Scaffolding within the structure of Dialogical Self: Hierarchical dynamics of semiotic mediation

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Abstract

Scaffolding is a notion that allows us to conceptualize direction towards change. As a form of guidance, scaffolding may result in both change and non-change. In this paper I apply the notion of scaffolding by signs (semiotic mediation) to the theory of Dialogical Self (DS). The DS is a construct that brings into psychology a new way of theoretical thought—thinking in dualities. Dualities are systemic units of two opposites that are mutually related by functional dynamic relations. Within the theory of DS, human psychological functioning is explained by transformations of constantly changed I-positions that are mapped both structurally (internal/external) and temporally (past/present/future). Semiotic mediation within the DS guarantees the person’s psychological distancing from the here-and-now setting. This distancing is guided by promoter signs—generalized meanings of field-like form that orient the self’s transformation. These signs are parts of the semiotic mediating processes where higher-level signs guide the range of openness of the sign hierarchy itself for further transformation when that is needed.

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1. Introduction

The topic of scaffolding is a complicated theme for the social sciences which are not used to see movement behind static states of affairs. The simplest example of such conceptual myopia is the use of rating scales as if the marks made on such scales represent some state of affairs as it is—rather than in its movement that is at the moment of rating encoded into a stable form (Wagoner & Valsiner, 2005). Most of psychology creates stationary data out...
of dynamic underlying processes as if some ontological state were to be “measurable” (see Michell, 1997, 1999) The very acceptance of the notion of “true score” indicates that axiomatic slicing of reality. While the extraction of data points from the ongoing process is technically possible (see Fig. 1(A)), it introduces the “blind spot” against the study of processes qua processes—and disallows the study of scaffolding. In Fig. 1(A) no scaffolding phenomena can be discerned—in contrast to Fig. 1(B) In the latter, the scaffolding phenomena can be analyzed as singular cases of the present moment that are directed—but not determined—by guiding constraints (Const. A. and Const. B.). In no moment of the “negotiation” between these constraints and the changing phenomenon itself is its “true state” discernible. Instead, the scaffolding framework successfully overcomes the theoretical stalemate of psychologists’ efforts to turn phenomena into non-historical and mutually independent “data points” by ruling out the reality behind such measurements. It replaces the traditional notion of sampling by historically structured sampling (Sato et al., 2007). The study of scaffolding phenomena is possible through the use of individual-socioecological reference frame (Gonçalves & Salgado, 2006; Valsiner, 2000, pp. 72–74, 2006), and requires the use of models of systemic causality.

1.1. Guidance and scaffolding

What makes scaffolding special is the future-oriented purposive function of the process involved. The root idea of scaffolding—guidance—entails purposefulness of the actor and the directional nature of the act. In its simplest abstract form, the notion of guidance is
given as

\[ X \rightarrow \{ Y \rightarrow Z \}, \]

where a system \((Y)\) that is oriented towards an objective \((Z)\) is being guided by some extrasytemic “other” \((X)\). The inclusion of two kinds of directionality (denoted by \(\rightarrow\)) in this unit makes it a system with a dialogically purposive nature: the orientation \(Y \rightarrow Z\) and its guidance \(X \rightarrow \{\text{the striving system } Y\}\) need not coincide. Scaffolding is a form of guidance that entails counter-orientation: \(X \leftarrow \{ Y \rightarrow Z \}\). The goal orientations of “the guided” may in fact be directly contradictory to those of “the guider”. Thus, scaffolding is a version of guidance that entails a mutuality relationship between the guider and the guided. That relationship may be of similar directionality (i.e., the guider suggests \(A\) and the guided does some version of \(A^1\)), or of opposite directionality (the guider suggests \(A\), the guided does nothing or acts in ways opposite to \(A\)), or of any other intermediate combination of the directions of guidance and action under guidance. Scaffolding is thus a subset of the whole set of processes of guidance.

Of course scaffolding is a process phenomenon of potentially infinitely regressive nature. Each effort of scaffolding can itself be scaffolded, as in Fig. 2.

So, parents may “guide” their children (who rebel), the Church may “guide” the parents (who may change their beliefs), the political system may “guide” the Church (which brings down the given government), and so on. Yet each of the lower levels of the system is included as part of the higher levels: children “belong” to the parents, the parents (and children) “belong to” the Church, the Church “belongs to” the political structure of the given country, etc. In each act of “belonging” is a counter-act of “non-belonging” (Boesch, 1997—on Heimweh and Fernweh).

In this paper, I outline one of such theoretical efforts—that of synthesis of a theory of semiotic mediation in cultural psychology (Valsiner, 2007) with the theory of Dialogical

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1The emphasis here is on some version of \(A\). The only case in which scaffolding is diluted among guidance is when the guided acts precisely in ways the guider suggests—imitation in its mechanical, not persistent form (J. M. Baldwin’s term—see Valsiner, 2000, p. 30).
Self (DS). The notion of scaffolding is here outlined in terms of semiotic mechanisms that regulate the temporal re-organization within the structure of DS.

2. DS theory: what is it?

The DS perspective emerged in the context of personality theory and psychotherapy. The DS theory is based on the construction of meaningfulness of the self in relation with others. Meaning construction makes it possible for the self to create different—distanced in space and time—I-Positions (Hermans, 1996a, b, 1999, 2000, 2001a, b, 2002, 2003; Hermans & Hermans-Jansen, 2003). The person is constantly involved in the construction of a dynamic structure of I-positions. Such positions are organized in an imaginal landscape. In this conception, the I has the possibility to move, as in space, from one position to the other in accordance with changes in situation and time. The I fluctuates among different, and even opposed, positions and has the capacity to imaginatively endow each position with a voice so that dialogical relations between characters in a story, involved in a process of question and answer, agreement and disagreement. Each character has a story to tell about its own experiences from its own stance. These characters exchange information about their respective ME-s, resulting in a complex, narratively structured self. In this multiplicity of positions, some positions may become more dominant than others, so that the voices of the less dominant positions may be subdued. (Hermans, 1996b, pp. 10–11, added emphases).

Even repetition of a similar statement is a contrast of “voices”—an autodialogue. A person who keeps repeating the same cliché in one’s mind to oneself (“I am fine” “I am fine”), or to others (e.g., while being forced to doing so by automatized interaction rituals like the “how are you?”—“I am fine” in a socially obligatory sequence of meeting casual acquaintances).

The DS theory is a holistic—structural and dynamic—perspective that divides the complex whole—labeled “the self”—into functional sub-parts:

The dialogical self is conceived as social—not in the sense that a self-contained individual enters into social interactions with other outside people, but in the sense that other people occupy positions in the multivoiced self. The self is not only “here” but also “there”, and because of the power of imagination the person can act as if he or she were the other (Hermans, Kempen, & van Loon, 1992, p. 29, added emphases).

This “multivoiced self system” can entail any number of parts—from two (e.g., ego and “the other”) to some (e.g., the different notions of “me”, as well as that of “the generalized other” in George H. Mead’s thinking—Dodds, Lawrence & Valsiner, 1997), to a high variety of sub-components (Mikhail Bakhtin’s “multivoicedness”—Bakhtin, 1981). When viewed from a developmental angle, the DS operates at the border of what is already developed and what might develop in the near future. It is here that DS comes close to the notion of logic of development (“genetic logic”—Baldwin, 1915) and the role of play in creating children’s “zone of proximal development” (Vygotsky, 1966). The DS can also be characterized through levels of intersubjectivity (Coelho & Figueiredo, 2003), and traced for changes in psychotherapy contexts (Hermans, 2001b; Hermans & Hermans-Jansen, 1995, 2003).
The core of the DS structure consists of varied I-positions that are spatially distributed between three concentric zones, and can be dynamically re-located between them:

External positions refer to people and objects in the environment that are, in the eyes of the individual, relevant from the perspective of one or more internal positions… In reverse, internal positions receive their relevance from their relation with one or more external positions (e.g., I feel a mother because I have children). In other words, internal and external positions receive their significance as emerging from their mutual transactions over time. (Hermans, 2001a, p. 252, emphasis added).

This perspective on feed-forward loops between internal and external positions is an implementation of George H. Mead’s original look at the ongoing relation between the I and the ME (Mead, 1912, 1913, also Valsiner & Van der Veer, 2000, chapter 6). Hermans has indicated the possibility to advance the DS theory along the lines of Bakhtinian notion of chronotope, and incorporating the dynamic systems theory (Hermans, 2003; Hermans & Hermans-Jansen, 2003, pp. 554–555). Whatever specific directions further development of DS might take, it is clear that it operates with large numbers of elementary components (see Chaudhary & Sriram, 2001, p. 389) that are organized into dynamic structures of relatively enduring kind. Large numbers of constituent components need to become organized into middle-level hierarchical configurations. The theoretical task for researchers is to make sense of the principles of making—and breaking—these configurational ties.

3. Novel psychology gains from DS: use of double concepts

The notion of DS opens the door to psychological theorizing in systemic categories that entail an inherent relationship at least between opposites within the same systemic whole (Ferreira, Salgado, & Cunha, 2006). This kind of theorizing changes cardinaly the ontological thinking that has haunted psychology all through its history. In place of theoretical terms of univocal ontology—such as attitude, value, belief, thought, emotion (to name a few), we are suddenly faced with a theoretical language of mutual relationships. At first glance, such terminology looks cumbersome: attitude and counter-attitude, value and counter-value; narrative and counter-narrative (Ramanujan, 1991), language and anti-language (Halliday, 1976), belief and non-belief, thought and non-thought (e.g. the “imageless thought” of the Würzburg School), suggestion and counter-suggestion, guidance and resistance (Poddiakov, 2001), or emotion and non-emotion—all seem useless complications to our otherwise clear and simple linear construction of psychology’s general terms. Yet other sciences seem to live comfortably in the theoretical idea-world of matter and anti-matter, astronomers have known the reality of double stars at least since 17th century, and immunologists take the conceptual value granted to them by the notion of antibodies (biological “self” <> “non-self” distinction) quite seriously. Actually, we may find such doubles already well-grained in our psychological theorizing: ego and non-ego, I and not-I (Me), narrative and counter-narrative, voice and counter-voice, and meaning and non-meaning (A and non-A—Josephs, Valsiner & Surgan, 1999), or “three-step analysis” (Marková, 1990) are present in the knowledge base of our science.

\(^2\)A contrast at times complicated by the language used—Chaudhary, 2003.
4. Self-organization through semiotic mediation

A crucial next step remains in the DS theory—the focus on integration of the structure of dynamically moving I-positions. But how can we conceptualize the processes that organize such movement? It is here that the semiotic mediation idea becomes linked with the theory of I-positioning—human beings create sign-mediated superstructures to regulate the fluidity of the structure of I-positions. In other terms—aside from re-positioning of the parts of the DS, there is also abstractive generalization of meaning of such re-positioning. Through the use of signs the self creates a meta-level organizing device within the mind that either makes it possible—or impossible—for the I-positions to move within the field of DS. As any meta-level construct, signs abstract some features (rather than other) from the I-positions and generalize them to larger overriding semiotic fields (Valsiner, 2005). The DS is a semiotically self-regulating self.

All development is the construction of the future state of the organism in the present move towards that future (Valsiner, 1997). The emerging whole that we are talking about is the narratively structured and self-structuring self (Gonçalves & Gonçalves, 2001; Gonçalves & Salgado, 2001, 2006; Salgado, 2003) within which dominance relations are established between different I-positions. The spatial structure of the DS acquires future-oriented temporal extension when we add temporally organized semiotic mediation to it. This extension comes through setting up specific signs of sufficient abstractness that begin to function as guiders of the range of possible constructions of the future. These signs—or parts of signs—operate as promoter signs (in analogy with the sequences in human genetic organization that promote the expression of other parts of the gene—Valsiner, 2004).

Every semiotic mediator can be functioning as a promoter sign—guiding the possible range of variability of meaning construction in the future. This happens in the microgenetic (in the sense of Aktualgenese—see Valsiner & Van der Veer, 2000, chapter 7) process in the present—with the help of the past.

Each sign that is in use during the infinitely small time “window” we conveniently call “the present” is a semiotic mediating device that extends from the past to the possible, anticipated (but not knowable) future. The promoter role of these signs is a feed-forward function—they set up the range of possible meaning boundaries for the unforeseeable—yet anticipated—future experiences with the world. The person is constantly creating meaning ahead of the time when it might be needed—orienting oneself towards one or another side of the anticipated experience, and thus preparing oneself for it.

The signs in the present are promoters of the ranges of possible future meaning making, not specific meanings. The range includes each and every point within the constraints that specify the boundary of the meaning field. Hence each and every possible specific meaning is included in the range that is afforded by the promoter signs.

Different semiotic mediators operate in parallel, and at different levels of abstractive generalization (Bühler, 1990). Human meaning-making system operates towards making ever-new abstracted reflexive complexes—point-like and field-like signs—in the process of self-scaffolding. The concurrently present meanings are setting the stages for the negotiation of the boundaries of meanings in the future. Every new experience of the future proceeds through the prism of constructive meaning-making through a semiotic hierarchy of various kinds of signs (Valsiner, 1999, 2002). These range from hyper-generalized fields (such as all-encompassing feelings or values—Valsiner, 2005) to verbally
accessible mediators (that can be visible in self-narratives), and finally in the “snippet
reactions” to everyday local triggers in a context.

Theories of semiotic mediation of human development have not been clear about how
the ontogeny and microgenesis of self-regulation are related (Valsiner, 2002). The whole
semiotic mediation system is viewed as a hierarchical regulatory system of meanings that
guarantee the person’s psychological distancing from the here-and-now setting.

This kind of quasi-open-ended future guidance for the DS is fitting with the
developmental notion of adaptation to the given setting as de facto pre-adaptation to a
range of possible future conditions—otherwise known widely in developmental psychology
under the label of Zone of Proximal Development—ZPD (Valsiner and Van der Veer,
1993). The ZPD notion can be analyzed further in either ontogenetic or microgenetic
scope. For its originator—Lev Vygotsky—that zone concept was linking the person’s
ontogenetic present with the future-under-construction. The developing person constantly
acts above his or her actual—already mastered—developmental competencies and through
such constant probing into the domains of incompetencies—expands the competencies.
The person puts oneself into a new situation where new problems need to be solved, finds
solutions, proceeds to the construction of new problems, finds new solutions, and so on.
Through the generalizing role of signs, the person is constantly oriented towards the
immediate future of the present psychological processes. In terms of the DS theory, the
person is oriented to the transformation of a current structure of I-positions into a new
form.

Fig. 3 displays the ways in which semiotic mediation operates to scaffold the transitions
within the DS structure. The dual opposition-filled (A  a non-A—see Josephs, Valsiner &
Surgan, 1999) sign—in the form of hyper-generalized field of the AUSPICIOUS $\setminus$ INAUSPICIOUS dialogical opposition—canalizes the process of movements of different I-positions in the structure of DS field.

Much of human activity is organized through the promoter signs of AUSPICIOUS $\setminus$ INAUSPICIOUS kind\(^3\). In many societies, actions in everyday life—getting married, or presidents becoming inaugurated—may occur at “good times” for that activity. In the secularized societies the same self-governing happens by the invention of personal will. The notion “I want it” is sufficient to re-arrange the structure of I-positions into a new state. Similarly, the growth of the semiotic block of transformation of the I-positions space by UNWANTED $\rightarrow$ WANTED promoter sign can stop the person from acting (see Janet, 1921—for descriptions of “fear of action”).

5. Conclusion: scaffolding as an example of generality in singularity

Scaffolding is a form of guidance—and guidance is everywhere in human social and (internalized) personal lives. It is a generic process that always operates in unique forms. Given this structured nature of scaffolding, it is clear that the mathematical systems capturing its nature cannot be those of traditional limited look at “measurement” (see Michell, 1999 for a definitive deconstruction of psychology’s uses of that notion). New mathematical perspectives—mostly from topology—might allow to model scaffolding are in the making (Joyce & Kennison, 2006; Rudolph, 2006). It is a necessity for theory construction in psychology to accept formal abstractions of the kinds of hyper-generalized fields (Diriwa¨chter & Valsiner, 2006; Valsiner, 2005). Topological formal models—despite their demise after their metaphorical use by Kurt Lewin—may be a new (yet old) way to bring psychology out of its current stagnation in the consensual glorification of statistics as science. It is not merely the need to move to topological models for the sake of innovating psychology’s realm of formalisms, but adding temporality to the analysis of structure—all within the general perspective of idiographic science (Molenaar, 2004).

The theory of Dialogical Self (DS) has provided social scientists with a challenge—what kind of theoretical models for explaining development are feasible. It is clear that each and every act of scaffolding—within DS through the promotion of specific relations between I-positions, and between the person and another social agent (parent, therapist, a person in a pulpit or on TV screen) is an once and only event. Uniqueness is the rule in all moments of scaffolding (Fig. 1(B) above)—yet the basic process of scaffolding is universal. It is here that the centrality of idiographic science becomes clear—we look for universal abstract models that could capture the nature of the extremely non-universal particular phenomena.

Our example of the promoter signs—future-oriented semiotic means of guaranteeing stability of human ontogeny—may lead to a new understanding of how ontogeny emerges from the constant flow of microgenetic episodes of relating with the environment. The DS theory—with its empirical focus on adult development (especially in psychotherapy)—could answer critical questions about the transfer of microgenetic psychological transitions to the ontogenetic domain. That such transfer is not of isomorphic kind—not each and every microgenetic advancement has an ontogenetic counterpart—is clear from the enormous overproduction of play in childhood, imagination in adolescence, and

\(^3\)Or by many other similar kinds: JUST $\leftrightarrow$ UNJUST; MORAL $\leftrightarrow$ IMMORAL, etc.
daydreaming and use of cognitive heuristics in adulthood. It would also create high vulnerability for the ontogenetic life course trajectory if all events of microgenetic kind passed on to change it.

References


