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Binary opposition is a powerful relation in language, cognition and perception – important to coherence in discourse and to how we perceive and understand the world around us. Research on binary opposition, or antonymy in language, has recently experienced a revival of interest. The rapid progress of investigatory experimental techniques and technological advances has made it possible to seek answers to fundamental questions such as: What is the nature of antonymy? How are antonyms represented? Are all antonym pairs equally good? If not, why not?

For many years, research in linguistics on lexical semantic relations such as antonymy was tied up with the Structuralist approach to meaning within which language is conceived of as an autonomous system of paradigmatic (Saussure, 1959 [1915]; Lyons, 1977; Cruse, 1986) and syntagmatic (Sinclair, 1987) relations between words. Even though lexical relations were the particular focus of the Structuralists, their research did not achieve very much in terms of explanation for the phenomena as such. More recently, the role of perception for cognition and language understanding has attracted considerable interest (Pecher & Zwaan 2005, Barsalou 2008, Bianchi & Savardi 2008, Binder & Desai 2011, Caballero & Díaz 2013) and with the advent of Cognitive Semantics new ideas about the importance of spatial thinking and the flexibility of viewing arrangements in language use have been brought to the fore (e.g. Langacker 1987, Talmy 2000, Dancygier & Sweetser 2012, Paradis, Hudson & Magnusson 2013).[1] The implications for the treatment of antonymy along these lines are that it is neither solely a lexical relation between words nor a categorical monolith (Paradis & Willners 2011, Jones, Murphy, Paradis & Willners 2012).

At the one extreme, antonyms show up as strongly associated pairs such as *long–short, heavy–light, hot–cold* and *good–bad* along the dimensions of LENGTH, WEIGHT, TEMPERATURE and MERIT, respectively. While other pairs appear to be less obviously or felicitously opposable and more clearly bound up with specific domains and situations, e.g. *calm–high-strung, calm–flowing, calm–agitated*, as in 'I prefer *calm* dogs to *high-strung* dogs', 'I prefer *calm* waters to *flowing* waters', 'I prefer a *calm* public to an *agitated* public' (Paradis, Willners & Jones 2009). In spite of this difference, all of them are used to express binary opposition. In that sense they are all antonyms. But, what makes the former pairings more felicitously opposable than the latter ones still remains a mystery, at least in part. It has been shown that it is the 'goodness' of the relations as such that is of importance, not lexical associations or co-occurrence frequency (van de Weijer, Paradis, Willners & Lindgren 2011). But, what then is this goodness?

The purpose of this contribution is to try to determine *why* some pairs are felt to be "better" antonyms than others and therefore more apt to take on special status as canonical antonyms. What is the difference between pairs such as *heavy–light* and *hot–cold* on the one hand, and most other antonymic construals such as *calm–high-strung* or *calm–flowing* on the other? In order determine this we first need to explain how two expressions can be understood as antonyms, and for that we need a theoretical framework that is capable of accounting, not only for canonical couplings in language, but also for antonymic meaning creation in text and

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[1] In fact, Cognitive Grammar was initially called Space Grammar (Langacker 1982)

discourse. Couched in the framework of *Lexical Meaning as Ontologies and Construals* (Paradis 2005), this contribution treats antonymy as a spatial configuration construal grounded in perception and effected through comparison of the opposing properties (Paradis & Willners 2011). Whenever we think of something as 'long', 'good' or 'dead', it will be in contrast to something that lacks or has little of this property, i.e. their opposites. This take on binary opposition has also gained phenomenological support in psychophysical experimentation (e.g. Bianchi and Savardi 2008, Bianchi, Savardi & Kubovy 2011). The proposal is that form–meaning pairings in language are antonyms when they are used as binary opposites. Characteristic of antonyms is that they share an important segment of meaning at the same time as they differ prominently along the same dimension. Configurationally, this translates into a spatial configuration construal where a simple content dimension, bounded (e.g. *dead–alive*) or unbounded (*short–long*), is divided in two parts by a BOUNDARY, as shown in Figure 1.
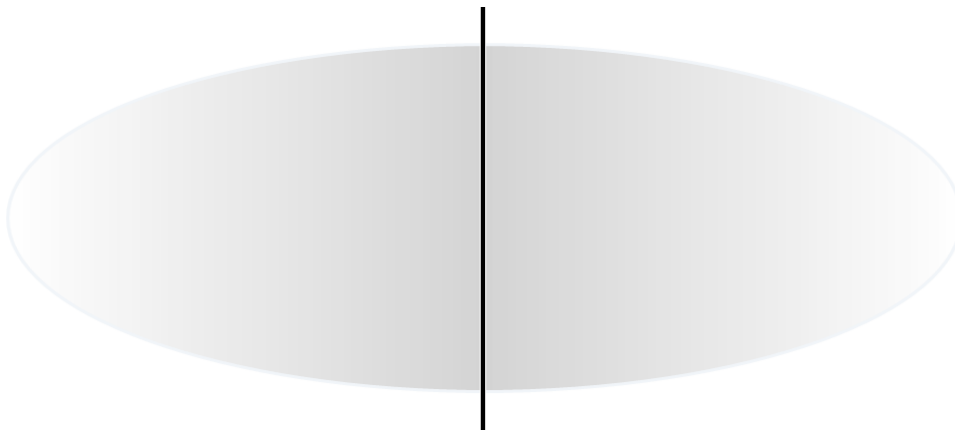

Figure 1. The antonymic configuration of a dimensional meaning structure (Paradis & Willners 2011)

The antonymic configuration in Figure 1 is a necessary requirement for meanings to be used as antonyms and from this point of view all antonyms have equal status as category members.[2] In contrast to such a categorization by configuration, categorization by contentful meaning structures forms a continuum ranging from the strongly related pairings, referred to as canonical antonyms (e.g. *long–short*) to more peripheral members (e.g. *calm–high-strung*). In order to explain why some lexical semantic couplings tend to form conventionalized pairs, this proposal appeals to (i) their ontological set-up in terms of the simplicity, entrenchment and perceptual basicness of dimensions along which they evoke opposing properties, e.g. *long–short* of LENGTH as opposed to *calm–high-strung* of EMOTIONAL TENSION OF ANIMATE CREATURE, (ii) the configurational clarity and symmetry of the antonyms in relation to the BOUNDARY dividing the meaning structure, e.g. *small–large* is a better pair than *small–huge* because the properties are at the same distance from a middle-ground reference point (Paradis, Willners & Jones 2009, Bianchi, Savardi & Kubovy 2011, Paradis & Willners 2011).

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[2] It should be noted that this most basic configuration construal does not take into account the more specific configurations that antonyms may have in relation to one another , which involve different constellations of the presence or absence of ranges and boundaries of the representation of the pairs (Paradis 2001, 2008, Bianchi, Savardi & Kubovy 2011, Paradis & Willners 2013)

Important outstanding questions concern why some meanings lend themselves to binary opposition more easily than others, and what the interplay between the salience/entrenchment of the contentful dimension and the robustness of the configurational structure of the antonymic relation in terms of boundaries, scales, distances and symmetry with respect to the basic binary divide shown in Figure 1 is like.