and mythological stories (Schele & Miller, 1992).

The writing system is logo-syllabic, with logographs denoting whole concepts and syllabographs, as the phonetic component of the script, delivering nuances of pronunciation (long, short, glottalised vowels) and grammar. Figure 1 shows a fragment of the Tablet of 96 Glyphs from the ancient city of Palenque together with its basic epigraphic analysis. Maya texts are generally read from top to bottom, left to right in double columns. Column (1) of the analysis provides the glyph block designation, (2) transliteration (glyph by glyph what is visible in each glyph block), with logographs in upper-case and syllabographs in lower-case letters, (3)

transcription (how we think the ancient Maya would have pronounced the words), (4) translation.[1]

Figure 1. Fragment of Palenque Palace Tablet of 96 Glyphs (drawing: Greene Robertson, 1991, figure 265) and its epigraphic analysis

Block	Transliteration	*Transcription*	Translation
A1	**12-AJAW**	*lajcha' ajaw*	(on) 12 Ajaw
B1	**8-CHAK-SIHOM- ma**	*waxak chak sihoom*	8 Keh
A2	**TZUTZ-yi**	*tzutzuy*	replanted is
B2	**u-11-WINAK-HAB**	*u buluch winakhaab*	the 11th K'atun
A3	**u-KAB-ya**	*u kabiy*	by
B3	**K'INICH-[JANAB] PAKAL-la**	*k'inich janaab pakal*	K'inich Janaab Pakal

The fragment of glyphic text shown above comprises a clause: it starts with a date (A1-B1), continues with the verb in mediopassive (A2) and its subject (B2), finally it provides the agent of the event (A3-B3):

(1)

tzutzuy	*ubuluch winakhaab*	*u kabiy*	*k'inich*	*janaab pakal*
tzutz-uy-ø	u-buluch-winakhaab	u kabiy	k'inich	janaab pakal
replant-MED-3SA	3E-11-20.year	REL	NAME	

'The 11th K'atun is replanted by K'inich Janaab Pakal'

As already mentioned, the script records all complexities of the language. Example (1) above offers the morphological analysis of glyph blocks A2–B2: the verb *tzutz* 'to repeat, do over, replant' (Stuart, 2011, p. 269) or 'finish, complete' (Macri & Looper, 2003, p. 79) is in mediopassive, signalled by the morpheme *uy* with the 3rd person singular absolutive pronoun (a zero morpheme) and the numeral *buluch*

1. The standard mode of epigraphic analysis in Maya studies is as follows: transliteration is given in bold, transcription in italics and translation in plain text.

'11' is in its ordinal form denoted by the 3rd person ergative pronoun *u*. The agent is provided by the expression *ukabiy*, which has been analysed as a transitive perfect verb reading 'he has overseen it' by MacLeod (2004), but which seems to work here as the head of an agentive phrase and is thus translated as 'by'.

2. Conceptual metaphor and metonymy in Classic Mayan

Research has shown that Classic Mayan employs metaphoric and metonymic mappings, both in language and in imagery (see Hamann, 2014; 2016; 2017). For instance, the LIFE IS A JOURNEY conceptual metaphor, identified in numerous world languages (see, e.g., Kövecses, 2010, pp. 14, 34–35, 53, 66), is illustrated in Classic Mayan by Example (2a). Example (2b) shows that the Earth is conceptualised as a living creature. The polysemy of the words in Examples (2c–d) shows that the Maya perceived similarities between the human world and the natural world, the latter, on the other hand, being also understood as something wild and distant for a civilised urban society (2e). Example (2f) illustrates one of the common events described in Maya inscriptions when one ruler oversees a ceremony (e.g. the accession of another lord) to legitimise the validity of the ritual (see also Section 2.1 *Verbs of cognition in Mayan languages*). Examples (2g–m) are typical metonymic extensions, which contribute to the economy of lexicon development, by which means the same word is used to name the whole and its part, material and an object made of this material, cause and its effect, instrument or another object used to perform an action and the action itself, etc.

(2)	a.	*bih*	road, life[2]	LIFE IS A JOURNEY
	b.	*ik'*	breath, wind	EARTH IS A LIVE BEING
	c.	*ch'ok*	unripe, young	PEOPLE ARE PLANTS
	d.	*nich*	flower, child of man	PEOPLE ARE PLANTS
	e.	*te'el*	of trees (adj.), wild	WILD IS OUT-OF-TOWN
	f.	*il*	to see, to witness	CONTROL IS SEEING
	g.	*ak'ab*	night, darkness	CAUSE FOR RESULT
	h.	*k'in*	sun, day	CAUSE FOR RESULT
	i.	*buhk*	clothing, to dress	OBJECT FOR ACTION
	j.	*may*	tobacco, offering	OBJECT FOR ACTION
	k.	*witz*	a mountain, to pile up	RESULT FOR ACTION
	l.	*chehb*	bamboo, quill	MATERIAL FOR OBJECT
	m.	*te'*	tree, forest	PART FOR WHOLE / WHOLE FOR PART

2. Glosses after: Kettunen and Helmke, 2014; Kaufman & Justeson, 2003; Johnson, 2014.

In iconography, the composition of the image is organised by rather universal rules such as IMPORTANT IS BIG, IMPORTANT IS CENTRAL, IMPORTANT IS UP, so the ruler is typically depicted in the central and/or upper part of the image with other figures standing or kneeling around him or with a captive crumpled under his feet. The script being highly iconic, a lot of signs are based on the FORM FOR CONCEPT and PART FOR WHOLE (including PART OF ACTION FOR THE WHOLE ACTION metonymies, so the sign for *il* 'see' depicts a human eyeball in profile (Figure 2a), *tzihb* 'write/paint' – a human hand with a stylus (Figure 2b), *bahlam* 'jaguar' – usually the head of a jaguar, but sometimes also its ear conflated with the image of another animal (Figure 2c).

Figure 2. Metonymic origin of the signs of the writing system (drawings: Montgomery, n.d.)

2.1 Verbs of cognition in Mayan languages

Since language is believed to be rooted in our bodily experience (e.g. Evans, 2007, p. 66), some conceptual metaphors are expected to be (near-)universal because they derive from very basic physical conditions of human bodies (Kövecses, 2010, p. 118). One such potential candidate for universality was the UNDERSTANDING IS SEEING conceptual metaphor, instantiated by such linguistic expressions as *I see your point of view, Ja to widzę inaczej* 'I see it differently', *Ya veo lo que dices* 'Now I see what you are saying', which derives from the supremacy of our sense of vision over other senses (Lakoff & Johnson, 1980, p. 48). However, research on Australian Aboriginal languages (Evans & Wilkins, 2000, p. 546) and Mayan languages (Hamann, 2014, pp. 20–22) showed that it is by no means universal, since in these two groups of languages, verbs of cognition such as 'to understand' or 'to know' tend to be derived from 'to hear' and not from 'to see'. Compare the following examples:

(3) a. reconstructed for Proto-Mayan
**abi* 'hear, understand'
b. Mocho
abi 'hear, listen, understand, feel'
c. reconstructed for Proto-Mayan
**il* 'see, witness'

d. Modern Ch'orti' (Kerry Hull, pers.comm., 2013)[3]

E	*sitz' uputputir*					*u't*		*ma'chi*	*o'b'yan*
e	sitz' u-	put	put	-ir		u-	ut	ma'chi	a-
DEF	boy ADJ	bulge	bulge	-ATTR		3A-	eye	not	3C-
	twa'	*apatna*							
ub'	-yan twa'	a-	patn	-a					
hear	-AP in.order.to	3C-	work	-TH					

'The capricious boy doesn't hear / understand how to work'

e. Classic Mayan (Dumbarton Oaks Panel: J6)

IL-ji-CHAK-TOK'

ilaj	*chak*	*took'*
il-aj-ø	chak	took'
see-PASS-3SA	red	flint

'It is seen / witnessed by Chak Took'

Examples (3a) and (3c) are the original forms reconstructed for Proto-Mayan (Kaufman & Justeson, 2003, pp. 210, 204). Example (3b) ideally illustrates the argument, as the meaning of the word *abi* originally meaning 'hear, listen' is extended into both the domain of cognition and emotions, but it comes from a minor member of the Mayan linguistic family. However, (3d) represents one of the major languages, which is believed to be a direct descendant of Classic Mayan (S. Houston et al., 2000; Hull, 2003) and in this language the word *ub'i* also means both 'hear' and 'understand'. Thus, in proto-Mayan and some modern Mayan languages "I hear" means also "I understand", while "I see" might mean "I witness", so consequently in these languages the conceptual metaphor is UNDERSTANDING IS HEARING, and not UNDERSTANDING IS SEEING.

2.2 Birth and death

The birth and death of rulers is a frequent topic in Classic Maya inscriptions, the birth (4a) being described with the intransitive verb *siyaj* 'to be born' derived from the noun *siy* 'gift' (Johnson, 2014, p. 312, also 178). For example, the right section of Palenque Temple of the Cross Panel, which in European historiography would be considered the 'historical' part of the narrative that describes the lives of actual rulers, mentions the births of no less than seven rulers of Palenque, in each case using the expression *siyaj* 's/he is born'. The left section of the Panel adds one more *siyaj* event of a 'mythical' founder of the city born in 3121 BC. The word 'mythical' is put here into inverted commas because it seems that for the ancient Maya people the two parts of the panel form a continuous narrative: the last clause of

3. I would like to thank Kerry Hull for his generous help with the Ch'orti' gloss.

the left-hand section continues in the first three glyph blocks of the right-hand section with no sign of division between the part of the story where lifespans and intervals between events count in hundreds and thousands of years and the part of the story where they are reduced to a human scale. All the events are equal parts of the historical narrative of the Maya people.

Birth is inevitably followed by death, which in Maya texts is often talked about in a metaphorical way (Kettunen, 2005; Schele & Miller, 1992, pp. 265–277; Stone & Zender, 2011, pp. 42–3). The two main conceptual metaphors are instantiated in (4b–e). Examples (4b–d) illustrate the DEATH IS A JOURNEY metaphor, which is a journey that may begin in water and/or inside a mountain, both of which in Mayan cultures are considered entrances to the underworld (Miller & Taube, 1993, pp. 56–57; Stone & Zender, 2011, p. 52). Example (4e), on the other hand, illustrates the DEATH IS LACK OF BREATH / LIFE IS BREATH conceptual metaphor, which is based on the PHYSIOLOGICAL EFFECTS OF DEATH FOR DEATH metonymy (see also Hamann, 2016 for a fuller account of death metaphors and metonymies identified in Mayan languages).

(4)	a.	*siyaj*	BEING BORN IS BEING A GIFT
		siy-aj-ø	
		gift-DER-3SA	
		'she/he is born'	
	b.	*ochbih*	DEATH IS A JOURNEY
		och-bih-ø	
		enter-road-3SA	
		's/he enters the road'	
	c.	*ochha'*	DEATH IS A JOURNEY
		och-ha'-ø	(STARTING IN WATER)
		enter-water-3SA	
		'she/he enters water'	
	d.	*ochwitz*	DEATH IS A JOURNEY
		och-bih-ø	(STARTING INSIDE
		enter-mountain-3SA	A MOUNTAIN)
		'she/he enters the mountain'	
	e.	*k'a'aj usak ? ik'il*	DEATH IS LACK OF BREATH/
		k'a'-aj u-sak ? ik'-il	LIFE IS BREATH/
		terminate-MED 3E-white ? breath-INAL	PHYSIOLOGICAL EFFECTS OF
		'his/her white breath is terminated'	DEATH FOR DEATH

The tendency to use non-literal language to talk about difficult and painful experiences has been described for numerous world languages (e.g. English in Kövecses, 2010, pp. 23, 26; Turkish in Özçalışkan, 2006; Chinese in Tian, 2014). The different euphemisms used to talk about death constitute attempts to hide its painful and definite character, drawing certain consolatory power from treating it as different from what it really is. For instance, Examples (4b–d) are based on pan-Mesoamerican beliefs that life is followed by another journey which humans undertake to and through the afterlife, with water reservoirs and mountain caves being portals between the two worlds. What is more, such visual motifs of water and caves also frequently appear in death-related imagery (Stone & Zender, 2011), which shows that this is truly a conceptual, not only linguistic, metaphor.

2.3 Agricultural connotations in Maya culture

Another important topic present in Maya inscriptions is the celebration and completion of time periods, which seems to have been one of the major duties of Maya rulers (Stuart, 2011). Time being an abstract concept, the vocabulary used to describe time-related ceremonies is also metaphorical. A recurrent metaphorical mapping instantiated in Examples (5a–c) is what Stuart (2011, p. 343) calls a "replanting metaphor", that is, a consistent tendency to use agricultural vocabulary to talk about time-related ceremonies. At major Period Endings (dates with zeroes at the end), Maya kings would perform ceremonies involving *chok chaaj* 'sowing droplets / incense'. Period Endings (PE) are *tzuhtzaj* 'replanted' and during important celebrations stelae are *tz'ahpaj* 'planted' to mark the flow of time.

(5) a. *chok*$_1$ 'to sow (seeds)' *chok*$_2$ 'to scatter (incense)'
b. *tzutz*$_1$ 'to replant (a field)' *tzutz*$_2$ 'to repeat (PE)'
(Stuart, 2011, p. 269)
c. *tz'ap*$_1$ 'to plant' *tz'ap*$_2$ 'to erect (a stela)'

The polysemy of Examples (5a–c) instantiates the more specific conceptual metaphors INCENSE-SCATTERING IS SOWING, REPEATING A PERIOD ENDING IS REPLANTING A FIELD, ERECTING A STELA IS PLANTING A PLANT, all of which may be generalised at a higher-level as the metaphor KINGS ARE FARMERS. This kind of conceptualisation is consistent with the society being agricultural (Coe & Houston, 2015, pp. 19–22) and agriculture being at the centre of life, where sowing is the beginning of the cycle of life that repeats itself year after year. Analogously to the society's everyday occupations, "[k]ings did not simply 'end' periods of time such as k'atuns and tuns, they 'replanted' or 'repeated' them, in the sense that they actively tended to the periods to ensure their proper coming and going. […] Divine kings […] did not 'end' time in their rituals, therefore; we can say, rather,

using a basic agricultural metaphor, that they perpetuated it through 'replanting'" (Stuart, 2011, p. 269). Thus, Maya kings were the "farmers of time" whose task was to ensure the prosperity of the people by ensuring the correct flow of time.

The replanting metaphor appears not only in text but also in imagery. The image of the ruler performing so called "scattering gesture" (see Figure 3) – throwing some material into the censer to be burnt as part of the ritual in a gesture closely resembling throwing seeds into the soil – is depicted for example in the 8th century's El Cayo Altar (Stuart, 2011, pp. 263–4), Nim Li Punit Stela 15 (Stone & Zender, 2011, pp. 68–69), La Pasadita Lintel 2 (Foster, 2005, p. 194) or Aguateca Stela 1, but also Late Postclassic (1200–1530 AD) Madrid Codex, page 34 (Stone & Zender, 2011, pp. 68–69). Moreover, Martin (2012, pp. 104–105) suggests that the scattering ceremony goes back to at least Teotihuacan (ca. 1–550 AD), and thus that it might be of Mexican origin and of pan-Mesoamerican significance.

Figure 3. Nim Li Punit Stela 15 depicting the "scattering gesture" (Tuszyńska, 2013).

2.4 Royal accession, Panel of 96 Glyphs

Royal accession is another frequent topic in Maya texts, and it is usually described as sitting on the throne or binding a white paper headband on the head of the ruler (Stuart, 2012). For instance, the Palenque Temple of the Cross Panel describes the accessions of no less than ten rulers of this city and they are all described with one expression: *i k'al sakhuun tubah* "then it (is) the white paper tying on his/her head", which makes the text rather repetitive. In this context, the variety of language exhibited by Palenque Panel of 96 Glyphs is rather intriguing. It describes accessions of three rulers (see 6a–c): each of them "sits into rulership", which is a standard expression to describe accession, and becomes the "Divine Lord of Palenque", which is the most important of royal titles (written with the so called "emblem glyph"). However, each event is described in two clauses and the second

one varies: in (6a) and (6c) it is rephrased as *u chum tz'am* "the throne seating" at the White House, while in (6b) *u mek'jiiy sak nuk naah* "he embraced the White House". The variation in phrasing becomes clearer when we analyse the family relationships of Palenque's ruling family (see Figure 4).

(6)	Event	Title	Name	Emblem Glyph	Event elaboration	Placename
a.	*chumlaj ta ajawlel*		*k'inich k'an joy chitam*	*k'uhul baakal ajaw*	*u chumjiiy tz'am*	*sak nuk naah*
	chum-laj-ø ta-ajaw-lel			u-chum-jiiy tz'am	sak-nuk-naah	
	sit-POSIT-3SA PREP-ruler-ABSTR			3E-sit-PAST throne	white-skin-house	
	'he sits into rulership'		K'inich K'an Joy Chitam	Divine Lord of Palenque	he sat (on) the throne	(of) the White House
b.	*chumlaj ta ajawlel*	*yajawte'*	*k'inich ahkal mo' naab*	*k'uhul baakal ajaw*	*u mek'jiiy*	*sak nuk naah*
	chum-laj-ø ta-ajaw-lel	y-ajaw-te'			u-mek'-jiiy	sak-nuk-naah
	sit-POSIT-3SA PREP-ruler-ABSTR	3E-ruler-tree			3E-embrace-PAST	white-skin-house
	'he sits into rulership'	Lord of Lineage	K'inich Ahkal Mo' Naab	Divine Lord of Palenque	he embraced	the White House
c.	*chumlaj ta ajawlel*		*k'inich k'uk' bahlam*	*k'uhul baakal ajaw*	*u chum tz'am*	*sak nuk naah*
	chum-laj-ø ta-ajaw-lel				u-chum-tz'am	sak-nuk-naah
	sit-POSIT-3SA PREP-ruler-ABSTR				3E-sit-throne	white-skin-house
	'he sits into rulership'		K'inich K'uk' Bahlam	Divine Lord of Palenque	it (is) throne seating	(of) the White House

Chronicle of the Maya Kings and Queens (Martin & Grube, 2008) is a history book based almost entirely on Native American written sources. It shows that this fragment of the history of Palenque was rather complex (Martin & Grube, 2008,

pp. 162–174). K'inich Janaab Pakal I, who is mentioned at the very beginning of the Panel of 96 Glyphs as the founder of the Maya White House, had three sons, the first and third of whom are not mentioned in the Panel of 96 Glyphs. This is rather surprising in the case of the former, as he was not one of the obscure rulers quickly forgotten by history, whereas it is rather expected in the case of the latter, as he seems to have never been crowned. Thus, K'inich Kan Joy Chitam II (Example 6a) does not succeed his father immediately; nevertheless his claim to the throne comes directly from his father. The situation repeats itself in the case of K'inich K'uk' Bahlam (6c), who probably also takes the throne after the rule of his two uncles. The situation is different, however, in the case of K'inich Ahkal Mo' Nahb III (6b) because he is the nephew of the previous ruler, so the line of descent is not direct, yet he is *yajawte'* "the lord of the (royal) lineage".

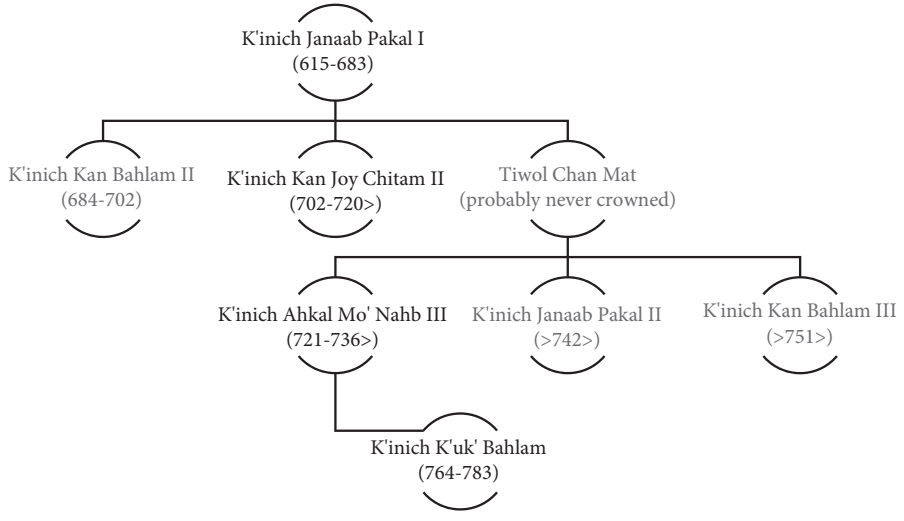

Figure 4. Fragment of the royal family tree of Palenque. Grey font – people not mentioned in the Panel of 96 Glyphs, but known from other sources (Martin & Grube, 2008, pp. 162–174).

Thus, the intricacies of Palenque politics may be the reason for the linguistic variety in the description of royal accession in the Panel of 96 Glyphs. All three rulers mentioned in Examples (6a–c) above *chumlaj ta ajawlel* 'sit into rulership', but those who take their claim to the throne directly from their fathers *chum tz'am sak nuk naah* 'sit on the throne of the White House', while the one who takes over from his uncle *umek'jiiy sak nuk naah* 'embraced the White House'. All three linguistic expressions are metonymic in nature, based on the PART OF ACTION FOR THE WHOLE ACTION metonymy because one element of the accession ceremony stands for the whole, and on the CAUSE FOR RESULT metonymy because performing the action causes a change of status of the person – sitting on the throne makes him/her

a ruler. Furthermore, because the expressions are not purely referential but rather describe an abstract concept, they may be further interpreted metaphorically as ACCESSION IS SITTING ON THE THRONE / EMBRACING THE THRONE.[4] This interpretation correlates with Mittelberg and Waugh's (2009) discussion of iconic gestures, where they argue that all iconic gestures involve metonymy, and those that indicate abstract concepts involve both metonymy and metaphor (a phenomenon also discussed by Littlemore (2015, p. 69)).

2.5 The language of war

Warfare is yet another topic frequently covered in Maya inscriptions. It is usually talked about in terms of being captured (*chuhkaj* 's/he/it is captured'), being a prisoner (*ubaak* 's/he is a prisoner'), being chopped (*ch'ahkaj* 's/he is chopped), being taken down (*jubuuy* 'it is taken down) or using an undeciphered verbal expression nicknamed a "star-war" glyph and interpreted as a total warfare event against another city-state (Coe & Stone, 2005, pp. 89–91; Johnson, 2014, p. 245; Schele & Miller, 1992, p. 210). Example (7) presents a thought-provoking passage from a hieroglyphic stairway (i.e. a staircase decorated with a glyphic text) from Dos Pilas (Dos Pilas Structure L5-49 Stairway 2 West Section), which describes a series of military events between the city-states of Tikal, Dos Pilas and Calakmul (Boot, 2002; Fahsen, 2002), and amongst which one event is described in the following words:

(7) a. **ju-bu-yi** **u-TOK'-PAKAL** **nu-u-JOL**
jubuuy-ø *u tok' u pakal* *nunujol*
jub-uuy- ø u-tok' u-pakal
bring.down-MED-3SA 3E-flint 3E -shield Nunujol

b. **NAB-ja** **u-CHICH-li**
nabaj-ø *u ch'ich'il*
nab-aj-ø u-ch'ich'-il
pool/lake-DER-3SA 3E-blood-INAL

c. **WITZ-ja** **u-JOL-li**
witzaj-ø *u jolil*
witz-aj- ø u-jol-il
mountain-DER-3SA 3E-skull-INAL
'The army of Nunujol is brought down, their blood pools, their skulls mountain'

4. As discussed in relation to Example 4b, the first layer of interpretation is metonymic in nature, but this step is metaphorical because it involves mapping between different domains.

The passage in Example (7) consists of 3 clauses, first of which is the standard expression *jubuuy u tok' u pakal* 'the flint and shield (of X) is brought down', which is an expression which appears in numerous texts, e.g. in Tikal Temple 1 Lintel 3, Bonampak Sculptured Stone 4 or Bonampak Lintel 4. The 'flint and shield' stands for the army of a ruler; it is a diphrastic kenning (see, e.g., Knowlton, 2002) that is a metonymically derived expression, based on the TWO PARTS FOR WHOLE metonymy, where two characteristic features of a metonymic target are elected to replace it. Then, the conceptualisation is enriched with a very graphic description of the outcome of warfare: the blood of the defeated is spilt in such amounts that it forms lakes (7b) and the skulls are piled up into mountains (7c) by the victorious king. It is a terrible war, indeed. This kind of detailed description is unique in the rather standardised texts describing dynastic histories, at least with respect to those which have survived until today, and it immediately captures the imagination and creates a vivid conceptualisation of a gory war with dire consequences.

3. In search of deliberateness

The examples discussed above show that metaphoricity and metonymy are inherent features of Classic Mayan. The non-literal language and symbolism appear both in the textual and visual modalities, which suggests that they are part not only of the lexicon but also of the Maya way of thinking.

The strategies employed by ancient scribes involve as a minimum (1) repetition, (2) accumulation, and (3) multimodality of the linguistic and artistic means. The repetition is employed, for example, in the Palenque Temple of the Cross Panel, where the whole right-hand section is composed of recurrent clauses stating that ruler X is born and Y years after he was born, he is crowned. This kind of repetition structures the whole text and focuses the readers' attention on the main message. In this case, the listing demonstrates the excellent pedigree of the incumbent ruler and legitimises his claim to the throne.

The accumulation of conceptualisations is employed, for instance, in the text-only Dos Pilas Stairway 2, where the typical phrase *jubuuy u tok' u pakal* 'the army (of X) is brought down' is reinforced by two additional clauses: *nabaj uch'ich'il* 'their blood pools' and *witzaj u jolil* 'their skulls mountain' which make the textual description more vivid and visually impactful. It is now impossible to state if this text was accompanied by some image(s) that illustrated it, as it is often the case with Maya inscriptions, but possibly it was not, which would have made it all the more crucial to make the verbal description as horrifying and imaginative as possible.

Finally, multimodality is employed, among others, in inscriptions where an event is depicted in the visual modality and described verbally in the textual modality, usually along with other events related to the depicted image, e.g. El Cayo Altar, Nim Li Punit Stela 15 (see Figure 3), La Pasadita Lintel 2, Aguateca Stela 1, where the image shows a scattering event, while the accompanying text describes several related facts. The manipulation of image and text makes it possible to grant or limit access to the information. Depending on the balance between the content of the image and text, some layers of the message might be accessible to both literate and illiterate audiences (e.g. the nature of the event and identity of person(s) involved), while others are only accessible for those who can read.

However, can any of the metaphors discussed above be seen as examples of deliberate metaphor as defined by Steen (2010, 2015)? Generally speaking, all language use, including the use of metaphor and metonymy, is purposeful and intentional, but, according to Steen's definition, metaphor is deliberate when it is intentionally used as a metaphor (2015, p. 67), and "a metaphor is used deliberately as a metaphor when its source domain concept requires setting up a source domain referent in the representation of the utterance" (2015, p. 68), so "it leaves the addressee no option but to consciously set up a cross-domain mapping" (2010, p. 56); in other words, "it instructs the addressee to momentarily adopt another standpoint, in another frame of reference, and to reconsider the local topic from that point of view" (2010, p. 58). Thus, language users consciously attend to both the source and target domain to work out how the two concepts may be compared. Therefore, deliberate metaphor is typically novel, and even if it is conventional, it is used in a novel way because it is "intended to produce a change in the perspective on the addressee on the topic" (2010, p. 43).

A typical example of deliberate metaphor is explaining the mechanism of Alzheimer's disease by comparing human brain to a house full of lights which gradually turn off and it is impossible to turn them on again (see Steen, 2013, p. 182; 2015, p. 67). It attempts to explain a concept which is new and/or difficult to comprehend by comparing it to a familiar concept, which may be in some way helpful in understanding it better. Thus, the criteria for identifying a deliberate metaphor include as a minimum: (1) its novelty and uniqueness, (2) the activation of both the source and target domains, (3) a new understanding of the target concept (Steen, 2013, p. 182; 2015, p. 67).

Thus, can any metaphors found in Classic Mayan be identified as instances of deliberate metaphor? Although we may safely assume that their use was intentional, I believe none of them may be considered a deliberate metaphor for the following reasons:

First of all, our understanding of Classic Mayan is based on an unquestionably fragmentary and randomly preserved corpus of language fossilised by

writing, not identical with actual vernaculars spoken by its users. The genre of monumental Maya inscriptions (both the iconography and language) is highly conventionalised with a limited scope of topics covered and a restricted vocabulary. Therefore, it is unlikely that innovative and spontaneous language use is to be found there.

Secondly, a lot of the concepts seem to have been not only Maya-specific but also pan-Mesoamerican, circulating among different cultures of the region throughout centuries, propelled by vibrant cultural and economic exchange. Though they might have been deliberate metaphors at some point, when they were used for the first time, they definitely became conventionalised with time. For example, the conceptualisations of death as a journey or kings as farmers discussed in 2.2 and 2.3 seem to go back as far as the Pre-Classic Period. Similarly, the extension of verbs of hearing into the domain of cognition discussed in 2.1 may be traced back to Proto-Mayan, so in the Classic Period they surely belonged to the everyday lexicon. Similarly, the accession rituals and depictions, as well as war expressions, from various Mesoamerican cultures and historical periods seem to be surprisingly uniform and standardised, forming part of the common lexicon of Mesoamerican cultures.

Finally, concerning the examples discussed in 2.4 and 2.5: varied vocabulary used to describe royal accession and military exploits may be unique in the available corpus, but this does not mean that they were exceptional in the language. New inscriptions are discovered every year, enriching our corpus of Maya texts, though it is obvious that we will never acquire a complete picture, as many of them have been lost forever. In any case, it is not feasible to base an argument for the uniqueness of a linguistic expression on the extant written texts.

To sum up, the conceptual metaphors and metonymies identified in Classic Mayan seem to belong to the everyday lexicon rather than to this one per cent of direct metaphors that Steen (2010, p. 54) estimates are best candidates for deliberateness. They may be so entrenched that possibly they were not even processed metaphorically (Steen, 2010, p. 50) but simply used conventionally and automatically, in the same way that speakers do not analyse the metaphorical use of spatial prepositions in temporal contexts (see Tyler & Evans, 2007). Though some of them might seem unusual and exotic to a 21st century European audience, for the Maya people of the Classic Period (250–900 AD) these expressions were most likely a codified and standardised means of communication. Thus, none of the analysed metaphors was identified as: (1) novel and unique, (2) requiring the activation of both the source and target domains, or (3) offering a new understanding of the target concept. Therefore, they cannot be treated as cases of deliberate metaphor.

Key to glosses

?	an undeciphered component of the expression
3A	"set A" personal pronoun
3C	"set C" personal pronoun
3E	3rd person ergative pronoun
3SA	3rd person singular absolutive pronoun
ABSTR	abstractiviser
ADJ	adjectival pronoun
AP	antipassive
ATTR	attributive adjective suffix
DEF	definite article
DER	derived intransitive suffix
INAL	inalienable possession suffix
MED	mediopassive
PASS	passive
POSIT	positional verb
PREP	preposition
REL	relational
TH	thematic suffix

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Is all poetic metaphor deliberate?

Exploring the relationship between verbal creativity and deliberateness

Anna Piata
Swiss Center for Affective Sciences & University of Neuchâtel

The present study focuses on poetic metaphor with the aim to explore the relationship between verbal creativity and deliberateness. It has been suggested that novel metaphors are typically deliberate, although this does not mean that all conventional metaphor is necessarily non-deliberate (Steen, 2010). In this study, I examine metaphors of time that appear in poetic texts and are linguistically and conceptually conventional, showing that they can nevertheless be used deliberately via the linguistic and textual context(s) in which they are embedded. They are thus endowed with new, enriched contextual meanings, thereby inviting readers to revise their existing conceptualisations. I finally conclude that deliberateness can serve as an overarching framework for identifying poetic metaphor and distinguishing it from metaphor in poetry.

Keywords: poetic metaphor, deliberateness, conventionality, verbal creativity, time

1. Introduction

It is common knowledge in the contemporary study of metaphor that much of the metaphorical language that we use every day goes unnoticed; it is conventional and linguistically entrenched, rooted in shared, underlying conceptual mappings, and it is automatically processed to the effect that neither the speaker nor the hearer would consider it metaphorical; this is the case in everyday linguistic expressions such as, e.g., '*We are approaching Christmas*' and '*Christmas is approaching*', which construe events as destinations towards which experiencers move or as moving towards a (real or imaginary) observer, respectively. This cognitive turn in metaphor research, commonly known as Conceptual Metaphor Theory (Lakoff & Johnson, 1980; 1999; Lakoff, 1993), generated an explosion in the study of everyday metaphorical expressions with the aim to unravel the conceptual backbone

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of metaphor, whether at the level of systematic patterns across languages or with regards to their psychological reality in discourse processing. In this context, attention was drawn to the *conceptual mappings* that metaphors afford between a source and a target domain, such as motion and time in the above examples: TIME AS A LOCATION and TIME AS A MOVING ENTITY, respectively.

This line of research revolutionised metaphor studies and deepened our understanding vis-à-vis the role of metaphor in language and thought. However, is it always the case that metaphor use goes unnoticed in verbal communication? When looking at real communicative events, the answer is blatantly 'no'; metaphor can be, and is, quite often used *deliberately*. Deliberateness refers to "people using metaphor *as* metaphor: it makes intentional use of something to think about something else" (Steen, 2013, p. 183; emphasis in the original). Deliberate metaphors activate the underlying cross-domain mapping that inheres in all metaphorical expressions (but is activated only when they are used deliberately) and their processing therefore requires comparison; the addressee is thus expected to understand the target domain in terms of the source domain that is used in the local discourse to represent it. This often results in *perspective changing*, in that language users need to revisit their existing conceptualisations. Such perspective changing is assumed to be the main communicative function of deliberate metaphor, designed to perform various rhetorical goals such as persuasion, instruction, amusement, etc.

An exemplary case of deliberateness is probably *poetic metaphor*. Poetic metaphors, unlike everyday metaphorical expressions, usually involve *novel* conceptual mappings; consider, for example, the following poetic lines from John Keats' *Endymion*: "And a whole age of lingering moments crept/ sluggishly by". Here moments passing by are metaphorically represented as creeping sluggishly, a conceptualisation that is consistent with time as a moving entity (cf. 'time goes by') but at the same is non-conventional and novel. Creeping is not conventionally associated with time, as a search in the BNC reveals, with only one result of time collocating with the motion verb 'to creep' and this probably with a different meaning ("And when my father gives it a little thought he'll realise it is now September and that my time off is likely to creep into next year" [BNC HHB 638]). The poetic metaphor above exemplifies what Lakoff and Turner (1989) call "extension" of a metaphor, namely activating an otherwise unused element of the source domain and mapping it onto the target domain; here the manner of motion is specified by virtue of "crept" and "sluggishly" (note that everyday metaphors of time generally tend to profile directionality and speed rather than manner of motion; see Piata, 2018). Finally, the metaphor construes the passage of the moments as being slow and perhaps irregular and difficult to cope with. The reader is therefore invited to come up with such an *ad hoc* conceptualisation of the passing moments.

It is quite clear that the above metaphor is deliberate. The frame that is used to talk about the passage of the moments (i.e., CREEPING) does not conventionally

apply to time, events and/or temporal units; in other words, the mapping between the passing moments and creeping is conceptually novel. What happens, though, when poetry makes use of metaphorical expressions that are conventional in linguistic and conceptual terms? In this paper, I shift the attention to such cases of conventional metaphors found in English and Modern Greek poetry, focusing specifically on metaphors related to time conceptualisation. In doing so, my aim is to show that poetic metaphor is indeed an exemplar case of deliberate metaphor not only because of the high degree of creativity, generating many novel expressions, but also because even the most conventional and indirect metaphors can be used deliberately in poetry. Deliberateness, I suggest, resides in contextual cues (linguistic and/or textual) of verbal creativity, which serve to 'revitalise' conventionalised metaphorical expressions and thus endow them with novel meanings (Müller, 2008). The underlying cross-domain mapping between time and space/motion is therefore contextually activated, urging the reader to shift to a novel, revised and/or enriched conceptualisation of time.

Finally, in light of the empirical evidence from poetry that I will examine, I wish to suggest that for metaphor to be considered poetic it has to be used deliberately, independently of whether it is conventional or novel in linguistic and conceptual terms. When not deliberate, I argue, it does not count as poetic metaphor but simply as *metaphor in poetry*. This line of research, I conclude, promises to offer some new insights as to how we can better conceive of poetic metaphor and delineate it from the non-poetic kind. Adding a communicative layer to our analysis of metaphor enables us to do full justice to the uniqueness of poetic metaphor that has been previously overlooked in the cognitive linguistic literature, the latter being concerned mostly with the conceptual continuity between conventional and non-conventional metaphors (Lakoff & Turner, 1989).

The structure of the chapter is as follows; in Section 2 I explicate the notion of deliberateness by looking at what I consider prototypical instances of deliberate and non-deliberate metaphors. The data analysis follows in Section 3, showing how indirect and conventional metaphors can be used deliberately in poetry. In Section 4, I discuss some implications and limitations of this approach vis-à-vis the definition of poetic metaphor. Section 5 closes the chapter with some concluding remarks along with questions and issues that remain open for further research.

2. Deliberate vs. non-deliberate metaphor

My aim in this section is to showcase how metaphors can be identified in discourse and, given that, how deliberate metaphors can be distinguished from non-deliberate ones, thus setting boundaries between the two. To illustrate this,

consider two metaphorical expressions of time, the former coming from Stephen Hawking's *Brief History of Time* (extracted from the BNC) and the latter from a poem:

(1) a. Suppose a system starts out in one of the small number of ordered states. **As time goes by**, the system will evolve according to the laws of science and its state will change. At a later time, it is more probable that the system will be in a disordered state than in an ordered one because there are more disordered states. [BNC H78]

b. What am I now that I was then?
May memory restore again and again
The smallest color of the smallest day:
Time is the school in which we learn,
Time is the fire in which we burn.
Delmore Schwartz, *Calmly We Walk Through This April's Day*

In order to identify metaphor in discourse, I implement the protocol for Metaphor Identification Procedure developed at the Vrije Universiteit Amsterdam, widely known as MIPVU. According to this, the following steps need to be followed (Steen, Dorst, Herrmann, Kaal, Krennmayr & Pasma, 2010):

1. Read the text to get a general understanding of the meaning.
2. Determine the lexical units.
3. (a) Establish the *contextual* meaning of the unit and (b) determine if it has a more *basic* meaning (i.e., one that is more concrete, body-related, historically older, but not necessarily the most frequent). Does the contextual meaning contrast with the basic meaning but can it be understood in comparison with it?
4. If yes, mark the unit as metaphorical.

A close reading of the two texts reveals that both expressions arise naturally in, and cohere with, the context of their occurrence. The former text describes various stages in the evolution of a system; in this context the expression "as time goes by" suggests the passing of time and the concomitant changes in the system. In the latter, the poet is contemplating how the passage of time has formed who he is now: "What am I now that I was then?". In this sense, it can be quite safely assumed that both expressions serve the author's rhetorical purpose; to put it another way, their use is *motivated* by the author's intentionality. As I aim to show in the remainder of this section, they are both metaphorical, albeit not in the same way.

More specifically, in (1a), "time" collocates with a motion verb (*goes by*), which thus acquires a contextual meaning different from its basic meaning, denoting translocation in space. This is a common, everyday expression and its understanding

resides in lexical disambiguation that enables the addressee to assign to the motion verb a meaning that is different from its basic sense; namely, a metaphorical one, also stored in the lexicon, that relates to the passage of events. For Steen (2008), this is the paradox of metaphor: most metaphor may not be processed metaphorically, that is, by means of a cross-domain mapping from one concept to another, as it has been claimed by cognitive linguists. No cross-domain mapping is required for metaphor understanding in (1a); stored lexical knowledge suffices for that purpose. The bulk of metaphor-related lexical units consists of such *indirect* metaphors. Indirect metaphors involve a contrast, as well as a comparison, between the basic and the contextual meaning of the lexical unit that is used metaphorically, although the contextual meaning can be well conventionalised and is often registered in general users' dictionaries (as is the case in (1a) above). Moreover, the metaphor in (1a) is conceptually *conventional*; it arises from an underlying conceptual mapping between time and motion, which is well established across languages (Radden, 2006) and is further corroborated with psycholinguistic evidence (see, e.g., Boroditsky, 2000; Gentner, 2001; Casasanto, Fotakopoulou & Boroditsky, 2010).

The poetic lines in (1b), however, exemplify a different use of metaphor: "Time is the school in which we learn,/ Time is the fire in which we burn". Here the time expression is not a common one and amounts to a copula construction with "school" and "fire" serving as the predicates of "time". The intended meaning is that time is *like* a school and *like* a fire; it gives humans a lesson to learn, it provides them with what is essential for living (just like the heat and the light released from fire) but (again like fire) it will eventually consume us. The expression, therefore, builds an analogy between, on the one hand, time and, on the other, schools and fire. The predicates of "time" retain their basic meaning, related to learning environments that offer a large variety of education-related services and a chemical process of combustion with particular reaction products, respectively. In other words, there is no contrast between the contextual and the basic meaning of "school" and "fire"; their contextual meaning is no different from their basic meaning. This entails that (1b) is a *direct* metaphor, involving a comparison between the source and the target domain (which can often be lexically signalled, e.g. with the marker 'like'). Moreover, at the conceptual level, (1b) is a novel metaphor; the mapping between time, and schools and fire is neither systematic nor frequent (although it is certainly motivated by our folk understanding of time throughout life, which therefore enables understanding the meaning of the metaphor). As such, it invites readers to momentarily shift to a novel way to conceptualise time, which may be subject to further inferencing (e.g., we learn our lesson over time but our life comes to an end before we have a chance to implement our newly acquired knowledge). Such a metaphor is therefore *perspective-changing*. In sum, the time expression in (1b) qualifies for a deliberate metaphor; it is linguistically direct and conceptually novel.

The fact that stylistic features such as parallelism (i.e., the repetition of the copula construction of time in two successive lines) and rhyme (/ləːn/ and /bəːn/) direct the reader's attention to the time metaphors further points to them being deliberate. Metaphors of this kind, finally, are typical of the poetic genre.

According to Steen (2010, p. 17), "[n]ovel and direct metaphors are typically deliberate, whereas deliberate metaphors can also be conventional and indirect". When examining metaphor in discourse, directness (at the linguistic level) and novelty (at the conceptual level) seem to serve as *indications* for identifying deliberateness in metaphor usage. I consider the time expressions in (1a) and (1b) as prototypical instances of non-deliberate and deliberate metaphors of time, the former being indirect and conventional and the latter direct and novel. What happens, however, when indirect and conventional metaphorical expressions like the one in (a) are used deliberately? On the assumption that poetry generally favours the deliberate use of metaphor, in the remainder of this chapter I aim to tackle this question on the grounds of metaphorical expressions found in poetic texts.

3. Poetic metaphor, verbal creativity and deliberateness

Consider, first, the following poem by Emily Dickinson, which opens with a time expression that gives also the title to the poem (*Time does go on*):

(2) **Time does go on –**
I tell it gay to those who suffer now –
They shall survive –
There is a sun –
They don't believe it now. Emily Dickinson, *Time does go on*

Dickinson's poem showcases how an everyday metaphor can be contextually rendered deliberate. In linguistic and conceptual terms, the metaphor in (2) is both indirect and conventional. Similarly to (1a) above, it makes use of "go" which literally denotes physical translocation and qualifies as a motion frame for conceptualising the passage of time in everyday language. However, here the metaphor has one additional element; it is accompanied by the emphatic auxiliary "does". This is not accidental; it seems that through this emphatic auxiliary Dickinson wishes to direct the reader's attention to the time metaphor and thus reinforces what would otherwise go unnoticed: "time goes on". The reader is thus invited to go beyond the formulaic and consider that time going on is more than a commonplace. Indeed, a closer examination of the poem reveals that the time metaphor in (2) is addressed to "those who suffer now" in order to offer them consolation of some sort. The metaphor is deliberately used here, aiming to reassure those who suffer

with something that may seem obvious: that time will keep on moving, even if it now feels still and frozen, and that "they shall survive". With this reinforcement, therefore, the poet aims to make sufferers switch to a different conceptualisation of time, one that is reassuring and comforting.

Another instance of an indirect, conventional metaphor of time is attested in the following extract from Walt Whitman's *Crossing Brooklyn Ferry*:

(3) These, and all else, were to me the same as they are to you;
I project myself a moment to tell you – also I return.

These and all else were to me the same as they are to you,
I loved well those cities, loved well the stately and rapid river,
The men and women I saw were all near to me,
Others the same – others who look back on me because I look'd forward to them,
(The time will come, though I stop here to-day and to-night.)

What is it, then, between us?
What is the count of the scores or hundreds of years between us?

Whatever it is, it avails not – distance avails not, and place avails not.
Walt Whitman, *Crossing Brooklyn Ferry*

Here, the metaphor imports conceptual structure from the motion domain to the target of time and, more specifically, from the frame of COMING, as it is also the case quite often in everyday language: "the time will come". The metaphor would go unnoticed had it not been followed by another metaphorical expression that elaborates the motion scenario: "I stop here to-day and to-night". In other words, time moves forward, the future will arrive, but the poet is stuck to the present, detached from time passing. The use of "though" in connecting the two metaphors clearly builds a contrast between the everlasting flow of time and the poet standing still in the present. In short, an otherwise everyday metaphor such as "the time will come" here is contextually manipulated to the effect that it serves a rhetorical goal and produces an aesthetic effect. More generally, it seems that when the source domain is manifested also in the immediate linguistic context in which an indirect and conventional metaphor occurs, then the metaphorical mapping cannot but be activated, as it is the case with "I stop here" in (3). Besides that, spatial language (underlined) is found also elsewhere in the passage: "I project myself a moment to tell you – also I return" and "What is the count of the scores or hundreds of years between us?". It thus transpires that the time metaphor is perhaps part of a larger time-space metaphor in *Crossing Brooklyn Ferry* in which the ferry stands for the imagined time travel, and the Hudson River between Brooklyn and New York resembles the "scores or hundreds of years" between the poet and the future commuters.

Such contextual cues that activate the frame structure of the source, thus directing the reader's attention to a conventional mapping, can be of different kinds, as suggested in the following extract from Walt Whitman's *Passage to India*:

(4) Ah, who shall soothe these feverish children?
Who justify these restless explorations?
Who speak the secret of impassive Earth?
Who bind it to us? What is this separate Nature, so unnatural?
What is this Earth, to our affections? (unloving earth, without a throb to answer ours; Cold earth, the place of graves.)

Yet soul be sure the first intent remains, and shall be carried out,
Perhaps even now the time has arrived.
After the seas are all cross'd, (as they seem already cross'd,)
After the great captains and engineers have accomplish'd their work,
After the noble inventors, – after the scientists, the chemist, the geologist, ethnologist
Finally shall come the poet worthy that name,
The true son of God shall come singing his songs.

Walt Whitman, *Passage to India*

Another motion verb that is also associated with time conceptualisation is attested in (4): 'to arrive'. There is nothing linguistically and/or conceptually novel about this metaphorical mapping; consider, e.g., 'The big day has arrived'. Notwithstanding its commonality, I wish to suggest that the metaphor "the time has arrived" here is used deliberately.

Deliberateness, I wish to suggest, lies in the poet choosing 'arriving' instead of 'coming', which is equally (and perhaps more frequently) used in everyday language with the same meaning: 'the time has come…'. The question then is: why does the poet opt for 'arrive' rather than 'come'? In other words, what is the idiosyncratic meaning evoked by 'arrive' in (4) that makes its use deliberate? The answer, I argue, lies in the implicature that each verb bears when collocating with "time". With reference to time and events both verbs express telicity, namely the completion of an action, as also indicated by the perfective aspectual operators: 'the time has come' and 'the time has arrived'. The two expressions look equivalent and one could argue that they come across as synonymous and perhaps interchangeable. However, I suggest that there is a subtle difference between them; while 'come' profiles the process towards the completion of the action, 'arrive' foregrounds the endpoint of an action. It is precisely this endpoint that the poet wishes to stress with the time metaphor in these lines; it is now the time that new lands have been discovered across the seas, and various scientific and technological achievements have been accomplished to eventually pave the way for "the true son of God": the poet. In this sense, it may not be a coincidence that the time expression pairs

with the completion of other actions in the passage, as suggested by "cross'd" and "accomplish'd". Such contextual cues prompt the reader to activate the endpoint of time passing, an aspect that is inherent in the semantics of 'arrive' but would otherwise go unnoticed.

The next example comes from Modern Greek poetry. It is derived from the poem *Inferno* by the contemporary poet Aleksandros Isaris and refers to the threatening advent of time:

(5) Τικ τακ τικ τακ
Σημαίνει μία δύο δώδεκα
Όταν το βράδυ σχίζεται

Κι ο χρόνος προχωρεί ποδοπατώντας.
And the time advance-3SG-PRES trampling
'And **time moves on** trampling'

Λάμπουν στο βλέμμα οι φωτιές
Καίγονται τα κορμιά
Που βγάζουνε ατμούς βογκώντας.
Τικ τακ τικ τακ

Ο χρόνος προχωρεί ποδοπατώντας.
The time advance-3SG-PRES trampling
'**Time moves on** trampling'

Aleksandros Isaris, *Inferno*

Tick tock tick tock
Signalling one two twelve o'clock
When the night is torn apart
And **time moves on** trampling
Flames shine in the gaze
The bodies are on fire
They evaporate and moan
Tick tock tick tock
Time moves on trampling.

This poem makes use of the motion verb 'προχωράω' ('to advance, to move on') that denotes forward motion and metaphorically applies to time passing under both patterns, namely Ego- and Time-moving. Here the latter is the case, suggesting that time is moving forward: "ο χρόνος προχωρεί" ('time moves on'). The metaphorical expression is indirect and conventional; its use, however, is deliberate in that the manner of motion is further specified in the metaphor: "ποδοπατώντας" ('trampling'). In other words, time keeps moving forward to the future, yet its stepping resembles a raid. Such a raid is instant but utterly destructive, since it leaves behind nothing but ruins: shining flames and burning bodies. Time, however, will keep going by as if nothing had happened.

The frame of TRAMPLING that is imported to the conceptualisation of time in (5) revitalises the dead metaphor of time passing by and moving forward, giving rise to an enemy construal (Piata & Pagán Cánovas, 2017), which is also consistent with the TIME IS A DESTROYER conceptual metaphor (see Lakoff & Turner, 1989). This already renders the use of metaphor in (5) deliberate. However, it seems that here deliberateness extends well beyond the metaphorical construction itself. First of all, the metaphor of time trampling is repeated twice in the poem; this means that it cannot escape the reader's attention. In addition to that, repetition invites the reader to entertain a particular conceptualisation of time; time's raid is not unique, it is recurrent just like the rise of the sun and the fall of the night in the sky and the ticks of the clock that are designed to measure the passage of time. In fact, the poem is rich in iconic iteration: the numbers one and two together constitute the number 12; the ablaut compound "Τικ τακ τικ τακ" 'Tick tock tick tock' is iterative and onomatopoetic, mimicking the sound of the clock; and, moreover, it is repeated twice at the beginning and the end of the poem, each time introducing the time metaphor that follows. Being itself rhythmic and ceaseless, the sound of the clock's hand thus alludes to the sound of trampling steps, bringing to mind a platoon of soldiers marching in lockstep. This iconic link between the sound of the clock and the sound of trampling reinforces, I argue, the enemy construal of time that is enacted by the metaphor. It follows that deliberate metaphor is far richer than the lexico-grammatical means used to express it; rather, textual patterns and stylistic choices are equally important in rendering the use of a metaphor deliberate.

Finally, the metaphor in (5) is interesting for one more reason; it instantiates what Lakoff and Turner (1989) call *extension* of a metaphorical mapping. Extension is one of the suggested mechanisms of metaphorical creativity, together with elaboration, questioning and composition. It refers to making use of an otherwise unused element of the source domain and mapping it onto the target domain. Here extension relates to the manner of motion, specified as 'trampling'. Although such mechanisms have been criticised for missing out the emergent meaning of poetic metaphors (see Piata, 2018), there is no doubt that, at least to some extent, they capture the link between conceptual metaphors and verbal creativity. The question then is: how does extension (and, more generally, any mechanism of metaphorical creativity) relate to deliberateness? A possible answer to this is that once a conceptual metaphor is extended (or somehow creatively exploited) it becomes deliberate; readers cannot but pay attention to the metaphor to the effect that they enrich and/or revise their existing conceptualisation(s).

Next, consider a poem by the well-known post-war Greek poet Tasos Leiva-ditis, instantiating yet another everyday spatio-temporal expression:

(6) Η μητέρα μου πέθανε
η αγαπημένη μου έφυγε
οι σύντροφοι με προδώσανε

τα χρόνια περάσανε
the years passed-3PL
'the years are gone'

τώρα μπορώ να κοιμάμαι ήσυχος.
Όλα έγιναν.

Tasos Leivaditis, *Η μητέρα μου πέθανε* ('*My mother died*')

My mother died
My beloved left
My comrades betrayed me
The years are gone
I can now sleep peacefully.
All has already happened.

In (6), the metaphorical expression is also indirect and conventional, making use of another motion verb prototypically associated with time and calendric units: "περνάω" ('to pass'). However, when metaphorically applying to time and events, passing also bears an implicature of non-reversibility; time goes by but, as our everyday experience suggests, it does not come back and is therefore perceived as being lost (and hence invaluable). Such folk knowledge about time passing is also recruited in the metaphor (thereby suggesting that spatio-temporal metaphors are not derived from a uni-directional mapping from space to time; see Fauconnier & Turner, 2008; Piata, 2018).

Unlike the previous examples, the metaphor in (6) is not elaborated in the immediate linguistic context; there is no evidence that the spatio-temporal mapping of time passing is lexically activated in the poem through, for example, a more elaborate motion scenario. Nevertheless, I suggest that the metaphor is deliberate. Deliberateness, I argue, lies in the textual patterning of the poem, which reinforces the typical inference of irreversibility and loss that is inherent in the semantics of 'time passing'. Consider the verses that precede the time expression: they manifest a similar syntactic construction of a VP (Subject + Verb), all of them expressing the loss of beloved ones: the poet's mother, his partner, and his comrades.[1] Those appear as the subject in each VP, each one followed by a verb denoting a different kind of loss: death ("πέθανε" 'died'); separation ("έφυγε" 'left'); and betrayal

1. Note that Leivaditis was a communist, so probably here he alludes to his communist comrades.

("προδώσανε" 'betrayed'). The repetition of the same syntactic pattern in successive lines is generally referred to in stylistics as parallelism. The time metaphor here is textually aligned with such linguistic expressions of loss. It is by virtue of this textual patterning, I suggest, that the inference of loss that is associated with "τα χρόνια περάσανε" ('the years are gone') is reinforced in the poem. Its use, therefore, cannot but be viewed as deliberate; the readers are invited to shift their attention to what is generally implicated when people say that the years have passed and perhaps simulate a sense of distress and regret over loss. Whether loss of a beloved one or of passing time, it is felt to be utterly painful and perhaps insurmountable.

It is worth noting, finally, that in the preceding expressions the object of loss is accompanied by the possessive "μου" ('my'), as expected when someone refers to a person, be it one's mother, partner or comrades. When the poet makes use of the entrenched expression "τα χρόνια περάσανε" ('the years are gone'), we can quite safely infer that it is *his* years that are gone and that his life is now confronted with loss on all fronts: time to live in and people to live with. In this sense, the closing of the poem comes across as ironical: "τώρα μπορώ να κοιμάμαι ήσυχος. Όλα έγιναν." ('I can now sleep peacefully./ All has already happened'). Now that what he considers as most precious and vital for living is gone, there is nothing left for him to expect nor is there a reason for him to agonise over his future.

The last poem I examine in this section belongs to the internationally acclaimed Greek Egyptian poet Constantine Cavafy. Entitled "Απ' τες εννιά" ('Since nine o'clock'). The poem describes an interval in the poet's present during which he recollects significant events from his past lifetime. As shown below, the poem opens and closes with a time expression that construes time as passing quickly:[2]

(7) **Δώδεκα και μισή. Γρήγορα πέρασεν η ώρα**
Half past twelve. Quickly passed-3SG the time
'Half past twelve. Time has gone by quickly'

απ' τες εννιά που άναψα την λάμπα,
και κάθισα εδώ. Κάθουμουν χωρίς να διαβάζω,
και χωρίς να μιλώ. Με ποιόνα να μιλήσω
κατάμονος μέσα στο σπίτι αυτό.
Το είδωλον του νέου σώματός μου,
απ' τες εννιά που άναψα την λάμπα,
ήλθε και με ηύρε και με θύμησε
κλειστές κάμαρες αρωματισμένες,
και περασμένην ηδονή – τι τολμηρή ηδονή!

2. For a full collection of Cavafy's poems in English see Keeley & Sherrard (1992).

…
Το είδωλον του νέου σώματός μου
ήλθε και μ' έφερε και τα λυπητερά·
πένθη της οικογένειας, χωρισμοί,
αισθήματα δικών μου, αισθήματα
των πεθαμένων τόσο λίγο εκτιμηθέντα.

Δώδεκα και μισή. Πώς πέρασεν η ώρα.
Half past twelve. How passed-3SG the hour.
'Half past twelve. How the time has gone by.'

Δώδεκα και μισή. Πώς πέρασαν τα χρόνια.
Half past twelve. How passed-3SG the years.
'Half past twelve. How the years have gone by.'

Constantine Cavafy, *Απ' τες εννιά* ('*Since nine o'clock*')

Half past twelve. Time has gone by quickly
since nine o'clock when I lit the lamp
and sat down here. I've been sitting without reading,
without speaking. Completely alone in the house,
whom could I talk to?
Since nine o'clock when I lit the lamp
the shade of my young body
has come to haunt me, to remind me
of shut scented rooms,
of past sensual pleasure – what daring pleasure…
The shade of my young body
also brought back the things that make us sad:
family grief, separations,
the feelings of my own people, feelings
of the dead so little acknowledged.

Half past twelve. How the time has gone by.
Half past twelve. How the years have gone by.

In everyday language, time is commonly construed as quick either through a verb or through an adverbial expressing rapidity: 'time flies/ passes quickly'. In the opening of the poem, in (7), the latter is the case: "γρήγορα πέρασεν η ώρα" ('time has gone by quickly').[3] This expression refers to the last few hours in the poet's present, namely from nine o'clock until now that is half past midnight ("Δώδεκα και μισή"). Being utterly alone in the house on an uneventful evening ("Κάθουμουν

3. Note that, given that Modern Greek is a free word order language, in the original text the adverbial appears in focus position in the beginning of the sentence and rapidity is therefore emphasised.

χωρίς να διαβάζω,/ και χωρίς να μιλώ" 'I've been sitting without reading,/ without speaking'), the poet is inundated with memories, both pleasant and sad, from his past life: sensual pleasure ("τι τολμηρή ηδονή!"), and family grief and separations ("πένθη της οικογένειας, χωρισμοί"). Such recollection of the past yields, finally, another temporal construal in the end of the poem, this time referring to his whole lifetime: "Δώδεκα και μισή. Πώς πέρασεν η ώρα./ Δώδεκα και μισή. Πώς πέρασαν τα χρόνια." ('Half past twelve. How the time has gone by./ Half past twelve. How the years have gone by.'). Again, this is a construal of time passing quickly but now there is no adverbial to denote rapidity; this is rather inferred through the lexico-grammatical means used in the construction. Not only does the construction implicate that the time has passed quickly but, moreover, akin to a rhetorical question, it expresses the poet's awe over the passage of time: how is it possible that so much time has elapsed? Although speed of motion is not mentioned in the last lines of the poem, the mapping is certainly conventional and the time expressions are indirect.

In what follows, I wish to suggest that the use of the time metaphors in (7), both in the beginning and in the end of the poem, is deliberate and, although simple at first glance, it affords a conceptually rich and aesthetically powerful conceptualisation of time. For that purpose, we need to look more closely at the textual patterning in which the metaphors are embedded. First of all, the time expressions appear in a circular pattern, opening with a compressed interval in the poet's present and ending with another compressed interval that goes back to the poet's past (which remains unspecified as to its extension but can be inferred as being far away from the present). The two intervals, however, are linked in one more way; by means of parallelism in the last two lines of the poem. The two time expressions are aligned and share the same syntactic structure with only the time lexeme being different: 'the hours' (in the present) and 'the time' (over the poet's life). Thus, they give rise to a more complex conceptualisation, whereby the poet's past lifetime is compressed into the last few hours that he has spent on recollecting it. Therefore, at the end of the poem our perspective for the compressed interval in the poet's present changes from its initial occurrence, when we find out that recollection is not *just* about these past hours of loneliness, uneventfulness and remembrance but rather about his whole lifetime that is being condensed into a few hours.

In theoretical terms, finally, the time construal that is enacted in the poem cannot be reduced to a uni-directional mapping from space to time. I suggest, instead, that the construal of compressed time in (7) requires a more complex cognitive operation such as blending, or conceptual integration (Fauconnier & Turner, 2002). Conceptual integration involves multiple-space networks whereby elements from two (or more) inputs are mapped and selectively projected onto a new space, the blend. No cross-domain mapping is required for conceptual

integration, which can therefore explain linguistic phenomena beyond metaphor. In (7), in particular, the two compressed intervals (i.e., in the present and in the past) serve as inputs to the blend. When mapped together, the emergent meaning is that the poet's past lifetime is equated with a few hours in his present. Such a conceptualisation is certainly consistent with how his past lifetime is *subjectively* felt in retrospect rather than with how it was actually experienced and/or measured in objective terms.

4. What is poetic metaphor?

In the previous section, I argued that indirect and conventional metaphors can be deliberately manipulated in the context of poetry so as to yield novel and original meanings. Does this mean that all indirect and conventional metaphors are deliberate when embedded in a poetic text? The answer to this is certainly 'no'. As I hope to have shown in the previous section, the identification of deliberate metaphors, no matter their level of indirectness and conventionality, resides in contextual cues, both linguistic and textual. In this section, I wish to take this idea a step further and tentatively suggest that *for a metaphor to count as poetic it has to be used deliberately*; in other words, an indirect and conventional metaphor that appears in poetry is not poetic unless it is intended to be perceived and understood as such. To this end, I will examine cases of metaphorical expressions in poetry which I consider to lack deliberateness or in which deliberateness is hard to identify and/or measure.

Consider the following poems:

(8) **When summer came**,
Our pastime was, on bright half-holidays,
To sweep along the plain of Windermere
With rival oars; and the selected bourne
Was now an Island musical with birds
That sang and ceased not; now a Sister Isle
Beneath the oaks' umbrageous covert, sown
With lilies of the valley like a field
And now a third small Island, where survive
In solitude the ruins of a shrine
Once to Our Lady dedicate, and serve
Daily with chaunted rites.
William Wordsworth, *The Prelude, or Growth of a Poet's Mind*

(9) Thus, in the bower, Endymion was calm'd to life again.
Opening his eyelids with a healthier brain,

He said: "I feel this thine endearing love
All through my bosom…
Can I want Aught else, aught nearer heaven, than such tears?
Yet dry them up, in bidding hence all fears
That, any longer, **I will pass my days**
Alone and sad
No, I will once more raise
My voice upon the mountain-heights; once more
Make my horn parley from their foreheads hoar:
Again my trooping hounds their tongues shall loll
Around the breathed boar: again I'll poll
The fair-grown yew tree, for a chosen bow…" John Keats, *Endymion*

(10) And Kung gave his daughter to Kong-Tchang
Although Kong-Tchang was in prison.
And he gave his niece to Nan-Young
although Nan-Young was out of office.
And Kung said "Wan ruled with moderation,
"In his day the State was well kept,
"And even I can remember
"A day when the historians left blanks in their writings,
"I mean, for things they didn't know,
"**But that time seems to be passing.**" Ezra Pound, *Canton XIII*

The poems above instantiate indirect and conventional metaphorical expressions of time, involving motion verbs like 'to come' and 'to pass' that are prototypically associated with time: "when summer came"; "I will pass my days/ alone and sad", and "but that time seems to be passing". They also share one more feature: there is nothing in the context of their occurrence to suggest that they are used deliberately. The source domains of coming and passing do not seem to be activated in the rest of the poems (either lexically or textually) or to be imported to more complex conceptual networks. In other words, they do not seem to be figurative or, to put it another way, poetic. This is not surprising, of course, given that for speaking about the passage of time there is no literal equivalent (unlike the sequence of events for which speakers can use purely temporal linguistic resources such 'earlier/ later' relations) and, therefore, whether in ordinary language or in poetry, speakers need to resort to spatio-temporal metaphors. This does not mean, however, that the use of the time metaphors in the poems above is not motivated; in (8), for example, the time metaphor "when summer came" introduces a recollection of childhood pastimes, while in (9) the poet will be passing his days only to emphasise that he will be "alone and sad" and, finally, in (10) time will keep going by even in the absence of any important events for historians to document ("A day when the historians left blanks in their writings").

Now consider poem (11) with yet another everyday spatio-temporal metaphor ("in time"):

(11) Time past and time future
Allow but a little consciousness.
To be conscious is not to be **in time**
But only **in time** can the moment in the rose-garden,
The moment in the arbour where the rain beat,
The moment in the draughty church at smokefall
Be remembered; involved with past and future.
Only through time time is conquered. S. Eliot, *Burnt Norton*

As it is widely known, prepositions are used to denote locations and spatial relations and are also often metaphorically transferred onto time and events: '*on* Sunday', '*in* the summer', '*at* this stage', '*over* the weekend', etc. The metaphoricity of such expressions is an outcome of historical development and semantic extension from space to time, which is no longer transparent for contemporary language users; after all, there is no other way to denote such temporal relations linguistically. They constitute, I suggest, the most prototypical instances of indirect and conventional spatio-temporal metaphors; therefore, they are the least prone to be used deliberately. Such a prepositional phrase is also attested here and is repeated twice: "in time". The question, however, is: can such a time expression whose metaphoricity has been bleached be used deliberately? I will attempt to address this question on the grounds of the poem in (11).

In general, the expression "in time" exploits the CONTAINMENT image schema that is inherent in the semantics of 'in' in English. For the temporal expression to be considered deliberate this image schematic structure needs to be activated while reading the poem. Here "in time" is used in a quite unexpected way, related to consciousness. For the poet only the present requires no consciousness because it can be experienced immediately, unlike the past and the future. It is only in time that one can experience the moment: "the moment in the rose-garden", "the moment in the arbour where the rain beat", "the moment in the draughty church". Time, therefore, is the overarching frame in which "the moment" is embedded. In this sense, one can arguably suggest that the CONTAINMENT schema is indeed activated in the temporal expression. In addition to that, the temporal prepositional phrase pairs with a number of spatial prepositional phrases denoting where the moment takes place (i.e., "in the rose-garden", "in the arbour" and "in the draughty church"). Last, but not least, there is no doubt that in these lines time is in the limelight and therefore it cannot escape the reader's attention; the lexeme 'time' appears six times (in a total of eight verses), the prepositional phrase "in time" is repeated twice while the poet makes repeated reference to "the moment", as well as to the past and the future.

The question still begs for an answer: does all this qualify "in time" as a deliberate metaphor? Despite the arguments sketched above, it would still be far-fetched, I think, to suggest that the readers' attention is directed to the underlying mapping to the effect that their views undergo a shift of perspective. What follows from the above is that deliberateness is not always crystal clear and can be rather hard to identify in discourse. One possibility could be that, just like other aspects in metaphorical and, more generally, figurative language related to, e.g., linguistic and conceptual conventionality, deliberateness is a matter of degree; for example, it could be the case that in (11) there is *some* deliberateness in the use of the time expression "in time". In addition, it transpires that the boundaries between deliberateness and intentionality can also be blurred; consider that in the above example the CONTAINMENT schema of the metaphor contributes to the intended meaning of the poem but this does not presuppose a full activation of the source domain (similarly to, e.g., 'this moment is still vivid in my memory' whereby the moment is contained in memory by virtue of 'in' but in the absence of any other contextual indication it would be safer to hypothesise a scalarity of deliberateness rather than considering the metaphor to be entirely deliberate).

Finally, a last issue that remains largely obscure relates to the study of deliberate metaphor in ancient texts. The fact that we have little and limited knowledge about the linguistic norms in ancient languages makes this endeavour rather risky and at best speculative. To illustrate this, consider the following spatio-temporal metaphor from Sappho's poetry:

(12) *Δέδυκε μὲν ἀ σελάννα*
καί Πληΐαδες, μέσαι δέ
νύκτες, πάρα ***δ'*** ***ἔρχετ'*** ***ὥρα,***
PRTC come-3SG hour
'time is passing'
ἔγω δέ μόνα κατεύδω. Sappho (Voigt 168b)

The moon has set,
and the Pleiades, it is
midnight, time is passing,
and I sleep alone.

The poem sets a scene of the night falling with the moon and the Pleiades (i.e., a cluster of stars located close to Earth and known for its bright light) glimmering in the night sky. This amounts to a description of solar (or natural) time, which is then followed by reference to calendric time: it is midnight and time is passing. What is crucial in this scene is that the poet sleeps alone. This invites an inference with some further implications about the poet's emotional state. Although passing, time does not bring what she longs for: her beloved one. This cannot but be

experienced with a sense of bitterness and regret on the part of the poet. There is no doubt that the time expression is intentionally used; there is repeated reference to motion, both physical and metaphorical, related to the constellation of Pleiades and the moon, and to time, respectively. Motion is also contrasted to the state of the poet, herself being motionless ("and I sleep alone").

However, the question of whether the metaphor is deliberate is hard to answer in (12). In linguistic terms, the metaphor is indirect. But deciding whether it is conceptually conventional or novel is not straightforward in the case of ancient texts; making such a judgment would require more extensive knowledge regarding the frequency and the usage of the construction *ἔρχετ' ὥρα* ('time is passing', lit. 'the hour comes') at the time when Sappho wrote her poetry. Contextual cues of deliberateness may be able to remedy this by serving as an indication for a metaphor to be considered 'poetic'. Still, however, judging whether the metaphor ensues a shift in the reader's perspective is on rather shaky ground. The issue is far from being resolved.

5. Concluding remarks

The aim of this chapter was to cast some new light on the category of metaphor that is generally referred to as 'poetic' through the lens of deliberateness; that is, metaphor being intended to be perceived and understood as such. On the assumption that "novel metaphors will typically be deliberate, whereas conventional metaphors are not" (Steen, 2010, p. 17), it set out to explore those cases of conventional metaphors that are, nonetheless, deliberately used. The discourse domain of poetry qualifies for such an endeavour. Poetry generally profiles the use of figurative language and is therefore expected to favour the deliberate use of metaphorical expressions, even when they are linguistically and conceptually mundane. As the present study has shown, such expressions are revitalised in the sense that they convey novel meanings that are contextually generated by virtue of the immediate linguistic context and the textual patterning in which they are embedded. As a result, they induce some sort of perspective changing, calling readers to negotiate and revise their pre-existing mental representations vis-à-vis the concept of time that constitutes the focus of this study.

Although the present study was initiated by the idea that poetic metaphor can offer some new insights on deliberateness by examining cases that have been largely overlooked in the relevant literature, at the same time it aspired to reverse the question with some, I hope, promising implications: how can the notion of deliberateness illuminate what is generally defined and identified as poetic metaphor? Rather than treating poetic metaphor solely in linguistic and/or conceptual

terms, the proposed analysis adds the communicative layer of metaphor use. Deliberateness, I argued, can offer an integrated way to account for poetic metaphor. From a linguistic point of view poetic metaphor varies considerably, ranging from everyday metaphors that are contextually manipulated in novel ways and thus acquire new meanings (such as the ones examined here) to completely original mappings that are prototypically deemed 'poetic' (e.g., "Time is the school in which we learn…"). Simply reducing poetic metaphors to some general preexisting conceptual mappings (such as, e.g., time as a moving entity or time as a destroyer) does not do justice to the rich meanings they evoke; in order to understand the meaning of a metaphor other linguistic and textual considerations need to be taken into account, such as additional features in the motion scene (e.g., different types of manner of motion, such as trampling) and/or textual and stylistic features (e.g., iconicity, parallelism).

Further implications arise from this line of research vis-à-vis the study of metaphor. First of all, it transpires that deliberateness in the use of metaphor is situated in the *genre events* in which it occurs, as also noted by Steen (2013, p. 194): "[g]enre contexts can guide the search for deliberate metaphor's linguistic forms, conceptual structure and communicative functions and elaborate its relation to non-deliberate metaphor". In poetry, in particular, readers *expect* to have their ordinary expectations (linguistic, textual and conceptual) challenged; poetry typically aims at being incongruent with readers' available mental representations, organised in clusters of knowledge structure – so-called *schemas*. Poetry generally favours the disruption of such schemas (Stockwell, 2006; see also Piata, 2016), resulting in perspective changing, which corresponds to the very essence of deliberate metaphor.

Another issue that also pertains to the genre context refers to the motivations behind the emergence of metaphor. Traditionally, metaphorical mappings have been analysed as arising from experiential motivations (e.g., the more distance is covered or the more quantity of a substance is accumulated, the more time is perceived as passing), which are also filtered according to cultural preferences. However, in a model that views metaphor at all three levels (i.e., language, thought and communication), the motivation behind metaphor should also be three-dimensional, comprising discursive parameters along with experiential and cultural ones. Such discursive motivations, as I call them, include any aspect of the discourse event that licenses the emergence of a particular metaphor, including genre and the immediate linguistic context with its lexico-grammatical, stylistic and textual features (such as, e.g., onomatopoeia, iconicity and parallelism). For example, when time is construed as trampling, the clock sounds that repetitively and forcefully signal time passing enhance the enemy construal of time that is already enacted by the semantics of trampling. This line of research entails that

our conceptualisation of embodied cognition should be broadened so as to also comprise the dimension of discourse. Last, but not least, the notion of deliberate metaphor seems to be complementary not only to Conceptual Metaphor Theory as it has already been suggested in the literature (Steen, 2010; 2013) but also to Conceptual Integration Theory, which is sensitive to the online construction of meaning and is able to account for more complex networks of metaphors.

Despite the new insights offered by this approach, however, we are still left with a handful of questions that beg for an answer. Such questions can be summarised as follows:

1. Are novel metaphors more 'deliberate' than the conventional ones that are used creatively? Would it be better to assume the existence of degrees of deliberateness and, if yes, is there a way to distinguish them (e.g., prototypicality, intentionality, metaphor processing…)?
2. How does deliberateness relate to the rhetorical goals and the aesthetic effects of metaphor use in poetry? More generally, how does deliberateness relate to intentionality?
3. Should deliberateness be viewed from the standpoint of the producer or from that of the receiver?
4. Is it always the case that deliberate metaphor is perspective-changing? Is it possible to have attention to metaphor without a change of perspective?
5. When examining metaphor in ancient texts, which are the limitations but also the opportunities offered by deliberateness?

Future research should address these questions in more detail to the effect that metaphor in communication can deepen our understanding of figurative language and thought. In this respect, poetry promises to offer a fruitful field of inquiry. However, corpus data and evidence from discourse processing should also be recruited if we wish to form a more complete picture of the interplay between language, cognition and communication vis-à-vis metaphor.

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To those walking in the footsteps of the faith

Deliberate metaphor in the Pauline epistles

Markus Egg
Humboldt-Universität zu Berlin

This paper investigates deliberate metaphors in the Pauline epistles in the framework of Deliberate Metaphor Theory (DMT), which targets metaphors that require conscious processing (Steen, 2009), but also with reference to other threads of metaphor research that pay attention to phenomena of deliberateness. Focus is on metaphors that exhibit deliberateness through their content. For these metaphors, deliberateness emerges through alienation, which highlights the differences between the two domains that are brought together in the metaphor. Three techniques of alienation are identified, using an ill-fitting literal (or source) domain for the metaphor, using contradicting source domains for the same metaphor, and using an internally flawed source domain. Many of these metaphors are motivated in that they convey a clear message that emerges through the alienation.

Keywords: metaphor, Pauline epistles, Deliberate Metaphor Theory, Conceptual Metaphor Theory, alienation

1. Introduction

In this paper, deliberate metaphors will be researched in the mixed text type of the Pauline epistles, which are both didactic and persuasive. The analysis does not only aim at unravelling the intricate metaphors in these epistles; on a more abstract level of analysis, these metaphors are a very interesting test case for Deliberate Metaphor Theory (DMT), which focuses on metaphors that call for conscious processing (Steen, 2009). I will discuss deliberate Pauline metaphors in the framework of DMT, but also within other threads of metaphor research that have paid attention to phenomena of deliberateness. My focus will be on those metaphors that exhibit deliberateness through their content.

The paper is structured as follows. First, the Pauline epistles will be introduced as a corpus, then I will review research on DM in Deliberate Metaphor Theory, Conceptual Metaphor Theory, hermeneutics, and Blending Theory. The main

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part of the study then investigates DM in the Pauline epistles. I will show that for these metaphors, deliberateness emerges through alienation, which highlights the differences between the two concepts that are brought together in the metaphor ('vehicle' and 'tenor' in the traditional terminology). The analysis of these metaphors reveals that many of them are motivated: They convey a clear message that emerges through the tension between the two concepts.

2. The Pauline epistles as a corpus

Paul's epistles are famous for their rich metaphorical imagery. His metaphors not only use an unusually wide range of domains, e.g., sports, family, body, or plants (see Williams, 1999 for a classification), they are very creative and unusual, like in Example (1):[1]

(1) ἔπινον γὰρ ἐκ πνευματικῆς ἀκολουθούσης
drink-IPFV.3PL indeed of spiritual-GEN.F.SG follow-PRS.PTCP-GEN.F.SG
πέτρας, ἡ πέτρα δὲ ἦν
rock-GEN.F.SG DET-NOM.F.SG rock-NOM.F.SG moreover be-IPFV.3SG
ὁ Χριστός.
DET-NOM.M.SG Christ-NOM.M.SG
'and indeed they drank from the spiritual rock that followed them, and the rock was Christ' (1 Cor. 10:4)

This example comprises three metaphorical expressions, first and foremost πέτρα 'rock' for Christ,[2] reinforced by the modifying adjective πνευματικός 'spiritual', and the verbs ἀκολουθέω 'follow' and πίνω 'drink' (in the sense of 'watch over' and 'profit'). What is more, these metaphors are linked by antonymous salient properties of the literal interpretations of the metaphors, πέτρα vs. πίνω (arid – wet) and πέτρα vs. ἀκολουθέω (mobile – immobile) (Egg, 2016).

1. The epistles are cited according to the *Novum Testamentum Graece* (Nestlé/Aland, 28th edition), available online under https://www.bibelwissenschaft.de). The English glosses often use the English Standard Version, quoted from the same source.

2. This metaphor falls back upon a metaphor already well established in the Old Testament (OT), which characterises God in terms of strength, steadfastness, and, in particular, as offering refuge (Knowles, 1989). Consider e.g. Psalm 18:2: 'The Lord is my rock and my fortress and my deliverer, my God, my rock, in whom I take refuge.' In fact, the metaphorical uses of *ṣwr* 'rock' in the OT, nearly always referring to God, outnumber the literal ones (Knowles, 1989). The metaphor seems to be culturally grounded, in that rocks provide natural places for defence in the landscape of Canaan (van Hecke, 2005).

Such metaphors go against the grain of most approaches to metaphor, for which some notion of preconceived similarity between the literal and the metaphorical interpretation (often referred to as 'vehicle' and 'tenor'; Richards, 1936, 96ff.) is central. Rather, they bring together notions that are not similar at a first glance in unexpected ways, they institute a resemblance rather than simply registering one, in Ricœur's (1975, 79) words, they 're-describe' or redefine expressions.

This redefinition is triggered by the impossibility of reference in terms of the literal interpretation of the metaphor, which then enforces metaphorical interpretation. However, the literal interpretation persists, and coexists with the metaphorical one, which superficially introduces a semantic tension, but at a deeper level of understanding uncovers not immediately obvious aspects of the referent of the metaphor (Ricœur, 1978).

While the Pauline metaphors are discussed intensively in biblical hermeneutics, e.g., Ricœur (1975) or Harnisch (1990), they have not received much attention from a linguistic perspective, which might be partially due to the fact that they fall outside the focus of the currently dominant paradigm of Conceptual Metaphor Theory (CMT), which concentrates on metaphors in everyday language (Lakoff & Johnson, 1980). According to CMT, metaphors emerge as linguistic reflex of a fundamental and mostly unconscious conceptualisation of more complex cognitive domains by simpler ones.

But contrary to the CMT appraisal of metaphorical language, Pauline metaphors pattern with those stylistic devices that were considered a deliberately applied purposeful and ornamental figure of speech, a kind of 'calculated category mistake' (Goodman, 1968) and mostly investigated in literary studies, rhetorics, and hermeneutics.

Paul's epistles are also interesting from the perspective of register research.[3] They are mixed (both didactic and persuasive) in that they mainly introduce and elaborate Christian theology, but at the same time they comprise exhortations and other persuasive elements, very often in response to concrete problems in the Christian communities to which the epistles were addressed. Previous research shows that metaphors occur frequently in both the didactic and the persuasive register, e.g., to support a cause by presenting it from a specific perspective (Lakoff, 1996), or for layman-expert communication (e.g., in medical discourse, Gwyn, 1999).[4] For

3. 'Register' refers to those aspects of variation that are influenced by situational and functional settings (Biber & Conrad, 2009).

4. For recent accounts on the dependency of metaphor on register and other kinds of text types, see Steen et al. (2010); Deignan, Littlemore & Semino (2013) and the contributions in Herrmann & Berber Sardinha (2015).

the present study, previous work that focuses on didactic discourse for advanced learners and contrasts it with other didactic settings is of particular interest, because Paul's letters addressed an audience that had already mastered the basic concepts of (Jewish) theology, which he confirms e.g. in his letter to the Romans (Kobel, 2019):

(2) γινώσκουσιν γὰρ νόμον λαλῶ
know-PRS.PTCP-DAT.M.PL indeed law-ACC.M.SG speak-PRES.1SG
'I speak to those who know the law indeed' (Rom 7:1)

Skorczynska and Deignan (2006) analysed metaphors related to economics in both a scientific and in a popular journal, showing that both the source domains and the purpose of the metaphors differ. The popular journal intends to explain things, hence, uses a lot of illustrating metaphors, while the scientific journal intends to motivate and present its content, which is reflected in the use of metaphor for the development of a theory. They put down the difference to the relation between the interlocutors (one of the central aspects of register, called 'tenor' in register research), which is equal in the first and hierarchical in the second register, and field (the nature of the interaction).

Similarly, Beger (2015) contrasts experts' metaphors for love and anger for a lay group (in counselling) and for a student audience. She found that the metaphors used in counselling are geared towards bringing people into action, whereas the metaphors used for the student audience was designed to help them turn everyday lay concepts into specialist concepts. We will return to these results in Section 5, when we analyse Paul's metaphors in detail.

3. Deliberate metaphor and DMT

The hallmark of deliberate metaphor (DM) is that it makes the addressee recognise the metaphor, and thus that the processing of such metaphors is conscious (Steen, 2009). Consequently, DM cannot be defined fully in terms of features of its form or content; deliberate usage of metaphor emerges predominantly in communication. DM is relevant both for producing and processing metaphors.

The goal of DM is to change the addressee's perspective on a topic (Steen, 2008), which constitutes the target domain (TD), or the tenor of the metaphor. This change is effected in that the addressee is forced to view the topic consciously from the perspective of a different conceptual domain, which functions as source domain (SD) or vehicle of the metaphor. This change of perspective is novel or 'alien' as opposed to the usual unconscious production or processing of metaphors in non-poetic everyday language (see Section 4.1).

Formally, this novelty could be modelled by assuming that DM enforces the inclusion of SD referents into the emerging text or discourse model. The coexistence of SD and TD referents leads to what Steen calls 'discourse incongruity'. In this way, the ongoing debate on Deliberate Metaphor Theory (DMT) brings back into focus those metaphors that were the result of conscious language production, as Steen (2009) puts it: The power of metaphor may reside '…most prominently in its conscious use and more generally in its deliberate use.' Such metaphors include, but are not restricted to metaphors in literary texts.

Empirical validation of the claims of DMT is ongoing and intensively debated (Krennmayr, Bowdle, Mulder & Steen, 2014). Gibbs (2015a; 2015b) and Steen (2015) empirically test the claim that deliberate metaphor introduces SD items into the text model. So far, results seem to be not fully conclusive, in particular, for extended yet conventional metaphors, but further testing is called for.

Researchers have already drawn attention to the fact that manipulating discourse perspectives via DM is not an end in itself but can serve a wide range of goals (Steen, 2009; Herrmann, 2013), most prominently supporting discourse goals (Herrmann, 2015). For example, in didactic writing, DM can contribute to the goal of creating a common ground of reference for difficult or complex topics aligning the understanding of such topics (thereby reducing 'alterity', or differences in the level of knowledge, in the sense of Cameron, 2003). The contribution of metaphors to discourse goals will be discussed in Section 5.2, which analyses deliberate metaphors of Paul in detail.

While deliberateness is part of the communicative dimension of metaphor and not bound to specific aspects of form or interpretation, there are signals for DM in form and content (Steen, 2009; Krennmayr, 2011). In general, there are one-directional – and defeasible – implications suggesting deliberateness for some (overlapping) kinds of metaphors.

First, there are formal indications for DM. All forms of direct or explicitly signalled metaphor tend to be deliberate, e.g., similes, or other means of referring to metaphor explicitly. The latter include *as it were*, inverted commas, and expressions of the form 'A is B' (perhaps excluding clichés like *He is a pig*; Steen, 2009). There are many such deliberate metaphors in the Pauline corpus, for instance the simile in (3):

(3) ἡμέρα κυρίου ὡς κλέπτης ἐν νυκτὶ
day-NOM.F.SG lord-GEN.M.SG as thief-NOM.SG by night-DAT.F.SG
οὕτως ἔρχεται
in.this.manner come-PRS.MED/PASS.3SG
'the day of the Lord will thus come like a thief in the night' (1 Thess. 5:2)

Similarly, (4), which alludes to similar metaphors in Deuteronomy 30 and Jeremiah 4,[5] explicitly signals the metaphor:

(4) περιτομὴ καρδίας ἐν πνεύματι
circumcision-NOM.F.SG heart-GEN.F.SG in spirit-DAT.N.SG
οὐ γράμματι
not letter-DAT.N.SG
'circumcision of the heart in the spirit but not in the letter' (Rom 2:29)

Just like the physical act of circumcision has the purpose of removing superfluous material, Paul calls for a pruning of the mind (introduced metonymically by καρδία 'heart'). The qualification ἐν πνεύματι οὐ γράμματι 'in the spirit but not in the letter' then points out the metaphorical nature of the circumcision (and thus makes the metaphor deliberate), in that πνεῦμα 'spirit' (lit. 'breath') and γράμμα 'letter' indicate the intended and the literal interpretation metonymically.

Extended metaphor often is deliberate too, because repeated mappings between the same SD to TD foreground the SD so that it cannot escape the addressee's attention. The metaphor of Christian life as a race illustrates this technique, there are repeated references to SD aspects, apart from the race itself, to the contestants, the prize, and the training:[6]

(5) Οὐκ οἴδατε ὅτι οἱ ἐν
not know-PRF.2PL that DET-NOM.PL in
σταδίῳ τρέχοντες πάντες μὲν
race.course-DAT.N.SG run-PRS.PTCP-NOM.M.PL all-NOM.M.PL indeed
τρέχουσιν, εἷς δὲ λαμβάνει τὸ
run-PRS.3PL one-NOM.M.SG moreover receive-PRS.3SG DET-ACC.N.SG

5. Jeremiah 4:3 makes the metaphor even more explicit, calling on the Israelites to remove the 'fore-skins of their hearts'.

6. Another example for an extended metaphor, instantiating the mapping ARGUMENT IS WAR, can be found in 2 Cor 10:3–6: Ἐν σαρκὶ γὰρ περιπατοῦντες οὐ κατὰ σάρκα στρατευόμεθα, τὰ γὰρ ὅπλα τῆς στρατείας ἡμῶν οὐ σαρκικὰ ἀλλὰ δυνατὰ τῷ θεῷ πρὸς καθαίρεσιν ὀχυρωμάτων, λογισμοὺς καθαιροῦντες καὶ πᾶν ὕψωμα ἐπαιρόμενον κατὰ τῆς γνώσεως τοῦ θεοῦ, καὶ αἰχμαλωτίζοντες πᾶν νόημα εἰς τὴν ὑπακοὴν τοῦ Χριστοῦ, καὶ ἐν ἑτοίμῳ ἔχοντες ἐκδικῆσαι πᾶσαν παρακοήν, ὅταν πληρωθῇ ὑμῶν ἡ ὑπακοή. 'Although we walk in the flesh, we do not wage war according to the flesh, as our weapons in this war are not of the flesh but have the power to destroy strongholds for God. We destroy arguments and everything that exalts itself against the knowledge of God and take captive all thought into the obedience to Christ. We are ready to punish all disobedience, when your obedience is complete.' Small capitals are used in the usual way to indicate SD and TD in a metaphor. The classification of metaphors uses categories of the *Master metaphor list* of the Cognitive Linguistics Group (1991) where applicable.

βραβεῖον; οὕτως τρέχετε ἵνα καταλάβητε.
prize-ACC.N.SG thus run-PRS.IMP.2PL so.that obtain-AOR.SBJV.2PL

πᾶς δὲ ὁ
everyone-NOM.M.SG moreover DET-NOM.M.SG

ἀγωνιζόμενος πάντα
strive-PRS.MED/PASS.PTCP-NOM.M.SG (in) all things-ACC.N.PL

ἐγκρατεύεται, ἐκεῖνοι μὲν οὖν ἵνα
control-PRS.MED/PASS.3SG same.NOM.M.PL indeed then so.that

φθαρτὸν στέφανον λάβωσιν,
perishable-ACC.M.SG crown-ACC.M.SG receive-AOR.SBJV.3PL

ἡμεῖς δὲ ἄφθαρτον. ἐγὼ
PRON-NOM.1PL moreover imperishable-ACC.M.SG PRON-NOM.1SG

τοίνυν οὕτως τρέχω ὡς οὐκ ἀδήλως…
therefore so run-PRS.1SG as not uncertainly

'Do you not know that in a race all the runners run, but only one gets the prize? So run that you may get it. Every athlete exercises self-control in all things. They do it to receive a perishable wreath, but we an imperishable. So I do not run aimlessly…' (1 Cor. 9:24–26)

Juxtaposing literal and metaphorical readings of the same or semantically related expressions is yet another way of formally introducing DM in Pauline metaphors. This introduces a zeugmatic effect, consider e.g. the veil metaphor in the second epistle to the Corinthians:

(6) (…) Μωϋσῆς ἐτίθει κάλυμμα ἐπὶ τὸ
Moses- NOM.M.SG put-IPFV.3SG veil-ACC.N.SG over DET-ACC.N.SG

πρόσωπον αὐτοῦ πρὸς τὸ μὴ
face-ACC.N.SG himself-GEN.M.3SG for DET-ACC.N.SG not

ἀτενίσαι τοὺς υἱοὺς Ἰσραὴλ εἰς
look.intently-AOR.INF DET-ACC.M.PL son-ACC.M.PL Israel-GEN.M.SG to

τὸ τέλος
DET-ACC.N.SG end-ACC.N.SG

τοῦ καταργουμένου.
that-GEN.N.SG fade.away-PRS.PTCP-MED/PASS.GEN.N.SG

'…Moses would put a veil over his face so that the Israelites might not gaze at the end of what was fading away.'

(7) (…) ἄχρι γὰρ τῆς σήμερον ἡμέρας τὸ
Until indeed DET-GEN.F.SG present day-GEN.F.SG DET-NOM.N.SG

αὐτὸ κάλυμμα ἐπὶ τῇ ἀναγνώσει
same-NOM.N.3SG veil-NOM.N.SG at DET-DAT.F.SG reading-DAT.F.SG

τῆς παλαιᾶς διαθήκης μένει,
DET-GEN.F.SG old-GEN.F.SG covenant-GEN.F.SG remain-PRS.3SG

μὴ ἀνακαλυπτόμενον ὅτι ἐν
not lift-PRS.PTCP.MED/PASS-NOM.N.SG because in

Χριστῷ καταργεῖται.
Christ-DAT.M.SG remove-PRS.MED/PASS.3SG

'(…) To this day, when they read the old covenant, that same veil remains unlifted, because is it taken away in Christ.' (2 Cor. 3:13–14)

In this example, the first instance of κάλυμμα 'veil' is used literally, it refers to the veil that Moses put over his head when returning from Mount Sinai with the Ten Commandments (Exodus 34). The second instance, however, instantiates the mapping KNOWLEDGE IS VISION, in the form that the veil as an obstacle to vision stands for a mental blockade against knowledge.[7]

Juxtaposed literal and metaphorical readings can create such a zeugmatic effect, too, if they are related by a sense relation like antonymy, as in the following example. Here ἄπειμι 'I am absent' is used literally, whereas the antonymic expression σὺν ὑμῖν ειμι 'I am with you' is used metaphorically:

(8) εἰ γὰρ καὶ τῇ σαρκὶ ἄπειμι, ἀλλὰ
if truly indeed DET-DAT.F.SG flesh-DAT.F.SG be.absent-PRS.1SG yet

τῷ πνεύματι σὺν ὑμῖν εἰμι
DET-DAT.N.SG spirit-DAT.N.SG with PRON-DAT.2PL be-PRS.1SG

'though I am absent in body, yet I am with you in spirit' (Col. 2:5)

Furthermore, deliberateness of a metaphor can also emerge through additional semantic relations between SD and TD. Very clear cases emerge through SDs that allude to the topic of the text (topic-related metaphor), very often with a punning effect. The economics section of the German daily *Süddeutsche Zeitung* is well known for this technique, which appears in headlines like the following:

(9) Faber-Stifte schreiben wieder
Faber-crayon-NOM.M.PL write-INF again

rote Zahlen
red-STRONG.ACC.F.PL number-ACC.F.PL

'Faber crayons write red numbers again.' (i.e., make a loss)

7. Another example of this kind shows up in 2 Cor 8, where the semantic field 'giving' is used in a metaphorical way (in the sense of 'devoting oneself to someone') as well as literally (Paul mentions a huge collection of money from Macedonia.)

The literal meaning of *rote Zahlen schreiben* is 'write red numbers', and this alludes to the sentence topic *Faber-Stifte* 'Faber crayons', which functions as a metonymy 'product for producer'. Thus, the proposition conveyed by (9) eventually is that the Faber company is making a loss again.

Much of the debate on DM discusses the question of how to recognise and to distinguish deliberate metaphors. Assuming that explicitly signalled metaphors are deliberate in practically every case, the issue of deliberateness arises especially for metaphors without such characteristics.

Furthermore, novel metaphors also count as deliberate. For ancient texts, however, this raises the question of how to recognise the novelty of a metaphor in the first place. Worse still, in some cases, one must be very careful to attribute metaphoricity to an expression in the first place due to the cultural differences between the author of the text and its analyst. This is a problem that also haunts investigations of Pauline metaphors and will be taken into account in the analyses offered in this paper.

The Pauline corpus is very well suited to investigate DM, because deliberate metaphors seem to occur with a much higher frequency than has been noted for other corpora. Usually, DM is extremely rare across different text types (Herrmann, 2013).

4. Deliberate metaphor in CMT

This section is devoted to the question of how CMT handles deliberate metaphors. In principle, the theoretical inventory of CMT should be suitable to describe those metaphors. As Steen (2008) points out, 'all deliberate metaphors by definition involve processing by comparison, or cross-domain mapping'. However, it turns out that deliberate metaphor goes beyond the scope of CMT, even though it could be described in terms of CMT at a first glance. To see this, I will first review CMT's Invariance Principle, which allows for a imperfect match between SD and TD, and the attempt to account for many deliberate metaphors in CMT under the heading of poetic metaphor.

4.1 The Invariance Principle

CMT reformulates the notion of similarity between literal and metaphorical interpretation as structural mapping across domains (Lakoff, 1993). The idea is that metaphor does not relate just isolated items but whole domains in that the structure of a cognitively more accessible SD is mapped onto a cognitively less accessible TD. What is more, metaphor is regarded as a mere linguistic reflex of a much

more fundamental (mostly unconscious) cognitive process in which we grasp domains that are difficult to grasp in terms of more accessible ones. Consequently, the focus of CMT is on metaphor in everyday language.

The question of the degree to which SD and TD match is also raised in CMT. CMT resolves potential tension between SD and TD in terms of the so-called 'Invariance Principle'. It states that the mapping of the SD structure is limited to those parts that are compatible with the TD, which leaves room for metaphors to introduce specific perspectives onto the TD. Consider e.g. the various metaphors for love, among them LOVE IS FINANCIAL TRANSACTION (as in *steal someone's boyfriend*) and LOVE IS MADNESS (as in *crazy for you*): The SD of each one of them is not a perfect fit, for instance, stealing is a criminal offence and calls for a return of the stolen goods, which does not apply to poaching someone's partner. At a first glance, therefore, it looks as if the often quite considerable tension between SD and TD in deliberate metaphor is anticipated and taken care of by the Invariance Principle.

However, such a naive approach would run into problems: According to CMT, the common ground between SD and TD structures is much more important than their differences. The Invariance Principle is therefore merely topping off the theory, making sure that the idea of the mapping is not carried too far. But in the case of deliberate metaphors, the differences can be at least as important as the common ground, thus, simply ignoring the differences (with an appeal to the Invariance Principle) would not only fail to bring out the very nature of such deliberate metaphors, it would also falsely suggest that all metaphors comply with the basic rule that metaphor is based on similarity only.

Example (5), repeated here partially as (10), highlights this problem: Christian life as TD is introduced in terms of a race as SD, consequently, winning the race corresponds to obtaining redemption as the prize for a Christian conduct in life. However, the match between SD and TD is incomplete in that a race has only one winner, whereas redemption as the prize for a truly Christian life is in principle available for many:

(10) Οὐκ οἴδατε ὅτι οἱ ἐν σταδίῳ τρέχοντες πάντες μὲν τρέχουσιν, εἷς δὲ λαμβάνει τὸ βραβεῖον; οὕτως τρέχετε ἵνα καταλάβητε.
'Do you not know that in a race all the runners run, but only one gets the prize? So run that you may get it.' (1 Cor. 9:24)

Neglecting this incomplete match on the basis of the Incompleteness Principle, however, would miss the main point of the metaphor, because the tension between the two domains introduces the central message of the metaphor: Christians should strive to live their lives in a truly Christian way as if they were competing for a single place in heaven.

4.2 Poetic metaphor in CMT

In spite of their focus on metaphors in everyday language, proponents of CMT have tried to integrate 'poetic' metaphor into CMT. This work is relevant for the discussion of DM and will be reviewed in the following, since there is an obvious overlap between poetic and deliberate metaphor.[8] For instance, Lakoff and Turner (1989) distinguish four classes of poetic metaphor, which all can be found in the Pauline epistles.

The first class is called *questioning*, it emerges through the highlighting of the boundaries of metaphors or questioning their appropriateness. A clear case in point is the grafting metaphor in Rom 11:

(11) εἰ γὰρ σὺ ἐκ τῆς κατὰ
if indeed PRON-NOM.2SG out.of DET-GEN.F.SG according.to
φύσιν ἐξεκόπης ἀγριελαίου καὶ
nature-ACC.F.SG cut.off-AOR.PASS.2SG wild.olive.tree-GEN.F.SG and
παρὰ φύσιν ἐνεκεντρίσθης εἰς
against nature-ACC.F.SG graft-AOR.PASS.2SG into
καλλιέλαιον, πόσῳ μᾶλλον
cultivated.olive.tree-ACC.F.SG how.much-DAT.N.SG more
οὗτοι οἱ κατὰ φύσιν
these-NOM.M.PL who-REL.NOM.M.PL according.to nature-ACC.F.SG
ἐγκεντρισθήσονται τῇ ἰδίᾳ ἐλαίᾳ.
graft-FUT.PASS.3PL DET-DAT.F.SG own-DAT.F.SG olive.tree-DAT.F.SG
'For if you were cut from what is by nature a wild olive tree, and grafted, contrary to nature, into a cultivated olive tree, how much more will these, the natural branches, be grafted back into their own olive tree.' (Rom 11:24)

The metaphor states that Christians (the wild scions) may partake of the firm rooting that Israel has in God (the cultivated tree), thus replacing some of the Jews (cultivated scions that have been cut off). However, this metaphor is questioned explicitly by pointing out that the grafting is παρὰ φύσιν 'against nature'.

Similarly, the SD and TD differences are highlighted in the letter metaphor of 2 Cor 3, which characterises the addressees as message-bearers (of a letter of recommendation) for the Christian doctrine:

8. This formulation takes into account the possibility of creating a poetic metaphor unconsciously, and hence, also not deliberately, as well as the observation that in non-poetic language, too, it is possible to create metaphors deliberately.

(12) Φανερούμενοι ὅτι ἐστὲ ἐπιστολὴ
reveal-PRS.MED/PASS.PTCP-NOM.M.PL that be-PRS.2PL letter-NOM.F.SG
Χριστοῦ διακονηθεῖσα ὑφ' ἡμῶν,
Christ-GEN.M.SG administer-AOR.PASS.PRCP.NOM.F.SG by PRON-GEN.1PL
ἐγγεγραμμένη οὐ μέλανι ἀλλὰ
inscribe-PRF.MED/PASS.PTCP-NOM.F.SG not ink-DAT.N.SG but
πνεύματι θεοῦ ζῶντος, οὐκ ἐν
spirit-DAT.N.SG God-GEN.M.SG live-PRS.PTCP-GEN.M.SG not on
πλαξὶν λιθίναις ἀλλ' ἐν πλαξὶν
tablet-DAT.F.PL stone-DAT.F.PL but on tablet-DAT.F.PL
καρδίαις σαρκίναις.
heart-DAT.F.PL fleshy-DAT.F.PL
'you show that you are a letter from Christ delivered by us, written not with ink but with the Spirit of the living God, not on tablets of stone but on tablets of fleshy hearts.' (2 Cor 3:3)

Questioning is a case of deliberate (and explicit) reference to metaphor. In the typology of deliberate metaphors presented in Section 3, it falls on the side of the formal means of introducing deliberateness. Consequently, it can be combined with content-related techniques of making a metaphor deliberate, which is the case in (11). See Section 5.2 for a detailed analysis of the content-related deliberateness of this example.

Two other of Lakoff and Turner's classes are deliberate in that they manipulate the mapping in order to alter the TD. First, *extension* extends the boundaries of a partial mapping in that the mapping introduces seemingly incompatible elements into the TD, e.g., introducing dynamics into the mapping 'STATES OF AFFAIRS ARE SPATIAL POSITIONS':

(13) τοῖς στοιχοῦσιν τοῖς ἴχνεσιν
DET-DAT.M.PL walk-PRS.PTCP-DAT.M.PL DET-DAT.N.PL steps-DAT.N.PL
τῆς πίστεως
DET-GEN.F.SG faith-GEN.F.SG
'to those walking in the footsteps of the faith' (Rom 4:12)

Faith is in principle a static state of affairs, but here it is described as a dynamic process with a development.

Second, *elaboration* instantiates 'slots' (i.e., elements of the SD that correspond to elements in the TD) in unconventional ways. This alters the TD because these unconventional aspects carry over to the TD through the mapping.

For instance, there is a slot for the cause in the mapping CAUSATION IS COMMERCIAL TRANSACTION which introduces the cause of a state of affairs as a source

of money, the resulting state of affairs itself as the money gained, and the main protagonists of that state of affairs as the recipients of the money. A typical (non-deliberate) example is the expression *profit from the exercise*.

But in the following metaphor, the ensuing state of affairs, which is specified as death, is not just something that follows from the cause, in this case, sin. There is an additional relationship between the main protagonists of the ensuing state of affairs and the cause: The cause is portrayed as an employer that contracts the main protagonists, i.e., those who die for their sins:

(14) τὰ γὰρ ὀψώνια τῆς
DET-NOM.N.PL indeed wages-NOM.N.PL DET-GEN.F.SG
ἁμαρτίας θάνατος
sin-GEN.F.SG death-NOM.M.SG
'the wages of sin is death indeed' (Rom 6:23)

Finally, *composition* is the combination of different metaphors. For example, consider (15) and (16), which introduce containers as the source[9] or the goal of downward trajectories. The metaphors combined here are STATES ARE CONTAINERS and GOOD IS UP. Consequently, the movement itself is a deterioration, and a container that is the source of such a movement acts as a metaphor for a positively evaluated state, as in (15). Analogously, a container (and the state it represents metaphorically) gets a negative evaluation if it is the goal of a downward movement, which is illustrated by (16):

(15) τῆς χάριτος ἐξεπέσατε
DET-GEN.F.SG grace-GEN.F.SG fall.away-AOR.2PL
'you have fallen from grace' (Gal. 5:4)

(16) οἱ δὲ βουλόμενοι
DET-NOM.M.PL moreover desire-PRS.MED/PASS.PTCP-NOM.M.PL
πλουτεῖν ἐμπίπτουσιν εἰς πειρασμὸν καὶ
be.rich-PRS.INF fall-PRS.3PL into temptation-ACC.M.SG and
παγίδα καὶ ἐπιθυμίας πολλὰς ἀνοήτους
snare-ACC.F.SG and desires-ACC.F.PL many-ACC.F.PL foolish-ACC.F.PL
καὶ βλαβεράς, αἵτινες βυθίζουσιν
and harmful-ACC.F.PL which-REL.NOM.F.PL plunge-PRS.3PL
τοὺς ἀνθρώπους εἰς ὄλεθρον
DET-ACC.M.PL men-ACC.M.PL into ruin-ACC.M.SG

9. Please note that this spatial use of the word 'source' is unrelated to its use in 'source domain' and the like.

καὶ ἀπώλειαν.
and destruction-ACC.F.SG

'But those who want to be rich fall into temptation, into a snare, into many senseless and harmful desires that plunge people into ruin and destruction.' (1 Tim. 6:9)

When we combine the metaphors PROPERTIES ARE CONTENTS and KNOWLEDGE IS VISION, (opaque) containers can also be hiding places:

(17) ἐν ᾧ εἰσιν πάντες οἱ
In whom-DAT.M.SG be-PRS.3PL all-NOM.M.PL DET-NOM.M.PL
θησαυροὶ τῆς σοφίας καὶ
treasure-NOM.M.PL DET-GEN.F.SG wisdom-GEN.F.SG and
γνώσεως ἀπόκρυφοι
knowledge-GEN.F.SG hidden-NOM.M.PL
'in whom are hidden all the treasures of wisdom and knowledge' (Col. 2:3)

These examples illustrate that composition is not necessarily deliberate, because such combinations of metaphors might be due to an intuitive connection between the SDs involved, e.g., movements typically start and end somewhere (at the source and the goal of the movement, respectively). In contrast, the metaphor of the spiritual rock in (1) obviously is deliberate, because it brings together SDs that have no such intuitive connection, on the contrary, there is considerable tension between these domains.

In sum, CMT is not ideally equipped to handle deliberate metaphor. While it acknowledges the possibility of an imperfect mismatch between SD and TD, which characterises many instances of DM, it plays down the central role of this mismatch in those instances.

At the same time, the discussion of the CMT account of 'poetic metaphor' has shown that its concepts are very useful to describe some of the techniques that are used in DM. Still, DM remains alien to a theory that presumes an unconscious and automatic use of metaphor in language.

4.3 Blending Theory

This section will briefly discuss the way in which deliberate Pauline metaphors could be analysed in terms of mental spaces (Fauconnier, 1985). Mental spaces can be characterised as small sections of (our conceptualisation of) reality, populated by individuals and structured by relations between them, which often integrate stereotypes of situations, so-called 'frames').

Such spaces can undergo conceptual operations, most prominent among them conceptual integration or blending (Fauconnier & Turner, 2002; 2008). Blending of two mental spaces is based on their common ground, which is recorded in a

'generic space'. Then selected input from the two spaces is combined in a fourth space, the 'blending space', which then can be augmented by further processes.

Fauconnier and Turner propose to analyse metaphors in terms of blending. They point out that blending anticipates metaphors with a tension between SD and TD. One classic example is (18), which suggests an incompetent surgeon:

(18) *My surgeon is a butcher*.

The decisive question is: How does the notion of incompetence arise in (18)? After all, according to the mental spaces that describe stereotypical representative of a specific profession, butchers are very capable in what they are doing – and so are surgeons. The answer is that the blending space comprises conflicting information from the two blended domains, viz., butchers' techniques and surgeons' life-saving goals. Trying to achieve the latter using the former would surely be a sign of incompetence.

However, the depiction of Christian life in terms of a race in example (19) [= (5)] shows that further specification of the details of blending is called for (see also Tendahl & Gibbs, 2008).

(19) Οὐκ οἴδατε ὅτι οἱ ἐν σταδίῳ τρέχοντες πάντες μὲν τρέχουσιν, εἷς δὲ λαμβάνει τὸ βραβεῖον; οὕτως τρέχετε ἵνα καταλάβητε. πᾶς δὲ ὁ ἀγωνιζόμενος πάντα ἐγκρατεύεται, ἐκεῖνοι μὲν οὖν ἵνα φθαρτὸν στέφανον λάβωσιν, ἡμεῖς δὲ ἄφθαρτον. ἐγὼ τοίνυν οὕτως τρέχω ὡς οὐκ ἀδήλως…
'Do you not know that in a race all the runners run, but only one gets the prize? So run that you may get it. Every athlete exercises self-control in all things. They do it to receive a perishable wreath, but we an imperishable. So I do not run aimlessly' (1 Cor. 9:24–26)

Merely blending the race's prize scheme with Christian life does not suffice to model the intended effect of the metaphor, because the race's prize scheme does not replace the way redemption works (it is open for many). Instead, both coexist, but on different levels: The race's prize scheme characterises only the required intensity of Christian life (one should live as if this scheme applied to Christian life, too).

This discussion of (19) shows that more involved and intricate processes of integration are called for. While this has been acknowledged in principle (see e.g. the discussion in Fauconnier & Turner, 2008), the question of how to constrain this integration in general is still open.

5. Creating deliberate metaphor

This section is devoted to the way in which deliberate metaphor is created. Many techniques of creating deliberate metaphor are related to form, as expounded in detail in Section 3. While these techniques also figure prominently in the Pauline

corpus, the focus in this section will be on DM that is signalled by content-related aspects (even though it might be reinforced by additional formal aspects). Thus, this section complements the extensive investigations on predominantly formal features that can be used to signal DM. The goal of the section will be to point out that many content-related instances of DM in Paul's epistles work by a technique known as poetic alienation.

5.1 Deliberate metaphor and alienation

Egg (2016) points out that many of Paul's metaphors function by *poetic alienation* (Schklowski, 1971). Alienation presents familiar objects deliberately in an unexpected and novel way. Thus, it forces the reader not to take things for granted but to have a really close look at them that reveals their essence. It provides the reader with an impression of an entity that is based on very conscious and intensive perception, i.e., the entity should not just be recognised without focusing on it. In this way, alienation deliberately lengthens and aggravates the process of perceiving an in principle familiar object. The concept of alienation was introduced into biblical hermeneutics by researchers like Ricœur (1975) and Harnisch (1990).

Metaphor is a very apt tool for alienation. Such metaphors highlight the dissimilarity between SD and TD. At the same time, they create similarity rather than merely pointing it out, which draws the addressee's attention to the metaphor, consequently, these metaphors are deliberate. It is not surprising, therefore, to find that this description fits the characterisation of the semantic effect of DM very well: As Steen (2008) puts it, DM intends to change the addressee's perspective on the TD, the addressee must view it from a novel perspective, which is introduced by the SD. Therefore, metaphor by alienation is a clear case of content-related DM.

DM by alienation can be distinguished from other kinds of content-related DM, like in example (9), in terms of its semantic impact. It differs in the perspective that is introduced by the mapping from SD to TD. DM without alienation focuses on a specific perspective onto the TD by establishing the SD as the mandatory point of reference from which the TD is regarded. In this way, particular aspects of the TD are focused, which might be unexpected or surprising for the audience, but the metaphor does not transform the TD.

In contrast, DM by alienation does not just highlight a specific perspective on a TD, it influences the understanding of the TD in a more fundamental way. The influence of the SD on the TD, often characterised as de-familiarisation, changes the TD rather than merely emphasising some of its aspects.

In the following, I will show the ways in which alienation is introduced into Pauline metaphors. This description will reuse some of the analyses offered in the last sections.

5.2 Techniques of DM by alienation in Paul's metaphors

The basic strategy of metaphor by alienation introduces a novel perspective onto TDs by enforcing a structural mapping with SDs that are not a good match for the TD. There are three reasons for this imperfect match: The SD can be impeccable in itself, but at variance with specific features of the TD, there are conflicting SDs for the same TD, or the SD can be internally flawed. I will now review these three possibilities in turn.

5.2.1 *Ill-fitting source domain*

The first way of alienation in metaphor brings together an SD that does not fit the TD well. This encompasses the techniques of elaboration and extension as described by Lakoff and Turner (1989). Here the dissimilarity between SD and TD is not resolved in terms of the Invariance Principle, rather, the similarity between them is enlarged by pushing the invariance boundary. I.e., aspects of the SD that are in principle alien to the TD (and hence should be ignored in metaphorical mappings according to the Invariance Principle) are carried across to the latter, which alters the TD. Numerous examples in Paul's epistles illustrate this technique.

(10) is a metaphor for Christian life, which is introduced in terms of a race. Here we encounter a case of elaboration in that redemption as reward of Christian life is filled in in a way that seems to be at variance with the TD, viz., as a unique reward for the best performer, even though redemption is in principle open for a multitude of human beings (see Section 4.1). Another Pauline elaboration that exemplifies the technique is (14) (see Section 4.2), and so is (20):

(20) αὐτὸ τὸ πνεῦμα
REFL-NOM.N.3SG DET-NOM.N.SG spirit-NOM.N.SG
συμμαρτυρεῖ τῷ πνεύματι ἡμῶν
witness-PRES.IND.ACT.3SG DET-DAT.N.SG spirit-DAT.N.SG PRON-GEN.1PL
ὅτι ἐσμὲν τέκνα θεοῦ. εἰ δὲ
that be-PRES.IND.ACT.1PL child-NOM.N.PL GOD-GEN.N.SG if moreover
τέκνα, καὶ κληρονόμοι. Κληρονόμοι μὲν
child-NOM.N.PL also heir-NOM.M.PL heir-NOM.M.PL indeed
θεοῦ, συγκληρονόμοι δὲ Χριστοῦ
God-GEN.N.SG together:heir-NOM.M.PL moreover Christ-GEN.N.SG
'the Spirit himself bears witness with our spirit that we are children of God, and if children, then heirs; heirs of God and fellow heirs with Christ…'
(Rom 8:16–17)

This metaphor, which also appears in several other Pauline epistles (e.g., Gal 4:30, or Eph 3:6), introduces the relationship between Christians and God in terms of

kinship (parental relation) as SD. However, this metaphor fills in the children role in an unexpected way by focusing on its legal ramifications: Children are natural heirs of their parents, which means that they have demands against them.

While this seems to contradict the notion of an omnipotent God, it makes sense in the light of Paul's insistence on belief as the foundation of salvation: Christians are entitled to salvation because they are believers, i.e., as believers they have demands against God. Thus, the metaphor stresses the fact that God has voluntarily restricted his omnipotence in this way (which is due to his grace according to Pauline theology).[10]

(3) is yet another example, in which the metaphor presents temporal development in terms of spatial motion (PROGRESS OF EXTERNAL EVENTS IS FORWARD MOTION). The event, however, is filled in an unusual way, in terms of a thief, who is highly unwanted, even though its correspondence in the TD, the day of the Lord, should be desired by every Christian (cf. *thy kingdom come* in the Lord's prayer). This suggests that Christians should lead a life as if Judgement Day was just around the corner, short of being surprised by it with all the negative consequences this might have. For the unprepared, the day of the Lord might thus be as unwelcome as a nightly burglar.

Finally, we find another instance of an ill-fitting SD in the vessel metaphor in 2 Tim 2. This domain introduces the different classes of vessels in an ordinary household, and suggests that in this context the substance and the content of the container are interdependent. No one would prefer a wooden or earthenware drinking cup over a gold or silver one, for instance. However, the rather conventional metaphor MINDS ARE CONTAINERS FOR IDEAS gets a twist in the next verse, which points out that in the TD it is the content that is the decisive factor that overrules substance. Moreover, it is the job of the human beings to choose the content of their minds. In this way, using vessels as a metaphor for minds is a case of elaboration, because human minds are rather different from inert vessels in that they can choose the content they harbour.

(21)	᾽Εν	μεγάλῃ	δὲ	οἰκίᾳ	οὐκ	ἔστιν	μόνον
	In	great-DAT.F.SG	moreover	house-DAT.F.SG	not	be-PRS.3SG	only
	σκεύη	χρυσᾶ	καὶ	ἀργυρᾶ	ἀλλὰ	καὶ	
	vessel-NOM.N.PL	golden-NOM.N.PL	and	silver-NOM.N.PL	but	also	

10. One more dissimilarity between the present-day concept of inheritance and Paul's use of this concept for the description of the relationship between God and Christians is the fact that in modern law, the status of heir comes into being only at the demise of the bequeather. However, Lyall (1981) points out that according to Roman law, the relationship between bequeather and heir is established already during the lifetime of the former, hence, SD and TD are not at variance here.

ξύλινα καὶ ὀστράκινα, καὶ ἃ μὲν
wooden-NOM.N.PL and earthen-NOM.N.PL and some-NOM.N.PL indeed

εἰς τιμὴν ἃ δὲ εἰς ἀτιμίαν.
for honour-ACC.F.SG some-NOM.N.PL moreover to dishonour-ACC.F.SG

ἐὰν οὖν τις ἐκκαθάρῃ
if therefore anyone-NOM.M.SG cleanse-AOR.SBJV.3SG

ἑαυτὸν ἀπὸ τούτων, ἔσται
himself-ACC.M.3SG from these-GEN.N.PL be-FUT.MED.3SG

σκεῦος εἰς τιμήν
vessel-NOM.N.SG for honour-ACC.F.SG

'Now in a great house there are not only vessels of gold and silver but also of wood and clay, some for honourable use, some for dishonourable. Therefore, if anyone cleanses himself from this, he will be a vessel for honourable use'
(2 Tim. 2:20–1)

The message is clear: The human mind is more than just an inert vessel and therefore responsible for the thoughts it entertains, thus great care should be taken to exclude impure, dishonourable thoughts.

The metaphor SALVATION IS DEATH (Rom 6, 6–11) is the final example of an ill-fitting SD. The SD is human death, as a change of state from being alive to being dead, with a subsequent burial. The TD is the process of salvation, as a change of state from living in the power of sin to living free of sin.

(22) εἰ γὰρ σύμφυτοι γεγόναμεν τῷ
if thus united-NOM.M.PL become-PRF.IND.ACT.1PL DET-DAT.N.SG

ὁμοιώματι τοῦ θανάτου αὐτοῦ,
likeness-DAT.N.SG DET-GEN.M.SG death-GEN.M.SG self-GEN.M.SG

ἀλλὰ καὶ τῆς ἀναστάσεως
instead also DET-GEN.F.SG resurrection-GEN.F.SG

ἐσόμεθα· τοῦτο γινώσκοντες
be-FUT.IND.MED/PASS.1PL DEM-ACC.N.SG know-PRES.PTCP.ACT-NOM.M.PL

ὅτι ὁ παλαιὸς ἡμῶν ἄνθρωπος
that DET-NOM.M.SG old-NOM.M.SG PRON-GEN.1PL man-NOM.M.SG

συνεσταυρώθη, ἵνα καταργηθῇ
together:crucify-AOR.IND.PASS.3SG that destroy-AOR.SUBJ.PASS.3SG

τὸ σῶμα τῆς ἁμαρτίας,
DET-NOM.N.SG body-NOM.N.SG DET-GEN.F.SG sin-GEN.F.SG

τοῦ μηκέτι δουλεύειν ἡμᾶς
DET-GEN.M.SG no:longer be:enslaved-PRES.INF.ACT PRON-ACC.1PL

τῇ ἁμαρτίᾳ· ὁ γὰρ
DET-DAT.F.SG sin-DAT.F.SG DET-NOM.M.SG thus

ἀποθανὼν
die-AOR.PTCP.ACT-NOM.M.SG

δεδικαίωται ἀπὸ τῆς ἁμαρτίας.
free-PRF.IND.MED/PASS.3SG from DET-GEN.F.SG sin-GEN.F.SG

εἰ δὲ ἀπεθάνομεν σὺν Χριστῷ,
if moreover die-AOR.IND.ACT.1PL with Christ-DAT.M.SG

πιστεύομεν ὅτι καὶ συζήσομεν
believe-PRES.IND.ACT.1PL that also together:live-FUT.ACT.IND.1PL

αὐτῷ, εἰδότες ὅτι Χριστὸς
PRON-DAT.M.3SG know-PRF.PTCP.ACT-NOM.M.PL that Christ-NOM.M.SG

ἐγερθεὶς ἐκ νεκρῶν οὐκέτι
raise-AOR.PTCP.PASS-NOM.M.SG from dead-GEN.M.PL no:more

ἀποθνῄσκει, θάνατος αὐτοῦ οὐκέτι
die-PRES.IND.ACT.3SG death-NOM.M.SG self-GEN.M.SG no:more

κυριεύει. ὃ γὰρ ἀπέθανεν,
rule-PRES.IND.ACT.3SG REL-NOM.N.SG thus die-AOR.IND.ACT.3SG

τῇ ἁμαρτίᾳ ἀπέθανεν ἐφάπαξ·
DET-DAT.F.SG sin-DAT.F.SG die-AOR.IND.ACT.3SG once:and:for:all

ὃ δὲ ζῇ, ζῇ
REL-NOM.N.SG moreover live-PRES.IND.ACT.3SG live-PRES.IND.ACT.3SG

τῷ θεῷ. οὕτως καὶ ὑμεῖς
DET-DAT.M.SG God-DAT.M.SG thus also PRON-NOM.2PL

λογίζεσθε ἑαυτοὺς [εἶναι]
consider-PRES.IMP.MED/PASS.2PL self-ACC.M.3PL be-PRES.INF.ACT

νεκροὺς μὲν τῇ
dead-ACC.M.PL indeed DET-DAT.F.SG

ἁμαρτίᾳ ζῶντας δὲ τῷ
sin-DAT.F.SG live-PRES.PTCP.ACT-ACC.M.PL moreover DET-DAT.M.SG

θεῷ ἐν Χριστῷ Ἰησοῦ.
God-DAT.M.SG in Christ-NOM.M.SG Jesus-NOM.M.SG

‘For if we have become united in the similarity to his death, we also will in the similarity to his resurrection, knowing that our old self (lit. human being) was co-crucified, so that the body of sin might be destroyed, so that we are no longer enslaved to sin. For one who has died has been freed of sin. Now if we have died with Christ, we believe that we will also live with him, knowing that Christ, who has been raised from the dead, will not die any more, death has no power over him. For what he died he died to sin once and for all; but what he lives, he lives to God. Thus you, too, consider yourselves dead to sin but alive to God in Jesus Christ.’

(Rom 6, 6–11)

SD and TD fit together in that both dying and salvation ensure liberation from sins, because sin used to have all human beings alive in its grip, losing power over them only after their death. But the two domains clash dramatically in that the poststates of the change of states are incompatible (being dead vs. being alive). The last verse highlights this contrast by bringing these poststates together (νεκροὺς μὲν τῇ ἁμαρτίᾳ ζῶντας δὲ τῷ θεῷ 'dead to sin but alive to God').

This contrast is deliberate and is resolved in the person of Christ, who brings together the two domains in that he underwent death just like any human being. However, his death resulted not just in a state in which he himself could not have sinned anymore, but – following Pauline theology – brought about salvation in that he terminated the power of sin over all human beings. From the viewpoint of sin, this is equivalent to all human beings being dead.

Thus, the message is that the lowest and most horrible moment in history, viz., Christ's death, was simultaneously the most joyful moment for all human beings, viz., the onset of redemption for mankind.

5.2.2 *Contradicting source domains for the same target domain*

Other examples of semantic alienation work by combining contradicting SDs in metaphors that address the same TD. This technique looks similar to Lakoff and Turner's composition (see Section 4.2) at a first glance, but is different in that the metaphors do not mutually complement and reinforce each other.

The contradictory nature of some SDs for one single TD has not gone unnoticed in the theological literature, which did not try to attribute a message to these seemingly incompatible metaphors. E.g., Collins (2008) points out a number of such contradictions, and Dunn (1998, 332ff.) sees no relations between the metaphors in such cases. In this section, I will discuss these cases and show that it is possible to see them as the result of a deliberate composition of metaphors.

As a first instance of this pattern, (1) was expounded in detail in Section 2. The three SDs were rather innocuous in isolation, but introduced pairs of antonymies, which carried over to the TD, thus giving a rather complex description of Christ, the eventual referent of πέτρα 'rock'.

Another very characteristic example in point is the following combination of container metaphors:

(23) ἐπιμένωμεν τῇ ἁμαρτίᾳ
remain-PRES.SUBJ.ACT.1PL DET-DAT.F.SG sin-DAT.F.SG
'should we remain in sin' (Rom 6:1)

(24) ἡ οἰκοῦσα ἐν
DET-NOM.F.SG dwell-PRES.PTCP.ACT-NOM.F.SG in
ἐμοὶ ἁμαρτία
PRON-DAT.1SG sin-NOM.F.SG
'the sin dwelling in me' (Rom 7:17/20)

Both metaphors in isolation are pretty run-of-the-mill, they are STATES ARE LOCATIONS AND IDEAS ARE OBJECTS (mind is a container for objects), respectively. It is their combination in the same epistle that triggers alienation:

Since both verbs in these examples, ἐπιμένω 'remain' and οἰκῶ 'dwell', are local and introduce a relation of containment, their combination does not make sense mathematically: If *A* is contained in *B*, then the reverse relation cannot hold (the relation is 'asymmetric').[11]

The explanation to the puzzle can be described in mathematical terms: Mathematically, there is also a relation of so-called 'improper' inclusion, which includes identity as a borderline case. This relation then is 'antisymmetric' instead of asymmetric: If *A* is contained in *B* and vice versa, then *A* = *B*. In this way, the contradiction is avoided, but at the cost of assuming a different, unusual kind of containment. The message that this move conveys is that the containment of Man and sin is also different, it suggests that both permeate each other completely.

At a first glance, a similar case seems to hold in the following pair of metaphors. We find 'Man in God' as well as 'God in Man':

(25) Χριστὸς ἐν ὑμῖν
Christ-NOM.M.SG in PRON-DAT.2PL
'Christ in you' (Col. 1:27)

(26) ὑμεῖς ἐστε ἐν Χριστῷ Ἰησοῦ
PRON-NOM.2PL be-PRS.2PL in Christ-DAT.M.SG Jesus-DAT.M.SG
'you are in Jesus Christ' (1 Cor. 1:30)

However, as discussed in Egg (2016), at least the first kind of expression was not used metaphorically but literally at the time of writing the epistles. Thus, the example illustrates one of the challenges of researching metaphor in ancient languages, viz., cultural change. Therefore, this combination of examples does not count as a case of semantic alienation.

Another instance of conflicting SDs for the same TD shows up in 1 Thess 2, where two incompatible kinship metaphors are used simultaneously (Collins, 2008) to characterise the roles of Paul and the Thessalonians, first, the frequent address of the Thessalonians as ἀδελφοί 'brothers', and then Paul's self-descriptions as mother and father:

11. Neither does the combination make sense from the viewpoint of the SD: There is a sharp contrast between prototypical containers and prototypical content, hence, it is highly unusual for a single item to function in both ways.

(27) ὡς ἐὰν τροφὸς θάλπῃ τὰ
As if nursing:mother-NOM.F.SG care-PRES.SUBJ.ACT.3SG DET-ACC.N.PL
ἑαυτῆς τέκνα
self-GEN.F.SG child-ACC.N.PL
'as if a nursing mother would look after her own children' (1 Thess 2:7)

(28) ἕνα ἕκαστον ὑμῶν ὡς πατὴρ
one-ACC.M.SG each-ACC.M.SG PRON-GEN.2PL as father-NOM.M.SG
τέκνα ἑαυτοῦ
child-ACC.N.PL self-GEN.M.SG
'(we treated) each one of you like a father his own children' (1 Thess 2:11)

These metaphors are used in an inclusive sense and point out that the relation between Paul and the Thessalonians is multi-faceted and cannot be described in one single metaphor. Paul is on an equal footing with them considering the fact that they all are children of God, but at the same time he is superior to them, being their teacher. An analogous case can be found in 1 Cor 3:1f., where Paul describes himself as brother and mother simultaneously. In addition, Paul's parallel self-characterisation as father and mother points out that Paul's job of guiding the Thessalonians comprises paternal elements that are associated with male behaviour as well as elements that are associated with female behaviour, thus surpassing the role that a single parent could fulfil.

Another instance of such an inclusive use of incompatible SDs shows up in the slave metaphors in 1 Cor 4:1:

(29) Οὕτως ἡμᾶς λογιζέσθω ἄνθρωπος ὡς
thus PRON-ACC.1PL regard-PRES.IMP.MED/PASS.3SG man-NOM.M.SG as
ὑπηρέτας Χριστοῦ καὶ οἰκονόμους
under:rower-ACC.M.PL Christ-GEN.M.SG and steward-ACC.M.PL
μυστηρίων θεοῦ
secret-GEN.N.PL God-GEN.M.SG
'Thus a human being should regard us as Christ's under-rowers and stewards of the secrets of God.'

Under-rowers (the ones at the lowest benches of a battleship) are at the bottom of the slave hierarchy; a steward, in contrast, wields considerable power as the major servant in a household (Collins, 2008). The intended image, however, is not contradictory: Paul characterises himself as a servant of his followers. He knows that he is in charge of things, after all, he is an apostle with an important mission, at

the same time, he does not want to exalt himself, thus characterising himself in a lowly and humble way.

In the same way, ἀλλήλων τὰ βάρη βαστάζετε 'bear one another's burden' (Gal 6:2) and ἕκαστος γὰρ τὸ ἴδιον φορτίον βαστάσει 'everyone will bear his own burden' (Gal 6:5) indicate that Christian responsibility is a mixture of taking responsibility for oneself and simultaneously supporting those in need.

Finally, Paul introduces conflicting SDs in an indirect, intertextual way in the epistle to the Romans. Paul alludes to another metaphor in Isaiah 26 when he compares Christ to a stone, however, the quote is not verbatim (Collins, 2008) and introduces the stone in a very different function:

(30) ἰδοὺ τίθημι ἐν Σιὼν λίθον
look-AOR.IMP.ACT.2SG lay-PRES.IND.ACT.1SG in Zion stone-ACC.M.SG
προσκόμματος καὶ πέτραν σκανδάλου
stumbling-GEN.N.SG and rock-ACC.F.SG offence-GEN.N.SG
'Behold, I lay in Zion a stone of stumbling and a rock of offence' (Rom 9:33)

(31) *Behold, I am the one who has laid as a foundation in Zion a stone, a tested stone, a precious cornerstone, of a sure foundation.* (Isa 26:16)

Again, the conflicting SDs are used inclusively, Christ is the foundation of human salvation and Christianity, but simultaneously a source of irritation and offence for those who do not believe in him.

To sum up, the use of conflicting SD for a single TD introduces deliberateness through alienation. Typically, the combination of metaphors is used in an inclusive way, which indicates that each of the combined metaphors conveys only part of the truth; this technique highlights the fact that all metaphors are just approximations to a complex reality.

5.2.3 *Internally flawed source domain*

The perhaps most powerful cases of alienation function by presenting a SD that is internally flawed. I consider this to be a case of highlighting the differences between SD and TD, too: The difference between SD (in its original state, without distortion) and TD is so big that the SD can only serve in the metaphor at the cost of being altered in a way that makes it a better fit for the TD. However, this alteration changes the SD so much that it can no longer count as a true instantiation of the original SD. This changes the TD, too: It is presented as similar to a distorted SD, which characterises it also as unusual.

A clear case in point is (32) [= (11)], in which the SD is grafting, but at the same time the whole idea of grafting is turned upside down. This has not gone unnoticed in the exegetic literature, for a summary of the theological discussion see Havemann (1997).

(32) εἰ γὰρ σὺ ἐκ τῆς κατὰ φύσιν ἐξεκόπης ἀγριελαίου καὶ παρὰ φύσιν ἐνεκεντρίσθης εἰς καλλιέλαιον, πόσῳ μᾶλλον οὗτοι οἱ κατὰ φύσιν ἐγκεντρισθήσονται τῇ ἰδίᾳ ἐλαίᾳ.
'For if you were cut from what is by nature a wild olive tree, and grafted, contrary to nature, into a cultivated olive tree, how much more will these natural ones be grafted back into their own olive tree.' (Rom 11:24)

According to this metaphor, Christians (the wild scions) may also have a firm relationship with God (the cultivated tree), in place of some of the Jews (cultivated yet clipped scions), even though the Jews have more rights to partake of the relationship with God (the cultivated scions have a higher possibility to be grafted back into the tree).

This metaphor deliberately renders a rather distorted image of what grafting is all about: It assumes that wild scions are grafted onto a cultivated tree and that clipped scions might be re-grafted to their place of origin. As pointed out in Section 4.2, this is reinforced by questioning the metaphor (the grafting is called παρὰ φύσιν 'against nature').[12]

In this way, the grafting metaphor serves as part of a warning to non-Jewish Christians not to exalt themselves over Jews: It first explains that this exaltation happened because Christians replace some Jews in the relation with God. In its second half, however, Paul makes it clear that he considers this exaltation presumptious, by pointing out that this replacement might be only temporary, since a resumption of the relation between God and the Jews would be only natural (κατὰ φύσιν).

At the same time, the deliberate distortion of the SD in the grafting metaphor reflects Paul's grief about the fact that most of his fellow Jews did not follow his spiritual course from Judaism into Christianity (see Rom 9).

The same topic is introduced in terms of another distorted SD to support Paul's discussion of the relationship between Jews and Christians (Rom 9). Here he introduces the relationship between sons of the same father in the sense of primogenital right as SD. However, the SD is distorted in that not the first-born son but the second one gets priority. This distortion is exemplified in the story of Jacob and Esau (Gen 27), in which the Jacob, the younger son, becomes the heir of his father Isaac instead of his elder brother Esau, as summarised in Paul's quote (Gen 25:23): ὁ μείζων δουλεύσει τῷ ἐλάσσονι 'the elder [son] shall serve the younger'.

12. There is an interpretation of the metaphor in the sense of a botanically sensible rejuvenation technique for old olive trees by grafting in new wild scions, documented in contemporary arboricultural manuals (Baxter and Ziesler, 1985). However, assuming this procedure as SD would first entail that Paul regarded Israel as old and decrepit, which he did not, and cannot explain the clear signs of having a distorted SD, the παρὰ φύσιν 'against nature'.

This thwarted expectation is carried over to the TD, the relationship between Jews and Christians. According to usual practice, the Jews came prior to the Christians, hence, should be the ones enjoying higher priority with God. However, the metaphor suggests that this practice is overruled, with the Christians getting higher priority.

The following example introduces a distorted SD too, this time, the SD is the relation between children and their mothers, the TD, the relation between a leader and his disciples:

(33) τέκνα μου, οὓς
child-NOM.N.PL PRON.GEN.1SG REL-ACC.N.PL
πάλιν ὠδίνω
again travail-PRES.IND.ACT.1SG
'My children, for whom I am again in the anguish of childbirth' (Gal 4:19)

Distortion of the SD comes in via the question of how the parent-child relation is initiated: Normally, it is brought about by giving birth, and is neither undoable (it could be terminated only by death), nor could it be repeated. However, Paul talks about bearing children a second time. (The additional quirk that Paul as a man cannot bear children adds to the distortion but does not figure prominently in this metaphor.)

For the TD, this means that it is unnatural to break the relationship between a leader and his disciples. In this way, Paul tells the Galatians that they should not have abandoned him and hence are in need of returning to his guidance as their spiritual leader.

The same technique of alienation shows up in the following two examples:

(34) Ἔχομεν δὲ τὸν θησαυρὸν
have-PRES.IND.ACT.1PL moreover DET-ACC.M.SG treasure-ACC.M.SG
τοῦτον ἐν ὀστρακίνοις σκεύεσιν
DEM-ACC.M.SG in earthen-DAT.N.PL vessel-DAT.N.PL
'but we have this treasure in vessels of clay' (2 Cor 4:7)

(35) αὐξήσωμεν εἰς αὐτὸν τὰ
grow-AOR.SUBJ.ACT.1PL into PRON-ACC.M.3SG DET-ACC.N.PL
πάντα, ὅς ἐστιν ἡ
all-ACC.N.PL REL-NOM.M.SG be-PRES.IND.ACT.3SG DET-NOM.F.SG
κεφαλή, Χριστός
head-NOM.F.SG Christ-NOM.M.SG
'We should grow in every way into him, who is the head, Christ' (Eph 4:15)

The distortion in the SD of (34) is a mismatch between the value of a vessel (as defined by its material) and the value of its content, which should correlate (see the

discussion on the vessel metaphor in 2 Tim 2 in Section 5.2.1), but fails to do so in this example. This highlights the contrast between value of the human beings (as sinners) and of the ideas that they carry (the holy Gospel). The difference between the two vessel metaphors is that in 2 Tim 2, the correspondence between the values of vessel and content is upheld in the SD (only to be questioned in the TD), while it is already violated in the SD in the present example. I.e., the SD is impeccable yet ill-fitting in 2 Tim 2 but itself flawed in 2 Cor 4.

In (35), the SD is distorted in that a body does not start growing as a unified whole, but in a way that separate parts emerge that are joined as the result of their growth.

Finally, the first epistle to the Corinthians introduces a whole cluster of metaphors to describe Paul's expectation to be supported by his followers:

(36) ὁ κύριος διέταξεν τοῖς
DET-NOM.M.SG Lord-NOM.M.SG order-AOR.IND.ACT.3SG DEM-DAT.M.PL
τὸ εὐαγγέλιον καταγγέλλουσιν
DET-ACC.N.SG good:news-ACC.N.SG proclaim-PRES.PTCP.ACT-DAT.M.PL
ἐκ τοῦ εὐαγγελίου ζῆν
from DET-GEN.N.SG good:news-GEN.N.SG live-PRES.INF.ACT
'the Lord has ordered those who proclaim the gospel to live off the gospel'
(1 Cor 9:14)

This claim is prepared by metaphors whose SDs are all flawed in that they describe thwarted expectations of returns for concrete investments:

(37) Τίς στρατεύεται ἰδίοις
INTER-NOM.M.SG serve-PRES.ACT.MED.3SG own-DAT.N.PL
ὀψωνίοις ποτέ; τίς φυτεύει
expense-DAT.N.PL ever INTER-NOM.M.SG plant-PRES.IND.ACT.3SG
ἀμπελῶνα καὶ τὸν καρπὸν αὐτοῦ
vineyard-ACC.M.SG and DET-ACC.M.SG fruit-ACC.M.SG PRON-GEN.M.SG
οὐκ ἐσθίει; ἢ τίς
not eat-PRES.IND.ACT.3SG or INTER-NOM.M.SG
ποιμαίνει ποίμνην καὶ ἐκ τοῦ
shepherd-PRES.IND.ACT.3SG flock.ACC.F.SG and from DET-GEN.N.SG
γάλακτος τῆς ποίμνης
milk-GEN.N.SG DET-GEN.F.SG flock-GEN.F.SG
οὐκ ἐσθίει
not drink-PRES.IND.ACT.3SG
'Who would ever serve as a soldier at his own expense? Who would plant a vineyard and not eat its fruit or who would shepherd a flock and not drink of the milk of the flock? (1 Cor 9:7)

The obviously distorted nature of the SDs clearly expresses the opinion that in the TD, too, those that preach the gospel should get the necessary support. Again, the SD is flawed in order to convey a message to the audience, which emerges as the motivation for this kind of introducing deliberateness through alienation.

At this point one might argue that these are rhetorical questions that in fact state that the SDs are not distorted in that no one would subscribe to the odd behaviour as described in the questions. However, even the mere deliberation of this odd behaviour as an albeit slight possibility clearly introduces an alienating effect for the TD.

To conclude the presentation of the ways in which Paul introduces deliberate metaphor in terms of alienation, the question of how not to classify metaphors erroneously in this way will be raised. There are two potential errors to be avoided, especially in the analysis of metaphor in ancient languages: assuming a metaphor to be present where there is none, and assuming that metaphors work by alienation when they do not. As a case that could be classified erroneously as metaphorical by present-day interpreters, see the discussion of Example (25) in Section 5.2.2.

However, more problematic is the second kind of fallacy, because metaphors that sound semantically alienated to modern readers might be completely innocuous for contemporaries.

An example in point is Eph 6:11–17, an extended metaphor that lists the arsenal of Christians in their fight against evil and for τοῦ εὐαγγελίου τῆς εἰρήνης 'the gospel of peace'. Truth, justice, faith, salvation, and the word of God are presented as belt, corslet, shield, helmet, and sword, respectively. For Paul and his contemporaries, who lived in more belligerent times than we do today, this metaphor undoubtedly did not work through deliberate alienation, regardless of the observation that it might feel that way to more pacifist present-day readers.[13]

Another, less easily identifiable instance of this second fallacy shows up in (38) and (39), two metaphors in which Christ himself is characterised as a curse:

(38) τὸν μὴ γνόντα ἁμαρτίαν ὑπὲρ
DET-ACC.M.SG not know-AOR.PTCP.ACT-ACC.M.SG sin-ACC.F.SG for
ἡμῶν ἁμαρτίαν ἐποίησεν
PRON-GEN.1PL sin-ACC.F.SG turn-AOR.IND.ACT.3SG
'He turned the one who had not known sin into sin for our sake'
(2 Cor 5:21)

13. The metaphor is deliberate nevertheless, because it is extended in a very elaborate and ornate way.

(39) Χριστὸς ἡμᾶς ἐξηγόρασεν ἐκ
Christ-NOM.M.SG PRON-ACC.1PL ransom-AOR.IND.ACT.3SG from
τῆς κατάρας τοῦ νόμου
DET-GEN.F.SG curse-GEN.F.SG DET-GEN.M.SG law-GEN.M.SG
γενόμενος ὑπὲρ ἡμῶν κατάρα
become-AOR.PTCP.MED-NOM.M.SG for PRON-GEN.1PL curse-NOM.F.SG
'Christ ransomed us from the curse of the law, having become a curse for our sake' (Gal 3:13)

These look like alienation through a deliberate contradiction at a first glance, considering the characterisation of Christ as the only human being who was without sin. However, Finlan (2003) points out that Paul uses the ritual practice of the scapegoat (Lev 16) as SD in these examples. In this ritual, the sins of the Israelites are literally transferred to a goat, which is then driven away into the wilderness. This transfer cleanses the Israelites from sin. The metaphor thus suggests that the curse directed at mankind is transferred to Christ, and with his death, the curse is destroyed (Collins, 2008).

Understanding the cultural background of this metaphor thus reveals that it is not deliberate by alienation (though deliberate by extension, as the metaphor is taken up several times in the chapters quoted).

5.3 Deliberate metaphor and conceit

In the preceding sections, many of Paul's metaphors were characterised in terms of an unusual combination of SDs and TDs that uncovers similarities not so obvious at a first glance. This description resembles the notion of *conceit*, which is defined as a metaphor or simile that is surprising because it brings together two dissimilar domains by pointing out unexpected common ground between them. For instance, John Donne compares lovers to a pair of compasses in his famous poem A *Valediction: Forbidding Mourning*. The lovers are together with their souls even if they are apart physically, just as the two elements of a pair of compasses are always linked up at the top end, no matter how distant from each other the bottom ends may be.

However, the analysed Pauline metaphors go beyond conceits in two ways. First, a conceit has no end but itself, while this is different for Paul's metaphors, which have a message to tell through the change of perspective they introduce onto the TD via dissimilarity, consider e.g. the above discussion on the race metaphor (10).

Second, both domains are just inert background features in a conceit, the backdrop against which a surprising similarity is revealed. But this similarity does not alter the perspective on the TD, rather, it reinforces and highlights a feature of

the TD that is there right from the start. In contrast, Paul's alienating metaphors introduce a tension between SD and TD that changes the way in which we view the TD, and this change introduces a clear message.

5.4 Deliberate metaphor and the influence of register

The analysis of Pauline metaphors revealed two major insights: First, these metaphors often rely on alienation, and, second, many of them express a clear message. Either of these findings can be correlated with the specific register of the epistles, which are both didactic and persuasive.

Alienation is highly characteristic not only for many of Paul's metaphors, it is a technique that has been identified in other didactic discourse too, e.g., in academic lectures (Beger, 2011; 2015), where it is used in particular to force the audience to reconsider everyday concepts from a scientific perspective. Still, the alienation in Paul's metaphors does not try to de-familiarise topics known too well to enforce a more distanced perspective (in contrast to academic discourse; see Beger, 2011, 2015), because most of Paul's topics are completely novel (he is the founder of Christian theology). On a more general level, Paul's metaphors reflect the findings of register research in that they are used heavily for the development and motivation of a theory, but not for explanation or illustration (Skorczynska & Deignan, 2006; Beger, 2015).

At the same time, the persuasive nature of the epistles motivated the use of metaphors for messages. This echoes the finding of Beger (2015) that metaphors used in counselling, which is also strongly persuasive, are intended to have an impact on the addressees' future behaviour. This dual nature of the epistles could also explain why they do not pattern with the results of Herrmann (2015), who points out that the overwhelming number of metaphors in academic discourse are indirect, hence, not signalled openly. It is the persuasive intention of Paul that motivates open signalling of metaphors even though his metaphors have a didactic purpose at the same time.

6. Conclusion

To sum up, this paper focused on instances of deliberate metaphor in the Pauline epistles that are signalled semantically. Paul's rich metaphorical imagery, which has often been noted, e.g., by Dunn (1998), Williams (1999), or Collins (2008), has proven an abundant source of such deliberate metaphors.

One of the crucial underlying techniques that brought about deliberateness was identified as alienation, the technique of transforming TDs by presenting

them from a novel and typically unexpected perspective. For metaphors, alienation comes in through semantic tension between SD (which provides this perspective) and TD. In such metaphors, the dissimilarity between the two domains is more important than their similarity, which could not be captured adequately in standard approaches to metaphor that focus on the common ground between the two domains and phase out their differences (e.g., in terms of the Invariance Principle of CMT).

These metaphors were classified in terms of the relationship between SD and TD: The tension can arise in a not so close fit between the domains, by using potentially conflicting SDs for the same TD, or by distorting the SD to allow a closer fit between SD and TD. The use of such metaphors in both didactic and persuasive texts is not predicted by the tenets of CMT, which suggests that in these texts the usability of metaphor both for teaching and persuading lies in the similarity between SD and TD (see also Collins, 2008 for a similar conclusion).

The detailed analysis of deliberate metaphor in the Pauline epistles reveals that in many cases the alienation conveys a clear message, which originates from the tension between the two domains. Both the alienation and the messages conveyed through metaphor are related to the register of the epistles, which is both didactic and persuasive.

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Key to glosses

ACC	accusative	IND	indicative
ACT	active	INF	infinitive
AOR	aorist (perfective)	INTER	interrogative pronoun
DAT	dative	IPFV	imperfective
DEM	demonstrative pronoun	M	masculine
DET	determiner	MED	middle
F	feminine	N	neuter
FUT	future	NOM	nominative
GEN	genitive	PASS	passive
IMP	imperative	PL	plural

PRF	perfect
PRON	personal pronoun
PRS	present
PTCP	participle
REFL	reflexive pronoun
REL	relative pronoun
SBJV	subjunctive
SG	singular
STRONG	strong adjective declension (in German)

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Index

The communicative act of drawing attention to metaphor is a relatively recent topic in metaphor studies and one that has remained contentious from a cognitive perspective. This book brings philologists of ancient languages together with metaphor experts from several modalities to interrogate whether ancient and modern texts and languages draw attention to figurative tropes in similar ways. In this way, the diachronic, multimodal and pluridisciplinary contributions to this volume critically review the theoretical frameworks underpinning metaphor marking and metaphor analysis from a completely new empirical basis.

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