

# **Critical Review of Sociocultural Theory, Cognitivism, Postmodernism: Redefining L. S. Vygotsky's Non-Classical Psychology**

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## Introduction

For many years various labels have been used when referring to the theories of L. S. Vygotsky, all of which have resulted in a most interesting, yet confusing, phenomenon. Why isn't there one label for Vygotsky's psychology? Although this type of diversity reflects a flexible and robust nature of current Vygotskian thinking internationally, it has led to confusion, with people not understanding the difference between sociocultural theory, activity theory,<sup>1</sup> cultural-historical theory, and many other variations. For this reason, a new focus is slowly emerging in Russia, with an attempt to return to the roots of L. S. Vygotsky as a Russian thinker, within an expanded context of interpretation. In celebrating the 110<sup>th</sup> centennial since Vygotsky's birth (November 2006), it is suggested that we begin to use one term related to Vygotskian thought, and that term---which was created by a Russian---is called *non-classical psychology*. Daniel Elkonin (1989) stated that Vygotsky was the founder of *non-classical* psychology, with the following definition: non-classical psychology is "the science of the way the subjective world of a single person emerges from the objective world of art, the world of production tools, the world of the entire industry" (p. 478). Non-classical psychology does not stand in opposition to classical psychology, but transforms it. As well, there is no such term called "non-classical philosophy," with much of Vygotsky's theories being derived from classical philosophy. At this point in time, there is no attempt to set up new oppositions that carry empty contradictions; however, there is a call to return to the overall intentions

of Vygotsky, and to clarify many general hypotheses, such as the claim that Vygotsky's psychology was simply one of "communication." When rereading Vygotsky's texts, we want to focus on a new paradigm of synthesis/unity that reflects extremely new, often non-spatial thinking. We are ultimately viewing the concept of personality development with the actualization of "self-determination," "self-regulation," related to the individual, social, and cultural world, connected with Spinozian monism (which is not static in nature). Sometimes, this understanding is called *free action of will*. The focus on personality does not refer to the sum total of relationships of a single individual, but is actually a construct transcending the biological and the social. There is a feeling of shared development between the cultural/social, outside world, as well as relations to other individuals and artifacts, and intra-mental/ developmental growth, all of which is connected through synthesis. One basic goal of non-classical psychology is to "bridge the gap between the objective and subjective, between the realm of mind and the realm of culture, between the person and the world" (D. Leontiev, 2005, p. 26). We need to return to a view of the world both within the framework of content and process, as well as an understanding of the relationship between the external and internal. When developing new theories of Vygotskian non-classical psychology, we will need to understand that nothing is totally completed, but that everything is in a state of process and change, and that we have not yet grasped the notion that concepts such as "motive," "goal," are *not* viewed as internal structures only; and, other core concepts such as "units of analysis" simply cannot be extracted from the world of process and change to be dissected, analyzed, and put together again. "Units of analysis" must be understood within a holistic flow model of change. As well, there are many hierarchies of motives, units of analysis,

activity, sense, meaning, etc. N. Bernshtein and A. A. Leontiev spoke of “levels,” and this understanding of hierarchy must be reevaluated in light of current theories today, such as sociocultural theory, cognitivism, and postmodernism. Traditionally, we tend to think of a single construct when we speak of “motive,” “goal,” “ZPD,” “units of analysis,” etc., instead of understanding asymmetrical layers that intersect. We will offer introductory thoughts to the problems resulting from the multifarious labeling of Vygotskian theory, to return to the suggestion of establishing one term of reference to Vygotskian thought, which is *non-classical psychology*.

### **Rethinking Vygotskian Labels: Sociocultural Theory, Cognitivism, Postmodernism**

J. Wertsch (1991, p. 6) states that “perhaps the first point to make about the Vygotskian foundations of a sociocultural approach is that Vygotsky himself seldom, if ever, used the term ‘sociocultural.’ ” No matter what stance one takes, it should be clear that Vygotsky did not write from a contemporary sociocultural perspective. Various authors have simply placed Vygotsky’s thoughts within the word *sociocultural*, sometimes without accepting Wertsch’s basic understanding of sociocultural. There is also confusion regarding other writers in Europe, Latin America, etc. who also use the term sociocultural, but in a different context than Wertsch. However, we do not have two distinct terms to refer to sociocultural theory in the United States, and sociocultural theory in parts of Canada, Latin America, Europe, etc. Also, when Europeans and others refer to the *Westernization* of Vygotsky many problems arise. Sometimes this label is called the *Americanization* of Vygotsky; however, there are many sociocultural theorists in Europe (such as in Denmark, Sweden, and Holland) who do not subscribe to American sociocultural theory, but are still Westerners. At the same time there is another problem,

because the word *Americanization* refers to North America, and not Latin America, where deep and rich traditions of Vygotskian psychology-philosophy stand much closer to the European roots of Russian/German thought than in North America.

J. Wertsch (1991, p. 16) states the following:

I use the term *sociocultural* because I want to understand how mental action is situated in cultural, historical, and institutional settings. I have chosen this term rather than others. . . in order to recognize the important contributions of several disciplines and schools of thought to the study of mediated action. On the one hand, I wish to recognize the contributions made by Vygotsky and his colleagues . . . On the other, I wish to recognize the contributions made by many contemporary scholars of culture . . . A term such as *socio-historical-cultural* would be more accurate, but it is obviously too cumbersome.

In many respects, sociocultural theory often incorporates the ideas of Vygotsky to the same degree as it does writers such as Dewey, Whorf, Burke, Bakhtin, etc. Therefore, sociocultural theory sometimes turns into a model of postmodern bricolage. Sociocultural theory normally does not deal with history as change, Marxian dialectics, deeper and intricate principles of internalization, nor does it normally deal with a focus on the integrated personality, Marxism, Spinozian monism, etc.

However, it does bring other aspects of Vygotskian thought into a more simplified understanding that can be translated into practical guidelines within education. One reason for the popularity of sociocultural theory is that people in the field of education in North America have become enamored with Vygotsky's *Zone of Proximal Development*. The ZPD was created during the last two years of Vygotsky's life, and was based on the

thoughts of the American, Dorothea McCarthy, *inter alia*. The ZPD represents a metatheory of more freedom for student-centered interaction within education [including adult/peer guidance, modeling, and mentoring], and it has become a real antipode to the lockstep ideas gained from Piagetian epistemological educational philosophy. At the same time many articles on the ZPD in the West are not situated within the Russian cultural-historical tradition, and are often compared with theories of educational constructivism (a term that is associated with Piaget, although Vygotsky used the same term in a different context).<sup>2</sup> As a result, Vygotskian thoughts are often paralleled with theories of interaction and group collaboration, and it is at this point that the simplification of Vygotsky's ZPD within sociocultural theory should be viewed with extreme caution.

Another phenomenon is the Western acronym CHAT (Cultural Historical Activity Theory), which has become very popular in the West. In reality, there is one overall school of Vygotskian thought serving as the basis for many directions, branches, trends within that school. Theoretically, it is dangerous to join two theories together, such as CHAT, without an exact and theoretical understanding of the differences between them, all of which has led to much confusion internationally. A quote will be given by L. I. Bozhovich (2004), a close collaborator of Vygotsky, who also worked with A. N. Leontiev:

It seems to us that Leontiev's theoretical structure cannot be considered a resolution of the crisis in psychology because, in it, psychological reality *per se* disappears and is replaced by the reality of action. One might ask the following. If the appropriate subject of psychological study was already identified in

Vygotsky's works and an approach to it outlined, why has the crisis not been resolved, and why is there again discussion of the appropriate subject of study and methodology appropriate to the science of psychology? (p. 26)

With the introduction of the International Vygotsky Society in Moscow in November, 2006, a new forum has been established calling for a return to reading and better understanding Vygotsky from a Russian perspective.<sup>3</sup> There is a call to abandon theory for theory's sake only! The goal of this undertaking will hopefully result in a more expanded, cross-cultural practice of Vygotskian theory in areas such as psychology, education, clinical psychology, etc., to develop a direction of applying theory to practice.

Another criticism that should be faced is the claim that Vygotsky was a cognitivist, meaning a Western cognitivist, which has an entirely different meaning than it did in Russia during the 1920s and 1930s.

### **Cognitivism**

Vygotsky has been called a "cognitivist" or "cognitive" psychologist by some in the West and in Russia. This is a very dangerous position to take, and it is a wrong position for many reasons. Cognitivism began during the 1950s, offering an alternative to behaviorism. During that period the word "innate" was an attempt to reclaim the inherent qualities each individual possesses. And, politically in the United States, during the 1960s, there was a focus on social equality. However, it left a sense of dualism or a split within real life, just like the Cartesian mind/body division. Chomsky, for example, is known for his extremely conservative linguistics and extremely liberal politics. The initial idea of cognitivism was to place "meaning" back into theory. Jerome Bruner (1990), one of the founders of Western cognitivism, explains it this way:

I want to begin with Cognitive Revolution as my point of departure...For, at least in my view, that revolution has now been diverted into issues that are marginal to the impulse that brought it into being...Now let me tell you first what I and my friends thought the revolution was about back there in the late 1950s. It was, we

thought, an all-out effort to establish meaning as the central concept of psychology—not stimuli and responses, but meaning... Very early on... emphasis began shifting from “meaning” to “information,” from the *construction* of meaning to the *processing* of meaning... Very soon, computing became the model of the mind, and in place of the concept of meaning there emerged the concept of computability. (pp. 1-6)

Interestingly, brains are *not* designed like computers<sup>4</sup> (see Deacon, 1997), and symbolic real world realities cannot be reproduced in a computer today; and it is precisely the symbolic process that we want to better understand, and perhaps even transcend.

Cognitivism led to the fact that the “human agent” does not even need to be present, and when a person is referred to, everything is calculated within the individual’s mind/brain/consciousness, which has led to a dead-end often resulting in solipsism and fragmentation. Within cognitivism, human existence seems to be understood as the *sum of our parts*, which can only lead to fragmentation. David Bohm (1980, pp. 15-16) has stated this problem succinctly: “...in the first instance, fragmentation is an attempt to extend the analysis of the world into separate parts beyond the domain in which to do this appropriately...it is in effect an attempt to divide what is really indivisible. In the next step, such an attempt will lead us also to try to unite what is not really unitable.”

Another important point is that cognitivism is often not scientific, but deductive. Within Chomsky’s model, there is an attempt to state that there are universal grammar rules, located somewhere in the “deep” structure, but there is no explanation of how the rules reach the “surface” structure, and no explanation of the “deep” structure. There is a top-down, deductive approach, functioning outside a real-life continuum. And, in the 1960s, Chomsky tried to warn second language researchers to not use his method for understanding the teaching of foreign languages, but to no avail.

To state the cognitivist problem simply, F. Varela (1997) maintains that:

- (1) cognitivism postulates mental or cognitive processes of which we are not only unaware but of which we cannot be aware; and
- (2) cognitivism is thereby led to embrace the idea that the self or cognizing subject is fundamentally fragmented or

unified...Cognitivism...postulates processes that are mental but that cannot be brought to consciousness at all. Thus, we are simply unaware of the rules that govern the generation of mental images or of the rules that govern visual processing. (pp. 48-49)

Cognitivism has gone so far as to presume that cognition can proceed without consciousness (see Varela, 1997, p. 51); and, as reflected through Chomsky, cognitivism operates outside of everyday life, standing on the principles of the Cartesian division, although it appears to offer unity and wholeness.

Some of the background ideas and paradoxes of cognitivism are: (1). Cognitivism was a reaction to behaviorism and the political climate of the 1950s. Innatism also represented the equality of all people, reflected in the North American politics of President Johnson during the 1960s. (2). Cognitivism deems itself scientific, without any explanation of how the “rules” are generated, emerging from the linguistic “deep structure.” There is no real time processing in most cognitivist thinking. Some areas of cognitivism include innatism, some branches don’t. (3). The process of fragmentation within cognitivism which unfolded was also reflected in the emergence of postmodernist thought (cf. F. Varela, 1997, pp. 48-49).

### **Postmodernism**

Vygotsky has also been labeled a postmodernist by Westerners and Russians, and a caveat should be given at this point. In much of postmodern society, psychological, and philosophical theories tend to focus on “parts” of a whole structure, often without understanding the all-encompassing nature of what “holism” refers to. Postmodernism reflects a horizontal level of communication, of equal voices, often replacing a vertical level of hierarchy, which in the past had only a few experts determining research debates. The older, vertical structure demanded a holistic approach to knowledge building; however, this type of structure was usually tied to a traditional philosophical-foundationalist understanding, all of which is rejected in postmodern thought. In other

words, there are no longer a few experts at the top, who dictate a limited number of values all of which determine much research, such as Chomsky's linguistics. The negative side of the vertical structure can be understood as a reflection of a unitary approach, which could then be distorted into monolithic, even totalitarian theories. The negative side of the horizontal structure within postmodernism is the famous statement: "anything goes," normally in the name of diversity.

It is suggested that Vygotsky, Luria, Pribram, Eisenstein, Vološinov, and many others have all contributed to a totally new focus that transcends postmodern fragmentation, as well as transcending the vertical, more traditional, philosophically-foundationalist (i.e. top-down), unified approach to knowledge. For example, Vygotsky's theories are a combination of Spinozist monistic philosophy, combined with the relative movement of an asymmetrical dialectic (see Karcevskij, 1982) that allows for change and development (while including elements of regression). It is the combination of the absolute (here, monism) together with the relative (here, dialectic) that allows Vygotsky to transcend both vertical and horizontal thinking, entering the philosophical understanding of *holography* (a newer branch of physics). To better understand this approach, V. N. Vološinov (1929/1973) stated: "Only on the grounds of a materialistic monism can a dialectical resolution of all such contradictions be achieved. Any other grounds would necessarily entail either closing one's eyes to these contradictions and ignoring them or transforming them into a hopeless antinomy, a tragic dead end" (p. 40). The major reason that Vygotskian non-classical psychology is not postmodern is because it reflects a sense of hierarchy, but often in a non-spatial reality, something almost impossible to grasp without reading the newer theories of physics from quantum

mechanics to holography. Vygotskian non-classical psychology has never fallen prey to postmodern “flatbed holism.” (K. Wilber, 1982). In today’s language, a new understanding of “whole” and “parts” has been coined, called *holon*, within a *holarchy*, which represents wholeness, unity, and functional integration. “Holarchy is a word coined by Arthur Koestler. It is a combination between the Greek word 'holos' meaning whole and the word 'hierarchy.' It is a hierarchically organized structure of units or entities that are called 'Holons.' Each Holon can be regarded as either a whole or as a part depending on how one looks at it. A Holon will look as a whole to those parts beneath it in the hierarchy, but it will look as a part to the wholes above it. So, a Holarchy is then a whole that is also a structure of parts that are in themselves wholes” (F. Funch, 1995).<sup>5</sup>

Within Vygotskian non-classical psychology the focus is on the interrelationships of developmental growth (and regression) within holarchies. Vygotsky’s overall metatheories transcend classical psychology, cognitivism, postmodernism, etc., leaving us with theories, which to date have simply not been understood in their unity, and will perhaps never be understood completely.

### **Vygotskian Non-Classical Psychology**

Within a new understanding of Vygotskian non-classical psychology it is important to restructure one’s thinking regarding classical psychology, where mental processes are viewed as being exclusively internal. “Vygotsky stated that mental contents and processes do exist in extracerebral and extracorporeal forms, outside the human mind, in the world of human artifacts, cultural sign structures, human-made environment and interpersonal communication, prior to their intra-individual functioning” (D. Leontiev, 2005, p. 20). A primary focus of non-classical psychology is on the development of a “self-determined,” “self-regulated” personality, which is individual, cultural, and social. In classical psychology there is often a focus on stimulus and response, and in non-classical psychology the focus is on the “gap” and the “firing

potential” [normally understood regarding neurons in the brain] engendered between the stimulus and response, and the resulting *functional relationships* which are transformed. For Vygotsky, this type of thinking can be understood with the concept of *meaning*, which lies *between* thought and the word. It is the “still point” where transformation is created. An example of this new thinking within neuroscience is called “synaptogenesis,” or the creation of new synapses between the existing neurons, a process that probably continues until the moment of death. It is the “firing potential” within the space or Taoist *hole*, between the synapses where creativity is born; and, because of the dance of the projection neurons, inter-neurons, etc., a circuit/system creating human functions is formed. D. Leontiev (2005, p. 21) asked the following question:

What is there between stimulus and response? Usually scholars speak about intermediate variables, O for organism. Gordon Allport noted that when he started to study these processes, he found a very small S, a very small R and a very, very big O (quoting Evans, 1970, p. 14). Rollo May (1981) wrote that human freedom, human self-determination starts when we make a pause between the stimulus and response. The gap between S and R is a very important point where natural, mechanistic chains are broken.

There is a “still point” of creation, which can be understood in Vygotsky’s thoughts on *displacement*<sup>6</sup> (which can lead to *catharsis*), Viktor Frankl’s *dereflection*, V. Sklovskij’s *deautomatization*, A. N. Leontiev’s *disobjectivation*, Mamardashvilli’s *converted form*, all of which can lead to a transformation and the development of new *functional organs* (Uktomsky, Zinchenko). Within non-classical psychology, the answer to the problem of innatism is the development of functional organs [which correspond to Vygotsky’s *psychological functional system*], meaning the development of various new skills, such as collective memory, intentions, integral worldview, etc. These functional organs can only arise through interaction with the environment, with an *image of the anticipated future*. “Transformation is the process in which novel functional organs are constructed. This process is performed by means of mediators that Vygotsky called psychological tools” (Zinchenko, 2002, p. 7). In order for this process of transformation to take place, there must be a structure and system in place to allow for concept formation. “Only with a system can the concept acquire conscious awareness and a voluntary nature. Conscious

awareness and the presence of a system are synonyms when we are speaking of concepts” (Vygotsky, 1987, pp. 191-192). And, within the system of development, asymmetrical *relationships* are of the utmost importance, within a non-spatial understanding of consciousness. “Consciousness determines the fate of the system, just like the organism determines the fate of the functions. Each interfunctional change must be explained by a change of consciousness as a whole” (Vygotsky, 1997, p. 130). It is at this juncture that the importance of *language* becomes understood. Returning to the law of conscious awareness (Claparede) and the law of displacement (Vygotsky), the following definition is offered: “to become consciously aware of an operation it must be transferred from the plane of action to the plane of language; it must be recreated in imagination such that it can be expressed in words. This displacement of the operation, from the plane of action to the plane of thought, is accompanied by the same difficulties and complications that were encountered when the operation was first learned on the plane of action” (Vygotsky, 1987 p. 183).

Within the various, often static debates regarding externalization and internalization, a big problem has revolved around the concept of “rooting” or “ingrowth.” Where does the external actually take root as the internalized form, which becomes a sign/symbol/word agent of mediation? In many areas of traditional discourse, externalization/internalization are positioned against each other, as opposites. One aspect we hope to concentrate on in non-classical psychology is the role of *transformation* that allows us to create voluntary action (remembering that thinking transforms action and action transforms thinking). This type of new understanding of “self-determination” is *action directed towards the future*. In much of traditional thinking, “the largest problem is that the logic of internalization-externalization eliminates the creative nature of the developmental process, without which new formations cannot arise. This logic leaves no place for intuition, insight, and ultimately, for revelation” (Zinchenko, 2002, p. 21). In viewing the *ideal*, *real*, and *mediational* forms of human existence, we simply must go beyond the implications of stimulus/response and externalization/internalization to a very different, non-spatial level. It is the *space between* that needs to be nurtured and allowed to develop.

Affective-meaningful formations, which are objectivized in ideal forms that also have a material existence (i.e., that are objectivized in culture), never lose their subjectivity. The real, individual aspect of affective-meaningful formations is not something internal. It is quite objective and exists in the dimensions that Buber termed as the space *in-between* (between you and me). Therefore, a real form has a subjective-objective existence... Relations between ideal and real forms can be described as that of mutual generation between each other: Real forms generate ideal ones and ideal forms generate real ones... Ideal, real, and mediational forms constitute human existence, or, in Mamardashvili's words, form 'a single existence-consciousness continuum.' It is here that I see the *non-classicism* of Vygotsky's approach and the *organic nature* of his cultural-historical psychology. (Zinchenko, 2002, p. 23)

## **Conclusions**

The purpose of this paper has been to look at a few Vygotskian non-classical theories, which have not yet been written about in depth theoretically, or used practically. Looking at the fusion of the objective and subjective worlds through the lens of consciousness (viewed as non-spatial as related to mental functions, cf. Vygotsky, 1997 p. 129), the internal mechanisms that lead to a personal transformation via principles of mediation, displacement, catharsis, transformation, the formation of functional organs, inter alia, all lead to the possibility of self-mastery, self-determination, *free action of will* (in a Spinozian context). And *action directed towards the future* will always include thinking + interrelating with one's environment. However, the focus is not on the environment acting upon the individual. D. Leontiev (2005, p. 21) states an important point in non-classical psychology: "In [A. N.] Leontiev's formulation we find... [in] the inner reality, the subject is the true agent of development, its starting point is inside rather than outside. It is not the external reality that acts upon the individual, but rather the subject acting upon him/herself through some external reality."

This focus is holistic, yet differentiated, as described within the parameters of holography; and, the basic goal is to reach the ultimate level of development of one's personality. "The key to the mastery of behavior is the mastery of stimuli. Thus, *mastery*

*of behavior is a mediated process that is always accomplished through certain auxiliary stimuli”* (Vygotsky, 1997, p. 87).

Another basic key to this understanding is that of language development via the system of concept formation, all translated into personality development. One of the core elements within the “gap” or the “still point” between stimulus/response and external/internal is *mediation*. We need to remember that theory and practice form a basic unit within non-classical psychology, which is viewed as a “holistic unit.” When rereading Vygotsky we can begin to analyze phenomena as “wholes,” viewing components/structures historically (within a genetic-developmental perspective), which must be studied in motion, with an analysis of process (cf. Vygotsky, 1997, p. 43). In other words:

If we replace analysis of things with analysis of process, then the basic problem for consideration naturally becomes the genetic restoration of all the instances of development of the given process. Here the principal task of analysis is restoring the process to its initial stage or, in other words, converting a thing into a process. This kind of experiment attempts to dissolve every congealed and petrified psychological form and to convert it into a moving, flowing flood of separate instances that replace one another. In short, the problem of such an analysis can be reduced to taking each higher form of behavior not as a thing, but as a process and putting it in motion so as to proceed not from a thing and its parts, but from a process to its separate instances. (Vygotsky, 1997, p. 68)

Vygotsky’s non-classical psychology is *height* psychology within a process model of movement and change. And, paradoxically, the core of this psychology is a focus on *holism* and *synthesis*.

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New York: Nova Science.

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<sup>1</sup> For the purposes of this paper an analysis of sociocultural theory and activity theory will not be offered. For a deeper discussion, please refer to D. Robbins and A. Stetsenko (2002), *Voices within Vygotsky's Non-Classical Psychology*, New York: Nova Science Publishes, Inc. All branches, trends, directions mentioned in this paper are viewed as being heirs of Vygotsky's thinking, and it is in the interest of all of us to understand the various definitions of these schools of thought, and to work together to form a strong international body of theory, research, and practice. Although the term *non-classical psychology* has basically been used by Russians to date, it is indeed used within both Russian cultural-historical theory and activity theory.

<sup>2</sup> For a detailed discussion of comparisons between Vygotsky's ZPD and Western educational constructivism, see D. Robbins (2003), *Vygotsky's and A. A. Leontiev's semiotics and psycholinguistics: Applications for Education, Second Language Acquisition, and Theories of Language*. Westport, CT: Praeger.

<sup>3</sup> For information on the International Vygotsky Society, write to [Vygotsky1@ru.ru](mailto:Vygotsky1@ru.ru) or [drobbins@mail.ru](mailto:drobbins@mail.ru).

<sup>4</sup> "We have argued that the brain is not organized like a computer, that its functioning rests instead on such properties as variability, differential amplification, degeneracy, and value" (Edelman, 2000, p. 93).

<sup>5</sup> Parts of this section were published in D. Robbins (2005) "General Holographic Visions of Vygotsky, Luria, Pribram, Leontiev, Eisenstein, and Vološinov," in *Intercultural Pragmatics* 2/1, pp. 25-39.

<sup>6</sup> Displacement as described by T. Deacon (1997, : "...a genetic variation that increases or decreases the relative sizes of competing source populations of growing axons will tend to displace or divert connections from the smaller to favor persistence of connections from the larger..." (p. 207) "...the displacement process provides the crucial link between global changes in brain growth patterns and changes in functional organization. Our relatively larger brain and its comparatively prolonged and out-of-sync growth suggest that displacement may have played a crucial role in restructuring the relationships within it, ultimately resulting in some very different functional relationships from those in other primates and other mammals generally" (p. 212).