Creating Sign Hierarchies:
Social Representation In Its Dynamic Context

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In this paper I complement Moscovici's focus on the processes of social representation by theory of personal presentation that involves construction and destruction of dynamic hierarchies of signs. Such hierarchies enable intra-psychological dialogues about one's self-positioning while proceeding further in the flow of experience. Both the processes of social representation and semiotic mediation feed into each other, creating potential for change at both personal and societal levels. Forms of such relationships -ranging from conflict, contradiction and opposition on the one extreme to those of oppositional co-existence, constructed harmony, and dialectical synthesis, on the other -are multiple and co-exist in human lives at the same time. The process of social representation -similarly to personal presentation -is simultaneously oriented towards the not-yet-known future and presently-reconstructed past. Such simultaneity makes the processes of representing generative - we can view social representation as a presentation process on the border of the Future and the Past, as the construction of self-organization takes place in the Present.

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The status of the phenomena of social representation is that of the symbolic: establishing a bond, making an image, evoking, saying and causing to be said, sharing a meaning in some transmissible propositions, and in the best of cases summarizing in a cliché which becomes an emblem (Moscovici & Vignaux, 2001, p. 156).

The study of social representation has proven its versatility in the past half-century. It is a major theoretical undertaking at the intersection of psychology and sociology -attempting to make sense of the person as an active agent in the given society. That active role is made possible by internalization of meaning systems that are operational in parallel at the collective and personal levels. As such, social representations are meaning complexes that entail simultaneously abstract and often abbreviated generalizations (themata - Moscovici *et. al.*, 2001) together with socially proliferated value additions to the complexes, and specific social suggestions that can be generated through such complexes in a concrete setting.

COMPLEXES OF FLEXIBLE PRESENTATION: *COGNITIVE POLYPHASIA*

Social reality delimits the nature of the social representation process. The object of its investigation - social ways of representing the World - is of high or intermediate complexity and cannot be fixed through rigid making of categories that reduce that complexity to traditional logical operations. The feature of *cognitive polyphasia* – co-existence of mutually incompatible presentations within the same complex - is usual within the social representing process. It represents the paradoxical nature of our social realities (Friling, 2012). As Serge Moscovici himself looked back at his own introduction of the concept,

I cautiously suggested the hypothesis of cognitive polyphasia. Basically I thought that, just as language is polysemous, so knowledge is polyphasic. This means in the first place that people are able in fact to use different modes of thinking and different

representations according to the particular group they belong to, the context in which they are at the moment, etc (Moscovici, 2001, p. 241).

The flexibility of cognitive polyphasia introduces new kinds of relations between knowledge and belief (Jovchelovitch, 2002). First of all, the complementarity of seemingly incompatible forms of thought - those of logic and common sense - operates in the case of cognitive polyphasia. Furthermore, the decision to use one or another form of representations can be a result of semiotic hierarchies (see Figures 6 and 7, below).

If viewed from a time perspective the inconsistency of meaning-making that is entailed in cognitive polyphasia indicates is a tool for flexible adaptation to potentially changing circumstances. As long as the human *psyche* is functional in facing the ever-changing life conditions, any socially established general category is likely to be re-negotiated at the next moment. The use of such social representations takes place through communication - a process of coordinating different understandings of the world. It is the unity of categorization and communication that provides for the dynamic nature of the social representation process. While doing that, such unity also guarantees the approximate and complex-like nature of the key notion of social representation. The complexity of the *concept* of social representation matches adequately the dynamic complexity of the world that this concept represents.

REPRESENTING THE THEORY ITSELF

It would be a kind of truism to claim that the social representation research field is itself socially immersed. There seems also to be shared pride among the researchers working within the Social Representation Theory (SRT) domain about the practical value of that area of social psychology. Without doubt, doing something practical - which means - "good" for somebody - can be viewed as a noble goal for a scientific discipline. In the social sciences we seem to strive towards "doing good" for abstract entities - "the society", "justice", "humanity" or even the future of our Planet Earth. These humanly best desires are of course carefully watched by kings, governments, warlords, and tax collectors for whom the notion of "doing good" is a by far mundane social representation than for the scientists who feel left out of "where the action is" in their self-constructed ivory towers. The understanding of the role of Social Representation Theory within a

society starts from the ways in which various self-invested agent(s)cies represent the value of "doing good".

SRT AS A COMPLEX THEORETICAL WEB

Serge Moscovici points to the complexity of the theory of Social Representation (Bauer & Gaskell, 1999; 2008; Markova & Moscovici, 1998; Moscovici, 1976; 1981; 2001; 2013). What makes SRT complex is its unabashed perspective upon accepting the holistic phenomena of the human *psyche* that are located at the intersection of the person and his/her social world[1]. SRT does not shy away from analyzing complexity. In view of the location of the impact of SRT in terms of frames of reference (Valsiner, 2000) it is in the case of the "social other" that regulates the open-systemic view of the interaction (Figure 1) that key components of SRT - anchoring and objectification - are located.
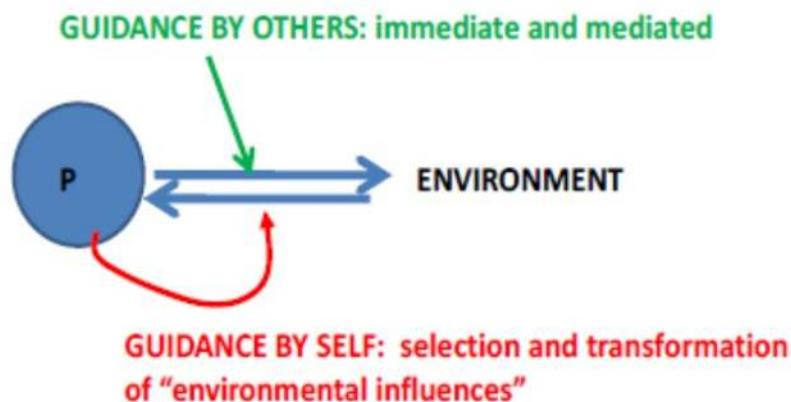

Figure 1. The individual-socioecological reference frame

All psychological phenomena - including representations of something - are results of human (personal) construction. Yet their function is to regulate persons' relations with the environment - either those by the person oneself (GUIDANCE BY SELF in Figure 1) or that by

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[1] As Moscovici points out :.. the aspiration of the theory of social representations is clear. By taking as its centre communication and representations, it hopes to elucidate the links which unite human psychology with contemporary social and cultural conditions… The reason for forming these representations is the desire to familiarize ourselves with the unfamiliar… (Moscovici, 2001, p. 150).

others (GUIDANCE BY OTHERS). These two forms of regulation operate in tandem - creating a redundant guidance system in which a particular social representation can link the two guidance systems. For example, an external marker of a social norm "**you** should be/do/want X because it is *appropriate for **your** age*" can be supported by the internalized personal conviction "**I** *want* X because it is *appropriate for **my** age*." Of course the idea complex - appropriate to X age -is an ill-defined social representation that bridges the social and personal guidance systems in one's relations with the environment (which may include X).

Relevant Human Functions Are Organized By Redundant Control Systems

Redundancy is the name of the game in all social systems. If a person enters a building s/he believes to be a church s/he is likely to self-control one's noise level, independent of whether an external sign ("silence!") is displayed at the entrance. Anchoring "*allows something unfamiliar and troubling, which incites our curiosity, to be incorporated into our own network of categories*" (Moscovici, 1981, p. 193). Objectifiction that "*saturates the unfamiliar concept with reality*" (ibid, p. 198) joins in guidance of the self by self.

Relating With The Social World

Social representations play dynamic roles - they both stabilize and destabilize the given dynamically stable states of affairs (collective equilibria). This is accomplished through their roles as prescriptions, imperatives, inhibitions, tolerances, prejudices, prohibitions, and many other forms of goals-oriented ways of intervention into the ongoing person-environment relations. These roles are necessarily internally contradictory-uniting the opposites within the same whole.

> Our society is an institution which inhibits what it stimulates. It both tempers and excites aggressive, epistemic, and sexual tendencies, increases or reduces the chances of satisfying them according to class distinctions, and invents prohibitions together with the means of transgressing them. Its sole purpose, to date, is self-

preservation, and it opposes change by means of laws and regulations. It functions on the basic assumption that it is unique, has nothing to learn, and cannot be improved. Hence its unambiguous dismissal of all that is foreign to it. Even its presumed artificiality, which might be considered a shortcoming, is taken, on the contrary, for a further sign of superiority, since it is an attribute of mankind (Moscovici, 1976, p. 149).

Given the inherently contradictory nature of the social life, the traditions of classical logic are not applicable to the SRT, but its closest relative in the realm of formal systems is deontic logic[2] (Mally, 1926; for systematic overview see Rudolph, 2013) and dialectical theory building (Valsiner, 2012). It is not coincidental that Moscovici has insisted upon the close relations of SRT with the theoretical basis of Vygotsky and his colleagues (Marková & Moscovici, 1998). The unity of anchoring and objectification leads to the continuously unfinished nature of social representations. They constantly border upon "somethingness" that can be partially indicated by the social representations, but never fully captured (Wagner, 1996, pp. 108-109). Here SRT shares some ground with developmental theories of Jean Piaget and Lev Vygotsky (Moscovici, 1990) where development necessarily is an open-ended process.

Social Representations Are Phenomena In-Between

Representations are social in three concurrent ways (Moscovici, 2001, p. 153):

1. They are impersonal - they are considered to belong to everyone

2. They are representations of the others belong to other people

3. They are personal (*idiomorphic* - Wagner, 1994, p. 211) - they are felt affectively to belong to the Ego

The unity of the triad EVERYONE<>THE OTHERS<>MYSELF of the central concept- social representation - makes SRT a unique theoretical scheme that links the personal and the social phenomena through the realities of *one*group<>*other*group relations. These groups can

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[2] The logical system working on the basis of *obligation to do something* and will of the person to *accept the obligation*. Social representations suggest such obligations as well as the act of willfully acting to fulfill these. Without social representations deontic logic would be impossible.

vary in size - from one (*my*self $<>$ my *other self*) two (*my*self $<>$ *your*self) to some (*my*group$<>$*your*group) to infinity (*my*crowd$<>$*your*crowd) - but they all share the affective tension of a particular ideation - encoded into signs - belonging simultaneously to the Self and the Other. A person who internally feels guilty for wandering thoughts that are believed to hurt one's close family (e.g. Janet, 1928) or another person who, as a member of a football fan's crowd, is ready to enter into a brawl with the crowd supporting the rival team, are involved in similar processes of anchoring and objectification. Objectification emerges from the tension of I-you-object (Marková, 2000a, 2000b). Given this tension it is not surprising that social representations as a notion in SRT look vague - they are representations that are "located" neither *in* a person nor *in* a society, but precisely in the *process relation between* one and the other (Jovchelovich, 2002, Figure 1). Hence the notion of social representations fits the role of semiotic organizers of persons' relations with their social worlds.

SRT As A "Practical Theory"

Any practical application of any theory is necessarily ambiguous as it occurs within the field of divergent social interests. The owners of factories need to close down the production lines for economic reasons in one country and open new factories on the other end of the Globe, while the workers (who are about to be unemployed and stay where they have lived all their lives) cannot wholeheartedly share that interest. Divergent needs clash - at least through discourses used for argumentation, or, at times, by the uses of cultural tools of destruction , i.e. swords, drones, and nuclear bombs - that are meant to force the divergent "social others" into some form of convergence. Of course the SRT can do little if faced with the latter: the researcher is as unsafe on a real battlefield as are the "research participants" who are actually fighting yet another war. Still the theory can help to understand the former by specifying how propaganda efforts fail (or succeed), or how psychological barriers between the sane and the insane can be overcome (or strengthened). SRT provides potential tools for understanding complex social practices.

How can this happen? Consider the efforts by public health officials to introduce a new powerful product - a birth control pill - in a country where women are empowered - by way of socialized coercion - to bear as many children as possible. The pill should "save" the women

from such coercion (a theme of improvement for a society), reduce the birth (and poverty) rate, give women autonomy, and accomplish many other tasks that the public health interventionists deem needed for that society. The pill - presented as a vehicle to personal autonomy - should succeed. Yet it does not. It turns out that it changes the nature of the regular menstrual flow - which is presented by the women as a sign of their femininity - attached to their autonomous need (internalized and personalized) to bear children. The notion of "*my own control* over when to have children" clashes with the threat to self-presentation of "*my femininity*" (that includes "having children" *rather than* "not having children"). Within such cultural battlefield of social representation of the same biological function of the body the public health interventionists lose, at least temporarily. Without doubt the SRT here succeeds - showing how the representation of the donors and recipients mismatches. It is the dialogical nature of human living that enters into the play of social representations (Marková & Moscovici, 1998; Marková, 2012). Still, SRT does not move as far so as to turn the dialogical tensions into a new form of being, to development of a new tension with new opposites. The latter would be the realm of a sub-set of dialogical perspectives - that implies dialectical synthesis. SRT is not a developmental theory[3] but a theory that makes it possible to account for various dynamic transformations in persons<> societies relationships.

Inconsistency And Uncertainty Of Living

Ideological wars about many innovations - the acceptance or rejection of genetically modified products as a good example - are all fought through the social processes of presenting the new through representing the known. Echebarria-Echabe (2013) provides a nice imaginary illustration of how different social representations become intermingled in the real life:

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[3] As Ivana Marková has put it succinctly
> "The theory of social representations is not concerned with an ascendant development of knowledge as is dialectics, but *with transformations of one kind of knowledge into another one*" (Marková, 2011, paragraph 26.2, added emphasis).

Of course what "developmental" means can be understood in different ways. Here I consider the slow introduction of the time perspective into SRT as an obstacle on the way of becoming developmental. The stop of SRT at the threshold of building dialectical models of anchoring and objectification is viewed as due to the nature of verbal language SRT relies upon.

…we could imagine a woman self-defined as Catholic, but at the same time as feminist militant, mother and pediatrician. She finds that one of her daughters (an adolescent) is pregnant. As feminist, she could stimulate the choice to abort. As catholic, she would think that she might give all her affective and economic support to her daughter, but convince her to refuse abortion. We could also imagine a person who is a convinced socialist but appointed Economy minister. It is easy to imagine a number of contexts in which his/her beliefs and his/her duties would provoke strong personal conflicts (p.195).

A person assumes multiple social roles - a mother, a Catholic, a minister, etc - and each of these roles brings with it a set of social representations through which the person presents oneself[4]. The person inherits the history of the social role while assuming it. That role is encoded through social representations that help to maintain continuity of such role—a "king" in 21st century has some social role continuity with a "king" from the 11th century. Each role includes internally-oriented and externally-oriented processes that are coordinated by social representations. The notion of trust in others can be undermined by non-trust within oneself (Jesuino, 2008, p. 203) and vice versa. Again, the external and internal social guidance systems (Figure 1.) feed into each other in either escalating or attenuating the role of the Other. Thus, the seemingly opposite phenomena of deep depression and melancholy on the one hand (Janet, 1928) and the trust in the psychotherapist (Miltenburg & Singer, 1999) and the patriotic sentiments cultivated by any country (Carretero, 2011) are generated by the same universal system of anchoring and objectification.

Operating at the intersection of person and society, the SRT has a unique opportunity to capture the processes of personal compensation for the social inadequacies, as well as social compensation for personal ones. However, to examine such processes of resilience (Trzesniak, Libório & Koller, 2012) one needs to turn from the static view on social representation to the dynamic view of their operation.

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[4] Note that the mandatory - by now -use of the supposedly gender-neutral language -"his/her" as in the quote, and elsewhere in psychological publications, is an example of social presentation of symbolic equality of the two genders. As such, equality is not gender-neutral but just the opposite - it separates genders ("he" versus "she") and presents them discursively as if these are equal. Yet in such separation is the starting point for new form of inequality. In contrast the gender separation could be un-presented by reverting to terms like "oneself".

INTRODUCING PROCESS: FROM SOCIAL REPRESENTATION*S* TO SOCIAL REPRESENTATION

The process of social representation (i.e. representing something through social means) and the outcome (different enumerable entities - social representations) have become mixed in the discourses in the field. Part of that fusion is due to the unity of the two in the French original term - both a noun and a verb - which in English becomes a noun, and moves to be countable (representation*s*, see further Voelklein & Howarth, 2005) Quantification within SRT eliminates the theoretical novelty the theory brings to the social sciences. I think this shift of focus is unfortunate - and therefore here I would like maintain the contrast between the notions *representation OF X and representing THROUGH X.* The first -representation of X - is the outcome of social processes of presenting X that result in making of the stable characteristics of X[5]. Social representations - adequately described in plural terms - are here predicates of X. There are many examples of such predicate making in the literature on social representation: careful descriptions of social representations of criminal justice, AIDS, intergroup relations, taxes, economy, historic capital cities, and even of political units of countries (de Rosa, 2013). That is natural - the theory works on the basis of the common sense—the richness of which in predicate making is the main arena for human construction of signs. In contrast, the focus on representing something *through X* maintains the focus on the functional side of sign mediation that underlies the process of social representing. This process is inherently dialogical (Marková, 2000; 2012) and could best be understood in terms of dialectical models (e.g., the 3-step model of Marková, 1990; or Falmagne, 2006) that operate within the semiosphere (Raudsepp, 2005).

To continue with the example given above - we represent the pregnant daughter of the Catholic mother through the set of meanings that the predicates "pregnant", "daughter" "feminist", and "Catholic" evoke, and that become functional in the future - constructing activity. We can imagine - only on the basis of the scenario presented - that the mother of the daughter is in serious intra-personal conflict. How that conflict can be resolved - in the mother's mind, and in the daughter's pregnancy - becomes the issue for research in this direction of the extension of the

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[5] Reasons for such shifts in focus are well analyzed by De Rosa (1994) who points out that social representations are viewed at three levels of presentation: as tools for knowing, as collection of definitions, and as a metatheory. As tools they are part of the ongoing process of making sense – "a journey" (Foster, 2003, p. 634). They develop in that process as they are used by different social groups (Foster, 2011).

SRT[6]. No longer is the mapping of all social representations (predicates) of X sufficient, but what becomes crucial is the discovery of how the dynamic relations of different social representations lead to the generation of concrete pathways of social action.

Processes In Presenting Towards The Future

Social representations are simultaneously *re*-presentations (of what already has come into being, and is recognizable on the basis of previous experience) and re-*pre*sentations (of the expected - yet indeterminate - future experience). Making such distinction is imperative if we build our process theory of social representation on the basis of the general notion of irreversibility of time. If viewed from this perspective, social representations are idea complexes that play the role of macro-level cultural constraints of human conduct in its PRESENT→FUTURE transition. These constraints lead to the generation of micro-level constraints that guide particular thought, feeling, and acting processes. A semiotic view on SRT thus leads to the analysis of the negotiation of the future (becoming the past, through the present) and involves the unity of presentation (*Vorstellung*) and representation (*Darstellung*)[7] processes which in turn is guaranteed by the historicity of both persons and societies - living under the inevitability of irreversible time.

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[6]   There is an interesting parallel here with the work of Daniel Kahnemann in cognitive psychology who made the key discovery that the human decision-making mind violates principles of statistics and classical logic - instead of accepting the probability of the conjunction A and B being <u>less</u> likely than that of the constituent parts (A, B) human beings find it <u>more</u> likely (i.e. the so-called "conjunction fallacy"). The classic example from the work of Tversky and Kahnemann (1983) included a story followed by a forced choice:

> "Linda is 31 years old, single, outspoken, and very bright. She majored in philosophy. As a student, she was deeply concerned with issues of discrimination and social justice, and also participated in anti-nuclear demonstrations. Which is more probable?
> 1. Linda is a bank teller.
> 2. Linda is a bank teller **and** is active in the feminist movement".

 About 85 % of respondents selected option 2 - while by Aristotelian logical standards that is an error. What looks as an aberration from the cognitive perspective becomes understandable as the norm in the process of social representing where the conflictful opposites may amplify each other. That amplification can take the form of dialectical synthesis of a new form (Marková, 1990) that renders the adequacy to the classical logic irrelevant. The "conjunction fallacy" of cognitive psychology is a regular example of the combination of different social representations making a new meaning Gestalt that transcends the separated sum of its elements.

[7] I bring in the old contrast used in German philosophy and psychology because it is more appropriate in the present context. In English translation, these terms have become merged into the translation as *representation*, thus eliminating the time focus that exists in the German originals from where contemporary cognitive science borrows the idea.

The process of social representation—similarly to personal presentation-- is simultaneously oriented towards the not-yet-known future and presently-reconstructed past. Such simultaneity makes these processes generative—and creates specifiable obstacles for their empirical study. This was exemplified in the notion of the "theory of enablement" (Valsiner, 2003) and is further advanced here. Said simply, human beings create semiotic mediators that set the *range* and *direction* for further expectation of to-be-lived-through experience. The resulting meaningfully bounded indeterminacy allows the person to transcend the here-and-now setting in the ideational sphere. So , the focus is on how persons regulate themselves through signs -some of which are (established) social representations.

THE NATURE OF HIERARCHICAL MODELS: STATIC VS DYNAMIC

Complex systems are hierarchically organized and dynamically self-regulated. Any hierarchical organization entails the transitive structure. From the differentiated set of elements (P. Q, S) emerges a hierarchical order, such as:

$$P$$
$$|$$
$$Q$$
$$|$$
$$S$$

A hierarchical order like this is transitive. Transitivity - the core for the "gold standard" of classical logic and static rationality - is an unwanted feature in biological systems since it is closed to adaptive modifications. Transitivity fixates the hierarchical structure in a rigid way that fits government bureaucracies, but does not help the survival of organisms in their environments. Hence it is descriptively useful in making sense of the structures of the organisms (anatomy) but not of the functional aspects of the lives of the organisms. Transitivity is completely "blind" to any aspect of change or development.

The notion of *dynamic* self-regulation counters this transitivity with intransitivity - through cyclical loops of regulation that feed from the lowest to the higher levels:
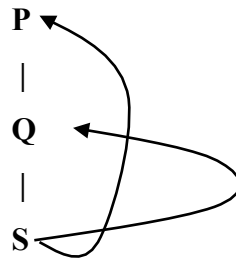
In this example, *sometimes* S dominates Q (P>Q>S and S>Q) and at *other times* S dominates P (P>Q>S and S>P) - resulting in a structurally flexible cycles. The system entails *bifurcation* between the two - which entails P's temporary loss of control over the on- going process (when S starts dominating P)

P> (Q<>S) →   >P>Q>S

Nevertheless, this bifurcation does not entail new structural emergence. It merely indicates conditional "flip-flopping" between two existing structural solutions - both of which are based on intransitivity. Both cycles remain closed, while the moment of novelty is the switching between the two. While living systems are characterized by such intransitive-cyclical-regulatory hierarchies, they also need to be open to the development of qualitatively new cycles. The whole dynamic hierarchy entails coordination of "top-down" and "bottom up" regulatory processes where new levels of the hierarchy can emerge. Yet each level is qualitatively unique and irreducible to any other levels.

RUPTURE IN INTRANSITIVE STRUCTURES: WHERE NOVELTY EMERGES

Biological, psychological, and social systems that are "open" in nature depend for their existence upon their exchange relation with their environments as well they are self-reproducing (autopoietic) and display high variability in their existing forms. Transitivity as a general model is inadequate to the nature of the phenomena, while intransitivity reigns (Poddiakov & Valsiner, 2013).

Figure 2 allows us to figure out where systemic self-maintenance becomes open for innovation of the system itself, and when it merely fluctuates between momentary dominance of any of the three components over the other two. In fact, in case of an intransitive hierarchy, it is not possible to answer the question "which of the parts is dominant over the others?" They all are over all others! The systemic cycle in Figure 2 leads us to further elaboration of what the posited relationship between parts of the cycle means. Thus, if we say that "P is dominant over Q" or that "Q is dominant over S" (etc.) the notion "dominant" refers only to the *initial condition* of the to-be-performed transformation in the cycle. We may enter into our examination of the cycle at any place, and that initial point determines the "dominance" of that point over the subsequent ones - yet that point itself ends up sub-dominant in relation to the others. *In cyclical systems, the notion of dominance is simultaneously that of its opposite - non-dominance*.

The auto-reproductive system in Figure 2 is open to change. Under certain conditions it continues as a cycle (trajectory Y) along the lines of the cyclical relation. Yet under other conditions (trajectory X leading to the end of the cycle vands establishment of linear hierarchy P>Q>S) Here we can see how transitive relations are a special case of intransitivity, and not vice versa (P>Q and Q>S in case of trajectory X leads to P>S). Transitivity is a temporary solution in the field of intransitive relations of various kinds - classical logic and cognitive models of human thinking that assume transitivity are a sub-class of all possible models of intransitive relations.

What are the costs of "straightening up" cycles of intransitivity, turning them into lines of fixed order of transitive kind (i.e. trajectory X in Figure 2). Such move to transitivity equals elimination of the auto-reproductivity of the system which in terms of living systems means the extinction of the system. Hence it is clear that all organisms that maintain their systemic nature operate under conditions of intransitivity cycles. Transitivity, in a manner of speaking, is suicidal for them.

The "locus of rupture" in Figure 2 is interesting also as to its potential for the innovation of the system and its development. Aside from the system-detrimental re-direction of the

"leading to" relation from the regular (Y) to self-destructive[8] (X) trajectory, the rupture can lead to a trajectory where a new component of the system is created (marked as ? in Figure 2) and integrated into the system. A new part of the system (?) can "join" the cycle, or become its external hierarchical regulator (see below emergence of levels of sign regulation in the semiotic regulatory system).

In Figure 2, the "breaking point" (or "weakest link"- depending on one's perspective) is the place where the fate of which of the three possible trajectories -X, Y, or Z -is about to be taken by the cyclical system. This *trifurcation* – possibility of proceeding in between options of {maintenance Y $\diamond$ extinction X $\diamond$ innovation Z} is regulated by catalytic systems (CAT A in Figure 2). This structural condition indicates that in all open systems the primary role in determining the course of their dynamics is not the causal system (cycle) itself, but the catalytic conditions that make the system open for transformation into another form (while keeping it usually running in its already established form). Such conditional action settings are all possible through the construction - and demolishing - of hierarchical sign complexes.
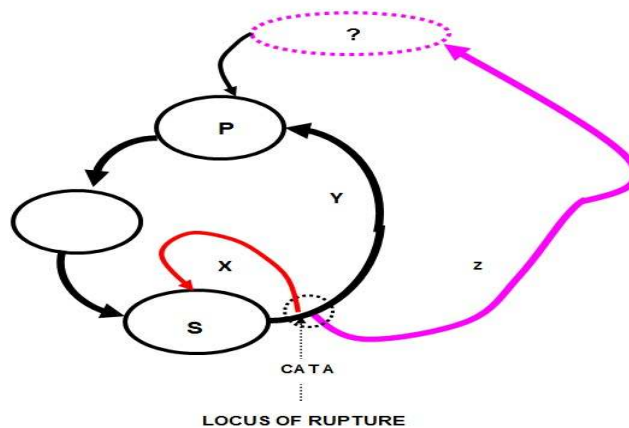

Figure 2. An intransitive hierarchy with a rupture point

CONSTRUCTING SIGN HIERARCHIES: PERSONAL SEMIOSIS

The processes of semiosis - creating signs and sign complexes that guide human meaning-making process in irreversible time - is a prime example of the processes of creation, maintenance, and

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[8] Trajectory X eliminates the intransitivity cycle, turning it into a transitive one

extinguishing of hierarchical control systems. Signs are created to regulate actions, and further signs are created to regulate signs that are regulating actions. My focus on such dynamic and future-oriented perspective of a semiotic cultural psychology strives towards general explanation of each and every human act of the construction of meaningful relation with the world that is always contextual in practice. This perspective operates on the basis of general principles of hierarchical meaning-making that takes the context into account as a major part of the general scheme.

The most universal feature of human meaning-making is its contextual dependency on the specific local conditions. This claim fits the notion of concrete generality (Falmagne, 2006) - what in particular entails simultaneously general basis that makes the particular possible. Thus - context-specificity of human lives is a general principle that operates universally - giving rise to high variability of particular forms. In principle, every single act of meaning-making in practice is unique - as it is dependent upon irreversible time (where no event occurs more than once). Nevertheless, the principles of such meaning-making are general. There is generalized unity of the process of dynamic semiosis in the unique production of outcomes of human sign construction and use.

In the process of psychological differentiation that is the setting for dynamic semiosis it is possible to observe the emergence of signs from the flow of experience. The emerging signs distance the meaning-maker from the initial here-and-now context that is rapidly moving from the present to the past. The first types of signs are therefore necessarily those which either link the new present to some recent one by impact of the actor (*indexical* signs in Peirce's terms[9]) on some substance. A footprint of an animal in the mud is an indexical sign of that animal *having been* in that place some time ago. The sign here distances from its referent by time (now<>then) and part<>whole relation (foot of the animal leaving the mark <> whole animal). It could be argued that most of our meaning-making activity occurs on the basis of indexical signs (and their

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[9] For Peirce, *index* is a sign that represents an object by its impact on another object. It has a special characteristic of temporality, as it is

> …a sign which would, at once, lose the character which makes it a sign if its object were removed, but would not lose that character if there were no interpretant. Such, for instance, is a piece of mould with a bullet-hole in it as a sign of shot; for without the shot there would have been no hole; but there is a hole there, whether anybody has the sense to attribute it to a shot or not (Peirce, 1902, p. 527).

Different areas of human knowledge depend differentially on that type of signs. For paleoanthropology all original evidence comes in terms of indexical signs—pieces of proto-hominid skeletons excavated in specific layers of sediments.

combinations with other sign types). Indexical signs preserve the continuity of the quality of the sign with its referent over time (e.g. the footprint of a tiger does not change - nor can it be reconstructed - into that of a lion as time passes).

A similar restriction of non-reconstruction of the sign applies to *icons* - signs that are images of the referent object. A portrait of a woman is an iconic sign of that woman[10]. It is in the 20th century art that the borders of iconic representation have been tested - a cubist portrait of a woman that does not directly represent the object moves the borders of iconicity towards that of creating a visual *symbol* - similar to human language. The iconic language with symbolic linkages dominated the mediaeval religious messaging in European churches (Lavin, 1990)[11], and is returning to dominate human meaning-making in the 21st century in the new form of hyper-dynamic images we evoke on our i-pad and cellphone screens with simple finger movements. In other terms, human meaning-making process operates by various forms of sign combinations where, at different historical periods and for different purposes, one sign form dominates over others within the same sign complex. A detective needs to rely upon indexical and iconic signs before making it possible for the symbolic level to be used - in the verbal interrogation of the possible criminal who has inadvertently left some non-verbal signs on the crime sites. A psychologist or psychoanalyst may verbally discuss the sexual problems of a therapy client with him or her without ever having any evidence of the sexual activity encoded in indexical or iconic signs.

The basic model of the semiotic dynamics perspective is simple - human beings, while relating with their environment (acting upon it) create signs that regulate that very process of

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[10] The confrontation of a person with one's own portrait, after sitting for many sessions and hours posing for it in an artist's studio, for the first time gives us indications of the complexity of the psychological distancing processes relating to that iconic sign:

> When I saw it I was shocked, disappointed, and awed all at the same moment. I had the odd sensation that the portrait did not look like me and yet it captured my essence. I quibbled about the eyes looking empty, the mouth being tight and severe, the expression being overly serious. I had not thought of myself as high waisted, nor did I recognize the yellowish cast to my brown skin. The woman in the portrait looked more mature and static than I felt. "She is 30 years my senior," I complained to myself. I was relieved when friends saw the painting and commented on how much younger I looked in person and how the artist had not captured my vitality and spirit (Lawrence-Lightfoot, 2005, p. 4).

This example illustrates the intricate connection of iconic and symbolic signs in their operation—the iconic sign is the basis for symbolic construction of the object (in this case- one's self). The regular self-examinations in symbolic terms that people engage in after changing their hairdos provide further illustration of the organization of our meaningful lives not by single signs, but through sign complexes where signs of different kinds feed into one another.

[11] With episodic revolt against iconicity in various movements of iconoclasm (Duffy, 2005).

acting in irreversible time (Figure 3). Within the flow of the irreversible time, the sign (S) differentiates from the ongoing experience and becomes available at the present moment to guide that moment towards the future in two ways - immediate (at the locus of the Act) and through its relative extension over time—for the future (Sf). The act of meaningful social construction is thus always dual - involving action towards the future *through the context of the sign* (S), and vice versa (i.e., the sign has the act as its context). The phenomenon and its context cannot be separated from each other - by charting out a phenomenon its context is charted out dependently, according to co-genetic logic (Herbst, 1995).
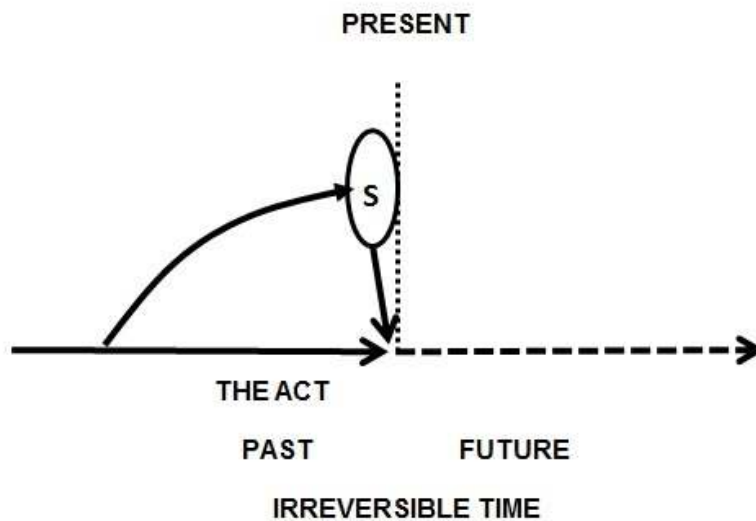

Figure 3. The core of the dynamic semiotic perspective: duality of the act

The power of signs regulating human conduct is so obvious that under our ordinary conditions we hardly notice it. In some pathological cases that power gives rise to dramatic and sometimes amusing examples. Thus, Pierre Janet (1919, p. 193) describes one of his patients (Nof, 19 years of age) who, walking around in Paris, notices a hatmaker's shop and remarks to himself "[...] *c'est une boutique de chapelier où on achète des chapeaux*" - after which he enters the shop and buys himself a hat he does not need. The same Nof, walking by the Garé de Lyon railway station, says to himself "*C'est une gare de chemin de fer, on y entre pour voyager*", after

which he enters the station, buys a ticket to Marseille, and travels - only recognizing half-way to the destination that he had not planned to travel anywhere.

In these examples the power of the sign is not inhibited, and acquires determinative role. This is not automatically the case in our normal self-regulation. Here the determinative nature of the emerging sign generates its own limits (e.g., "this is a railway station, but I have no intention to travel anywhere" and "this is a hat shop but I do not wear hats"). The emerging sign is inherently a *Gegenstand* - an object that limits its own course of being through constraints inherent in its own emerging structure[12].
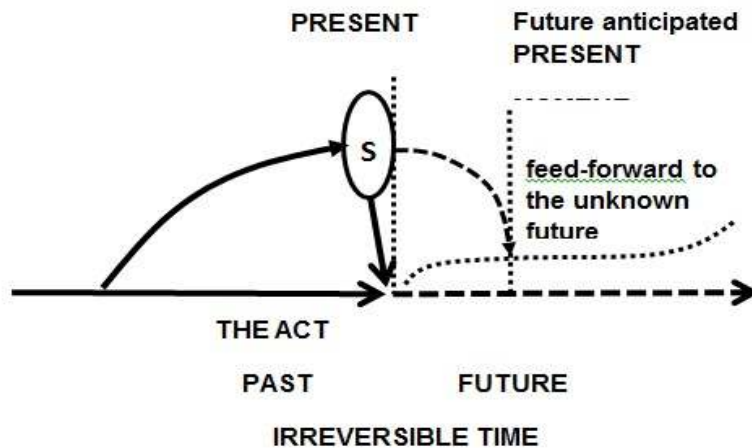

Figure 4. The emerged sign with functional longevity (feed-forward to the future)

As signs emerge in the flow of experiencing and regulate that flow in the present, they can also set up a residual guidance of similar flow in some unspecifiable time in the future (Figure 4). Such feed-forward functions of the emerged sign may be explicit—fixing it in some form to be usable in the future, or implicit - carried forth to anticipate similar situations in the unpredictable future (see Figure 4. - Future anticipated present moment). The *function of signs is always future-oriented* - both in their immediate impact (turning the next immediate future into a new present)

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[12] I prefer to use the German term that carries the implication of "standing against" (gegen- against). The usual English translation - *object* – is misleading as it has lost it notion of standing against (visible if we look at the verb - *to object*)

and their general orientation towards encountering similar situations in some indeterminate future moment.

This brings us to the curious question - if sign use is future oriented, how can it be that the meaning-makers are constantly referencing the past - digging into one's memory, trying to recall relevant life moments of the past? Such efforts - even if they seem to involve backward referencing - *are actually forward referencing*. The meaning-maker at the present accesses different traces of the signs of the past that can be accessed now as s/he is moving towards the future. What looks as if it entails "looking back" at the given moment is actually "looking forward" - thanks to the accessibility of different trace signs from the past. Within irreversible time one cannot reference "what was" without making it to be in the service of "what might come".
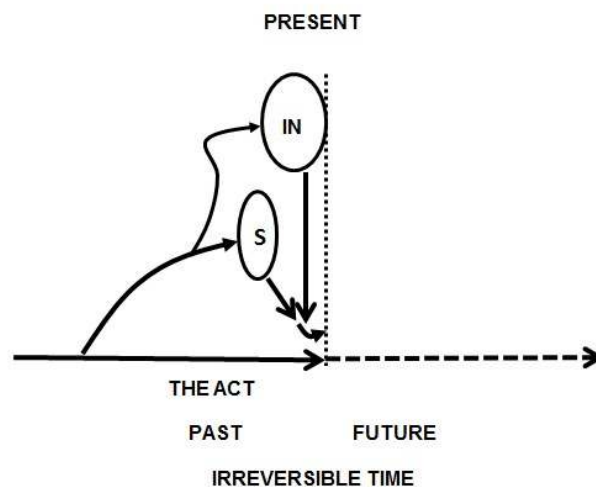

Figure 5. Sign hierarchy as an inhibitory sign (IN) emerges and blocks the meaning (S)

A relevant feature of the emerging sign is its self-regulatory potential. Its emergence can lead to the parallel emergence of another sign (see IN in Figure 5) the function of which is to block the first sign. A case reported by Vladimir Bekhterev—in the context of post-hypnotic suggestion-- illustrates the work of inhibitory sign:

> I suggested to a person in hypnosis that when he wakes up he must take a postcard
> from the table. When he woke up, he almost immediately looked around on the

table and his gaze became fixated on a certain spot. Do you see something - I asked, "I see a postcard." I said goodbye to him and prepared to leave, but he still keeps staring at the table. Don't you need to do anything? I ask. "I would like to take that card, but I do not need it!" -answers the man, and leaves - not having fulfilled the suggestion and obviously fighting with it (Bekhterev, 1903, p. 14).

The emerging meaning ("this is a postcard" and "I want to take it" [the suggestion]) is blocked by the inhibiting meaning ("I do not need it"). The example also illustrates the notion of circumvention strategies (Josephs and Valsiner, 1998) - meanings that override the previously constructed ones, to allow for new experience rather than be cycled in the middle of previous dilemmas.

Our ordinary lives give us examples of dialogical negotiation within the emerging sign hierarchy. The inhibitor sign can itself be inhibited (Figure 6) by yet another sign that gains a role higher up in the hierarchy. The usual story of a weight-watching person on one's birthday is an example of this internal dialogue: "I want that cake" → "but I am on diet, I should not eat it" → "but today is my birthday" (leading to eating the cake) illustrates such dialogicality.
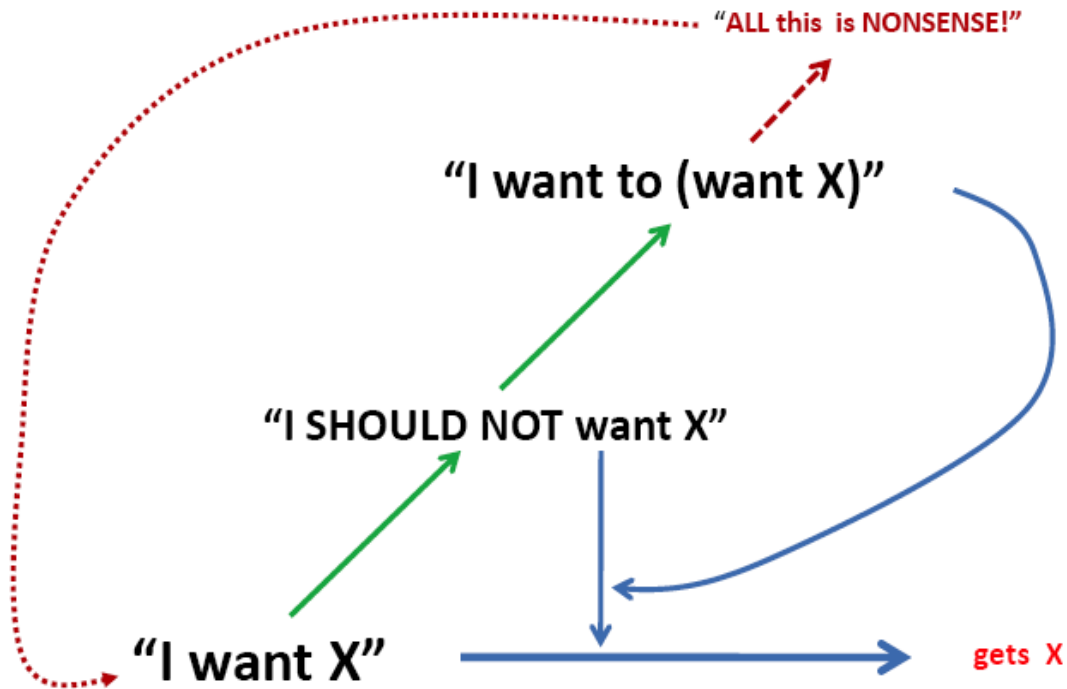
Figure 6. Extension of the sign hierarchy to include the Inhibitor of the Inhibitor and Demolish signs (D-signs- "all this is nonsense")

FROM DYNAMIC MEANING-MAKING TO SRT

Where do social represent*ions* enter into this scheme of sign hierarchy construction? As we can observe from Figure 7, this can happen at two levels—that of Obligation ("I should not want X") and Demolishing signs ("all this is nonsense"). While the whole process of semiotic hierarchy construction and demolition belongs to the process of social representing, it is only at adjacent levels of the sign hierarchy that social representations as cultural tools are brought in by the meaning maker.
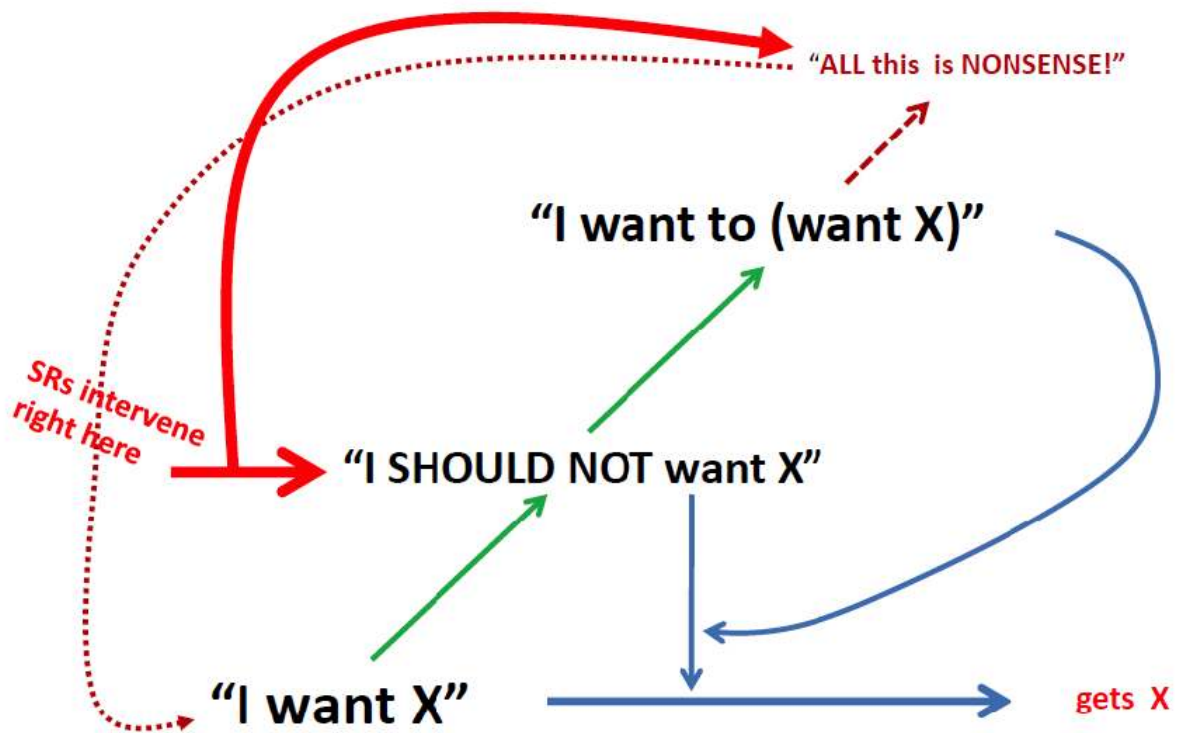
Figure 7. Locating social representations (as signs) in semiotic hierarchies

The social representations thus are in-between the realm of actions and the realm of willfulness. They enter into a *vertical dialogue* that gives us the tensions between personal will and social obligations:

{I AM} AND {I WILL}

|

{SOCIAL REPRESENTATIONS imported}

|

{I NEED} <> {I WANT}

Such vertical dialogue allows us to specify the precise *loci* in the human meaning-making processes where the insertion/import of social representations can enable - or block - human action. Such enabling and blocking activity is going on in everyday contexts all the time, ranging from simple action decisions in the here-and-now situations to complex life-philosophical

questions people ask themselves over months, or even years. For example, an inquisitive 17 year old girl Karen[13], living in Hamburg over a century ago, could not but address herself with a moral issue:

> One question occupied my mind for weeks, even months: is it wrong to give oneself to a man outside of marriage or not? I answered now in the affirmative, now in the negative.
>
> Only very gradually did I become certain that it is never immoral to give oneself to a man one really loves. If one is prepared also to bear the consequences. How did I arrive at this joyfully triumphant certainty? I don't know. I think a lot of things worked together. In the first place it was Shakespeare who helped me on the right track: "For there is nothing either good or bad but thinking makes it so." One should base every consideration of things human on this sentence. A girl who gives herself to a man in free love stands morally way above the woman who, for pecuniary reasons or out of a desire for a home, marries a man she does not love. Marriage is something only external (Horney, 1980, p. 61, diary entry dated to February, 1903)

Karen's struggle with the desire for love ("I WANT X" as in Figure 7) was countered by the social representing of moral norms ("being married" makes "giving oneself to the other" socially legitimate). She overcomes the inhibition by the moral imperative by developing a higher-level sign ("REALLY love"), together with a catalytic condition ("prepared to bear consequences") that eventually inhibited the moral inhibitor (status of "being married"). The new sign generated by the person (see Figure 1- GUIDANCE BY SELF) - acquires the status of a generalized moral imperative (free REAL love "standing morally above" that of marriage of convenience). Interestingly it is the role of reading fiction - Shakespeare's work -that becomes utilized as a condition that at first weakens the "marriage imperative" thus making possible to construct the generalized notion of "REAL love."

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[13] who later became well known in psychoanalytic circles as Karen Horney (1885-1952)

Social representing down (or up) regulates the system of meaningful action, by specifying the socially appropriate needs the persons may want to satisfy, as well as blocking the inappropriate ones. Yet the latter can still be fulfilled once the social representations are overridden by the willful person who exercises one's agency. The final higher-level semiotic organizer of the human psyche - and its actions - is the construction of the meaning I → WILL. Human beings are intentional actors.

However, most ordinary human beings are not particularly willful. Their social interdependence with the cultural world surrounding them includes down-regulation of the personal will. Human beings are susceptible to social suggestions from many sources - yet they can also ignore such suggestions. They can invent sign hierarchies that inhibit their own willfulness. Pierre Janet's description of the phenomena of "fear of action" provide fitting illustrations of the ways in which persons themselves stop their meaning systems from development (Janet, 1928). The person can oneself construct the inhibiting sign for one's possible actions. Consider one of Janet's psychiatric patients:

> Daniel, forty years old, is busy selecting a country home for his family: a particular house does not displease him and he is willing to rent it. However, immediately one thought invades his mind. Now he knows what in that house was appealing to him: *the rather beautiful monumental entrance door would look fine when draped in black above the coffin of his wife*. Another day he hesitates to go home, because *he would find the staircase crowded with bearers ready to carry down the coffins of his children* (Janet, 1928, p. 298, added emphases).

The emerging inhibitory signs block the possible action. Social representations of the funeral paraphernalia of one's family members become inhibitors of action. If such immediate construction of inhibitory signs generalizes, the person finally "arrives at the fear of life" (Janet, 1928, p. 309) which results in complete sadness.

It becomes apparent based on Janet's clinical cases how cognitive polyphasia is a necessary adaptation of the human *psyche* under the conditions of uncertainties of the social world. It matches the heterogeneity of that world. In contrast, both two homogeneous conditions of no

polyphasia - that of non-production of inhibitory signs (and hence - hyperactivity with bravado that can lead to accidents), and that of sole production of inhibitory signs—are dysfunctional. Both fear of action and fearless action are aberrant conditions for human survival. It is the construction of dialogical oppositions - of excitatory and inhibitory signs - that guarantees cautious move ahead in one's development.

GENERAL CONCLUSIONS

SRT provides our contemporary social sciences with a fertile analytic starting point for unification of sociological, historical, and psychological features of human social living. Moscovici has constructed SRT in ways that allow both processual -dialogical -and static directions of analysis to be achieved. Bauer and Gaskell (1999; 2008) have introduced time perspective into the SRT, first through the "toblerone model" (1999) followed by its extension into "wind rose" (2008). The advantage of their models over the hierarchical dynamic semiosis idea outlined in this paper is the inclusion of the communal sharing - starting from the minimal case of two actors -of the social representing process in line towards a future project. Representation is indeed a "time Gestalt" of "inter-objectivity" (Ibidem, 1999) -a socialized form of Lewinian life space.

Temporality is crucial for making the SRT into a process-oriented theory (Castro and Batel, 2008). Bringing in temporality into the social representing process allows one to study - longitudinally -how the tools (social representations) transform in their process of being used (Sammut, Tsirogianni & Wagoner, 2012, p. 495). It can also transform initial "sharing" of the object into an asymmetric state of non-sharing. "*Our*" commonly shared "cute friend" becomes "*my* boy/girlfriend", or "your wallet" will soon "be mine" (i.e., the pickpocket's dream) -as the future projects unfold. Social representations can be tools for both creating unity ("we") and opposition ("we"<>"they"). Emergence of new forms of social representations can be illustrated by computer simulations using neural network models (Thévenet, 2010).

However, simply recognizing the relevance of time is not sufficient to describe the work of social representation *across* time. Here in continuation with my earlier effort (Valsiner, 2003) I looked for the processes of social representing through the construction, proliferation, and

abandonment of signs. It is an effort towards a semiotic extension of the theory of *social presenting* of the ongoing life experience—to oneself, and to others. The first "social other" to the sign hierarchy constructor is not another person "sharing" the same object, but *oneself* in one's imaginary next future moment. As such, the notion of *representation* in the framework of SRT is here treated as a process of forward-oriented presentation. The "re"added to *presentation* in SRT is viewed as the constructive borrowing of the available memories of the past in the present, constructing the future (Valsiner, 2011).

The field illuminated by the Social Representation framework - the beautiful invention that is bigger than a theory (Jodelet, 2013) - needs to move in the direction of micro- and macro-genetic process analytic perspectives that are re-emerging (Abbey and Surgan, 2012) and that could utilize the value of social representation to its fullest. That would entail charting out of the process mechanisms that hierarchically regulate the flow of meaning construction in any social context. Predicates of the object X -otherwise known as social representation_s_ -are higher-order signs that guide, enhance, maintain, or block, the functioning of the signs at lower levels of the semiotic control hierarchy. As generalized and often hyper-generalized signs these representation_s_ look ephemeral[14] - yet they function with power that may surpass that of visible signs. They are parts of the general semiosphere (Raudsepp, 2005) within which thematic anchoring and objectification create unique personal pathways through the mazes of possible meanings.

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[14] and at times may take the form of purposeful absence of a sign - as in the case of "zero signifiers" (Ohnuki-Tierney, 1994)—a social representation as a predicate can be that of the form of expected-but-absent sign of heightened functionality.

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