

Rosario Caballero and Javier E. Díaz-Vera (Eds.)

**Sensuous Cognition**

# **Applications of Cognitive Linguistics**

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## **Volume 22**

# Sensuous Cognition

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Explorations into Human Sentience:  
Imagination, (E)motion and Perception

Edited by  
Rosario Caballero and Javier E. Díaz-Vera

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Rosario Caballero and Javier E. Díaz-Vera

## Unifying the body, mind and culture

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Rosario Caballero and Javier E. Díaz-Vera: Universidad de Castilla-La Mancha

As suggested by its title, the present volume places the emphasis on the indissoluble relationship between body, mind and culture, i.e., on the threshold quality of the human sensuous plus rational soul in our figuring the world. As it is, the term *figure*, either in its nominal or verbal form, is polysemous and means several, albeit related, things. As a noun, its main senses, as recorded in standard English dictionaries, are (a) human body, (b) bodily form, (c) the impression produced by a person, (d) language used in a figurative sense, and, most interestingly, (e) a unitary percept having structure and coherence that is the object of attention and that stands out against a ground. In turn, as a verb we find it defined as (a) judge to be probable, (b) imagine, conceive of, see in one's mind, and (c) understand. As happens with sensuous cognition, the term *figure* – used here to refer to our interactions in and with the world – encapsulates a basic premise in Cognitive Linguistics, namely, the highly imaginative quality of the human mind as suggested by its actual, physical expression.

Of course, our – conscious or unconscious – figurative construal of the world as well as the close link between body and mind, i.e., sensuous cognition, is far from new. For one thing, it can be traced back to Aristotle's discussion of the close relationship between the soul (i.e., cognition) and the body in *De Anima*, a relationship that concerns such – disparate, yet in his view, related – human traits as sense perception, emotions and motion. Thus, in Aristotle's (1976: 238–239) words, “some say that the soul moves its body exactly as it is moved itself. [...] Democritus speaks in a similar strain; for he says that the spherical atoms, as they move because it is their nature never to remain still, draw the whole body with them and so move it”. Aristotle went on to explain that, rather than the brain – too ‘cold’ in his view, the whole body, with the heart as the main force given its ‘warm’ nature, was in charge of *sentience*, i.e., the faculty through which the external world is apprehended.

Aristotle's all-encompassing ideas on the communion of the body and the mind are closely related to the notion of *embodiment* in Cognitive Linguistics. Indeed, Johnson's (1987: 154) claim that

*meaning and value are grounded in the nature of our bodies and brains, as they develop through ongoing interactions with various environments* that have physical, social, and cultural dimensions. The nature of our embodied experience motivates and constrains how things are meaningful to us. [Authors' emphasis]

is not at odds with Aristotle's views on the close link between the physical (the body and its functions, including what are called as complex or multiple senses such as motion) and the non-physical (cognition, emotions, imagination, etc.).

The importance of the body has also been stressed by scholars from such different fields of enquiry as Cultural Studies – where the body has been seen as “the cultural product” (Grosz 1994: 23), Art Philosophy – where emotions and bodily configuration are explained as orchestrating and triggering rational thought and actions (Tooby and Cosmides 1990; Dutton 2009), and Anthropology – where peoples' construal of the world has been explained as resting upon “intersensory relationships [which] will inflect the form of social relations and the manner in which the universe is perceived and ascribed meaning, or in other words ‘sensed’” (Howes 2003: xx).

However commonsensical the aforementioned claims may seem, and despite the uncontested status of the body-mind binomial in Cognitive Linguistics, research in this field has proved somewhat incorporeal and, quite often, atomistic in that, while embodiment is largely unquestioned, most scholarship has focused on distinct processes in human thought and communication – whether these involve metaphor as a cognitive mechanism, its manifestation through diverse media such as language, pictures or gesture, emotions, perception, etc. – and has, more often than not, kept the – albeit invisible – line among the senses and other cognitive processes intact. Last, but not least, drawing the line between the physical and the mental has too often led to foreground the cognitive at the expense of the sensual in Cognitive Linguistics. Consider, for instance, the classification of metaphors into conceptual, image or synesthetic ones, which preserves a somewhat simplistic and disembodied view of knowledge. An interesting attempt to overcome this somewhat desensitized view of cognition is Talmy's work and his notion of *ception*, i.e., a blend of perception and conception that is explained as follows:

Much psychological discussion has implicitly or explicitly treated what is termed *perception* as a single category of cognitive phenomena. If further distinctions have been adduced, they have been the separate designation of part of perception as *sensation*, or the contrasting of the whole category of perception with that of conception/cognition. One motivation for challenging the traditional categorization is that psychologists do not agree on where to draw a boundary through observable psychological phenomena such that the phenomena on one side of the boundary will be considered “perceptual”, while those on the other side

will be excluded from that designation. [...] Moreover, psychologists not only disagree on where to locate a distinction boundary, but also on whether there is a principled basis on which one can even adduce such a boundary. Accordingly, it seems advisable to establish a theoretical framework that does not imply discrete categories and clearly located boundaries, and that recognizes a cognitive domain encompassing traditional notions of both perception and conception. [...] To this end, we here adopt the notion of “ception” to cover all the cognitive phenomena, conscious and unconscious, understood by the conjunction of perception and conception. While perhaps best limited to the phenomena of current processing, *ception* would include the processing of sensory stimulation, mental imagery, and ongoingly experienced thought and affect. An individual currently manifesting such processing with respect to some entity could be said to “ceive” that entity. (Talmy 1996: 244–245)

Our main aim in this book is to provide an interdisciplinary and unified view of the human embodied soul and its cultural manifestations or, as Howes (2003: xvii) puts it, of “the relation of the verbal to other ‘nonverbal’ (or sensual) registers of communication”. This endeavor asks for approaching this relation from an ecological perspective which, while not at odds with the core assumptions in Cognitive Linguistics, may require both revisiting and problematizing some of its taken-for-granted, yet sometimes forgotten assumptions in order to revitalize the original tenet that human thinking is grounded on experiential gestalts (Lakoff and Johnson 1980, 1999) as well as on the dynamics or interaction between peoples’ bodies and their various environments or cultures – i.e., what Jackson (1983) sees as the unity of *body-mind-habitus*. The contributions in this volume, then, approach this body-mind-habitus unity from the perspective of Cognitive Linguistics by dealing with some of the topics and areas still underexplored in this paradigm.

The volume is arranged in three sections, ranging from papers on the relationship between the mind and the body, to the incorporation of sensory information into the texture of human cognition, and the interplay between cognition, imagination and (e)motion.

The first section in this volume focuses on some of the manifold relationships between the body and the mind. Thus, the three chapters included in this section look at some of the possible connections between mind-body and language-body, as a previous step towards our understanding of the embodied nature of cognition. Cognitive Linguistics has showed a growing interest for the embodied nature of mind and language. Within this cognitivist approach, language is not viewed as arising from the mind; linguistic structures are instead related to and motivated by bodily experience, conceptual knowledge and the communicative functions of discourse. In the opening chapter (“Different bodies, different minds: The body-specificity of language and thought”), Daniel Casasanto proposes an analy-

sis and discussion on the role played by bodily experience in the construction of the mind. Casasanto explores motoric differences between right- and left-handers in order to show to what extent these differences contribute to shaping the way we think, feel, communicate, and make decisions. The analysis of the linguistic representation of the relationship between the body and the mind in Basque is the main aim of Roslyn Frank's contribution "Body and mind in Euskara: Contrasting *dialogic* and *monologic* subjectivities". Her focus is on the modification of indigenous functional schemas in situations of linguistic contact and bilingualism. The author describes two plausible scenarios: bilingual speakers can either become familiar with the competing schema, which they will perceive as incongruent with the dominant schema, or modify the indigenous schema in favor of the newly-acquired cultural conceptualizations. In his chapter "The body in anatomy: Looking at 'head' for the mind-body link in Chinese" Ning Yu discusses the uses of Chinese body-part terms for *head* and parts of the head in metonymic and metaphoric extensions for non-physical domains. In doing so, his study analyzes how potentially universal mechanisms and cultural factors could possibly mingle and interact with each other in language and cognition.

The second section focuses on the grounding of language and cognition in perception, or the senses. Rosario Caballero and Carita Paradis ("Perceptual landscapes from the perspective of cultures and genres") compare the perceptual landscapes of architectural design and wine tasting, in order to show how these experiences are communicated in discourse through an exploration of reviews of buildings and wines. In "The power of the senses and the role of culture in metaphor and language" Iraide Ibarretxe-Antuñano uses data from Spanish, English and Basque in order to analyze three issues traditionally neglected in the relevant literature on perception and cognition: the motivation, entrenchment and distribution of perception metaphors. Rune Nyord ("Vision and conceptualization in ancient Egyptian art") examines the idea that pictorial sources can be useful for the study of patterns of conceptualization. More exactly, he analyzes a set of ancient Egyptian written signs (known as *determinatives*) that mark conceptual categories related to perception that are not present in the spoken language. Finally, in "One man's cheese is another man's music: Synaesthesia and the bridging of cultural differences in the language of sensory perception" Ernesto Suárez-Toste analyzes a set of internationally well-known movies (including *Ratatouille*, *Babette's Feast* and *The Cook, the Thief, His Wife and Her Lover*) in order to describe some of the different ways in which the passions aroused by food and wine are communicated to international and multicultural audiences.

The chapters in the last section explore some of the relationships between cognition, imagination and (e)motion. Historically, these concepts have been viewed as largely separate. However, in the last two decades, a growing body of work has

pointed to the interdependence between them. In the opening chapter (“Embodied emotions in Medieval English language and visual arts”), Javier E. Díaz-Vera describes a set of Old English expressions for fear and their pictorial manifestations in Anglo-Norman textiles. According to his analysis, Anglo-Norman artists used a well-organized set of visual stimuli to convey fear-related meanings in a patterned way, most of which are based on embodied container concepts. In “Moving across metaphorical spaces over developmental time” Şeyda Özçalışkan and Lauren J. Stites tackle the question of developmental changes in children’s metaphorical abilities. Based on data extracted from English and Turkish, their results provide further empirical support for the view that metaphor is both a linguistic and a conceptual phenomenon. Farzad Sharifian explores in his paper “Conceptualizations of *ruh* ‘spirit/soul’ and *jesm* ‘body’ in Persian: A Sufi perspective” the cultural embedding of these two Persian concepts. Moreover, his chapter examines the relationship between Sufi and Neoplatonic conceptualizations of the body and the soul. In the last chapter in this volume, Kashmiri Stec and Eve Sweetser (“Borobudur and Chartres: Religious spaces as performative real-space blends”) examine the performative power of the Christian and Buddhist rituals related to these two sacred spaces, which are themselves considered sources of performative power.

In short, the papers in this volume start from the original and most critical assumption in Cognitive Linguistics of embodied cognition, yet attempt to take it further by stressing the highly sensuous quality of human cognition, a ‘universal’ tendency nevertheless tempered by culture. Indeed, by exploring such different things as enology, lay and religious spaces, visual arts, etc. the main notion explored in this book is the sensory specificity or culture-sensitive quality of our figuring the world or, in Howes’s (2003: 55) words, the fact that “the senses also have different metaphorical associations across cultures [...] These associations are actualized in the ways in which people employ their senses to think about and live in the world”.

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## **Part 1: The mind and the body**





Daniel Casasanto

# Different bodies, different minds: The body-specificity of language and thought

**Abstract:** Do people with different kinds of bodies think differently? According to the *body-specificity hypothesis*, they should. In this chapter, I review evidence that right- and left-handers, who perform actions in systematically different ways, use correspondingly different areas of the brain for imagining actions and representing the meanings of action verbs. Beyond the concrete domain of action, the way people use their hands influences the way they represent abstract ideas with positive and negative emotional valence like *goodness*, *honesty*, and *intelligence*, and how they communicate about them in spontaneous speech and gesture. Changing how people use their right and left hands can cause them to think differently, suggesting that handedness is not merely correlated with cognitive differences. Body-specific patterns of motor experience shape the way people think, communicate, and make decisions.

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**Daniel Casasanto:** The New School for Social Research, New York

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## 1 Introduction

What role does bodily experience play in constructing the mind? Since antiquity, a recurring answer has been almost none. According to Plato, “the eyes, ears and the whole body [are] a disturbing element, hindering the soul from the acquisition of knowledge” (*Phaedo*, ca. 360 BCE). Plato believed that before birth, we are endowed with perfect knowledge of everything. Bodily experience stimulates us to discover parts of our inborn knowledge (a view echoed by nativist theories of language and concepts in the 20<sup>th</sup> century; Chomsky 1965; Fodor 1998), but it also distorts this knowledge. Plato made a distinction between the distorted ideas that people actually use and perfect *essential* ideas, of which our ordinary thoughts are just shadowy reflections. Essential ideas are immutable and pure, whereas ordinary thoughts are constantly changing, and are tainted by bodily experience.

In contemporary cognitive science, the difference between essential ideas and ordinary thoughts is echoed in the distinction between *concepts* and *instantiations* of these concepts (i.e., particular instances of activating a concept). Con-

cepts are generally believed to be stable across time and across individuals (Barsalou 1987; Prinz 2002; Machery 2009). Instantiations may vary, but the concepts of which they are instances remain unchanged. Yet, despite widespread acceptance of this view, there is no empirical evidence that universal, invariant concepts exist. There is no evidence that an essential concept of *cat*, or *game*, or *happiness* is shared by all people at all times, or that our flexible thoughts are instantiations of invariant concepts.

On the other hand, there is abundant evidence that the patterns of neurocognitive activity that constitute our thoughts can vary dramatically from one instance to the next, and from one person to the next (Casasanto and Lupyan 2011). Arguably, these variable neurocognitive representations, which are always “contaminated” with physical and social experience, are all that we have. On this view, rather than instantiating pre-existing concepts, we construct idiosyncratic neurocognitive representations *ad hoc*, activating stored information in response to the demands of the physical and social context.

Our bodies are an ever-present part of the context in which we use our minds, and may therefore exert a pervasive influence on the representations we tend to form. To the extent that the content of the mind depends on the structure of the body, people with different kinds of bodies should tend to think differently, in predictable ways. This is the *body-specificity hypothesis* (Casasanto 2009). When people interact with the physical environment, their bodies constrain their perceptions and actions (e.g., Fischer 2005; Linkenauger et al. 2009). Here I review research exploring ways in which the particulars of people’s bodies also shape their words, thoughts, feelings, and choices.

## 2 Body-specificity of action language and motor imagery

Initial tests of the body-specificity hypothesis used handedness as a test bed. Right- and left-handers often perform the same actions differently. When people throw a ball, sign a check, or grasp a coffee mug they usually use their dominant hand. Do differences in how people perform actions influence the way they imagine actions and process action language? To find out, my collaborators and I used functional magnetic resonance imaging (fMRI) to compare right- and left-handers’ brain activity during motor imagery and action verb understanding.

### 3 Imagined actions

In one experiment, participants were asked to imagine performing actions while lying perfectly still in the fMRI scanner. They imagined some actions that are usually performed with the dominant hand (scribble, toss) and some actions performed with other parts of the body (kneel, giggle). Mental imagery for hand actions corresponded to different patterns of activity in right- and left-handers' motor systems. Left-hemisphere motor areas were activated in right-handers, but right-hemisphere motor areas were activated in left-handers (Willems et al. 2009). People with different kinds of bodies imagine the same actions differently, in this case using opposite hemispheres of the brain.

### 4 Motor action and verb meaning

A similar pattern was found when people read words for actions they usually perform with their dominant hands or with other parts of the body. When right-handers read words for hand actions they activated the left premotor cortex, an area used in planning actions with the right hand. Left-handers showed the opposite pattern, activating right premotor areas used for planning left-hand actions (Willems, Hagoort, and Casasanto 2010). This was true even though they were not asked to imagine performing the actions, or to think about the meanings of the verbs. Further fMRI experiments confirmed that activation during action verb reading was not due to conscious imagery of actions (Willems et al. 2010).

Do the meanings of action verbs differ between right- and left-handers? One way to address this question is to determine whether the motor areas that show body-specific patterns of activation play a functional role in verb processing. We used theta-burst repetitive transcranial magnetic stimulation (rTMS) to modulate neural activity in the premotor hand areas identified in our earlier fMRI study. Participants' ability to distinguish meaningful manual action verbs from pseudo words was affected by rTMS to the premotor cortex in the hemisphere that controls their dominant hand, but not in the other hemisphere. RTMS to the hand areas had no effect on processing non-manual action verbs, which served as a control. These data suggest that, when people read words like *grasp*, neural activity in the premotor area that controls the dominant hand is not an epiphenomenon, or a downstream consequence of semantic processing. Rather, body-specific activation of the motor system plays a functional role in processing language about hand actions (Willems et al. 2011). People tend to understand verbs as referring to actions they would perform with their particular bodies – not to a Platonic ideal

of the action, or to the action as it is performed by the majority of language users. In this sense, people with different bodies understand the same verbs to mean something different.

## 5 Body-specificity of emotion

Abstract concepts of things we can never perceive with the senses or act upon with the muscles are the hard case for any theory that foregrounds the role of bodily experience in constructing the mind. Beyond the concrete domain of action, how might bodily experience shape mental representations of more abstract ideas like *goodness* and *badness*, *victory* and *loss*, *deceit* and *honesty*? Like many abstract concepts, these notions carry either positive or negative emotional valence. Affective valence (i.e., positivity or negativity) and motivation (i.e., the predisposition to approach or withdraw from physical and social situations) appear to be grounded in patterns of body-specific motor experience.

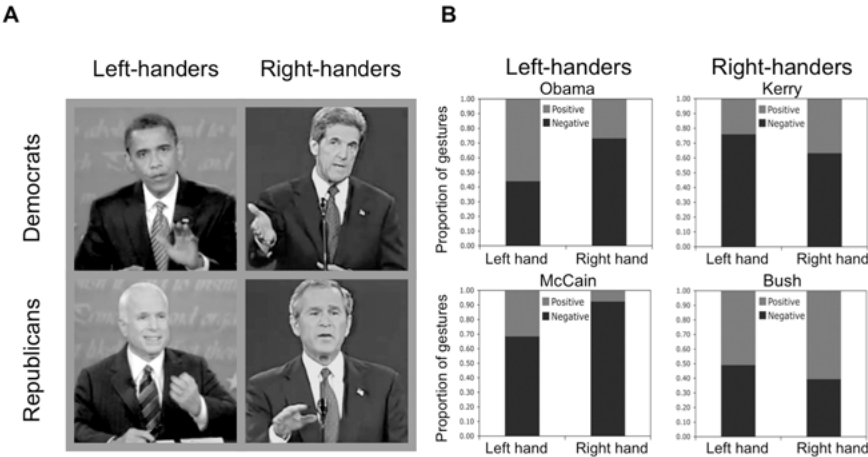
## 6 Choosing sides

Across languages and cultures, good things are often associated with the right side of space and bad things with the left. This association is evident in positive and negative idioms like *my right-hand man* and *two left feet*, and in the meanings of English words derived from the Latin for ‘right’ (*dexter*) and ‘left’ (*sinister*).

Beyond language, people also conceptualize good and bad in terms of left-right space, but not always in the way linguistic and cultural conventions suggest. Rather, people’s implicit associations between space and valence are body-specific. When asked to decide which of two products to buy, which of two job applicants to hire, or which of two alien creatures looks more trustworthy, right- and left-handers respond differently. Right-handers tend to prefer the product, person, or creature presented on their right side but left-handers tend to prefer the one on their left (Casasanto 2009). This pattern persists even when people make judgments orally, without using their hands to respond. Children as young as 5 years old already make evaluations according to handedness and spatial location, judging animals shown on their dominant side to be nicer and smarter than animals on their non-dominant side (Casasanto and Henetz 2012).

Beyond the laboratory, the association of “good” with the dominant side can be seen in left- and right-handers’ spontaneous speech and gestures. In the final debates of the 2004 and 2008 US presidential elections, positive speech was

more strongly associated with right-hand gestures and negative speech with left-hand gestures in the two right-handed candidates (Bush, Kerry), but the opposite association was found in the two left-handed candidates (McCain, Obama; Casasanto and Jasmin 2010; Figure 1). Body-specific associations between space and valence have visible consequences for the way people communicate about positive and negative ideas.



**Figure 1:** Speakers associate dominant-hand gestures with positive speech and non-dominant hand gestures with negative speech. Left panel: Examples of dominant-hand gestures produced by the 2004 and 2008 US presidential candidates during speech with positive emotional valence. Right panel: Associations between speech and gesture in each presidential candidate. In the left-handers (Obama, McCain), left-hand gestures were more strongly associated with positive-valence speech (light bars) than right-hand gestures, and right-hand gestures were more strongly associated with negative-valence clauses (dark bars) than left-hand gestures. The opposite association between hand and valence was found in the right-handers (Kerry, Bush). (Figure reproduced from Casasanto and Jasmin 2010, *PLoS ONE*.)

## 7 How using your hands can change your mind

Why do right- and left-handers think differently in this way? These results cannot be predicted or explained by conventions in language and culture, which consistently associate “good” with *right* and “bad” with *left*. Instead, implicit associations linking valence with left-right space appear to be created as people interact with their physical environment. In general, greater motor fluency leads to more positive feelings and evaluations: People like things better when they are easier

to perceive and interact with (e.g., Ping, Dhillon, and Beilock 2009). Bodies are lopsided. Most of us have a dominant side and a non-dominant side, and therefore interact with the physical environment more fluently on one side of space than on the other. As a consequence, right-handers, who interact with their environment more fluently on the right and more clumsily on the left, come to implicitly associate “good” with *right* and “bad” with *left*, whereas left-handers form the opposite association (Casasanto 2009).

To test this proposal, Evangelia Chrysikou and I studied how people think about “good” and “bad” after their dominant hand has been handicapped, either due to brain injury or to something much less extreme: wearing a bulky ski glove. One experiment tested space-valence mappings in stroke patients with hemiparesis (weakness or paralysis) on either their right or left side following damage to the opposite hemisphere of the brain. The patients, who had all been right-handed prior to brain injury, performed a task known to reveal body-specific space-valence associations in healthy participants. Patients who lost the use of their left hand post-stroke showed the usual right-is-good pattern. By contrast, patients who had lost the use of their right hand associated “good” with *left*, like natural left-handers.

A similar reversal was found in healthy university students who performed a motor fluency task while wearing a cumbersome glove on either their left hand (which preserved their natural right-handedness), or on their right hand, which turned them temporarily into left-handers. After about 12 minutes of lopsided motor experience, participants removed the glove and performed a test of space-valence associations, which they believed to be unrelated. Participants who had worn the left glove still thought *right* was “good,” but participants who had worn the right glove showed the opposite left-is-good bias, like natural lefties (Casasanto and Chrysikou 2011).

Motor experience plays a causal role in shaping abstract thoughts. Even a few minutes of acting more fluently with the left hand can change right-handers’ implicit associations between space and emotional valence, causing a reversal of their usual judgments. People generally have the impression that their judgments are rational and their concepts are stable. But if wearing a glove for a few minutes can reverse our usual decisions about what is good and bad, the mind may be more malleable than we thought.

The effects of short-term motor asymmetries are presumably temporary, but the same associative learning mechanisms that changed people’s judgments in the laboratory training task may result in the long-term changes we found in stroke patients, and may shape natural right- and left-handers’ space-valence associations in the course of ordinary motor experience. Using our asymmetrical bodies, and therefore interacting with the physical environment more flu-

ently on one side of space than the other, may serve as a kind of natural “motor training”.

## 8 Motivation and motor action

Body-specific patterns of motor action lead to different emotion-related behaviors. Do they also lead to different neural organization for emotion? In right-handers, the left frontal lobe (which controls the dominant hand) is specialized for approach-motivational states and the right frontal lobe (which controls the non-dominant hand) for avoidance-motivational states (Davidson 1992). This may be no mere coincidence. Perhaps brain areas that support approach and avoidance motivational states are functionally related to areas that support approach-related motor actions (which are often performed with the dominant hand) and avoidance-related actions (which are often performed with the non-dominant hand). If so, hemispheric specialization for motivation should co-vary with hemispheric specialization for motor control, and should therefore reverse between right- and left-handers (Casasanto 2009).

To test this prediction, Geoffrey Brookshire and I used electroencephalography (EEG) to measure power in the alpha frequency band in right- and left-handers’ brains. Across many studies, approach-motivational tendencies have been found to correlate with a reduction in alpha power (indicating more neural activity) in the left hemisphere compared to the right hemisphere, for right-handers (Coan and Allen 2003). We observed this well-established pattern in right-handers, but we found the opposite pattern in left-handers (Brookshire and Casasanto 2012). These results provide initial support for the functional link we proposed between the neural substrates of affective motivation and of motor control for manual actions. Emotional motivation is differently lateralized in right- and left-handers’ brains, consistent with (and perhaps because of) handedness-related differences in hemispheric specialization for manual motor control.

## 9 Conclusions and future directions

People with different kinds of bodies think differently, in predictable ways. Even highly abstract thoughts depend, in part, on the ways people interact with the physical environment using their particular bodies. The body shapes the mind on various timescales. To the extent that habits of body-world interaction are stable, the habits of mental representation they encourage should be stable over time;

to the extent that they change, mental representations may change accordingly. Many other contextual factors influence the representations people form and the judgments they make, as well, and other factors may override body-specific influences at times. However, the body is an ever-present part of the context in which we use our minds, and should therefore have pervasive influences on the neuro-cognitive activity that constitutes our thoughts.

These first tests of the body-specificity hypothesis focused on how handedness, genetic or induced, influences thinking. On the basis of this bodily attribute, right- and left-handers tend to form systematically different mental images, create different word meanings, and arrive at opposite judgments about the same objects in the world. But there may be nothing special about the mechanisms by which the hands shape the mind (e.g., associative learning), and body-specificity effects should extend beyond the initial test bed of handedness. The ways in which cognitive scientists could discover that bodily differences lead to cognitive differences are limited only by our imaginations.

Like research on linguistic relativity and cultural relativity, investigations of *bodily relativity* elucidate how patterns of experience give rise to corresponding habits of thinking, feeling, and communicating. A further challenge is to determine how influences of linguistic, cultural, and bodily experiences combine to shape our mental lives.

## 10 Acknowledgments

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# Body and mind in Euskara: Contrasting *dialogic* and *monologic* subjectivities

**Abstract:** During the past hundred years large numbers of Basque speakers have ceased being monolingual and become bilingual speakers in Spanish or French and the resulting contacts between the two cognitive frames of reference have resulted in mixed usages, speakers who alternate between the indigenous model and the contact model. This alternation is especially prevalent in terms of the way that physical sensations are perceived and portrayed: the way that the relationship between body and mind is represented linguistically. The indigenous frames are congruent with a conceptualization of self and selfhood defined as *dialogic subjectivity* whereas the contact frames are represented by a kind of *monologic subjectivity*. These contrasting frames are discussed and analyzed using concrete linguistic examples drawn from contemporary usage as well as historically attested sources.

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## 1 Introduction: Theoretical considerations

Over the past two decades, increasing attention has been directed toward analyzing the highly dynamic interactive relationship holding between language and culture, specifically the way in which language systems, conceived as supra-individual entities, both reflect and constrain processes of identity and selfhood, a field of study that in the past has been referred to as *cultural linguistics* (Palmer 1996) and more recently has come to be known by the term *cognitive cultural linguistics* (Sharifian 2011).<sup>1</sup> When talking about self and the properties ascribed to it, we cannot separate the culturally constituted categories that permeate a given culture from the linguistically coded ways of understanding selfhood that are entrenched in the language of the same community of speakers. Rather than

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<sup>1</sup> The growing interest in this particular field of endeavor is reflected in the recently initiated John Benjamin book series *Cognitive Linguistic Studies in Cultural Contexts*, edited by two of the contributors to the current volume, Ning Yu and Farzad Sharifian.

standing apart from the rest of culture, the dominant structuring elements of self-hood, produced and reproduced intersubjectively by speakers, are embedded in an ideological matrix that in turn derives from and lends support to the foundational ontology of the culture in question.

In the case of the worldview associated with Western and Westernized patterns of thought significant attention has been paid, of late, to the presence of certain asymmetric dualisms that serve to structure these interpretive patterns. In this study, the body-mind opposition will be the center of our focus, although this particular asymmetric dichotomy should be seen as forming an integral part of a broader interlocking set of cultural conceptualizations.<sup>2</sup>

BODY	MIND
NATURE	CULTURE
INSTINCT	REASON
WOMAN	MAN
ANIMALS	HUMAN BEINGS
LOW	HIGH
BAD	GOOD
MOON	SUN
NIGHT	DAY
BLACK	WHITE
DARKNESS	LIGHT
CROOKED	STRAIGHT

**Figure 1:** Western asymmetric foundational schemas

These cultural schemas are often elevated to the level of metaphysical postulates. Stated differently, they operate as *foundational schemas* that organize and link up a set of cultural conceptualizations, creating a network held together by the unarticulated background metaphysics to which the foundational schemas contribute and from which they draw their strength (Howell 1996; Ingold 2000; Shore [1966] 1996). Indeed, over seventy years ago, we find Whorf speaking of the power of these schemas in his essay “Implicit Metaphysics” (1938): “every complex of a culture and a language (or every ‘culture’ in the broadest sense, as including

<sup>2</sup> In the past I have attempted to bring into focus several of this polarities, by examining the way these dichotomies are instantiated in both linguistic and cultural schemas. For example, I have addressed different aspects of the nature-culture dichotomy, the asymmetry inherent in the black-white opposition as well as the polarity that positions human beings above animals (Frank 2003a, 2003b, 2005, 2008, 2010a, 2010b).

language) carries with it a metaphysics; a model of the universe, composed of notions and assumptions organized into a [...] system which is valid for framing statements about what goes on in the world as the carriers of that culture see it” (cited in Lee 1996: 264). In fact, we could argue that among the foundational schemas of the Western worldview the body-mind duality is one that has been involved in licensing, sanctioning or otherwise legitimizing the other asymmetric dualisms listed above and, therefore, the kind of dichotomous thought intrinsic to the overall system. At the same time there is little question that in recent years many of these asymmetric dualisms have been called into question, including the body-mind dualism.

For this study of Basque and Western schemas of self and selfhood, of particular relevance is Sharifian’s discussion of the distributed nature of *cultural conceptualizations*. As he points out, cultural conceptualizations are not imprinted equally in the minds of the members of a cultural-linguistic community. Rather the *cultural schemas* are represented in a distributed fashion, and more specifically, in a heterogeneously distributed manner.<sup>3</sup> Hence, the awareness of and allegiance to a particular cultural schema will vary from speaker to speaker (Sharifian 2008, 2009, 2011). These variations in awareness and allegiance depend, at least in part, on the sociocultural situatedness of the individual speaker and the person’s familiarity with the beliefs and norms of the community in question.

The shared understandings implicit in these cultural conceptualizations give rise to the discursive coherence that characterizes a particular culture. As Sharifian (2011) has emphasized, although people operate on the assumption of shared understandings, in reality, cultural conceptualizations are heterogeneously distributed across any given culture, forming a complex network where nodes that elicit a higher level of agreement resonate stronger and therefore tend to be more stable. As we will see, when an indigenous cultural schema comes under pressure from a competing cultural schema drawn from a different network of beliefs and cultural assumptions, the linguistic elements that formerly supported the indigenous schema can become destabilized: speakers begin to sense them as somehow incommensurate with their own cultural norms and assumptions, even when the latter are held unreflectively.

Consequently, members of the cultural group may share some, but not all, elements that make up a given cultural schema. For instance, today an accul-

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<sup>3</sup> For our purposes, the terms *cultural conceptualizations* (Sharifian 2011) and *cultural schemas* will be used interchangeably. For additional commentary on the role of cultural linguistics in identifying cultural schemas, see Palmer (1996, 2006).

tured English speaker probably accepts, consciously or unconsciously, some but not all asymmetric polarities that form part of the entrenched Western model portrayed in Figure 1. This patchy pattern of knowledge representation, schema recognition and acceptance, reveals that, when off-loaded, the resulting cognitive artifacts, both linguistic and material in nature, can act as *memory banks* for the schema in question. Consequently, cultural conceptualizations emerge from interactions between the members of a cultural group and therefore, the members of a cultural group act to negotiate and renegotiate their *emergent cultural cognition* across time and space (Sharifian 2008, 2009).

As a result, even though a set of cultural conceptualizations is fully entrenched in a given community of speakers and form an integral part of the foundational metaphysics of that culture, the conceptual schemas are not frozen in place but rather subject to constant reformulation. Moreover, the discursively produced subjectivities resulting from these collectively-held cultural conceptualizations are also subject to modification (Frank 2005). At the same time, conceptual schemas that are not explicitly articulated by members of a group can be available to them linguistically.<sup>4</sup> In this case, the speakers have access to them unreflectively while the schemas themselves only come into focus if and when the accepted linguistic norm is contrasted with one that violates the unstated consensus view concerning the appropriateness of the schema itself.

At this juncture, we can look at one of the highly entrenched Western cultural conceptualizations: the asymmetric polarity found in the “body-mind” dichotomy and the opposition between “matter” and “*pneuma* soul” in which “mind/soul” represents the *active* element, the agent, and “body/matter” plays the role of the passive element, if not under the control of the former, at least governed by it in some fashion. As Summers (1993: 251) notes, while there are various definitions of form and matter in classical thought, it has been Aristotle’s *hylomorphism*, the idea that existing things are unions of form and matter, that has dominated in terms of its depth and breadth of influence, right down to modern times. The relationship between form and matter, combined with what are called the ten Pythagorean contraries, has acted to perpetuate the asymmetric polarities in Figure 1, in part because the interlocking nature of the dichotomies is not always clearly in focus, nor is their inherent asymmetry. For instance, the asymmetry of the body-mind polarity seems relatively innocuous until it is linked to the inequalities inherent in the female-male polarity.

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<sup>4</sup> See Frank (in press) for examples of other Basque schemas that act as a *memory banks* for collectively-held cultural conceptualizations dating back to much earlier time periods.

In other words, the body-mind polarity is best understood when it is viewed from within the larger system of Aristotelian thought which held that things are unions of *form* and *matter*. And the dichotomy is asymmetric. A higher value is always given to the “active” rather than the “passive” element in the equation:

In the case of animals, the four elements in combination (matter) are shaped by form, which governs both the purposeful configuration of things and their growth, and is related to soul, which in its turn is related to *pneuma* or ‘breath’, a principle of life and movement. This fifth higher element, this quintessence, is related to the heavenly bodies, to their light, and to their perfect movement. This pneumatic spark of life, Aristotle believed, is carried and transmitted by semen. Men thus represent the immediate contact of heaven and earth. Women are at one remove from that contact. Men are associated with the two higher elements – air, which is closer to the heavens, and fire, which tries to reach the heavens. Women, by contrast, are associated with the lower elements of water and earth. It is for this reason that women are by nature colder than men, says Aristotle, and because of this coldness, women are unable to convert blood into semen. This is Aristotle’s explanation of menstruation. (Summers 1993: 254)<sup>5</sup>

In the set of asymmetric polarities listed in Figure 1 we also can detect the influence of the so-called “ten Pythagorean contraries,” discussed by Aristotle in the *Metaphysics*. As Summers notes, these dichotomies

are older than either Plato and Aristotle, and also give some notion of how ideas may be linked simply by virtue of the scheme of contrariety to which all belong. The pairs of contraries are: limited and unlimited, odd and even, one and plurality, right and left, male and female, resting and moving, straight and curved, light and dark, good and bad, square and oblong. These categories are pairs, but they are hierarchical rather than symmetrical, the first being superior, just as form and matter are both necessary principles but form is higher. (Summers 1993: 255–257)

Consequently, male aligns with the concepts of “limited”, “odd”, “right”, “oneness (unity)”, “rest”, “straight”, “light”, “good” and “square” while the female is paired with “unlimited” (or indefinite), “even”, “plurality”, “left”, “movement”, “curved”, “dark”, “bad” and “oblong”. And, as Summers observes, any one of these concepts “might trigger the idea of the others. We have already seen Aristotle pair matter with the female, the potential and passive, with ugly-

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<sup>5</sup> Summers (1993: 254) goes on to comment that the “monthly failure to convert blood into semen is, according to Aristotle, systematically related to other relative imperfections in female nature – passivity chief among them – and it was possible for Aristotle to formulate the idea, which has had a long historical life of its own, that the female is an incomplete or mutilated male”. For a more detailed account of the influence of the latter formulation across time, see Frank (in prep.-b).

ness and darkness (night), and in a long tradition matter was associated with the indefinite, the divisible and multiple (hence, the temporal), and with evil; clusters of oppositions might thus recur in many forms, any one of which was implicitly or explicitly gendered” (Summers 1993: 258).

The remarkable resilience of these dichotomies – across more than two millennia – testifies to the social consensus that undergirded them, at least until quite recently. Similarly, when language systems share the same or highly similar cultural conceptualizations, such as the asymmetric dichotomies discussed above, the cultural schemas that support these dichotomies tend not to come into clear focus. Rather our tacit understanding of these cultural conceptualizations contributes to the implicit conceptual consensus found in a given population of speakers, community or society. At the same time, because of the socially situated nature of discourse, communication takes place from within this horizon of shared, unproblematic convictions, these consensus-generating interpretative patterns (Habermas 1994: 66). Hence, we can argue that these cultural conceptualizations regularly constrain a speaker’s own *communicative conceptual horizon*, as Bakhtin (1981: 269–295) has called this aspect of communicative acts.

Moreover, this situation of passive acceptance can change if it is disrupted by an encounter with speakers communicating from within a radically different conceptual horizon. And often this is what happens when a bilingual speaker is required to navigate cognitively between two environments, two contrasting cultural models, each with its own set of ontological understandings and metaphors (Olds 1992). Stated differently, only when speakers are confronted with a different conceptual horizon, as expressed by a (radically) different culture and language, do they begin to reflect back on their own. When this communicative encounter takes place the possibility opens up for a type of recognition and a new sensitivity to the nature of one’s *common ground*, a process of understanding that might be compared to Gadamer’s (1975: 273) notion of a *Horizontverschmelzung* (“fusion of horizons”).

As Prasad (2002: 15) has succinctly stated, for Gadamer, language is not merely instrumental; rather, language has an ontological significance and the fusion of horizons in question takes place, quite inevitably, through the medium of language. Accordingly, in Gadamer’s hermeneutic philosophy, language should not be viewed merely as “an instrument or a tool” (Gadamer 1976: 62). It is not simply something we use for pointing to the objects of the world. Rather, our world is constituted in and through our language: “the appearance of particular objects of our concern depends on a world already having been disclosed to us in the language we use” (Linge 1976: xxix). When the language systems draw on cultural schemas that are perceived as unfamiliar, strange or anomalous, the dialogue set up, say, by bilingual speakers, moving back and forth between them,