# Usage of spatial metaphor in tellings of the crisis

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**DiscourseNet**Collaborative Working
Paper Series

no. 2/8 | August 2020

Special Issue: Discourse Studies Essays

on the Corona-Crisis

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Typeset by David Adler

## Citation

Kremer, Dominik (2020): Usage of spatial metaphor in tellings of the crisis, *DiscourseNet Collaborative Working Paper Series*, no. 2/8, Special Issue: Discourse Studies Essays on the Corona Crisis, https://discourseanalysis.net/dncwps.

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## About the Special Issue: Discourse Studies Essays on the Corona Crisis

Edited by Jens Maeße, David Adler & Elena Psyllakou

This special issue seeks to collect ideas, reflections and discussions on the multiple aspects of the ongoing corona crisis from a discourse analytical and discourse theoretical point of view. We publish short work-in-progress papers (approx. 1000—3000 words) that take empirical, ethical, psychoanalytical, economic, political and everyday aspects as starting point for developing discourse analytical research ideas and reflections which can be further developed into full research papers at a later time.

# Usage of spatial metaphor in tellings of the crisis

# Dominik Kremer

This short paper reflects on the use of spatial metaphors and metonyms in the context of discursive binding of the COVID-19 crisis. It shows how the dense use of metaphors and metonyms allows for an efficient but often misleading embodied reasoning of the crisis. I propose that current bindings of the crisis still show strong indications of neglecting behaviour rather than acceptance.

Keywords: discourse analysis, embodied cognition, image schemata, COVID-19

In his book "Pandemic!" Zizek (2020) states that, especially in times of COVID-19, language acts somehow mechanically. Besides their primary function for communicating topological relations, spatial metaphors are widely used to enable embodied cognition. This short paper aims to reveal the hazards of spatial argumentation patterns in tellings of the COVID-19 pandemic. Initially, I demonstrate that spatial argumentation patterns can be framed in the tradition of image schemata and that only a fraction of those has been studied intensely in the field of Human Geography to date. In addition, I provide evidence from Spatial Cognition for the strong observable cognitive effects of these patterns. A detailed analysis of single statements about COVID-19 taken from public discourses and everyday speech shows how these patterns allow for efficient thinking at the cost of potential fallacy. To conclude, the use of image schemata is linked back to the cognitive reflex of denial in the face of lethal threats.

## Structure of spatial arguments

Within the broad field of research on metaphor and metonymy (Stefanowitsch 2006), Lakoff/Johnson (2003, originally published in 1980) provide the soundest approach to generate insights into the structures and patterns of metaphors in natural language. They show that speech patterns, and especially spatial ones, can be used for both highlighting and concealing context. Even meta-argumentations make use of spatial metaphors (Lakoff/Johnson 2003). For example: "I still haven't gotten to the core of his argument." "That argument has holes in it." "That conclusion falls out of my argument." "You won't find that idea in his argument." The argument itself becomes a container that can be thought of as a spatial object containing a core and holes, allowing for the application of an inside/outside relation. Even the spatiotemporal process of disintegrating ("falling apart") can be used to mark the inconsistency of arguments made.

Johnson (1987) presents a rich inventory of metaphoric patterns that make use of the spatial embodiedness of reasoning. His *image schemata* give an overview of production patterns with the explicit aim to translate between multimodal perception and conception. Since then, image schemata have provided a wide range of applicability ranging from formalizing wayfinding tasks (Rauball et al. 1997) to describing the productive power of fictional narratives (Balint/Tan 2015). Although originally lacking an ability to take socio-cultural differences into account (Hampe 2005), a fraction of image schemata is widely understood and studied within human geography. Kremer (2018), in congruence with Schlottmann (2005, 2007) collects several patterns that are frequently used to reason, even about non-spatial problems:



- Center-periphery: well-known or desired phenomena are thought of as being nearby, whereas foreign or undesired phenomena are somehow placed outside.
- Container/Containment: all regions are thought of as objects that carry attributes and make the inside/outside relation applicable. All attributes of a container apply to each of its parts and are equally distributed over the area of the container (homogeneity) and all known places belong to exactly one container (full coverage).
- Anthropomorphism/personification (a concept of metonymy): complex issues like geopolitics are scaled to a level that can be instantiated and/or enacted bodily.
- Placement as evidence: in confirmation of Entrikin (1991), Felgenhauer (2009) and Kremer (2013), empirical data are used to demonstrate how spatial/platial references themselves are used as a proof in chains of argumentation.

Kremer (2013), in a case study of conflicts between different usages of public spaces, demonstrates how conclusions are drawn based on containerized inside/outside relations. Using an example from tourist exploration, a local inhabitant assumes that tourists walk on the street all through the town center because they judge that they are *in* World Heritage, whereas he wants to use the space as a transport area. Notably, the attribution "no traffic" of the concept "World Heritage" is never explicitly stated, but it can easily be derived from the bodily enactable blockage.

Findings from Embodied and Spatial Cognition strongly confirm these observations empirically. For instance, Tversky (1993) shows how hierarchical structuring of containers facilitates reasoning about spatial problems. If you do not know which of the two entry points into the Panama Canal is located farther West, you will derive this information from pre-existing knowledge about their top-level containers: if the Pacific is West of the Atlantic Ocean, the Pacific-side entry point has to be more westerly (even though this is a fallacy!).

Wilson/Foglia (2011) explicitly reference Lakoff/Johnson (2003) when they state that many levels of cognition utilize the body as an agent. Tversky (2003) names four basic scales of spatial cognition based on embodied experience, namely: (1) the body itself; (2) the space somehow related to the body (up/down, left/right, front/back); (3) the space of navigation (that can be explored by locomotion); and (4) the space of graphics (that represents complex (non-)spatial settings or even temporal relations, but can be performed bodily). Essentially, the space of graphics is the result of a transformation of complex information into the sphere of the body on the cost of reductions in dimension-

ality: "France fell into a recession and Germany pulled it out" (Lakoff/Johnson 2003).

## Preliminary analysis of telling the pandemic

In preceding epidemics the spatial placement of incidents outside the own living environment has been rather successful as occurrences happened frequently in regions outside the Western World. Stating that HIV is only *in* Eastern Europe, SARS is *in* China or Ebola is *in* Africa utilizes containers combined with the center-periphery-metaphor to locate the disease *outside*, leaving everyday routines *inside* untouched. The same pattern is applied willingly when COVID-19 is associated with China<sup>1</sup>. Armin Laschet, chief minister of the German federal state Nordrhein-Westfalen and member of centre-right party CDU, stated in an interview<sup>2</sup>:

"... weil Rumänen und Bulgaren da eingereist sind und da der Virus herkommt. Das wird überall passieren ...".

Author's transcription and translation: "... because Romanians and Bulgarians entered the country and that's where the virus comes from. This will happen everywhere ...".

The usage of this spatial pattern is subject to fallacy in many dimensions: The *center-periphery-metaphor* is utilized to push the source of transmission beyond the area of responsibility. Silently, the bad reputation of migrant workers is used to *superimpose* even more negative attribution. Implicitly, it is neglected that transmission can now take place anywhere on the globe.

Whereas the use of this pattern can be anticipated in the field of politics, it is surprising to observe just how long after the initial arrival of SARS-CoV-2 in Germany that physicians started asking "Did you stay *in* risk areas lately?" This serves as a diagnostic criterion to establish whether a symptomatic patient should be tested, and in doing so, reproduces a general dismissal of the possibility that transmissions may occur at any location.

Of course, on the private level those patterns can be observed in a wide range of interactions. From personal observation at a Biergarten, it was told:

"Was macht denn der Bus *aus Bielefeld hier?* Der soll daheim bleiben, in Niedersachsen<sup>3</sup> ist doch Corona!"

Author's translation: "What is the bus from Bielefeld doing here? It should stay at home, there is Corona in Lower Saxony!"

As introduced above, hierarchical reasoning with containers applies. Believing that at least some places in Lower

- 1 https://www.youtube.com/watch?v=E2CYqiJI2pE (10.08.2020).
- 2 https://twitter.com/nicolediekmann/status/1273257798307061762 (10.08.2020).
- 3 Bielefeld is member of the state of Nordrhein-Westfalen. As only individual arguments are analysed, this is not part of my argument.



Saxony reported a high frequency of COVID-19 cases, the cognitive container "Lower Saxony" itself inherited this attribute as a whole. Spotting a license plate from an administrative area considered to be in Lower Saxony, it was reasoned that all the vehicle's occupants reside in Lower Saxony as well and would thus be infected by COVID-19. By misusing generalization, the reports of COVID-19 incidence and the occupants of the bus were both mapped to the same spatial container "Lower Saxony", reducing reasoning to a simplistic reading of this concept's attributes. Furthermore, using the pattern of personification to transform the result of the inference into an action in a bodily enactable manner, the group of travellers is represented by the bus itself and the request to leave instantly is given directly to it (and not to the driver or the passengers).

## **Spatial denying**

Given that COVID-19 imposes a lethal threat to at least a certain share of the population, the use of spatial arguments about the crisis is congruent with what Kübler-Ross (1997) calls the phase of denial: "This cannot be true. This does not happen to me!" In the context of dying persons, she lists the following phases of reaction that do not follow a fixed order, but are observable: (1) Denial: the person reacts with disbelief; (2) Anger: the person reacts emotionally: "why me?"; (3) Bargaining: the person tries to trade something for relief; (4) Depression: the person is in desperation; (5) Acceptance: the person binds the inevitable with new routines.

4 Cf. https://www.dwds.de/d/k-web#corona (10.08.2020).

It can be assumed that in case of COVID-19, the *center-periphery-metaphor* is strongly related to denial in Armin Laschet's defensive reflex, and in the case of the bus tourists, closer to pushing away or cognitively *containing* than to acceptance.

Obviously, tellings of the pandemic are an emotional reaction in the face of observable lethal risk. But especially in the context of political decision-making, there is the need for full awareness and careful deliberation of the consequences of specific spatial argumentation patterns to prevent risky routines or even counterproductive behaviour. Even the term "containment" to describe the primary method of risk management is subject to fallacy (based partially on cultural clichés) when only applied regionally with little regard for epidemiological or virological evidence (e. g., social contact and interpersonal proximity).

A desideratum can thus be derived to scan across multiple disciplines on a large scale for image schemata and their systematic usage in discursive bindings of tellings about COVID 19. Next steps cover (1) the interpretative exploration of small chunks of a well understood and maintained corpus about COVID-19<sup>4</sup>, (2) formalization of the discovered usage patterns (cf. Bubenhofer 2015), (3) automated pattern recognition of these patterns on a large corpus and (4) qualitative evaluation of the identified occurrences in terms of their contribution to the overall narrative. Once this approach can be scaled up efficiently, it will provide better understandings of how health crises are enacted, socially reproduced and how the contingent behaviours themselves further fuel the COVID-19 pandemic as a social crisis.

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### References

- BALINT, K. AND E. TAN (2015): "It feels like there are hooks inside my chest": The Construction of Narrative Absorption Experiences Using Image Schemata. Projections 9, 63–88.
- BUBENHOFER, N. (2015): Muster aus korpuslinguistischer Sicht. In: Dürscheid, C. and J. G. Schneider (Eds.): Handbuch Satz Äußerung Schema, Sprachwissen. de Gruyter, 485–502.
- ENTRIKIN, N. J. (1991): The Betweenness of place. McMillian.
- FELGENHAUER, T. (2009): Raumbezogenes Argumentieren: Theorie, Analysemethode, Anwendungsbeispiele. In: Glasze, G. and A. Mattissek (Hrsg.): Handbuch Diskurs und Raum. transcript, 261–278.
- HAMPE, B. (2005): Image schemas in Cognitive Linguistics: Introduction. In: Hampe, B. (Ed.): From Perception to Meaning. Image Schemas in Cognitive Linguistics. de Gruyter, 1–14.
- JOHNSON, M. (1987). The Body in the Mind: The Bodily Basis of Meaning, Reason and Imagination. University of Chicago Press. KÜBLER-ROSS, E. (1997): On death and dying. Scribner.
- KREMER, D. (2018): Rekonstruktion von Orten als sozialem Phänomen: Geoinformatische Analyse semantisch annotierter Verhaltensdaten. University Bamberg Press.
- KREMER, D. (2013): Orts(re)konstruktionen. Analyse der Mikrostruktur ortsbezogener Argumentationsmuster in Erinnerungsnarrativen Bamberger Einwohner. Berichte. Geographie und Landeskunde 87(2), 175–193.
- LAKOFF, G. AND M. JOHNSON (2003). Metaphors we Live by. University of Chicago Press.
- RAUBAL, M., EGENHOFER M. J., PFOSER, D. AND N. TRYFONA (1997): Structuring Space with Image Schemata: Wayfinding in Airports as a Case Study. In: COSIT 1997, 3rd International Conference. Springer, 85–102.
- SCHLOTTMANN, A. (2005): RaumSprache: Ost-West-Differenzen in der Berichterstattung zur deutschen Einheit: eine sozialgeographische Theorie. Franz Steiner Verlag.
- SCHLOTTMANN, A. (2007): Wie aus Worten Orte werden Gehalt und Grenzen sprechakttheoretischer Sozialgeographie. Geographische Zeitschrift 95(1–2), 5–23.
- STEFANOWITSCH, A. (2006). Corpus-based approaches to metaphor and metonymy. In: Stefanowitsch A. and S. T. Gries (Eds.): Corpus-based approaches to metaphor and metonymy, Trends in Linguistics. de Gruyter, 1–16.
- TVERSKY, B. (1993): Cognitive Maps, Cognitive Collages, and Spatial Mental Models. COSIT 1993, 1st International Conference. Springer, 14–24.
- TVERSKY, B. (2003): Structures of Mental Spaces how People Think about Space. Environment and Behavior 35(1), 66-80.
- WILSON, R. A. AND L. FOGLIA (2011): Embodied Cognition. URL: stanford.library.usyd.edu.au/entries/embodied-cognition/.
- ŽIŽEK, SLAVOJ (2020): Pandemic! COVID-19 shakes the world. Polity.

