Workshop: Conceptual metaphors in a comparative and diachronic perspective

Convenors

Daniel Kölligan, Julius-Maximilians-Universität Würzburg, Institut für Altertumswissenschaften, Lehrstuhl für Vergleichende Sprachwissenschaft, Oswald-Külpe-Weg 84, D-97074 Würzburg, email: daniel.koelligan@uni-wuerzburg.de (corresponding author)

Lucien van Beek, University of Leiden, Faculty of Humanities, Leiden University Centre for Linguistics, Reuvensplaats 3-4, 2311 BE Leiden, The Netherlands, email: l.c.van.beek@hum.leidenuniv.nl

Keywords

cognitivism, conceptual metaphor, diachrony, etymology

Abstract

In cognitive linguistics, the term "conceptual metaphor", or "cognitive metaphor", refers to the understanding of one idea, or conceptual domain, in terms of another. The source domain is usually more concrete, relating to basic human experience and perception, the target domain is usually more abstract, e.g. time conceptualized in terms of space ("the days ahead of us" like "the road ahead of us"). The research paradigm took off with Lakoff & Johnson (1980), who investigated the persistent use of metaphorical language in all areas of human experience, such as love conceptualized as a journey.

Among the cases studied most in cognitive linguistics literature is the concept of anger conceptualized as a hot fluid in a container, e.g., "You make my blood boil", "He's just letting off steam" (cf. e.g. Lakoff 1987: 380ff., Kövecses 1986, Kövecses 1998, Stefanowitsch 2006:92, etc.). This specific metaphor has been claimed not to be a universal based on the general physiology of humans, but rather a historically contingent feature of languages and cultures influenced by the Ancient Greek Hippocratic theory of humors that was further developed in early modern Europe (Geeraerts & Grondelaers 1995). While the basic point that the history of ideas must be taken into account in cognitive studies is well made (as e.g. in studies like Brock 2013 on Greek political imagery), Geeraerts and Grondelaers did not discuss similar metaphors in non-European languages such as Sanskrit and in pre-Hippocratic European traditions, e.g. Classical Greek and Latin. Indeed, early evidence for anger as a pressurized fluid may be found, for instance in the etymology of Latin furor 'anger' (Kölligan 2020).

Conceptual metaphors have now been applied to (and described for) most languages spoken today, and also to some for the ancient and medieval languages (e.g., Cairns 2016; Forte 2018; Horn 2016; Zanker 2019 for Greek; Short 2013 for Latin; Izdebska 2016 on Old English). At the same time, attempts are being made to compare metaphors from different Indo-European languages, and to re construct specific metaphors for Proto-Indo-European (e.g., van Beek 2017 on metaphors for 'law' and 'justice', Bartolotta 2018 on the deixis of past and future events based either on absolute positioning or one relative to ego, Johnson 2019 et al. on metaphors for 'succeed, be successful' based on the notion of a motion forward as in Lat. *mihi succedit* etc.). The analysis of conceptual metaphors may also support or undermine specific etymological reconstructions (Kölligan 2022).

The workshop invites papers discussing the applicability of conceptual metaphor theory to historical language data, asking what is universal and what is historically contingent, whether and how conceptual metaphors may help us in judging etymologies, and inviting cross-linguistic and diachronic comparisons.

References

- Bartolotta, Annamaria (2018). Spatio-temporal deixis and cognitive models in early Indo-European. Cognitive Linguistics 29, 1–44.
- Beek, Lucien van (2017). Die Bildersprache des Rechts im Indogermanischen: Griechisch ἰθεῖα δίκη und δίκην βλάπτειν. In H. Bichlmeier and A. Opfermann (eds), Das Menschenbild bei den Indogermanen. Akten der Arbeitstagung der Indogermanischen Gesellschaft in Halle (31. März 2. April 2011), 129–150. Hamburg: Baar.
- Brock, Roger (2013). Greek Political Imagery from Homer to Aristotle. London & New York: Bloomsbury Academic.
- Cairns, Douglas (2016). Clothed in Shamelessness, Shrouded in Grief: The Role of "Garment" Metaphors in Ancient Greek Concepts of Emotion. In Fanfani, G., M. Harlow, M.-L. Nosch (eds), Spinning Fates and the Song of the Loom: The Use of Textiles, Clothing and Cloth Production as Metaphor, Symbol and Narrative Device in Greek and Latin Literature, 25–41. Oxford: Oxbow.
- Forte, Alexander (2018). The Cognitive Linguistics of Homeric Surprise. In: P. Meineck et al. (eds), The Routledge Handbook of Classics and Cognitive Theory, 39–58. London/New York.
- Geeraerts, Dirk & Stefan Grondelaers (1995). Looking back at anger: Cultural traditions and metaphorical patterns. In John R. Taylor & Robert E. MacLaury (eds.), Language and the Cognitive Construal of the World, 153-179. Berlin, New York: De Gruyter Mouton.
- Horn, Fabian (2016). 'Building in the Deep': Notes on a Metaphor for Mental Activity and the Metaphorical Concept of Mind in Early Greek Epic. Greece and Rome 63, 163–174.
- Izdebska, Daria (2016). Metaphors of weapons and armour through time. In: Anderson, W. et al. (eds.), Mapping English Metaphor Through Time, 221-242. Oxford: OUP.
- Johnson, Cynthia A., Peter Alexander Kerkhof, Leonid Kulikov, Esther Le Mair, und Jóhanna Barðdal. "Argument Structure, Conceptual Metaphor and Semantic Change: How to Succeed in Indo European without Really Trying". Diachronica 36, Nr. 4 (2019): 463–508. https://doi.org/10.1075/dia.00014.bar.
- Kölligan, Daniel (2020). "Seething anger: Latin furor". In: L. Repanšek, H. Bichlmeier, and V. Sadovski (eds.), vácāmsi miśrấ kṛṇavāmahai. Proceedings of the international conference of the Society for Indo-European Studies and IWoBA XII, Ljubljana 4–7 June 2019, 397–412. Hamburg: Baar.
- Kölligan, Daniel (2022). "Conceptual metaphors and historical linguistics some case studies". Talk at the Università Cattolica del Sacro Cuore, Milan. March 22, 2022.
- Kövecses, Zoltán (1986). Metaphors of anger, pride and love: a lexical approach to the structure of concepts. Pragmatics & beyond, 7,8. Amsterdam. Benjamins.
- Kövecses, Zoltán. "Are there any emotion-specific metaphors?" In Speaking of Emotions.
 Conceptualization and Expression, ed. by Angeliki Athanasiadou & Elzbieta Tabaskowska, 127–51. Berlin / New York: Mouton de Gruyter.
- Lakoff, George and Mark Johnson (1980). Metaphors we Live by. Chicago: University of Chicago Press.
- Lakoff, George (1987). Woman, fire, and dangerous things: what categories reveal about the mind. Chicago: University of Chicago Press.

- Marcinkowska-Rosół, Maria and Sellmer, Sven (2021). The Mind as Container: A Study of a Metaphor in Homer and Hesiod with a Parallel Analysis of the Sanskrit Epics. Mnemosyne pre-publication, https://doi.org/10.1163/1568525X-bja10076 (last visited 2022-09-19).
- Short, William (2013). 'Transmission' Accomplished? Latin's Alimentary Metaphors of Communication. American Journal of Philology 134, 247–275.
- Stefanowitsch, Anatol (2006). "Words and their metaphors: A corpus-based approach". In Anatol Stefanowitsch and S. T. Gries (eds.), Corpus-based approaches to metaphor and metonymy, 61–105. Berlin, New York: Mouton de Gruyter.

Zanker, Andreas T. (2019). Metaphor in Homer: Time, Speech and Thought. Cambridge: CUP.

Accepted speakers (including the convenors)

- 1. van Beek, Lucien
- 2. Bartolotta, Annamaria
- 3. Ginevra, Riccardo
- 4. Pompeo, Flavia
- 5. Roth, Theresa
- 6. Zampetta, Silvia et al.
- 7. Kölligan, Daniel

Abstracts

Lucien van Beek

Universiteit Leiden, Leiden University Centre for Linguistics

L.van.Beek@hum.leidenuniv.nl

Clouds or Arrows? Conceptual Metaphors and the Etymology of Homeric Greek *kertoméō* 'to mock; taunt'

The description of metaphors in Homer has recently been given a new impulse with, among other things, the work of Cairns (e.g. 2016) and the publication of Zanker (2019), who discusses conceptual metaphors for Time, Speech and Thought. In this paper I will illustrate how our improved synchronic understanding of conceptual metaphors in Homeric Greek may help us find and judge etymologies, using the verb κ eptoµέω 'to taunt; mock' as a case in point.

The etymology of $\kappa\epsilon\rho\tau\circ\mu\acute\omega$, a verb referring to a speech act (on the lexical meaning cf., *inter alia*, Hooker 1986; Clarke 2001; Lloyd 2004), has been the object of a continued scholarly debate. However, a definitive conclusion still hasn't been reached, and etymological dictionaries remain cautious (*GEW*: "expressives Wort strittiger Herkunft"; *DELG*: "mot expressif sans étymologie établie"; *EDG* claims Pre-Greek origin). Almost all previous proposals assume that the second part -τομέω has the same root as τέμνω 'to cut'. As for the first part $\kappa\epsilon\rho$ -, Jones (1989) and Clarke (2001) proposed that it reflects $\kappa\eta\rho$ 'heart', an idea that was current already in the ancient lexicographical tradition. Against this, Perpillou (1986) and García Ramón (2007) derive $\kappa\epsilon\rho$ - from a verbal root PIE **ker*- 'to cut', following an older proposal by Prellwitz.

In my paper, I will first discuss the problems with these existing etymological analyses. After that, I suggest two new ways to make sense of $\kappa\epsilon\rho\tau\circ\mu\epsilon\omega$ by analyzing it as a verb phrase reflecting a conceptual metaphor:

- κῆρ τετμεῖν 'to reach the heart'; I will argue that this could reflect WORDS ARE ARROWS (Durante 1958; recently Zanker 2019: 125-131);
- (2) κῆρ *τομεῖν 'to obscure/cloud the heart': -τομέω would be an inherited PIE causative *tomH-éie/o- 'to cloud, cover with darkness' from the verbal root *temH- 'get dark'. This phrase would reflect the metaphor GRIEF IS A COVER (Cairns 2016).

Next, I will show how Homeric poets may have consciously employed the above-mentioned metaphors in some contexts where $\kappa\epsilon\rho\tau\circ\mu\dot{\epsilon}\omega$ or a related word is used. Finally, I will consider potential evidence for conceptual metaphors involving descendants of **temH*- 'get dark' in other ancient Indo-European languages. On this basis, I will make a choice between the two possible reconstructions.

Literature

Cairns, Douglas. 2016. "Clothed in shamelessness, shrouded in grief: the role of "garment" metaphors in Ancient Greek concepts of emotion", in G. Fanfani, M. Harlow and M.-L. Nosch (eds.), Spinning Fates and the Song of the Loom: The Use of Textiles, Clothing and Cloth Production as Metaphor, Symbol, and Narrative, 25–41. Oxford.

Clarke, Michael. 2001. "Heart-cutting talk': Homeric κερτομέω and related words." CQ 51, 329-338.

- *DELG* : Chantraine, P. 1968–1980. *Dictionnaire étymologique de la langue grecque: histoire des mots*. Paris.
- Durante, Marcello. 1958. "Epea pteroenta. La parola come 'cammino' in immagini greche e vediche." *Rendiconti. Classe di Scienze morali, storiche e filologiche* 13, 3-14.
- EDG : Beekes, R.S.P. 2010. Etymological Dictionary of Greek (2 vols). Leiden.
- García Ramón, José-Luis. 2007. "Altlatein *cortumiō* 'Geländeausschnitt', Idg. **kr*-*tomh*₁-*ó* *'(Schnitt) schneidend', *contemnō* 'schmähe' und griechisch κέρτομος 'schmähend', κερτομέω 'schmähe'." *Aevum antiquum* 7 (NS), 285-298.
- *GEW* : Frisk, H. 1960–1972. *Griechisches etymologisches Wörterbuch* (3 vols). Heidelberg.
- Hooker, J.T. 1986. "A Residual Problem in Iliad 24." Classical Quarterly 36, 32–37.

Jones, P.V. 1989. "Iliad 24.649: another solution." CQ 39, 247-250.

- Lloyd, Michael. 2004. "The Politeness of Achilles: Off-Record Conversation Strategies in Homer and the Meaning of *kertomia*." *Journal of Hellenic Studies* 124, 75-89.
- Perpillou, Jean-Louis. 1986. "De « couper » à « insulter »." In: A. Etter (ed.), *O-o-pe-ro-si. Festschrift für Ernst Risch zum 70. Geburtstag*, 72-84. Berlin.
- Zanker, Andreas. 2019. Metaphor in Homer: Time, Speech and Thought. Cambridge.

Annamaria Bartolotta, Università di Palermo

annamaria.bartolotta@unipa.it

The right-left conceptual mapping in a comparative and diachronic perspective

This paper investigates the right-left conceptualization of space in ancient Indo-European languages. In a crosslinguistic perspective, RIGHT and LEFT terms can be recruited to designate cardinal directions (Hertz 1909: 567; Lloyd 1962: 59; Brown 1983: 136). These terms turn out to be associated respectively to east and west in languages such as Vedic Sanskrit, Hittite, and Homeric Greek. However, the interpretation of such metaphorical mapping from the source domain to the target domain is still an open question. This is also due to some unresolved inconsistencies between etymology and semantic developments emerged in the reconstruction of the Indo-European roots of these terms since the earlier studies of Grimm. The German linguist ascribed the origin of the spatial uses of RIGHT and LEFT to the orientation of the observer's body (1848: 981). The question is further complicated by the unclear origin of linguistic metaphors for positive and negative valence, through an associative mapping from the concrete right-left space to the abstract emotional concepts of 'goodness' and 'badness'. The mental spatial schema is indeed activated to represent such concepts by means of the well-known Good is Right and Left is Bad conceptual mapping (cf. Casasanto 2009; 2014). From a strictly linguistic perspective, a strong asymmetry has been observed between RIGHT and LEFT terms. More specifically, while the RIGHT terms of most Indo-European languages derive from one and the same root *deks- (Walde 1930: 784; Pokorny 1959: 190), the LEFT terms cannot be traced back to one common ancestor (cf. Buck 1949: 865). Traditionally, such an asymmetry has been ascribed to cultural conventions (cf. Van Leeuwen-Turnovcová 1990), which, however, would ultimately reflect the original embodied asymmetry within the hand domain (cf. Meillet 1906 [1982]: 290; Cuillandre 1947; Heesterman 1959: 256; Giannakis 2019: 256-257). Yet, from an etymological perspective, it has been shown how the words for RIGHT and LEFT derive from lexical roots that are not primarily related to the sides of the body (cf. Foolen 2019: 145), thus challenging an embodied origin of these mental metaphors. Now, recent studies on Indo-European spatial Frames of Reference (FoRs) have revealed that RIGHT and LEFT terms could be used within an absolute or geocentric FoR (Bartolotta 2022). Such results might shed light on the transfer pattern from the concrete domain of spatial regions to the abstract domain of right-left dimensions. Indeed, although it is widely assumed that the human body is the main source domain for the linguistic conceptualization of the entire domain of spatial relations, and that, accordingly, hands are the conceptual source for RIGHT and LEFT polarity (Heine 1997: 49; cf. Bickel 1994: 32), the analysis of the data from a comparative and diachronic perspective seems to suggest a different path of this conceptual metaphor. More specifically, the textual analysis of the RigVeda and the Homeric poems, aside from supporting pieces of evidence derived from Hittite oracle and ritual texts (cf. Ünal 1978; Puhvel 1983; Sakuma 2009) and the Umbrian Tabulae Iguvinae (Prosdocimi 1979; 2015; Untermann 2000: 475), suggests that the extension to hands is the result of a conceptual metaphor which goes from cosmogony (involving the concrete movements of the sun) to the body (cf. Kuiper 1970: 128; Gonda 1972: 8; Abrams & Primack 2001: 1769), thus proving that the metaphoric mapping between body-parts and other domains is not unidirectional (cf. Sinha & Jensen de López 2000: 24; Yu 2008: 408).

References

- Abrams, N. E., Primack J. R. (2001), Cosmology and 21st-century Culture, «Science» 293 (5536): 1769-1770.
- Bartolotta, A. (2022), Spatial Cognition and Frames of Reference in Indo-European, in D. Romagno, F. Rovai, M. Bianconi, M. Capano (eds.), Variation, Contact, and Reconstruction in the Ancient Indo-European Languages. Between Linguistics and Philology, Brill, Leiden/Boston, pp. 179-209.
- Bickel, B. (1994), *Mapping Operations in Spatial Deixis and the Typology of Reference Frames*, Working Paper n. 31, Cognitive Anthropology Research Group, Max Planck Institute for Psycholinguistics, Nijmegen.
- Brown, C.H. (1983), Where Do Cardinal Direction Terms Come From?, «Anthropological Linguistics» 25 (2): 121-161.
- Buck, C.D. (1949), A dictionary of selected synonyms in the principal Indo-European languages, University of Chicago Press, Chicago/London.
- Casasanto, D. (2009), Embodiment of Abstract Concepts: Good and Bad in Right-and Left-Handers, «Journal of Experimental Psychology: General» 138 (3): 351-367.
- Casasanto, D. (2014), *Experiential origins of mental metaphors: Language, culture, and the body,* in M. J. Landau, M. D. Robinson, B. P. Meier (Eds.), *The power of metaphor: Examining its influence on social life* (Vol. 155), American Psychological Association, Washington, DC.
- Cuillandre, J. (1943), La droite et la gauche dans les poèmes homériques en concordance avec la doctrine pythagoricienne et la tradition celtique, Imprimeries Réunies, Rennes.
- Foolen, A. (2019), *The value of left and right*, in J. L. Mackenzie, L. Alba-Juez (Eds.), *Emotion in Discourse*, John Benjamins, Amsterdam/Philadelphia, pp. 139-158.
- Giannakis, G. K. (2019), *The east/west and right/left dualism and the rise of some taboos in ancient Greek language and culture*, in G.K. Giannakis, C. Charalambakis, F. Montanari, A. Rengakos (Eds.), *Studies in Greek Lexicography*, Walter de Gruyter, Berlin/New York, pp. 233-262.
- Gonda, J. (1972), The Significance of the Right Hand and the Right Side in Vedic Ritual, «Religion» 2 (1): 1-23.
- Grimm, J. (1848), *Geschichte der Deutschen Sprache*, Zweiter Band, in der Weidmannschen Buchhandlung, Leipzig.
- Heine, B. (1997), Cognitive Foundations of Grammar, Oxford University Press, New York/Oxford.
- Hertz, R. (1909), *La prééminence de la main droite: Étude sur la polarité religieuse*, «Revue Philosophique de la France et de l'Étranger» 68: 553-580.
- Heesterman, J.C. (1959), *Reflections on the significance of the "Dákṣiṇā"*, «Indo-Iranian Journal» 3 (4): 241-258.
- Kuiper, F.B.J. (1970), Cosmogony and Conception: A Query, «History of Religions» 10 (2): 91-138.
- van Leeuwen-Turnovcová, J. (1990), Rechts und Links in Europa: ein Beitrag zur Semantik und Symbolik der Geschlechterpolarität, Otto Harrassowitz, Wiesbaden.
- Lloyd, G.E.R. (1962), *Right and Left in Greek Philosophy*, «The Journal of Hellenic Studies» 82: 56-66.
- Meillet, A. (1906 [1982]), Quelques hypothèses sur des interdictions de vocabulaire dans les langues indo-européennes, in A. Meillet (Ed.), Linguistique historique et linguistique générale, Paris, Champion, pp. 281-291.
- Pokorny, J. (1959), Indogermanisches Etymologisches Wörterbuch, I, Francke Verlag, Bern/München.
- Prosdocimi, A. L. (1979), *Umbria: Asisium, Parte III (Note e commenti)*. Rivista di Epigrafia Italica, in «Studi Etruschi» 47: 376-379.
- Prosdocimi, A. L. (2015), *Le Tavole Iguvine. Preliminari all'interpretazione. La testualità: Fatti e metodi,* II. Olschki, Firenze.
- Puhvel, J. (1983), *Homeric Questions and Hittite Answers*, «The American Journal of Philology» 104 (3): 217-227.
- Sakuma, Y. (2009), *Hethitische Vogelorakeltexte*, Ph.D. dissertation, Julius Maximilian University, Würzburg.

- Sinha C. & K. Jensen de López (2000), *Language, culture, and the embodiment of spatial cognition*, «Cognitive Linguistics» 11 (1/2): 17-41.
- Ünal, A. (1978), Ein Orakeltext über die Intrigen am hethitischen Hof, Carl Winter Universitätsverlag, Heidelberg.
- Untermann, J. (2000), *Wörterbuch des Oskisch-Umbrischen*. Handbuch der Italischen Dialekte. Band III. Carl Winter Universitätsverlag, Heidelberg.
- Walde, A. (1930), Vergleichendes Wörterbuch der indogermanischen Sprachen. Herausgegeben und bearbeitet von Julius Pokorny. 1. Band, Walter de Gruyter, Berlin/Leipzig.
- Yu, N. (2008), The Relationship Between Metaphor, Body and Culture, in R. M. Frank, R. Dirven, T. Ziemke, E. Bernárdez (Eds.), Body, Language and Mind. Sociocultural Situatedness (Vol. 2), Mouton de Gruyter, Berlin, pp. 387-408.

Riccardo Ginevra

Università del Sacro Cuore, Milan / Center for Hellenic Studies, Harvard riccardo.ginevra@unicatt.it / rginevra@chs.harvard.edu

Indo-European Poetics meets Cognitive Linguistics: an integrated approach to the comparative reconstruction of metaphoric and metonymic expressions

The development of Conceptual Metaphor Theory (cf. Lakoff and Johnson 1980) and Cognitive Linguistics in general (cf. Croft and Cruse 2004), as well as their application to Historical Linguistics(cf. Sweetser 1990:23-48; Winters, Tissari and Allan 2011), have greatly improved our understanding of how figurative expressions like metaphors and metonymies work. Even though cognitive-linguistic notions have been successfully employed in the study of figurative language within single ancient IE traditions (e.g., Latin: Short 2008; 2013; Fedriani 2016; Kölligan 2020; Ancient Greek: Pagán Cánovas 2011; Forte 2019; Zanker 2019; Vedic Sanskrit: Jurewicz 2010), correspondences between traditional formulaic phrases attested in several Indo-European traditions have been traditionally investigated exclusively through the lens of Historical Linguistics and Comparative Indo-European Poetics (on which see, e.g., Watkins 1995 and García Ramón 2021).

Aim of the presentation is to argue that, as proposed in Ginevra (2019, 2021a and 2021b), uniting Comparative Indo-European Poetics and Cognitive Linguistics might not only be possible, but also of great use to both disciplines. To this end, after reconstructing – on the basis of evidence from several IE languages – an inherited system of figurative expressions involving the conceptualization of LIFE and DEATH, this reconstructed system will be interpreted as a reflex of two basic metaphoric and metonymic processes that have long been discussed within Cognitive Linguistics:

- on the one hand, these IE traditional expressions will be shown to instantiate Lakoff's (1993:222– 223) "Event Structure Conceptual Metaphor", according to which STATES are mapped onto LOCATIONS, CHANGES onto MOVEMENTS, and CAUSES onto FORCES;
- on the other hand, this reconstructed system will be argued to reflect a so-called "complex event Idealized Cognitive Model" (Kövecses and Radden 1998:51) of the state TO BE ALIVE, i.e., as an event involving several distinct subevents that are habitually more or less co-present in the life of a human being.

The identification of these two (likely universal) processes of human cognition as the basic principles underlying this formulaic system of Indo-European heritage will be argued to be of fundamental importance for the investigation of further issues of Indo European etymology and historical semantics, especially if combined with other well established notions of Cognitive Linguistics (e.g., image schemata).

References

Croft, W., and D. A. Cruse. 2004. *Cognitive Linguistics*. Cambridge: Cambridge University Press. Fedriani,
 C. 2016. Ontological and Orientational Metaphors in Latin: Evidence from the Semantics of
 Feelings and Emotions. In W. M. Short (ed.), *Embodiment in Latin Semantics*, 115-139.
 Amsterdam/Philadelphia: John Benjamins.

- Forte, A. 2019. The Cognitive Linguistics of Homeric Surprise. In: P. Meineck, W. M. Short and J. Devereaux (eds.), *The Routledge Handbook of Classics and Cognitive Theory*, 39-58. New York: Routledge.
- Kölligan, D. 2020. Seething anger: Latin *furor*. In: L. Repanšek, H. Bichlmeier, and V. Sadovski (eds.), vácāmsi miśrá krņavāmahai. *Proceedings of the international conference of the Society for Indo-European Studies and IWoBA XII, Ljubljana 4–7 June 2019,* 397–412. Hamburg: Baar.
- García Ramón, J. L. 2021. Poética, léxico, figuras: fraseología y lengua poética indoeuropea. In: L. Galván (ed.), *Mímesis, acción, ficción: Contextos y consecuencias de la «Poética» de Aristóteles*. Reichenberger.
- Ginevra, R. 2019 (2020). Indo-European Cosmology and Poetics: Cosmic Merisms in Comparative and Cognitive Perspective. Archivio Glottologico Italiano 104.1.5–17. Ginevra, R. 2021a. Metaphor, metonymy, and myth: Persephone's death-like journey in the Homeric Hymn to Demeter in the light of Greek phraseology, Indo-European poetics, and Cognitive Linguistics. In: I Rizzato et al. (eds.), Variations on Metaphor, 181–211. Newcastle upon Tyne: Cambridge Scholars.
- Ginevra, R. 2021b. Reconstructing Indo-European Metaphors and Metonymies: a Cognitive Linguistic Approach to Comparative Poetics. *AI*Ω*N*-*Linguistica* 10.163–181. Jurewicz, J. 2010. *Fire and Cognition in the Rgveda*. Warszawa: Elipsa.
- Kövecses, Z., and G. Radden. 1998. Metonymy: Developing a cognitive linguistic view. *Cognitive Linguistics* 9.1.37-78.
- Lakoff, G., and M. Johnson. 1980. *Metaphors We Live by*. Chicago: University of Chicago Press. Lakoff,
 G. 1993. The contemporary theory of metaphor. In: A. Ortony (ed.), *Metaphor and thought*,
 202-251. Cambridge: Cambridge University Press.
- Pagán Cánovas, C. 2011. The Genesis of the Arrows of Love: Diachronic Conceptual Integration in Greek Mythology. *American Journal of Philology* 132.553-79.
- Short, W. M. 2008. Thinking places, placing thoughts: Spatial metaphors of mental activity in Roman culture. *I Quaderni del Ramo d'Oro on-line* 1.106-129.
- Short, W. M. 2013. "Transmission" Accomplished? Latin's Alimentary Metaphors of Communication. *American Journal of Philology* 134.247-75.
- Sweetser, E. 1990. *From Etymology to Pragmatics. Metaphorical and cultural aspects of semantic Structure.* Cambridge: Cambridge University Press.
- Watkins, C. 1995. *How to Kill a Dragon: Aspects of Indo-European Poetics*. New York/Oxford: Oxford University Press.
- Winters, M. E., H. Tissari, and K. Allan. 2011. *Historical Cognitive Linguistics*. Berlin/New York: De Gruyter Mouton.
- Zanker, A. T. 2019. *Metaphor in Homer. Time, Speech, and Thought.* Cambridge: Cambridge University Press.

Flavia Pompeo

University of Rome, "La Sapienza"

flavia.pompeo@uniroma1.it

New meanings and old constructions: the conceptualization of 'fearing' and 'protecting' in Old Persian in comparison with other Indo-Iranian languages

In the ancient Indo-Iranian languages, the argument structures of verbs meaning 'to fear' and 'to protect' respectively show interesting similarities. In this regard, Old Persian data, despite the scarcity of the evidence, are particularly interesting.

This paper focuses on the Old Persian verb *tars-* 'to fear, to respect', drawing on the tools of both comparative-historical and cognitive linguistics. In particular, two issues will be taken into account: 1. the meaning and the etymology of the verb *tars-*; 2. its argument structure. Both aspects can be adequately explained by adopting the perspective of cognitive linguistics and, in particular, by considering metaphorical and metonymic processes.

As far as the first point is concerned, the verb *tars*- is the only emotion verb attested in Old Persian where it means 'to fear, to respect' with a strong political connotation. This meaning is the end point of a semantic change that originates from the Indo-European root **tres*- 'to tremble (with fear)'(cf. LIV^2 650-651). This "composite" meaning has been reconstructed on the basis of the plurality of meanings attested in Indo-European languages, among which 'to be afraid'/'to fear' is the most frequent meaning, followed by 'to tremble, to shake' and, more rarely, 'to flee (in fear)'.

In particular, the relationship between the meaning 'to tremble, to shake' and that of 'to be afraid, to fear' will be considered. The conceptualization underlying the semantic shift from 'to tremble (with fear)' to 'to fear/to be afraid' – that is, from the more concrete source domain to the abstract target domain – will be explained as an essentially metonymic process, according to Kövecses (1998: 148-149 and further works) and Radden (e.g. Radden 1998, in Athanasiadou and Tabakowska). Furthermore, the analysis will confirm the need to study human emotions according to an "integrated" perspective that takes into account both the biological-cognitive and the socio-cultural aspects.

The second aspect worthy of attention is the construction of *tars*-. Here again, drawing on one of the fundamentals of cognitive linguistics, it will be assumed that the choice of a specific linguistic expression reflects a particular conceptualization of a given event, in other words it is motivated by cognitive factors. In particular, it will be shown that, despite the intervening semantic change, the Old Persian verb tars- has retained the original construction with the ablative (and the preposition hacā 'from'), which was common to ancient Indo-Iranian languages (Vedic, Avestan, and Old Persian). Interestingly, in this linguistic group, the construction with the ablative (with or without a preposition) is shared by *verba timendi* and verbs meaning 'to protect'. In Old Persian the construction is exactly the same for both verbs (see example 1 for Old Persian *tars*- and example 2 for Old Persian *pā*-).

(1) iyam dahyāuš Pārsa (...) hacā aniyanā nai trsati

'This country Persia (...) does not fear anybody else' (DPd 6-7, 11-12).

(2) utā imām dahyāum Auramazdā pātu hacā haināyā

'And may Auramazdā protect this country from the (enemy) army' (DPd 15-17)

Finally, for the construction shared by *verba timendi* and verbs meaning 'to protect', a common meaning will be proposed that includes both the semantic component "cause" (a metaphorical

extension from "origin/source") and the component "distance", both typical of the Indo-European ablative. The shared meaning can be formulated as follows: "X trembles with fear/fears in relation to an entity that is a potential source of danger and that must be kept at a distance".

References

Kövecses, Zoltán (1988). "Are there any emotion-specific metaphors?". In: *Speaking of Emotions. Conceptualization and Expression*, ed. by Angeliki Athanasiadou & Elzbieta Tabaskowska, 127-151. Berlin / New York: Mouton de Gruyter.

Kövecses, Zoltan (1990). Emotion Concepts. New York et al.: Springer-Verlag.

- Kövecses, Zoltan (2000). *Metaphor and Emotion. Language, Culture, and Body in Human Feeling.* Cambridge: CUP, Paris: Maison des Sciences de l'Homme.
- LIV² = Rix, Helmut and Kümmel, Martin (2001). Lexikon der indogermanischen Verben: Die Wurzeln und ihre Primärstammbildungen. Zweite, erweiterte und verbesserte Auflage. Wiesbaden: Reichert.
- Radden, Günter (1998). "The conceptualisation of emotional causality by means of prepositional phrases". In: *Speaking of Emotions. Conceptualization and Expression*, ed. by Angeliki Athanasiadou & Elzbieta Tabaskowska, 273-294. Berlin / New York: Mouton de Gruyter.

Theresa Roth

Philipps-Universität Marburg

rotht@staff.uni-marburg.de

Etymologies and emotions: Historical linguistics as a key to emotion categories

The problem of researching the history of emotions

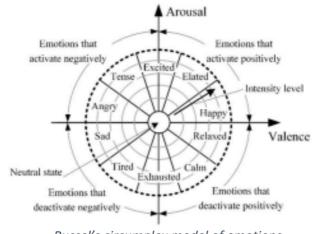
One of the major issues in researching the history of emotions has been the question whether our ancestors did feel completely different or indeed very much the same as we do today. The positions voting for the latter may be labelled, on the one hand, "universalist" – claiming a set of emotions as "basic" according to the allegedly universal evaluation of facial expressions (see Ekman / Friesen 1971) – or, on the other hand, "presentist", assuming that the "emotion modules" of our brains (e.g., for mate finding or hunting animals) developed in the Paleolithic period and haven't changed as much since then (cf. Cosmides / Tooby, "Evolutionary Psychology: A Primer.")

Constructionist theories and the role of language

However, these theories fail to account for the role of concept knowledge in *doing emotion*, that is the fact that we make sense of otherwise unspecific or ambiguous sensations and perceptions only by mapping them on emotion concepts, crucially represented in and acquired by language (for a detailed account on "emotional compounds" see Lindquist *et al.* 2015). This psychological constructionism corresponds with the social constructionist theory which claims emotions of former cultures to be accessible for us mainly via their – culturally shaped and historically embedded – conceptualizations. Researching textual sources of historical communities thus allows "to uncover systems of feeling (...); the emotions that they value, devalue, or ignore; the nature of the affective bonds between people that they recognize; and the modes of emotional expression that they expect, encourage, tolerate, and deplore" (Rosenwein 2010: 11).

Assessing emotional properties

Russel's circumplex model of emotions arranges emotion concepts according to two main parameters forming the axes of *affective valence* (if a sensation is experienced as positive or negative) and *arousal* (the degree to which an experience or sensation causes neural or physical activity). It might prove to be a helpful tool in assessing historical emotions – but the valence and degree of activation inhering a specific emotion might not always be obvious from the linguistic expression or context.



Russel's circumplex model of emotions

Evaluating the emotion words of a historical community of speakers and especially considering etymologies and conceptual metaphors could, in my view, provide an important key to both of these parameters. As an example, we might have a look at two of the Hittite expressions for "fear" revealing via their etymologies quite opposite degrees of activation (cf. Beckman 2022: 176):

pittuliya-, "to be constricted; anxious, anguished" (CHD P: 366–367; EDHIL 680–681) cf. *pittula-*, "loop, knot" (CHD P: 365–366)

lahlahhiya-, "to be agitated; to worry" (CHD L–N: 10–12; HED 4: 10–12) cf. *lahlahheškenu-* (CHD L–N: 12) with horses as object, "to work them up, cause them to run"

Other aspects which can be "extracted" from conceptual metaphors represented in language (but also enacted in ritual performance) refer to the valence of a sensation, a component prominently featured in conceptual metaphor theory: GOOD = up, present, light, sweet, in order, at rest; BAD = down, absent, dark, disordered, unsettled.

The goal of my paper is thus *not* to discuss how conceptual metaphors might be helpful in finding or judging etymologies but, quite the other way around, to raise the question if and to what extent historical linguistics might provide keys to approach emotional concepts via parameters like valence and activation. Doing so would help us to better delimit several "types" of emotions belonging to one conceptual cluster, to identify their correlations with specific situations or members of the community for whom they are considered appropriate – and to finally create more fine-grained maps of a community's emotional repertoires.

References

- Barrett, Lisa Feldman / Russell, J. A. 2015. *The psychological construction of emotion*. New York, NY, US: Guilford Press.
- Beckman, Gary. 2022. Hittite emotion terms. In: Sonik, K. / Steinert, U. (eds.): *The Routledge* Handbook of Emotions in the Ancient Near East. London / New York: Routledge, 171–196.
- CHD: Chicago Hittite Dictionary = The Hittite Dictionary of the Oriental Institute of the University of Chicago. Güterbock, Hans G./Hoffner, Harry A. Chicago: The Oriental Institute of the University of Chicago. 1980–. Cosmides, Leda / Tooby, John. 1997. Evolutionary Psychology: A Primer. https://www.cep.ucsb.edu/primer.html Ekman, Paul / Friesen, Wallace V. 1971. Constants across Cultures in the Face and Emotion. In: Journal of Personality and Social Psychology 17,2, 124–39.
- Goschke, T. / Dreisbach, G. 2010. Kognitiv-affektive Neurowissenschaft: Emotionale Modulation des Denkens, Erinnerns und Handelns. In: Wittchen U. / J.Hoyer (eds.): *Klinische Psychologie und Psychotherapie*. 2nd edition. Berlin: Springer.
- HED: Hittite Etymological Dictionary. Puhvel, Jaan. Berlin/Amsterdam/New-York: Mouton Publishers.
 1984–. Kövecses, Zoltán. 1986. Metaphors of anger, pride and love: a lexical approach to the structure of concepts. Pragmatics & beyond, 7,8. Amsterdam. Benjamins.
- Lakoff, George / Johnson, Mark. 1980. Metaphors we Live by. Chicago: University of Chicago Press.
 Lindquist, Kirsten A. et al. 2015. The role of language in emotion: predictions from psychological constructionism. In: Frontiers in Psychology 6, 1–17.

- Rosenwein, Barbara H. 2010. Problems and Methods in the History of Emotions. In: *Passions in Context* I, 1–32. Russell, J.A. 1980. A circumplex model of affect. In: *Journal of Personality and Social Psychology* 39, 1161–1178.
- Schwarz-Friesel. Monika. 2013. Sprache und Emotion. 2nd edition. Tübingen / Basel: A. Francke Verlag UTB.

Silvia Zampetta⁺, Erica Biagetti^{*}, Nicolò de Rossi^{*}, Martina Giuliani[#], Chiara Zanchi^{*}, Silvia Luraghi^{*}

*University of Pavia, ⁺University of Bologna, [#]University of Pavia / Bergamo

Chiara Zanchi <chiara.zanchi01@unipv.it>

Calidum hoc est! Metaphors of HOT and COLD in Sanskrit, Ancient Greek, and Latin

This paper focusses on patterns of polysemy of the Sanskrit (Skt.), Ancient Greek (AG), and Latin (Lat.) temperature terms carving up the subdomains of HOT and COLD in these Indo-European (IE) languages. Lexical typology has recently granted much attention to what, since Koptjevskaja-Tamm (2015; but see earlier Plank 2003), has been named 'linguistics of temperature'. The domain of TEMPERATURE is a good viewpoint to study the link among natural phenomena, human body, and cognition: we experience and evaluate temperature primarily through our bodies. Also, the perception of temperature is scalar and relative: different degrees of heat and coldness can represent good or bad experiences for humans. Since Lakoff/Johnson (1980), metaphorical extensions of temperature terms have been pointed out, mostly discussing the linguistic expression of emotions: positive and negative INTENSE EMOTIONS (e.g. LOVE, HATE and ANGER) are mapped onto HEAT, whereas LACK OF EMOTIONS/CONTROLLED EMOTIONS are conceptualized as COLD/LACK OF HEAT (Lakoff et al. 1991, Radden 2000, Kövecses 1995, Lorenzetti 2009, Coschignano 2021). Other axiologically negative emotions (e.g. DISLIKE, FEAR, and SADNESS) are mapped onto the COLD subdomain (Barcelona 1986, Lakoff et al. 1991, Apresjan 1997, Kövecses 2005, Zhong/Leonardelli 2008). Little research is available on temperature terms in ancient IE languages. What has been done is hardly framed within a cognitive linguistic framework (Fruyt 2013), lies outside the field of linguistics (on tapas- 'heat' in Skt. literature, see, e.g., Kaelber 1976, 1979) or regards a single conceptual metaphor in a single language (Kölligan 2020). This paper is a first step to fill this gap. By adopting an onomasiological perspective, we will investigate and compare the metaphorical extensions of the terms covering the subdomains of HOT and COLD in Skt., AG, and Lat. with one another and with other not necessarily related languages. Relevant lexical items will be manually extracted from reference dictionaries. Our data will show that metaphorical extensions of temperature terms go beyond the domain of EMOTIONS: e.g., in AG thermen epi psukhroîsi kardían ékheis 'a hot spirit in a cold business' (S. Ant. 88), COLD is used to mean USELESSNESS and INEFFECTIVENESS. Moreover, despite stemming from the same bodily metonymy (specifically, THE PHYSIOLOGICAL EFFECTS OF AN EMOTION ARE THE EMOTION ITSELF), temperature terms can develop axiologically opposite shifted meanings. See e.g. the subdomain of HEAT in Lat: in Reperiamus aliquid calidi conducibilis consili 'Let's find a useful nice and warm plan!' (PI. Epid 256), calidus instantiates the metaphor HOT IS PRODUCTIVITY, whereas in Calidum hoc est! etsi procul abest, urit male 'This is a burning matter! Though it is far away, it terribly smells like burning' (Most. 609a), calidum and urit show a metaphorical shift based on which HIGH INTEREST/ DANGER are conceptualized as HEAT. As pointed out for other languages (e.g., Ameka 2015 described HEAT as associated to BLACK MAGIC), some semantic extensions of temperature terms are noticeably culturedependent: this is the case of Skt. tapas- 'heat' > 'religious austerity, bodily mortification', sītala- 'cold' > 'free from passion, calm, gentle'. The data of this paper will contribute to enriching the semantic annotation contained in three comparable WordNets for ancient IE languages (Biagetti et al. 2021), which, providing etymological information, will allow scholars to investigate whether Skt., AG, and Lat. cognate words lexicalize comparable arrays of concepts. Containing information on periodization(s) and genre(s), and distinguishing literal and non-literal meanings, WordNets will also allow tracking the development of metaphorical meanings over time and across genres.

References

Ameka Felix K. 2015. Hard sun, hot weather, skin pain. In M. Koptjevskaja-Tamm (ed.). Apresjan, Valentina Ju. 1997. Emotion Metaphors and Cross-Linguistic Conceptualization of Emotions. *Cuadernos de filología inglesa* 612: 179-195.

Barcelona Sánchez, Antonio. 1986. On the Concept of Depression in American English: A Cognitive Approach. *Revista Canaria de Estudios Ingleses*, 12, 7-35.

Biagetti, Erica, Chiara Zanchi and William Michael Short. 2021. Toward the creation of WordNets for ancient Indo-European languages. In *Proceedings of the 11th Global Wordnet Conference, University of South Africa* (UNISA), 258–266.

Coschignano, Serena. 2021. The semantic network of temperature: Non-sensory domains accessed with metaphorical extensions of the Italian adjectives caldo and freddo. *Review of cognitive linguistics* 19(1): 232-258.

Fruyt, Michèle. 2013. Temperature and Cognition in Latin. *Revue de Linguistique Latine du Centre Alfred Ernout. De Lingua Latina 9*, 1-34.

Kaelber, Walter O. 1976. "Tapas", Birth, and Spiritual Rebirth in the Veda. *History of Religions* 15(4), 343-386.

Kaelber, Walter O. 1979. Tapas and Purification in Early Hinduism. *Numen* 26(2), 192-214. Koptjevskaja-Tamm, Maria (ed.). 2015. *The linguistics of temperature*. Amsterdam/Philadelphia: Benjamins.

Kölligan, Daniel. 2020. "Seething anger: Latin furor". In L. Repanšek, H. Bichlmeier, and V. Sadovski (eds). vácamsi miśrấ krnavāmahai, *Proceedings of the international conference of the Society for Indo-European Studies and IWoBA XII*, Ljubljana 4-7 June, 2019, 397-412. Hamburg: Baar.

Kövecses, Zoltán. 1995. Anger: Its language, conceptualization, and physiology in the light of cross-cultural evidence. In John R. Taylor & Robert E. MacLaury (eds.), *Language and the Cognitive Construal of the World*. Berlin: Mouton de Gruyter. 181–196.

Kövecses, Zoltán. 2005. *Metaphor in Culture: Universality and Variation*. Cambridge: Cambridge University Press.

Lakoff, George and Mark Johnson. 1980. *Metaphors We Live By*. Chicago: The University of Chicago Press.

Lakoff, George, Jane Espenson and Alan Schwartz.1991. *The Master Metaphor List*. Berkeley: Cognitive Linguistics Group, University of California, Berkeley.

Lorenzetti, Maria Ivana. 2009. "That girl is hot, her dress is so cool, and I'm just chilling out now": Emergent metaphorical usages of temperature terms in English and Italian. Paper presented at the *Corpus-Based Approaches to Figurative Language* Colloquium in Liverpool, UK, July 2009.

Plank, Frans. 2003. Temperature talk: The basics. Paper presented at the *Workshop on Lexical Typology at the ALT conference in Cagliari*, September 2003.

> http://ling.unikonstanz.de/pages/home/plank/for_download/unpublished/09_FP_Te mperatureBasics_2003.pdf

Radden, Günter. 2000. How metonymic are metaphors? In Antonio Barcelona (ed.), *Metaphor and Metonymy at the Crossroads. Topics in English Linguistics* 30. Berlin/New York: Mouton de Gruyter. 93-108.

Zhong, Chen-Bo, and Geoffrey J. Leonardelli 2008. Cold and Lonely Does Social Exclusion Literally Feel Cold? *Psychological science* 19, 838-42.

Daniel Kölligan

Julius-Maximilians-Universität Würzburg, Institut für Altertumswissenschaften, Lehrstuhl für Vergleichende Sprachwissenschaft, Oswald-Külpe-Weg 84, D-97074 Würzburg

daniel.koelligan@uni-wuerzburg.de

Conceptual metaphors and etymology

With the development of conceptual metaphor (CM) theory within the research paradigm of cognitive linguistics since the 1980s (cf. Lakoff & Johnson 1980) and the attribution of the pervasive character of CMs as permeating all registers of language and not being restricted to poetic language vel sim., their use and development is relevant for language diachrony in general. This applies both to independently recurring CMs found across languages and times, which might be due to general features of human experience (cf. e.g. Cairns 2016 and Kölligan 2017 on 'nakedness' and 'shame'), and to CMs contingent upon culturally and historically unique circumstances (which one might call a "locality constraint", e.g., the development of political metaphors such as "the state is a body" ["body politic"] and "the state is a ship" in ancient Greece, cf. Brock 2013).

This paper will examine a set of well-known CMs and their application to etymological research mostly in Greek and Latin arguing that

(a) the CM 'anger is a hot fluid in a container' may not only explain the case of Lat. furor 'anger' (cf. Kölligan 2020), but also, e.g., that of Greek $\sigma\kappa\nu\delta\mu\alpha(\nu\omega/\sigma\kappa\nu\zeta\rho\mu\alpha)$ 'be angry' and $\sigma\kappa\nu\zeta\alpha$ 'lust, heat', which have not received a satisfactory explanation so far (cf. Beekes 2010: 1360) and which may be related to the Proto-Indo-European root **skeud*- 'to impel', and allow to connect the superficially divergent roots **g*^her- 'to shine' (Lith. žeriù) and **g*^herH- 'to be angry' (Ved. hrnite);

(b) that the CM 'the soul is a sea' occurs not only in Lat. *tranquillus* 'calm' (cf. Kölligan 2022), Lat. *aequus, aequor* (cf. *aequo animo* 'with a calm mind') and Greek $\gamma \alpha \lambda \dot{\eta} \gamma \eta$ 'calm of the sea/of the soul', but also in derivatives of PIE **sem*- 'one (and the same)' developing the meaning 'even, calm' (cf. MIr. *sám*; Germ. *sanft*);

(c) that the CM 'success is reaching the end of the path' (cf. Lakoff 1993: 222) underlies the diachronic development of verbs originally meaning 'to stretch', 'to move (towards)', etc., denoting (agent-oriented) ability such as Greek $\delta \dot{\nu} \alpha \mu \alpha \iota$ (cf. Kölligan 2021), Toch. *cämp* and German *gelingen* 'to succeed' next to (*ge-)langen* 'to suffice, to reach'.

References

Beekes, Robert Stephen Paul. 2010. Etymological dictionary of Greek. 2 vols. Leiden: Brill. Brock, Roger. 2013. Greek political imagery from Homer to Aristotle. London; New York: Bloomsbury. Cairns, Douglas. 2016. "Clothed in Shamelessness, Shrouded in Grief: The Role of "Garment"

- Metaphors in Ancient Greek Concepts of Emotion". In: Fanfani, G., M. Harlow, M.-L. Nosch (eds.), Spinning Fates and the Song of the Loom: The Use of Textiles, Clothing and Cloth Production as Metaphor, Symbol and Narrative Device in Greek and Latin Literature. Oxford: Oxbow, 25–41.
- Horn, Fabian. 2016. "Building in the Deep': Notes on a Metaphor for Mental Activity and the Metaphorical Concept of Mind in Early Greek Epic." Greece and Rome 63, 163–174.
- Kölligan, Daniel. 2017. "PIE *h2eid- 'to reveal' and its descendants". In: David M. Goldstein / Stephanie W. Jamison / Brent Vine (eds.), Proceedings of the 27th Annual UCLA Indo-European Conference, Bremen: Hempen, 61–78.
- Kölligan, Daniel. 2020. "Seething anger: Latin furor". In: L. Repanšek, H. Bichlmeier, and V. Sadovski (eds.), vácāmsi miśrắkṛṇavāmahai. Proceedings of the international conference of the Society for Indo-European Studies and IWoBA XII, Ljubljana 4–7 June 2019. Hamburg: Baar, 397–412.
- Kölligan, Daniel. 2021. "Getting there? Greek δύναμαι 'be able'". In: Synchrony and Diachrony of Ancient Greek, ed. by Georgios K. Giannakis, Luz Conti, Jesús de la Villa, and Raquel Fornieles, 151–62. Berlin: De Gruyter. DOI: 10.1515/9783110719192.
- Kölligan, Daniel. 2022. "Full and calm Notes on Greek ἥσυχος and Latin tranquillus". Acta Linguistica Petropolitana. Vol. 18.1. Colloquia Classica et Indogermanica VII. Miscellanea in honorem Nikolai N. Kazansky septuagenarii. pp. 165–186. DOI:10.30842/alp23065737181165186.

Lakoff, George, & Mark Johnson. 1980. Metaphors we live by. Chicago: Univ. of Chicago Press.

Lakoff, George. 1993. "The contemporary theory of metaphor." In: A. Ortony (ed.), Metaphor and thought. Cambridge: Cambridge University Press, 202–251.