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COMPOSITION STUDIES AND COGNITIVE LINGUISTICS IN THE LIGHT OF THE LINGUISTIC TURN: AN UNRECOGNIZED AFFINITY

Discussions of the disciplinary roots of second language (L2) composition studies contain no mention of cognitive linguistics, even though there are regular references to systemic functional linguistics, which is one of the cognitive-functional approaches to language of which cognitive linguistics is a central member (Nuyts 2007). In fact, systemic functional linguistics is recognized in composition studies as an influence in composition's social turn (cf. Grabe and Kaplan 1996). However, composition researchers have apparently taken no interest in cognitive linguistics, a discipline which epitomizes the *linguistic turn* within linguistics. The *linguistic turn* became a slogan in the academic community in the 1970s, after Rorty (1967) used the phrase as the title of his anthology presenting the steps in what he called the *philosophical revolution* of the 20th century. The revolution meant the recognition that philosophical problems were in an important sense linguistic/conceptual: Knowledge depends on language, and philosophical concepts (e.g., truth, reality, etc.) are linguistic constructs that have a human socio-cultural (i.e., *embodied* and *embedded*) foundation rather than an ultimate transcendental foundation. As a result of this major development in 20th-century philosophy, the humanities and social sciences started to recognize the importance of language as a structuring agent of human consciousness. This fundamental idea affected the development of composition studies (bringing about its social turn) as well as contributed to the rise of cognitive linguistics in the 1980s. The paper looks into this affinity between composition studies and cognitive linguistics, focusing on how the two fields are defined by their opposition to what is called *Cartesian* or *first-generation* cognitivism.

1. Introduction

Discussing the disciplinary roots of L2 composition research and instruction, Silva and Leki (2004) present composition studies and applied linguistics as the parent disciplines and rhetoric and linguistics as the grandparent disciplines of L2 composition. Over the years, L2 composition has been definitely influenced and shaped much more by what was happening in composition studies (particularly in North America) rather than linguistics (see, e.g., Silva 1990). MacDonald (2007) traces a decline of interest in language among composition professionals in English departments in the United States since the 1970s. As she observes,

> One of the unfortunate disciplinary accidents of the late twentieth-century period is that trends in linguistics have been out of synch with English: at the points where English was most receptive to linguistics, linguistics had little to offer English, at least so it appears in retrospect. But by the time a more descriptive, applied, or functional linguistics developed that was relevant to writers, not just speakers, English had already turned its back on linguistics or vice versa as the new departments of linguistics began to have their own turf to guard and status to protect. (2007: 609-610)

The major developments in linguistics since the 1970s then have not been much of an influence on composition studies. In Silva and Leki's (2004) brief discussion of linguistics, there is no mention of cognitive linguistics. Composition researchers have indeed paid no attention to cognitive linguistics, a discipline which epitomizes within linguistics what is known as the *linguistic turn* of the 20th century. As a major development in 20th-century philosophy, the linguistic turn started to be more generally recognized in the 1970s, largely due to its popularization by Rorty's (1967) anthology. Mainstream linguistics of that time was not affected by the linguistic turn. However, it could be said that cognitive linguistics was in some sense mainstream already at its inception in the late 1970s and early 1980s because it had such prominent linguists as George Lakoff and Ronald Langacker among its founding fathers. At about the same time, that is, in the 1970s, composition instruction in the United States started to turn away from its focus on language and toward a focus on writing processes, while in the 1980s composition studies started to turn away from a focus on just the cognitive processes in writing (see, e.g., Faigley 1986). In view of these developments in composition, it should not come as a surprise that the name *cognitive linguistics* would have little appeal for composition professionals. At the time the name was coming into use in the late 1980s, cognitivism within composition studies was subjected to general criticism. The dominance of cognitive research on composing coming to an end in the 1980s, composition studies became less likely and less willing to define itself as one of the cognitive sciences at exactly the time when cognitive linguists like George Lakoff (e.g., Lakoff and Johnson 1980) were at the forefront of the paradigm shift in cognitive sciences toward an *embodied* and *embedded* perspective on cognition (e.g., Varela, Thompson, and

Rosch 1991; Clark 1997; Wheeler 2005), rejecting what they called *first-generation cognitivism* rooted in the Cartesian mind-body contrast and viewing cognition as an autonomous event taking place in the head rather than as emerging from the interactions of the brain, body and world, together constituting a dynamic whole (cf. Lakoff and Johnson 1999: 391-414; Thompson 2007: 37-65).

The linguistic turn of the 20th century has taught us to see our reality as discursively constructed, which among other things means that our naming/signifying practices do make a difference. As cognitive linguists explain, linguistic expressions matter because human conceptualizations are carried out (not exclusively but typically) by linguistic means. Language does not merely describe or reflect preexisting conceptual structures but largely creates those structures. In cognitive linguistics, grammatical structure is equated with conceptual structure, which is part of the crucial move to recontextualize grammar, language, and cognition. As cognitive linguists also point out, no meaning inheres in a linguistic expression. On the contrary, the meaning of an expression is what its users bring to it by using it not only in opposition to other terms but also in a natural and cultural environment. For members of the composition studies community, the term *cognitive* harks back to the 1970s cognitive science and its general-purpose problem-solving view of cognition. The meaning of the term is then defined largely by the opposition between the *inner-directed/cognitive* and *outer-directed/social* aspects of cognition (cf. Bizzell 1982). As we will see, for cognitive linguists, the meaning of the term *cognitive* arises from the opposition between *logical semantics* explaining meaning as *disembodied* and *disembedded*, and *cognitive semantics* explaining human meaning making as *embodied* and *embedded* action. Cognitive linguistics arose as a radical attack against the logical-computational first-generation cognitivism of the classical period of cognitive science which influenced composition studies in the 1970s and early ’80. Since then, composition studies has taken a social turn, the cornerstone of which is the shift to a fully contextualized (i.e., biologically *embodied* and historically, socially, culturally *embedded*) view of language. As I intend to explain here, such a conception of language is offered by cognitive linguistics, which means that the work of cognitive linguists should have great appeal for composition scholars, researchers, and teachers.

2. The Linguistic Turn in Composition

Composition scholars and researchers have generally followed Trimbur (1994) in opting for the term *social turn* to define the so-called *post-process* (i.e., post-cognitive) era in composition studies instead of defining it by referring to what had already been commonly known in the humanities, social sciences, and philosophy as the *linguistic turn* of the 20th century, a term popularized by Rorty (1967), as noted above. Apart from the major consideration that the term *social* functioned in direct opposition to *cognitive*, Trimbur’s (1994)

choice of the term *social turn* must have been motivated also by the fundamental ternary opposition in composition studies between *product*, *process*, and *post-process* (with *product* meaning the *language-oriented* approach and *process* meaning the *cognitive-process* approach). Since the *process approach* in composition was a reaction against understanding and teaching writing as just a linguistic product (i.e., as no more than a collection of idealized and prescriptively taught forms), the post-process era in composition could not be aptly described as a linguistic turn, because for composition specialists the term evoked misleading associations with the traditional *product approach*.

Certainly, the terms *social turn* and *linguistic turn* are not quite synonymous but highlight different aspects of the transition from structuralism to poststructuralism. As Atkinson (2003) has observed, there are four components in Trimbur's (1994) definition of post-process, namely, (a) the social, (b) the post-cognitivist, (c) literacy as ideology, and (d) composition as cultural practice. The first two components (i.e., the social and the post-cognitivist) are highlighted by and so can be easily subsumed under the notion of the social turn, which was a reaction against the structuralist decontextualizing tendency to reduce human behavior to basic elements and a formalized system of their oppositions—of which the development of phonology in the first half of the 20th century may be a good illustration. A mark of the advent of post-cognitivism was the recognition (e.g., the recognition by Day, French, and Hall 1985: 33) of a fact "so obvious that it [had] become virtually transparent," namely, that cognition "takes place within a social milieu." As for the other two components of post-process in Trimbur's (1994) definition, (i.e. literacy as ideology, and composition as cultural practice), they are highlighted by and can be subsumed under the notion of the linguistic turn of the 20th century, which foregrounds a sociology of knowledge in which language occupies the central position and whereby literacy and more generally language use becomes inseparable from a culture-specific value system inherent in a set of practices (i.e., ideology). Just as the social turn does, the linguistic turn also calls for attention to what has been hidden from our view: This time it is particularly the ideological transparency of language (i.e., the fact that the signifying practices of a discourse community instill a particular system of values).

In composition studies in the early 1990s, it was James Berlin who used the term *linguistic turn* in the context of his epistemic rhetoric. Berlin (1996/2003: xvii) explains the ideological transparency of language:

> One of the supreme conquests of the Enlightenment has been to efface the unique work of language in carrying out the ideological projects…. This victory has been accomplished by… insisting… that signs can and must become neutral transmitters of externally verifiable truths—truths, that is, existing separate from language. This is the correspondence theory of truth, the notion that signs are arbitrary stand-ins for the things they represent…. This theory insists that the signifying practices of the dominant class and its supporting intellectuals are identical with this purely

> representative language and that all other practices are to be rejected as deceptions. A central part of this effort was the dismissal of rhetoric by declaring the study of signifying practices and their effects on meaning a worthless undertaking.

The linguistic turn of the 20th century paved the way for the return of rhetoric in its epistemic function and thus contributed to the emergence of composition studies in the last decades of the 20th century. As I will argue, the terms *linguistic turn* and *social turn* both mean a *recontextualized* conception of language in the sense of language being seen as not a "neutral transmitter of externally verifiable truths." Such recontextualization means an embodied and embedded view of human meaning-making.

One of the defining characteristics of the process approach in composition studies and instruction was that it redefined writing as a linguistic activity aimed at the making of meaning. Even though Rohman and Wlecke's (1964) separation of *pre-writing* from *writing* as well as Flower and Hayes' (1981) separation of the *planning* part from the *translating* part of writing both amount to a separation of ideas from words (i.e., of meaning from language, which is a major point to be taken up soon), still thanks to what is called the *process revolution* in composition (Hairston 1982), writing/language started to be seen as indeed inseparable from human meaning-making. These developments eventually led to questioning the view that writing is no more than finding language for pre-existing and language-independent content. In view of this observation, the process movement in composition can be seen as participating in the linguistic turn of the 20th century (i.e., definitely a step in this direction within composition studies).

In fact, different intellectual movements can be grouped under the notion of the linguistic turn, but included among their major progenitors were typically such philosophers as Ferdinand de Saussure and Ludwig Wittgenstein. In the humanities and social sciences, the linguistic turn is linked with the traditions of structuralism and poststructuralism, and its hallmark is the recognition of the central role of language in structuring human consciousness. Language is ultimately equated with human conceptualization so that linguistic expressions are not seen as just labels for independently existing concepts but instead they structure concepts. Sometimes, a more extreme claim is made that whatever is outside of language is by definition unstructured and so hardly conceivable for us, that is, nothing really comes to exist for us and (what is less controversial) enters into our shared human, thus social, reality apart from language. As cognitive linguists explain (e.g., Langacker 1987), language always imposes a viewpoint and, as de Saussure (1916/1983: 8) says (albeit in a more restricted sense), "it is the viewpoint adopted which creates the object." Thus, contrary to what our common sense tells us and in opposition to most of the Western tradition of philosophy, language is said to *constitute* rather than *describe* reality. This is why Rorty (1967: 3) called the linguistic turn "the most recent philosophical revolution."

3. The Linguistic Turn in Linguistics: Recontextualizing Language

As already mentioned, in the 1980s composition studies started to turn away from its cognitive focus and has not paid much attention to cognitive studies since. Before I deal with the issue of cognitivism, putting it in the broader context of cognitive science, I start by making the point that the turn away from the cognitive focus in composition being called *social* must not hide from us that it is essentially a shift toward a fully contextualized conception of language, one that needs to be spelled out. My claim is that there is no better framework to spell it out for us than cognitive linguistics.

An early explanation of the *social view* in composition studies, offered by Faigley (1986: 535), states that one of its central assumptions is that

> human language (including writing) can be understood only from the perspective of a society rather than a single individual. Thus taking a social view requires a great deal more than simply paying attention to the context surrounding discourse…. The focus of a social view of writing, therefore, is not on how the social situation influences the individual, but on how the individual is a constituent of a culture.

The social turn initialized in composition studies in the 1980s can be seen in the context of what Geeraerts (2003) explains as the tendency arising in linguistic theory and literary theory to *recontextualize* language. It is this recontextualizing tendency in understanding language that I would like to explain by focusing on cognitive linguistics and the turn toward recontextualization that it constitutes within linguistics (Geeraerts 2010). However, to explain the recontextualizing tendency of the last few decades, it is essential to sketch out the decontextualizing tendency first.

Geeraerts (2003, 2010) presents Saussurean structuralism and Chomskyan generativism as responsible for the decontextualizing movement in 20th-century linguistics. The movement culminated in generative linguistic theorizing reducing the essence of language to an autonomous formal grammar, that is, a formal rule system that was severed from its major contextual aspects, both social and cognitive, except for its genetic foundation (i.e., the biologically-based universality of human language). Geeraerts (2003) proposes the following line of reasoning, condensed here to a bare minimum. Chomsky provides the missing link between Saussure's *langue* (the social code) and *parole* (the individual's use of the code) by introducing the notion of *competence* (the individual's knowledge of the code), which bridges the gap between the community and the individual. However, rather than broaden his conception of language, he restricts it to another dichotomy only different from the Saussurean one by leaving langue out of the picture, in effect ignoring the social nature of language. His rejection of the social in favor of the genetic conception of language grows out of his dispute not with Saussure but with behaviorists over the nature of language learning: Rejecting the idea that the complexity of individual linguistic knowl-

edge can be the result of acculturation, Chomsky advances his conception of an innate competence (a conception of language as a biological endowment). Its genetic nature makes the social aspects of language epiphenomenal. Seeing the genetic foundation of language as its defining feature leads to separating it from all non-essential variable contexts. Meanings of linguistic expressions are definitely most variable, contextual, and cultural aspects of language. Since meanings must accordingly be seen as peripheral to the genetically universal essence of language, semantics and the lexicon (as a repository of the most conventional of meanings) are seen as peripheral to linguistics. As a result, we end up with a conception of language as a desemanticized grammar, that is, a formal rule system with formal syntax as the core of all the rule-based aspects of language. Ultimately, language is not performance but the formal rule system with all the contextual factors removed. Studying performance (actual use of language rules) is seen as uninteresting and indeed of questionable value as interference from context can distort the true picture of language. The process of decontextualizing language can be thus summed up as follows: First, the shift from defining language as social *langue* to defining language as innate *competence* separates it from its sociocultural context. Second, defining language as an innate, genetic endowment identifies it with its (less conscious) invariable formal aspects and at the same time separates it from the (more conscious) cognitive context of its meaning dimension (its cognitive semantic aspect). Third, defining language as a formal rule system separates it from the situational context of actual language use.

In accordance with the three decontextualizing moves, generative linguistics marginalizes sociolinguistics, semantics, and pragmatics. The late 1960s and the 1970s witness the development of these three subdisciplines of linguistics, focusing on aspects of language excluded or neglected by generative linguistics. At that time, however, these are separate developments dealing with the marginalized aspects of language that do not offer any theoretical alternative to the dominant decontextualized view of language. The 1980s witness the appearance of a number of trends in linguistics that point to a new approach to language linking it to the contexts excluded by the generative approach. The new approach emerging in the 1980s and offering the best chance to fully recontextualize language has come to be known as cognitive linguistics. As Geeraerts (2010) explains, cognitive linguistics epitomizes the post-generativist cognitive-functional approaches, and can be thought of as a recontextualizing approach to language.

Now, I can proceed to explain the recontextualizing tendency in understanding language which has been taking place since the 1980s, specifically in cognitive linguistics. Cognitive linguistics constitutes a recontextualizing tendency because, in opposition to generativism, it locates language in the cognitive semantic context and makes meaning its central concern. What needs to be emphasized straight away is that cognitive linguistics advances a fully contextualized conception of meaning, which means that there is an inherent social di-

mension to cognitive linguistics even if social factors have not occupied center stage in it (see Hawkins 1997; Croft 2009; Harder 2010). In Lakoff's (1988: 120) explanation, cognitive semantics "accounts for what meaning is to human beings, rather than trying to replace humanly meaningful thought by reference to a metaphysical account of a reality external to human experience." In this quotation, we can see Lakoff opposing *cognitive semantics* to *logical semantics* (called *set-theoretical* and *objectivist*), the semantics which was the cornerstone of the philosophical view of mind in the classical period of cognitive science, through the 1970s. Lakoff refers to this underlying philosophical position as *objectivist cognition* in contrast to his *experientialist cognition*.

In the 1980s, cognitive linguists (particularly Lakoff 1987, 1988) brought a radical attack against logical semantics, first of all claiming that the very mathematical apparatus of set theory is inappropriate to model the world as it is experienced by humans. Logical semantics based on set theory constitutes a fundamentally wrong way of talking about the world humans understand themselves as inhabiting. It explains human rational thought as algorithmic (rule-based) manipulation of arbitrary symbols. The rules (algorithms) manipulating the symbols make no use of what the symbols mean. So the symbols are meaningless in themselves and get their meaning by being associated with things in the world. In objectivist cognition, the symbols and their rule-based transformations constitute *the language of thought* (Fodor 1975) and function as mental representations of external reality. In generative linguistics, the semantic module is distinct from the formal linguistic module. However, both modules involve the same kind of rule-based symbol manipulation, as all human cognition is explained as formal operations involving arbitrary symbols that are in themselves meaningless. Thus, objectivist semantics holds that meaning is based on reference (on symbols being associated with things in the world) and on truth (which consists in the correspondence between symbols and things in the world; recall the above quotation from Berlin). The association between symbols and things in the world, and so truth, can be ascertained in an objectively correct way, which is explained in terms of set theory. An objectivist metaphysics is necessary then to guarantee that the world is structured in the right way. This structure is seen as independent of human cognition and as allowing for the reality to be modeled by the apparatus of set theory. Thus, the so called *natural kinds* (in fact, natural categories as laid down in a natural language) are modeled as sets whose all members share the same necessary and sufficient features, which is known as the classical theory of categorization. Since cognitive research (beginning with Rosch 1973) has demonstrated that natural kinds are simply not sets, Lakoff (1987) argues that the objectivist-cognition view of mind has failed empirically and is fundamentally inadequate.

This radical attack brought by cognitive linguists (most notably Lakoff 1987, and Langacker 1987) against objectivist semantics, and so against objectivist cognition in general and against the desemanticized view of language in particular, is an attack on the underlying paradigm of what is still mainstream

cognitive science (e.g., Froese 2007). This paradigm is known as *cognitivism* (cf. Fodor 1975), now also referred to as *first-generation cognitivism* (Lakoff and Johnson 1999), and its central claim is that cognition is a form of computation, that is, rule-based manipulation/transformation of symbols which proceeds without access to their meaning, known also as *information processing* through transformation of symbolic representations. The mind is exactly like a digital computer which solves a given problem by transforming the input into an appropriate output, both in the form of meaningless symbols. Cognition is thus restricted to information processing in the head and seen as distinct from the embodied action of an agent situated in an environment. Cognitivism is based on the hypothesis (known as the *physical symbol system hypothesis*) put forward by Newell and Simon (1976: 116) and holding that a purely formal (i.e., completely desemanticized) system "has the necessary and sufficient means for general intelligent action." From this perspective, cognition is seen as abstract problem solving which involves essentially decontextualized and disembodied reasoning and planning, requiring some central control. In his very influential criticism of the computational view of cognition (known as the *Chinese Room* thought experiment), Searle (1980) argued that even if we could simulate human cognition and particularly linguistic competence by purely computational processes, such processes are not sufficient to bring about understanding: Computers cannot understand what they are doing. What is missing here is the cognitive semantic aspect of language, showing that language cannot be reduced to a formal grammar, a formal rule system. Cognitive linguists set about recontextualizing language in the sense of bringing in the missing cognitive semantic dimension, which means that for them language is about understanding (i.e., categorizing, i.e., conceptualizing) our human experience.

There can be no separation of the cognitive semantic from the formal linguistic aspect of human cognition and so, from the cognitive linguistic point of view, language analysis offers an insight into human categorization processes. Cognitive linguists are concerned with explaining language in terms of general cognitive abilities, and not as an innate, special-purpose, and autonomous cognitive faculty (even though there no doubt is an innate component to human cognitive abilities). The fundamental hypothesis that language is not an autonomous cognitive ability has two consequences: (a) "linguistic knowledge—knowledge of meaning and form—is basically conceptual structure" and (b) "cognitive processes that govern language use, in particular the construction and communication of meaning by language, are in principle the same as other cognitive abilities" (Croft and Cruse 2004: 2). This recontextualization of language in terms of general cognitive abilities would not amount to really much if cognition itself was not seen as embodied and socio-culturally embedded.

4. Toward an Embodied and Embedded Perspective on Cognition

As I noticed at the start, cognitive linguists were at the forefront of the paradigm shift in cognitive sciences toward an embodied and embedded perspective on cognition. The kind of objectivist cognition that was the central interest of first-generation cognitive science (which is to be identified with cognitivism) was presented by Lakoff and Johnson (1980) as fundamentally incompatible with what they saw as human experientialist cognition (see also Lakoff 1987; Johnson 1987). The two crucial things that according to them were left out of the objectivist explanation were the role of the body in what is meaningful to humans and the role of our imagination in constructing individual concepts as well as more complex cognitive models which go beyond the mind-free, external reality. As Lakoff (1988: 120) explains,

> "Experiential" is to be taken in the broad sense, including basic sensory-motor, emotional, social, and other experiences of a sort available to all normal human beings… [in the sense that it is] experience that we have simply by virtue of being human and living on earth in a human society… [It is] experience as *active* functioning as part of a natural and social environment… [Such] common human experience… *motivate*[s] what is meaningful in human thought… [That is,] the structure inherent in our experience makes conceptual understanding possible and constrains—tightly in many cases—the range of possible conceptual and rational structures.

Classical cognitive linguistics focused on the sensory-motor rather than socio-cultural dimension of human experience, and so on the role of embodied experience in grounding abstract thought in concrete domains (cf. Harder 2010). Lakoff's (1987: 380-415) case study of anger is a good example showing how our embodiment rather than our socio-cultural embeddedness was the central focus of cognitive linguistic analysis. However, the above quotation can attest to the fact that cognitive linguistics has an inherent social dimension, although this social potential was not acted upon before the mid-1990s (e.g., Hawkins 1997; Lakoff 1996). Lately, cognitive linguists have begun to study the socio-cognitive mechanisms by which mental structures go from being the content of individual cognition to becoming aspects of the social world. Harder (2010: 59) discusses the "natural conflation" between social phenomena and mental representations of those phenomena, for example, between a calendric system as an element of the social order and as an internal cognitive model. Actually, this is an example of how concepts are projected into the social world (cf. Harder 2011). The issue then becomes not only how our concepts are motivated by our embodied and socio-culturally embedded experience (i.e., where they come from) but also how concepts shared in a community become part of the way the community works, that is, how shared concepts go out into the world and how we adapt to them the way we adapt to our natural environment (e.g., in modern societies, time units such as *hours* and *minutes* exist outside an individual mind and in this sense are as real as aspects of our natural environment that we need to adapt to).

What is called *social cognitive linguistics* (Croft 2009) or the *social turn* in cognitive linguistics (Harder 2010) are among the latest signs of the on-going paradigm shift. In cognitive science, the mainstream cognitivist paradigm advancing the computational view of cognition has been challenged by the *embodied-embedded* paradigm since the early 1990s (e.g., Varela, Thompson, and Rosch 1991; Clark 1997; Anderson 2003; Froese 2007). These two competing theoretical approaches are known respectively as *Cartesian reductionism* and *Heideggerian holism* (Dreyfus 1991), because of their distinct philosophical assumptions. Cognitivism is a Cartesian inheritance (Anderson 2003). Explaining cognition as symbolic representation and rule-based symbol manipulation, it advanced a view of cognition as a generic reasoning process in which mental representations of the world are pieced together from basic elements such as symbols (cf. Wheeler 2005: 38). The insurmountable problem with such reduction of mental states to atomic elements is what we see in the classical approach to categorization reducing concepts to shared features (cf. Rosch 1973). Cognitive linguistics has offered its share of evidence against this kind of reductionism by explaining how linguistic categories are structured. In this respect, the embodied approach of cognitive linguistics finds an ally in the phenomenological claim that the world is experienced as a significant whole. In his Heideggerian critique of the Cartesian approach, Dreyfus (1991: 117) argues that any reductionist attempt at reconstructing a whole by reassembling previously isolated elements makes no sense because the atomic elements have been created by removing from them all contextual significance. That is, no worldly significance can arise from our manipulation of decontextualized basic elements. As Froese (2007: 66) points out, the two accounts of cognition (i.e., Cartesian cognitivism and Heideggerian phenomenology) have different assumptions (reductionism vs. holism) and are founded on premises one is at liberty to accept or reject: "there is no a priori theoretical argument which would force someone holding a Cartesian position to accept the Heideggerian critique from holism." Accordingly, this theoretical stalemate can only be resolved through sustained empirical research. Both cognitive linguistics and composition studies have been shaped by their opposition to Cartesian cognitivism, and research in both fields has been a significant contribution to our understanding of the embodied and embedded nature of human cognition, an issue that we are only just beginning to fathom.

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