Anna M. Borghi. *The Freedom of Words: Abstractness and the Power of Language*. Cambridge University Press 2025. 305 pp. \$125.00 USD (Hardcover 9781108842907); \$39.99 USD (Paperback 9781009663960).

Anna Borghi's *The Freedom of Words* offers a persuasive proposal of a grounded cognition account of language that views cognition as inherently intertwined with the body, sociality, and the environment. Borghi conceives of the processing and comprehension of language and concepts as eliciting a dynamic reenactment of emotional and sensorimotor areas that have been activated during previous experiences with the referents of the words or concepts. Recognizing that grounded approaches are particularly effective for concrete concepts, on which most grounded research has focused, she incorporates elements of language itself, such as association structures between words, as well as pragmatic aspects of dynamical interactions between individuals for a holistic account. This approach extends the framework of grounded cognition to abstract concepts, such as *freedom* or *justice*, that go beyond direct experience.

The book comprises an introduction and two sections: "Language and its Power", and "Abstractness and Language". The first three chapters lay the foundation of her understanding of language as a physical, inner, and social tool, respectively. Chapter 4 examines the evolution of language, and Chapter 5, which opens the second section, introduces the topic of abstract concepts. Chapters 6, 7, and 8 build upon the topics of the first three chapters, relating the interplay between language as a physical, inner, and social tool with abstractness.

Addressing language "as a tool that influences our experience of the physical environment" (42), Chapter 1 explores the interference of language with interoception, perception, and action. Borghi explains the modulating effects of language without attributing the full burden of perception and action to mental activity alone by arguing that language evokes and "harnesses affordances" (18). Calling an object "small" versus "large," for example, influences how we approach and interact with it by providing a frame of interaction that facilitates some and inhibits other interactions. In keeping with her moderate stance, she also emphasizes that the sensorimotor activation evoked by words tends to be more constrained than that evoked by pictures or objects.

In Chapter 2, the focus shifts to language as an inner or cognitive tool and the modulating effects of inner speech and inner sign, which are among Borghi's primary areas of research. This chapter effectively sets the stage for the entire book, as it provides the rationale for Borghi's hybrid approach; her view conceives of grounding and simulation as contributing to but not fully determining meaning; some concepts, such as abstract ones, necessitate language and the information it provides for the use



and acquisition.

Chapter 3 explores the notion of language as a tool that enhances social interaction and the ability to learn from others. It challenges the traditional understanding of language as divisible into comprehension and production. Not only is it a formalism applied to language after the fact, but it impedes research on the behavioural and linguistic alignment between interacting individuals. In the latter part of the chapter, Borghi argues for a form of externalism according to which word meanings cannot be equated to referents. She highlights our reliance on superficial knowledge in our daily lives, such as deferring to jeweler's expertise on gold or a specialist's on technology. While this could support a distributional approach to knowledge, Borghi employs it in favour of a hybrid view: our language helps us acquire concepts of things we did not immediately experience, but to fully grasp these concepts, we need to physically engage with them, as experts do.

The first section of the book concludes with Chapter 4, which elaborates on the evolutionary underpinnings of grounded theories. Borghi examines research findings that suggest language evolution is not arbitrary but rather is constrained by factors such as sensory grounding, iconicity, and the phonetic capabilities of the speaker's anatomy. The overall conclusion is that evidence favours accounts that integrate influence from vocal modalities with more embodied evidence from gestures.

Chapter 5 is the most sophisticated and contains an in-depth discussion on the nature of abstract concepts, as well as Borghi's 'Words As social Tools (WAT) theory'. Rejecting the conventional dichotomy between abstract and concrete concepts, Borghi proposes a continuous spectrum, arguing that even abstract concepts involve some degree of sensorimotor, social, or emotional reenactment. The question of the nature of abstract concepts is also considered in the context of empirical work that indicates the existence of different kinds of the latter. That is to say, there are abstract concepts that involve some degree of abstraction from our immediate experience that are processed differently, grounded to different extents, and in different modalities. Although not a unitary whole, abstract concepts exhibit common features that allow them to cluster together. They are more reliant on language than concrete concepts because, among other reasons, abstract concepts are acquired linguistically as opposed to perceptually, their exemplars tend to be more heterogeneous than those of concrete concepts, and they tend to be less dependent on single invariable contexts.

According to Borghi, WAT aligns best with the current state of research on abstract concepts because it can accommodate evidence for the contributions of both sensorimotor grounding and language. WAT consists of three main and several sub-tenets, which, in abbreviated form, are as follows: (1) "Abstract concepts and their varieties, like all other concepts, are grounded in situated

experiences and simulations, and are embodied...," (2) "Linguistic and social experience are more crucial for the acquisition, use, and brain representation of abstract concepts than concrete concepts," and (3) "Because of their undetermined character, abstract concepts should be more flexible and variable across participants and contexts" (171-174).

Chapter 6 relates abstractness with the first chapter's conception of language as a physical tool. Borghi's analysis of *conceptual metaphor theory*, an influential approach proposing that we understand abstract concepts by mapping them onto concrete experiences in the form of metaphors, leads her to reject the classical accounts as overly strong. A primary concern with these approaches is that metaphors do not fully determine abstract concepts and fail to exhaust their meanings. Especially timely is the author's consideration of the increasingly debated linguistic relativity hypothesis (Lucy 2016), which posits that the natural languages we speak influence our thinking about the world, particularly in the context of abstract concepts. Borghi argues that we should expect more crosslinguistic variation in abstract than in concrete concepts, as the former is less stringently tied to specific concepts and somewhat removed from our immediate experience. Her proposal is not only capable of handling linguistic diversity but predicts the latter's impact on cognition. The multi-representational character of WAT encourages adopting a broader perspective on the influence of culture on cognition that goes beyond language, suggesting that more detailed anthropological considerations could further enrich the framework.

Exploring abstractness within the context of language as an inner tool, Chapter 7 offers a more definitive perspective, suggesting that we depend on language for the acquisition and use of abstract concepts. This chapter revolves around studies indicating that abstract concepts activate the mouth motor system more than concrete concepts do; the author explains this through the mediating influence of inner speech. Concrete concepts, on the other hand, involve inner speech to a lesser degree and instead trigger greater activation of the hand motor system.

Chapter 8 relates abstract concepts and language as a social tool, emphasizing the need for novel, dynamic study methods of abstract concepts in conversation and interactions. This is one of the sections in the book where Borghi explicitly attempts to align her empirical approach commitments with the theoretical, more radical embodied ones, as some of these dynamic approaches to language have been developed by enactivists (Di Paolo et al., 2018). While it could be argued that this chapter's focus on value concepts to illustrate the social function of abstract concepts does not do justice to abstract concepts in general, this does not detract significantly from the book's argument.

Despite its primary focus on empirical issues, Borghi's book raises significant philosophical

questions. At times, this is because she only touches on rather than detailing her views on more theoretical topics, such as externalist theories of semantics, the nature and format of representations, or characterizations of affordances. In most of the cases, this seems justified, as these issues fall outside the scope of the text. However, I would like to elaborate on a particularly salient issue that, in my view, does fall within its scope. While stating that she is "not strongly committed to the notion of representation" (3), Borghi nevertheless asserts that a theory of cognition must account for the human ability to represent things in their absence, which might make representations necessary. This positions her between radically embodied enactivist accounts of language, with which she sympathizes and cognitivist accounts that rely on a more rigid dichotomy between language and thought. For her, "language and thought are strictly interwoven" (4) but distinguishable, nevertheless. It is from this distinction that she formulates her conclusions. However, a tension arises from the fact that the psycholinguistic framework underpinning the vast majority of the studies she considers relies on cognitivist principles, including the assumption of internal representations to interpret experimental findings. This tension between embodiment and cognitivism is most apparent in the first chapter, where object affordances are considered in the context of priming research (e.g., p.22-23) or when the author uses the language of "encoding" (8) to frame research findings. Despite her advocacy for a hybrid perspective, it appears that some Borghi's more radical claims extend beyond the empirical evidence currently available to support them. However, given her stated commitment to a moderate view, it may may be more appropriate to consider them as creative efforts to suggest that there is significant room for discussion and research regarding experiential grounding and language.

I highly recommend *The Freedom of Words* to anyone interested in the cutting-edge of cognitive science research on the interplay between language, embodiment, and abstract concepts.

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