

## Beyond Methods to Open-Systemic Methodology in Contemporary Cultural Psychologies

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**ABSTRACT.** Varieties of cultural psychology that have emerged since 1990s have charted out new domains for the study of the human *psyche*, but they have failed to innovate methodology. The main reason of this discrepancy is the overlook of the open system nature of the processes that are involved in the Gestalt-building phenomena. That overlook is axiomatically based, and solution to the methodology problem needs to begin from replacing the ontological axiomatic focus on *being* by that of *becoming*. This move is limited by the socially normative constraints on abduction that regulate innovation in any area of knowledge at any given time. What follows from the basic developmental perspective is the need for **Forward-Oriented Methodology (FOM)** where the traditional framework of input (“independent variables”) and output (“dependent variables”) comparisons are eliminated, and investigation is re-focused upon the ongoing construction processes involved in the transition of the system from the past to a new state guided by future imagination. FOM requires the replacement of traditional quantitative methods in psychology based on the belief in the fixed nature of phenomena (exemplified by the Gaussian curve) by qualitative focus on the context-constrained openness to novelty. This results in the change of focus in the THEORY<>METHOD relations within the Methodology Cycle to developing a class of methods **Context-Facilitated Microgenesis (CFM)**. Elaborations of such methods—in Bartlett-Wagoner memory research (**Constructive Confabulation**) and narrative perspectives (**Emerging Narrativity**) will be provided.

Cultural psychology—in its different versions<sup>1</sup>—is on the move. Yet it is not very clear in which direction it is moving. Surely it has become an increasingly fashionable label over the last decade when many traditional identity labels (social psychology, cross-cultural psychology) have become re-labeled into cultural psychology. But there seems to be no

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<sup>1</sup> I include here variety of perspectives that have used the term (Richard Shweder’s and Michael Cole’s pioneering efforts in the USA from 1980s onwards) as well as others: Ernst E. Boesch’s symbolic action theory and its advancement by Lutz Eckensberger; Hubert Hermans’ Dialogical Self Theory and its Portuguese extensions by Joao Salgado and Miguel Goncalves; Cor Baerveldt’s enactivism; Carl Ratner’s macro-cultural perspective, and new versions of activity theory (Mammen and Mironenko, 2015), and the different perspectives represented in the “Aalborg Constellation” of ideas about creative human minds.

breakthrough in the methods used in these re-labeled perspectives. The need for such breakthrough is clear (Power et al, 2017), but the precise alleys of how to proceed need elaboration. My claim here is that it is precisely the innovation in methods construction—based on general methodology—that would determine if cultural psychology has any future.

The reason for such claim is simple—any investigation into human psychology needs methods that fit the phenomena under study. In the case of human psychology these phenomena—similarly to all of their counterparts in the biological and social realms—are of open systems nature (Valsiner, 2017a, chapter 2). Open systems have clearly defined features—they depend upon *exchange relations* with their environments, they are characterized by the principle of *equifinality* (and *equipotentiality*—Valsiner, 2017b on the developmental perspectives of Hans Driesch), and their future states cannot be predicted from their previous organizational forms. These characteristics are completely overlooked in the expositions of psychology’s current sets of methods—both qualitative and quantitative—leading to a major mismatch between what psychology claims to be its “scientific method” and what psychological phenomena are like. Such mismatch is inexcusable for any discipline that aspires to be a science. For example, the open systemic nature of organisms’ existence is characterized by two major features—possible multiple pathways leading to a similar outcome, and non-predictability of the precise outcomes from the starting data. Neither of these are considered in the prevailing methodology of psychology.

Science is a search for surprises. Roots of human inquiry are in the surprise about the world we live in. However, in the case of the sciences looking at the human *psyche* in its various aspects our everyday surprises about our own and others’ ways of being are tempered by the normative nature of the science of psychology (Brinkmann, 2016, Valsiner, 2018). *The processes of abduction in psychology are constrained by that normativity.* To understand the socially constrained nature of scientific explanation we need to look at the processes of such constraining of abduction processes.

### Limits on abduction

Abduction is the way in which science breaks out from the vicious circle of inference making from “the data” (induction), linked with the closed reification of already set general rules in “the data” (deduction). In its classic form (introduced by Charles S. Peirce), abduction appears in comparison with induction as a preparatory step -offering suggestions- a form of post-factum re-construction of causality.

Peirce insisted in his logical character

The surprising fact C is observed  
But if A were true C would be matter of course  
Hence, there is a *reason to suspect* that A is true

(C.S. Peirce--Harvard Lectures on Pragmatism, CP 5.188-189, 1903, added emphasis)

The triggering condition for abduction is a *surprise* about some outcome. It is the beginning of the whole operation of reasoning, when some belief is broken up—and a

new one is constructed. Yet that construction crosses the border of the PRESENT in irreversible time, asserting that some other factor (A) could have been there in the past, and produced the surprising C. Thus, abduction is a form of retroactive hypothesis construction—projection into the past that explains the surprise in the present. As such, it has interesting limits on the re-constructed possible history itself (Figure 1).

Figure 1. Abduction process as retroactive explanation search

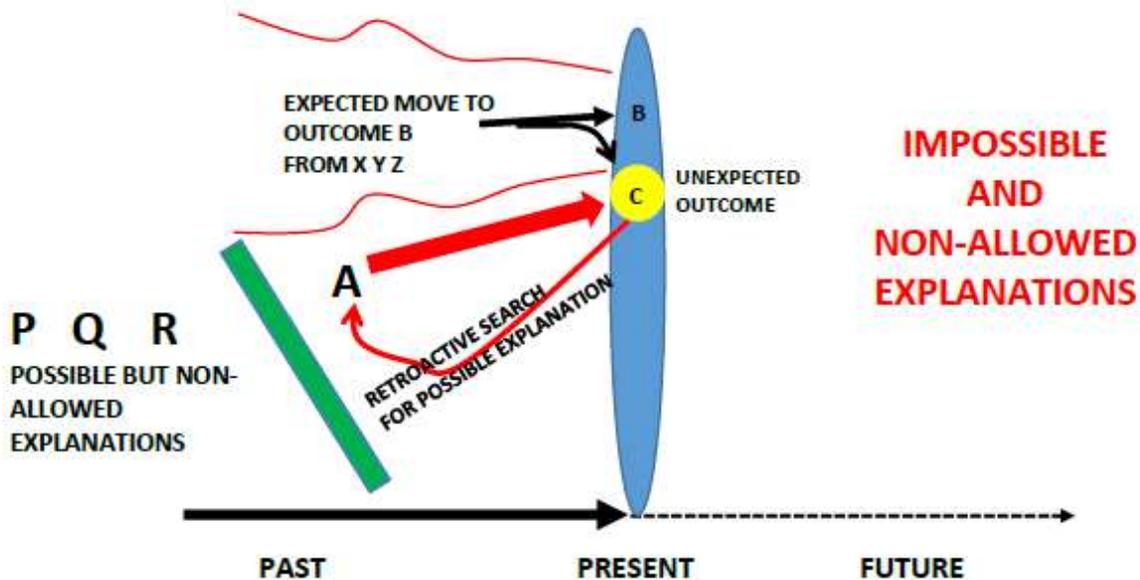


Figure 1 shows the location of the abductive search which is necessarily retrospective as long as causal explanations for the surprising event C is assumed. The search happens within the field of allowable but previously not considered explanations. Deciding upon A in that role and eliminating surprise about C adds simply a new causal connection ( $A \rightarrow C$ ) to the previously accepted ones ( $X, Y, Z \rightarrow B$ ). Yet any move beyond the present is hypothetical—discovering A is an act of reconstruction of the conditions of the past, while search for causal connections from the future is impossible in the causal explanatory scheme. Possible—but not allowable—“candidates” for the abductive search (P, Q, R) remain outside of the realm of the allowable new explanations. Possible future events are considered not only impossible (as explanations for the present) and non-allowable<sup>2</sup>.

<sup>2</sup> Unless specified in abstract but yet mechanistic terms—such as attractors in Dynamic Systems Theory that are projected into the future as constellations that mechanically “attract” the ongoing process to them (in analogy to gravitational fields). It is an abductive explanation (A in Figure 1) projected onto the future, and reversed in function (from “cause” to “attract”). In contrast, science traditionally has been more than reluctant to accept notions of the system by itself striving towards a future location (“attractor”). If future is an arena for abductive inference it is so in external terms—“pushing” or “pulling” the system—rather than “directing” the “striving” by the system itself.

The open question rarely (if ever) asked here is—*where does the set of acceptable new explanations for the surprising outcome originate?* The borders of that set are constantly being negotiated in different sciences. Are formal back-projections from an outcome (e.g. “intelligence test result”) to its hypothetical essential causal factor (e.g. “intelligence”) acceptable as post-factum acts of abductive inference? Psychology is filled with such back-projections—by what convention are these made acceptable as scientific explanations, while other—similar in structure (e.g. “my current emotional turmoil is caused by the anger of my ancestors’ spirits”) ones are outside of the border of scientific explanations? Attempted border crossings in science are vehemently resisted, as Daryl Bem’s (2011) demonstration —by conventional statistical means —of the presence of the “psi phenomena<sup>3</sup>” and its aftermath for social psychology (see Enigber, 2017 for a journalistic story of the “Bem Case”) amply shows. The social normativeness of the human *psyche* operates also at the meta-level—the border of the acceptable and non-acceptable retroactive (abductive) explanations is organized socially by way of affect-laden meanings<sup>4</sup>. The set of acceptable explanations for a surprising outcome is ideologically marked-- P, Q, and R (Figure 1) are not only non-allowed but emphatically dismissed.

### ***Borders of science and non-science.***

Science is a contested social field of inclusions and exclusions. Various “border fights” about what is and what is not an adequate scientific explanation have a venerable past. Historically, the first border zone of that negotiation is that of allowability of religious versus non-religious explanations—moving from “God’s will” to “nature” released the

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<sup>3</sup> Bem crossed the traditional psychology’s social “taboo line” by claiming that future can “cause” the cognitive processes in the present—claiming that the phenomena of “precognition” (conscious cognitive awareness) and “premonition” (affective apprehension) empirically prove the presence of parapsychological reality. His demonstration of the reversal of the time arrow of causality—socially accepted as moving from past to future to that of moving from future to past—is beyond the boundary of acceptable abductive explanations in non-developmental (ontological) cognitive and social psychologies of the 21<sup>st</sup> century. From the perspective of cultural psychologies which focus on imagination as the central process linking the past and the future, and that give up the notion of “causality arrow” in favour of forward-oriented constructive pre-adaptation to possible future states, Bem’s findings do not prove the presence (or absence) of the “psi phenomena” but demonstrate the relevance of constructive imagination (Marsico and Tateo, 2017; Tateo, 2016, 2017, Zittoun, 2016a, 2017a, also covered in Lecture I—Valsiner, 2018), albeit revealed in traditional experimental settings using artificial stimuli and traditional statistical inference. Theoretically the notions of “precognition” and “premonition” are contemporary versions of the notion of *apperception* that was a standard framework for understanding future-oriented psychological phenomena in 19<sup>th</sup> century psychology (Lipps, 1903)

<sup>4</sup> These affect-filled borders are built around normativity operating within the whole Methodology Cycle (Branco and Valsiner, 1997, Valsiner, 2017a) and give rise to different versions of “doing science” based on different assumptions about the phenomena under study. The axiomatic differences between Japanese and Western primate researchers about the nature or relating with the primates under study (Strum and Fedigan, 2000) give rise to different styles of treating the phenomena and to different styles of methods construction. If escalated within social collectives of scientists such axioms may turn from organizing ideas of research to deep beliefs and demonstrate the transition of an axiomatic bases of research to ideological orthodoxies and their outbursts into “boundary defense” between perspectives and disciplines. The presence of the “fights” between “qualitative” and “quantitative” kinds of methods in psychology (as well as the “truce” in that war in terms of agreeing on “mixed methods”) is an example of such transfer of axiomatics to orthodoxies.

natural sciences from the normativity of the assumed deities to the new all-encompassing set of allowable explanations in terms of “laws of Nature”. Over the period of 16<sup>th</sup> to 19<sup>th</sup> century in Europe this transition slowly took place, culminating in the triumph of the evolutionary ideas of the 19<sup>th</sup> century and the natural sciences of our times. Language use is often the means for such border negotiations. Scientists can be at times actively struggling with their language use in their scientific enterprises. Thus, Ivan P. Pavlov, almost two decades after receiving the Nobel Prize, proudly declared

For the last twenty years I have studied the highest nervous activities of the dog, the functions of the cerebral hemispheres of the brain. These functions I have studied only physiologically on strictly physiological grounds. *I never use any psychological conceptions or terms.* (Pavlov, 1923, p. 359, added emphasis)

Pavlov’s claim is rhetorical<sup>5</sup>—establishing the limits upon creativity in physiological science by ruling out psychological terminology. The struggles of ruling out different versions of language use in science are examples of normatively “ruling in” the set of allowable explanations for the given science, thus setting up social limits to the abductive inference processes.

***Psychology’s language limits on abduction.*** In psychology the negotiation of the limits on abduction has been evident in the basic terminology of the discipline. The 19<sup>th</sup> century focus on the object of study being “the soul” (*Seele*) is notably outside of the range of possible explanation domain a century later where “mind” or “brain” dominate the realms of normative inquiry<sup>6</sup>. Borders of perspectives in science are terminologically inserted, socially fortified (e.g. “brain” is the expected explanation domain in contemporary neuroscience, while “formations on the skull” in the tradition of phrenology no longer are), and set the stage for re-unification of the science by calling for inter-disciplinary scholarship. We in different fields of science insist first on its demarcation borders—and then—on crossing the very same borders we have set for new ways of getting to knowledge.

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<sup>5</sup> Pavlov has been reported to fine his co-workers for using psychological language. Yet he himself—contrary to his claim in 1923—was not immune to it. In fact, during the 1917 revolutionary turmoils Pavlov claimed the presence of “reflex of freedom” in dogs (who were trying to break out from the laboratory confines—Baars, 2003). “Freedom” is certainly part of a physiologist’s lexicon, and for us indicates the relapse to philosophical and psychological terminology that Pavlov himself had fiercely outlawed.

<sup>6</sup> My preference for the use of *psyche* is a terminological trick to keep the original explanations in terms of the *Seele* open for inquiry while not reducing the set of explanation to the acceptance of common sense terms that “soul” would indicate. The use of *psyche* designates a realm of psychological scientific discourses that keep the discipline autonomous in not allowing it to be reduced “downwards” to physiological or (nowadays more popularly) genetic explanations, nor “upwards” to reducing human psychological phenomena to cultural texts or myths. The agentive human *psyche* needs to be studied as such—intentional, affective, goal-setting, and self-reflexive.

## **The stumbling scientist: struggling to get out of self-created limbo**

Scientists are explorers. As such they are constantly in the liminal space between what is known already (as knowledge) and what is not (yet). They operate in the space between post-knowledge and non-yet-knowledge. Scientific effort

...reveals new knowledge, but the new vision that accompanies it is not knowledge. It is *less* than knowledge, for it is a guess; but it is *more* than knowledge, for it is a foreknowledge of things yet unknown and at present perhaps inconceivable. Our vision of the general nature of things is our guide for the interpretation of all future experience. Such guidance is indispensable. Theories of the scientific method which try to explain the establishment of scientific truth by any purely objective formal procedure are doomed to failure. Any process of enquiry unguided by intellectual passions would inevitably spread out into a desert of trivialities (Polanyi, 1962, p. 135).

Within this liminal field of search for knowledge that goes beyond the currently known, the scientist sets the sail towards approximate, appealing, but not yet fully known directions. This is the purposeful exploration task for the researcher—both to know which direction to take, but not know in advance what might be found as a result of the exploration endeavor. If one knew in advance what the end result of a scientific inquiry were the research effort would be either unnecessary, or surplus<sup>7</sup>.

### ***Normatively positioned stumbling scientists***

After the normative framework for scientific inference—inductive, deductive, or abductive—is set, the researchers are guided towards an encounter with their phenomena. Most importantly,

Many scientific discoveries are the result of the phenomenon we call stumbling. This approach sees errors as positive. After all, we talk about “coming across” or “stumbling across” a great offer, or a good idea. Again, stumbling can be painful if it does not result in the person regaining balance in a constructive way, it is a positive thing in the sense of being generative for the imagination. To “stumble on things” (in this figurative meaning) is a precondition for being able to see the world in interesting ways. It is when stumbling that we can break with the habits that characterize most of our everyday lives. (Tanggaard and Brinkmann, 2018, pp. 94-95)

Scientific search for creating new knowledge requires purposeful stumbling in the field of phenomena one studies. This practice of “stumbling upon data” constitutes the starting arena for developing empirical research techniques that focus on the structural transformation of intermediate forms in the making of new ones.

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<sup>7</sup> Jan Smedslund has over the past five decades criticized psychology’s empirical enterprise as pseudo-empirical—proving empirically what is already known by the tacit knowledge base of persons in a given society.

Researchers' stumbling upon data is not random. It is in the process of purposive guidance of young researchers towards the specific starting positions from where to go on and stumble that is built into the higher education system. At times it is delimited (Eckerdal, 2018), at others emphasized to be enhanced (Tanggaard, 2018). The first research task for Japanese primatologists is that of going and observing the primates – in wild or in captivity—to get the *feel into* the lives of the animals (Asquith, 2000). Young scientists are sent to “stumble” onto phenomena they feel are worth the while of further study. In contrast, the North-American primate research tradition would find such use of *Einfühlung* to be that of a “bias” (Strum, 2000, p. 492) that should be avoided by the use of standardized observation manuals that would distance the researcher from the animals – and from discovery of anything surprising. A manual for observations limits the possibility of discovery of new phenomena. Likewise, a pre-given format of a method pre-determines the limits of the knowledge that it can produce.

**Limits on knowledge: linear techniques**

Psychologists have been stumbling in the direction where they cannot find relevant questions. So they displace the questions—and get answers that are mis-fitting with the phenomena. This problem is basic—open systems lead to non-linearity of organization—while our methods in psychology adopt linearity as an ideal. The General Linear Model that is axiomatically accepted in psychology leads to the construction of linear techniques. The latter lead to incremental data accumulation that no longer represent the key issues of the phenomena from which they are derived.

The ordinary technique of a rating scale is a good example. Since early 2000s I have been interested in the encounters of ordinary human beings with the demands of linear graphic meaning construction—rating scales (Rosenbaum and Valsiner, 2011; Wagoner and Valsiner, 2005). The usual rating task consists of an object and a graphic pre-given drawing task:

<TARGET OBJECT>

ONE END (-) |-----|-----|-----|-----| THE OTHER END (+)

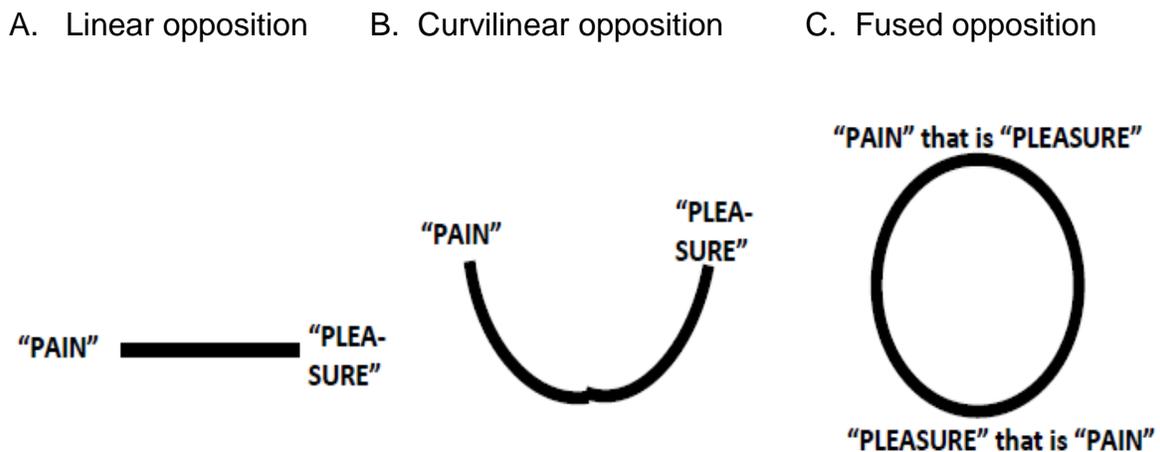
It is a graphic method that presumes that human meaning making processes are (1) linear opposites that (2) have fixed maximum and minimum positions (end points are pre-given) which (3) represent affective polarization. The ratings demanded from the respondent are point-like markers which are assumed to be quantifiable as ratio scale “measures” and comparable across respondents.

Each of these presumed properties of the scale can be proven wrong from a position of careful consideration of complexities of the human *psyche*. First, even if human feelings operate in terms of opposites, these need not be mutually exclusive (if A then the opposite—non-A—cannot exist). Rather, the opposites are likely to be inclusively separated—opposites relate with each other in specifiable ways (A relates to non-A—Josephs, Valsiner and Sorgan, 1999). Secondly, the *maximae* and *minimae* of the oppositions need not be fixed—especially as the opposites are assumed to be affective in nature. Thus, an end point VERY BAD (or its presumed opposite—VERY GOOD) can

be transcended any moment (e.g. not VERY BAD but AWFUL, or not VERY GOOD but EXCELLENT). The respondent to a scale has no opportunity to indicate feelings of such affective overflow, which should be imperative if affective polarization is implied by the method. Finally, the transformation of the graphic judgment task (which is to put a mark on a point on the scale where it feels “right”) into ratio scale “measures” is a magical trick of turning a minimal introspective process (which makes such marking in principle possible) into fixed and maintained data. The act of rating is unique to the respondent in the here-and-now evaluation moment. The actual rating is a trace—an outcome of the unique process. A rating scale is a nominal scale “measure”—a qualitative task within given graphic and meaning-marking confines. It is basically a drawing task of minimal drawing needs (putting a mark on a line between two end points). Yet the results are treated as if the ratings represent some continuously existing inherent quality in the object that is being rated.

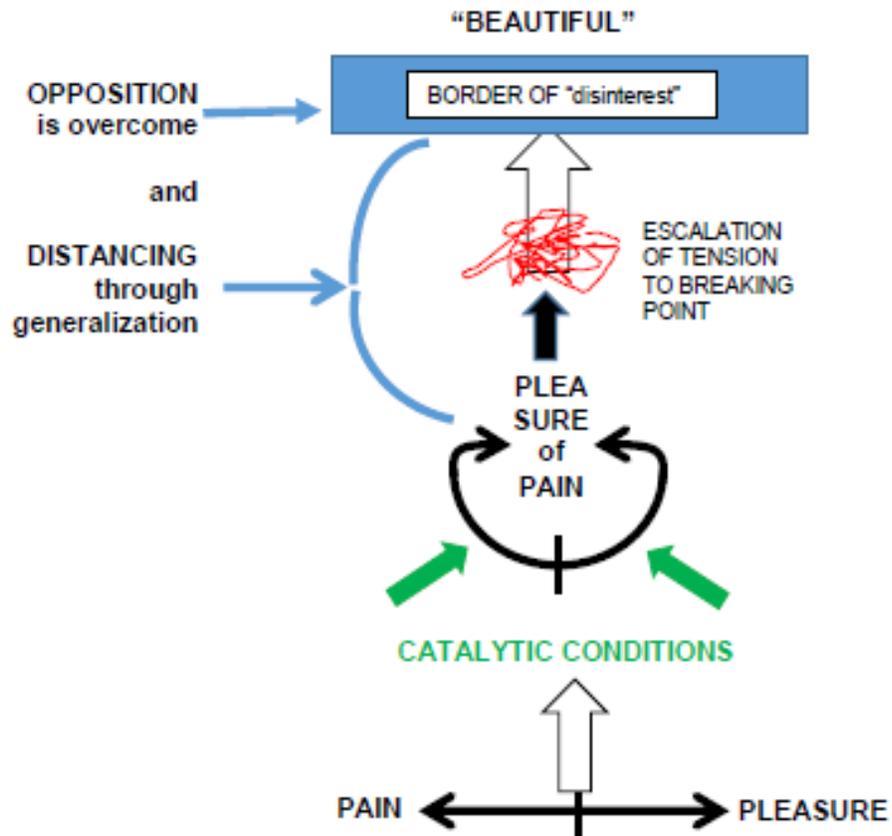
As a qualitative method, the rating task can be viewed as an oppositional affective process of constant tension between linearity, curvilinearity, and sphericity of the meaning construction processes. In other terms—the form of the opposition assumed by the scale can be transformable (Figure 2). The linear (presumed) opposition can take a curvilinear form, and end up in the circular fusion of opposites (where “pain” can become “pleasure”, and vice versa). An alternative to the fusing of the opposites in the curvilinearization process would be separation of each into its own neutralizing opposites (“Pain” <> “non-pain” and “Pleasure” <> “non-pleasure”), or a *distancing synthesis* of a new generalized and hyper-generalized feeling (Figure 3)

Figure 2. Curvilinearization of the field of opposites



The opposites of an affective counter-position (A.) are transformed into curvilinear relation (B) and finally united as a whole in which the distinction disappears and the unity of opposites is the new merged quality. Aside from the fusion of the opposites into a new whole the psychological processes can involve “dialectical leaps” beyond the unity of the opposites into new, previously not present but at the moment of emergence, uniquely real phenomena (see Valsiner, 2015 on aesthetic hyper-generalization—Vygotsky’s analysis of the last sentence of a short story). Human aesthetic synthesis (Baldwin, 1915)—creating the “disinterested interest” in the objects considered as beautiful (Figure 3)—are examples of the *aestheticological* focus (Klempe and Lehmann, 2017, pp. 76-77) that Alexander Baumgarten introduced in mid-18<sup>th</sup> century. The focus on such poetic moments in ordinary flow of human life experiences is the key to new methods construction (see below on emerging narrativity).

Figure 3. Qualitative “leap” in synthesis of generalized affect (aesthetic synthesis)



***Importance of immersion within the phenomena***

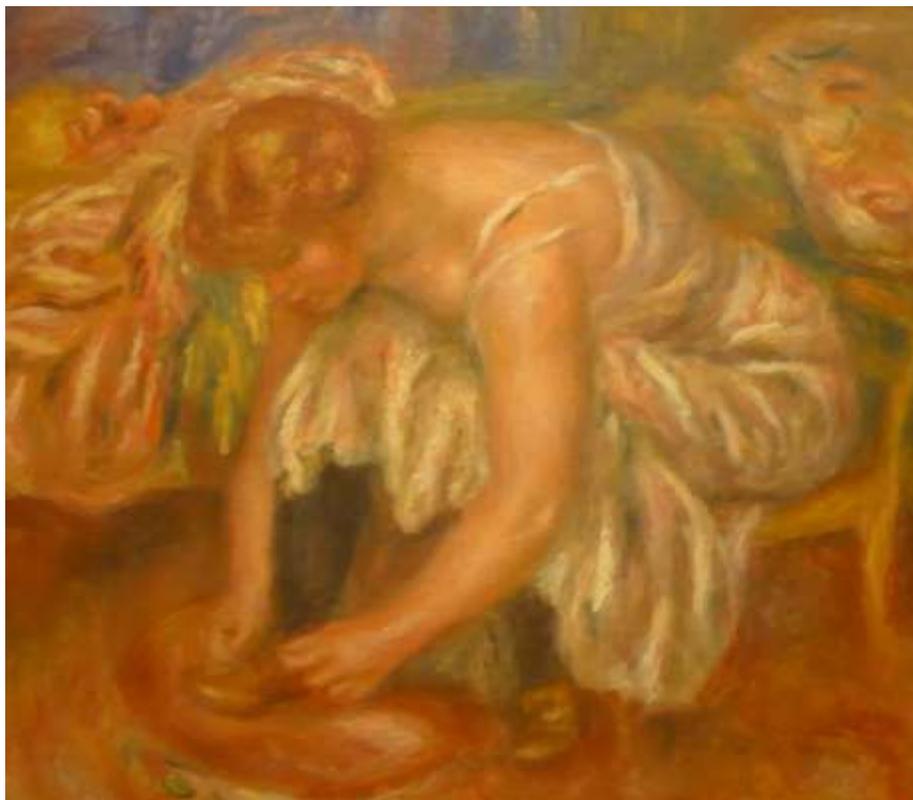
The Japanese-American comparison of the orientation to understand the lives of primates is directly informative for cultural psychologies of our times. Feeling intuitively into the phenomena (*Einfühlung*) is the starting point for any research (Branco and Valsiner,

1997). It is the moment of discovery of something new in something that looks very ordinary—shared by scientists and artists (Figure 4).

The artist has no way out of the full dependence upon the whole. Any painting, sculpture, or even an installation is necessarily a whole to which its author has given directional form through the unity of the figure and the ground. Figure 4 is a good illustration of such directionality—depicting a mundane everyday activity (tying shoelaces) Renoir is actually depicting the whole—the woman embedded in her immediate setting. The act of tying shoelaces is only a small detail—albeit one to which the title points—of the whole. The whole is presenting the sensuality of the total ordinary act—the kind of whole within which cultural psychologists as researchers need to be immersed in order to capture the general nature of very ordinary and transient aspects of *being* human.

The bodily being comes in the context of the semiotic skin (Nedergaard, 2016) that re-directs our research focus from the body in its original form to that of layers of meaningful coverage. Auguste Renoir (1841-1919)—after being well known for painting what is conventionally labeled as “nude women”—towards the end of his life began depicting women doing very ordinary tasks—dressing or washing themselves. There was—for the artist—something extraordinary in the ordinary.

Figure 4. Auguste Renoir's *Woman tying her shoelaces* 1918 (London, Cortauld Institute)



We find a similar situation in cultural psychologies—the feeling into the socially embedded complex phenomena is the starting point for further methodological thinking. The development of methodology of open systems requires new ways of general thinking so that new kinds of methods can be developed. It is my deep conviction that cultural psychology as a general orientation of psychological science towards the study of higher psychological functions cannot survive unless they develop their theoretically based and phenomena-appropriate methodologies—which are those of open systemic phenomena.

## **Science of Open Systems**

Cultural psychologies study the human ways of being as open systems (Valsiner, 2017a, chapter 2). This sets them apart from rest of psychology where the issue of systemic organization of psychological phenomena has not been of concern since the disappearance of the Gestalt/Ganzheit orientations from the forefront of science by the 1930s. Yet the open systemic focus sets up new rigorous demands for methodology:

**WHAT to study?** Meaning construction processes within social settings—in-between the settings and the intentional actor who pursues one’s goals within these settings. It is ordinary life phenomena that exemplify the empirically relevant domains—determined by the theoretical focus.

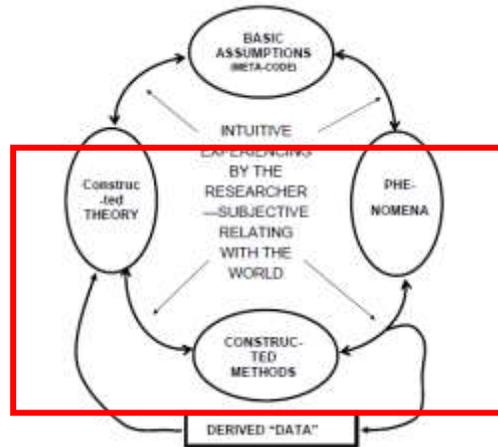
**WHERE to study?** In different settings where the goal-oriented nature of human conduct is observable. This means on the borders of the past and future, and of inside and outside of the meaning-making person or social unit (community, etc.).

**HOW to study?** Given the uniqueness of cultural-psychological phenomena the study, the general category of methods that is adequate is that of conditional-genetic kind (Lewin, 1927) at different levels of organization (microgenesis, mesogenesis, macrogenesis) with a special focus on the interpenetration of the levels into one another as well as the mechanisms that limit such links between the levels.

**WHY to study?** To learn about innovations human beings introduce into their lives that would lead us to advance general understanding of basic human psychology. The goals of cultural psychology—search for universal principles—are similar to all other basic sciences.

All these questions have—over the last 20 years – been centered on the Methodology Cycle (Branco and Valsiner, 1997, Valsiner, 2017a, figure 3.1.). It is an effort to restore the mutuality of phenomena and theoretical constructions in the building of psychological knowledge. A secondary role of the Cycle was to restore the confidence in the educated intuition of the scientist who is creating one’s own version of the Methodology Cycle (Figure 5)

Figure 5. Methodology Cycle



Out of the whole cycle, my focus here is on the construction of methods at the contrast between theoretical constructions and access to the phenomena (the red square). The construction of new methods is central—but under the conditions that the data adequately represent theoretically relevant features of the phenomena.

### ***Learning from far away—astrophysics and development?***

Cultural psychology can learn from GW170817. This claim indicates that there are no insurmountable barriers between sciences as far away from each other as astrophysics that deals with objects very far away, and cultural and developmental psychology that look at phenomena here-and-now. Both deal with the difficult task for understanding unique processes that lead to qualitative irreversible transformations. A child irreversibly becomes an adolescent, “emerging” adult, “real” adult, and emerging elder. Very far away, neutron stars transform into black holes or supernovas. Of course the latter are in no way self-reflexive about their own being—while we are. But the task of making sense of unique drastic qualitative transitions is shared between developmental psychology and astrophysics.

GW170817 is the designation of a gravitational wave that was recorded by the LIGO and Virgo Consortiae on August 17, 2017. It lasted 100 seconds, resulted in the irreversible collapse of two neutron stars into a qualitatively new form. The event took place 130 millions of light years from us. The hyper-large stars collapsed and formed a *kilonova*<sup>8</sup> (SSS17a) which emitted string burst of gamma waves 1.7 seconds after the merger had taken place. The result—a new astronomical object—could be traced as a new formation months after (Shappee et al, 2017).

For astrophysicists such rapid (few milliseconds) qualitative transformations of very large into very small celestial objects are a natural part of cosmic being. There is no need for creating specifically “developmental” astrophysics since all astrophysics looks

<sup>8</sup> The notion of *kilonova* has been introduced into astrophysics in 2010—1000 times brighter object than other (super) novas, emitting a strong gamma ray burst at the collapse of binary neutron stars into one another (spiral decay of the orbits). It was first detected in 2013; the GW170817 detection of gravitational waves leading into kilonova is the second (but best) observation of the phenomenon.

for such qualitative transformations. The stability of the celestial universe is in its perpetual movement that involves the “birth” of new celestial objects and the demise of previous ones. The astrophysical universe is inherently developmental and qualitative in its core. Yet the parameters of these qualitative leaps are detected in quantitative fluctuations of recordable waves—but these tell a story of qualitative kind.

There is no opposition in astrophysics between “qualitative” and “quantitative” approaches. Instead, there is social selectivity of potentially productive in contrast to less likely—yet good to have in the public domain—ideas. The creation of the story is itself embedded in the social organization of the science—the freedom of expression in the science of astrophysics (publication) is paralleled by the freedom of reception (reading) that renders the proliferation of a basic breakthrough to the whims and wishes of deeply intuitive basic scientists (Collins, 1999). As research projects like those in astrophysics require large team collaborations between various academic institutions, the intuitive scientists often enter into collectives where it is teamwork and administrative management— not to speak of substantial funding— rather than intuitions that lead the movement towards scientific goals.

The final success of the LIGO-Virgo teams in 2015-17 in detecting gravitational waves was preceded by hypotheses published since 1960s which could not be tested by technology of half century ago. The “dormant” (=little read or remembered) theoretical ideas led the development of technology that finally made it possible to detect the predicted waves, leading to the Nobel Prize in physics awarded in 2017 to the leaders of the teams. In science, theory leads invention of new technologies. In psychology, new technologies lead the repetition of old ideas in new empirical practices.

For our methodological tasks in cultural psychology there are further useful lessons to learn from gravitational astrophysics. First, the focus of observation of relevant phenomena need to cover as wide a field as possible. In terms of human ways of being it is the realm of all aspects of living—day and night—that can be productive in generating relevant phenomena for further analysis. Secondly—and in ways that reduces the enormous observational demands on observing myriads of unique events—the observation direction can be intelligently set. If gravitational waves researchers expect to detect such waves within the dynamics of mutually linked neuron stars—the recording of the sights of such stars (rather than of every place) will set the stage for empirical research. Similarly, if a cultural psychologist posits that it is moments of rupture, rather than those of harmony, that leads to the making and use of symbolic resources (Zittoun 2006) are the expected *loci* of such rupture—in ordinary lives or in laboratory conditions, or in extreme new circumstances—that need to have observational priority. Here societal organization of expected life-course transitions that are often marked by rituals provides hints for where and when relevant phenomena might come into focus. Thirdly—like in the case of successful recordings of traces of gravitational waves, the observations or researcher-based elicitation of object phenomena are transitory—the trace left is that of the event *that has already passed*, rather than one that stays in existence after it has been detected. What we observe now as an event “out there” took place 130 million (Earth) years ago—simultaneity of our observation and the event is out of the question.

This means that all psychological data are traces—indexical signs in terms of C. S. Peirce—that represent events that have occurred in the flow of irreversible time. The data are created on the phenomena of the (immediate) past, but interpretations are to be

applicable to the (indeterminate) future<sup>9</sup>. As trace data, they represent the processes of unfolding a lawful phenomenon there-and-then, while our analysis of such traces happens here-and-now.

### ***Cultural Psychology: Science of inevitably unique events***

Methodology of cultural psychology is solidly set on the foundation of idiographic science (Molenaar, 2004, Salvatore, 2016, Salvatore and Valsiner, 2010; Valsiner, 2015a, Zittoun, 2017a). This version of generalizing knowledge is set up to function on the basis of single cases (or—“samples” of N=1) which are viewed as systems constantly relating with their Umwelten. Case studies are the major information source in all sciences-- for the simple reason that they are analyzable as wholes where the phenomena are not lost. The open systems nature of the psychological phenomena make them unique (Valsiner, 2015). The Methodology Cycle needs to fit the analysis to future-oriented phenomena which—once recorded—are already a part of the past. This is the cruelty of irreversible time.

## **Forward-Oriented Methodology**

It is appropriate—given the arguments above—to introduce a general category of **Forward-Oriented Methodology (FOM)** where the traditional framework of input (“independent variables”) and output (“dependent variables”) comparisons are eliminated (Valsiner and Brinkmann, 2016), and the methodological creativity is re-focused upon the ongoing construction processes involved in the transition of the system from the past to a new state guided by future imagination.

This re-focusing is revolutionary for the human sciences. It replaces the basic axiom of the ontological human sciences—the belief in the normative power of the normal (Gaussian) distribution—by the ***axiom of inherent directionality***. When the axiom of normal distribution prescribes to us a world-view of the being of the objects as they are (and their distribution by the Gaussian curve), the axiom of inherent directionality prescribes to us the view of objects with at least one inherent disposition (direction) to move from the present state to some other state. The difference between the two axioms is illustrated by interpretations of the same statement:

“At age X I am young”

By the Gaussian axiom this statement is accepted as a given, and the actual value of X is being put into a class of ages which is normally distributed (e.g. “young” means any age between 20 and 40 with average of 30). Outliers (e.g., a 70 year old person making such statement) would be dismissed as aberrations to the “normal distribution” (“she is not young at age 70”).

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<sup>9</sup> Including any claims made from the phenomena transformed into data that are made ontological—freed from the confines of irreversible time and context in the process of abstraction. A statement “I am shy” can refer to the specific way of *being* (being shy within context X), but as an outcome of the process of being it becomes interpreted as ontological statement (e.g. “I am shy”= “in me there is the property of SHYNESS that makes me act shy”)

In contrast the inherent directionality axiom prescribes to us further inquiry into the statement:

“At age X I am young” (but I know I will grow older)  
 “At age X I am young” (but not as young as I was before)

Or even

“At age X I am young” (and I wish to be older)  
 “At age X I am young” (and I wish to be younger)

Every phenomenon is treated as if it is poised to move in some direction—even if no movement is detectable, or even possible. The adoption of this axiom borrows from the philosophical tradition of Franz Brentano (1874) while locating it on the border of being and (yet)-non-being. In terms of open systems that border is precisely located in the interchange between the system and its environment.

The translation of this axiom into concrete methods construction is straightforward. First, all methods involve some kind of direction of movement—from the present state to elsewhere, directly by action or through imagination. All notable (in observation—self or other—Valsiner, 2017a chapter 6) or researcher-triggered (in experimentation or interview) changes by which the movement trajectory changes are potential data—traces of some underlying processes.

Figure 6. The basic scheme of Forward-Oriented Methodology: *Gegenstand* created in movement

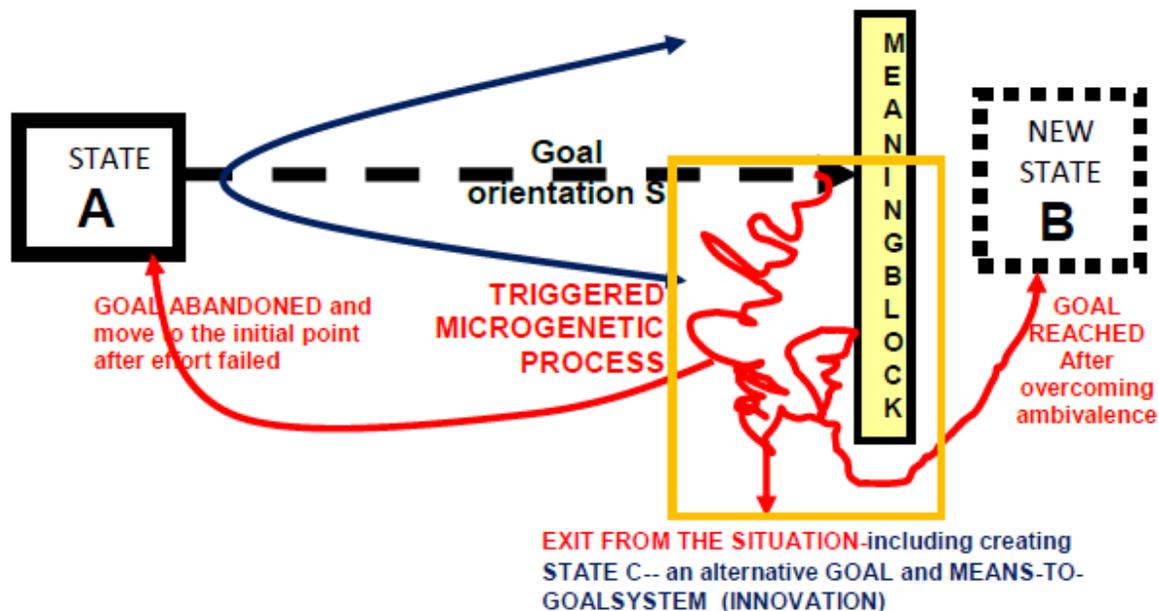


Figure 6 is a generic description of the process-focused rule for method construction—building on the general Methodology Cycle as presented above (Figure 5) and in Valsiner

(2017a, chapter 3). It is similar to Max Wertheimer's experimental investigation of productive thinking (Wertheimer, 1945) in general (a problem is given that requires "out of the box" thinking to arrive at a solution). Yet in the case of cultural psychology the demand for innovation is given through signs ("meaning block" in Figure 6). An ongoing—ordinary or experimentally given—task for goal-directed movement is truncated by the introduction of a normative counter-force that operates in the direction *opposite* to the goal-orientation (the counter-direction in *Gegenstand*). The actor- *who is already in the process of movement* towards the goal (Gillespie and Zittoun, 2015; Zittoun and Gillespie, 2015) now encounters culturally (semiotically) triggered ambivalence (Abbey, 2018) in the process of approaching the goal. What was initially a simple task (move from State A to State B) becomes complicated because reaching State B is now made difficult by the "meaning block". It is at this moment of triggered microgenetic process where the processes underlying the otherwise ordinary move are slowed down (because of the ambivalence) and made observable for the researcher.

Three possible trajectories are possible as the microgenetic process is triggered. First, the task can be abandoned and the person moves on to the state (A) that was the initial point—only now with the added experience of the failure due to the "meaning border". Secondly, the person can find a way to bypass the "meaning border" and reach State B by way of some circumvention strategy (Josephs and Valsiner, 1998). This includes symbolic removal of the meaning border (O'Byrne, 2001). Thirdly—and most importantly—the ambivalence can lead to finding an alternative problem with alternative solution (State C). This is the route through which phenomena of creativity emerge—substitution of a task together with new meanings generated to make the new task and its solution meaningful. A painter's deep feeling into the life in general can lead to painting a figure that—while recognizable in realistic terms—expresses hyper-generalized feelings about the world at large (Figure 7). One single sentence—the finale of a fable, short story, or a novel (Vygotsky, 1971) can lead the reader to feel into the world in ways that are hyper-generalized without a single word available to depict it. Musical experiences link the general and the particular feelings at a given moment in life (Klempe, 2018, p. 253). They play crucial roles in changing people's life course paths (Zittoun, 2016, p. 32). Human beings organize their movement ahead along their life course pathways by constantly linking (and un-linking) the mundane and the mythological (Boesch, 1991; Guimarães, 2017). Capturing this constant movement between microgenetic, mesogenetic, and macrogenetic spheres of meaning construction and its corresponding move between bodily, verbal, and hyper-verbal (not any more verbalizable) experiences is the challenge to new methodological tools cultural psychology brings to psychology in general.

It is at the poetic instants (Lehmann, 2015, Abbey, 2018) in life when the person makes a decision to transcend the normativity of the ways of being—while being fully aware of the border crossing—and create a new aspect of one's *Umwelt* that begins to be a carrier of new generalized meaningfulness. Forward-oriented methodology is needed to capture these moments of "collapse" of the previous normative meaning system and the emergence of a new one. It is here where the Loop Model (Zittoun and Cerchia, 2013) becomes a general framework for methods construction.

Figure 7. Valentina Schapiro, *The Obedient Girl*.



Figure 8. Locating future-oriented unique events: overcoming ruptures

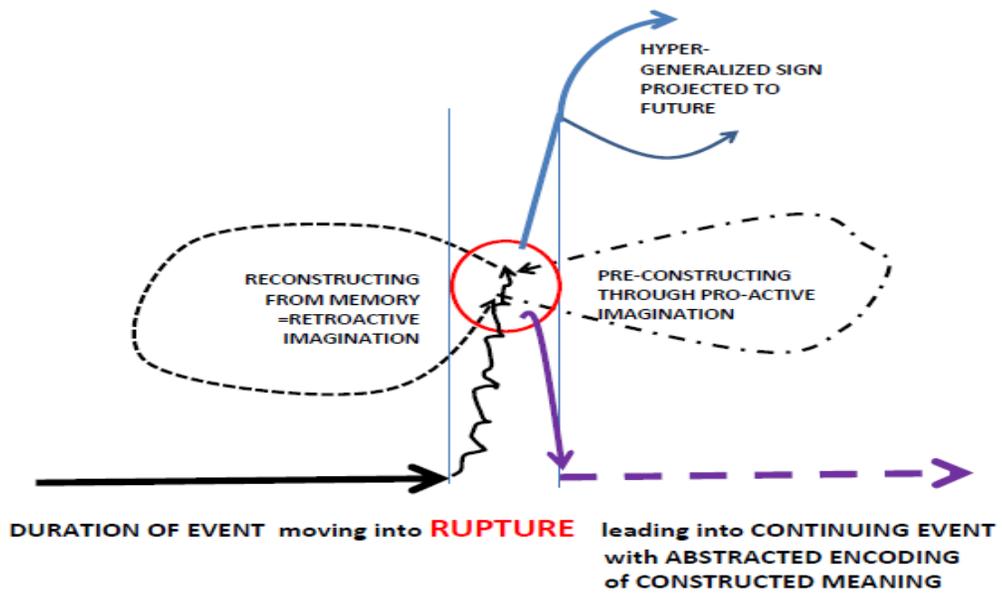


Figure 8. is an extended model of the Loop Model—with the addition of hyper-generalizations projected to the indefinite future. The negotiation of the relations between past and future happens in the flow of the present (red circle in Figure 8)—usually so rapidly that it cannot be investigated. Under conditions of rupture it may be “caught” in a state of ambivalence and become observable. Imagination—forward (future) and backward (memory) oriented—becomes central for the person’s moving on in one’s life course.

How do the two directions of imagination—pro-active and retro-active—become coordinated? Figure 9 provides a model of that negotiation process. Inspired by Abbey (2018) analysis of Lev Vygotsky’s feelings during his single foreign trip (described by van der Veer and Zavershneva, 2011, and analyzed by Abbey, 2018, p. 188 figure 10.8), the figure depicts how the two imagination processes, one oriented to the future and the other into the past, and feed into each other.

Figure 9. Enhancing and blocking imagination at Reversal Points (RP)

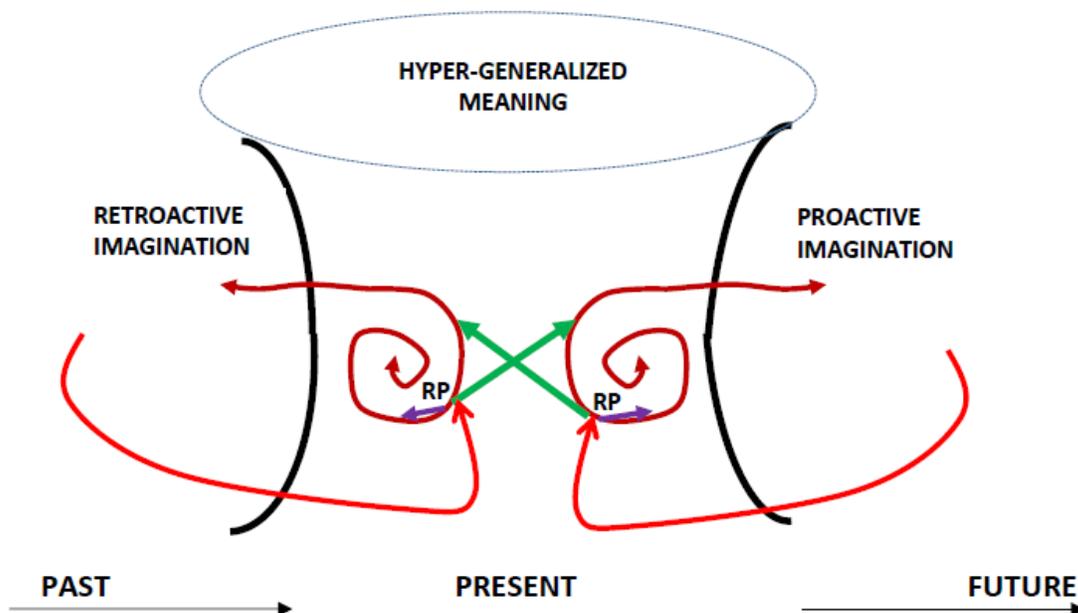


Figure 9 is built on the opposition IMAGINATION<>non-imagination where the latter (in both pro-active and retro-active cases) takes the form of the “eye” of the spiral. The movement of the reflection process is usually directed towards inquiry of the past and imagination of the future. But that direction can be reversed at RP (reversal point) where imagination can be re-directed towards the “eye” of the spiral. Imagined future (or past) can stop further imagination. This re-direction “mutes” the given imagination process. The reversal of the spiral process from outwardly-oriented to inwardly oriented (spiral “eye” driven) indicates the fixed end of inquiry. A person under these conditions may keep “digging in one’s past” without any referencing of the expected or possible futures. The future is lost by the loss of proactive imagination, but retroactive imagination may remain

functional. At certain moment in human life course the person turns from considering the future into going back to one's past.

The opposite process—reversing the direction of inquiry into the past into the end point of the left spiral in Figure 9—is also observable. Proactive imagination can dominate in the work of architects, writers, scientists—and the search into history for resources for the future can be blocked. This can happen at the personal level—in terms of creating idealized futures of paradise or “promised land”, religious conversions, or deep beliefs in the new reconstituted marital relations. It can also be observed at institutional level—many scientists block the explorations of ideas from history of their disciplines by belief that history was that of errors that are best ignored.

Finally—consider a scenario where both proactive and retroactive imagination processes at the given present state are blocked (=the arrows of movement in both spirals become oriented towards the “eyes” of the two spirals). The pattern that emerges here is that of complete “muteness” of the person. In general terms that amounts to depression. It is also visible in the fear of action (Janet, 1921) where a psychiatric patient explicitly dismisses possible actions through inhibitory signs and remains inactive.

### ***Spirals everywhere: dynamics of curvilinearization.***

Spiral forms are present in our scientific abstractions. Models using the image of the spiral (and its 3D extension—helix) are central for genetics and developmental science (Bibace and Kharlamov, 2013). The collapse of the binary neutron stars (GW170817) is explained by the progression of the two orbits in the act of spiral decay into merger with each other, ending in the explosion when reaching the “eye” of the spiral. The ends of the spiral are where qualitative transformations happen.

Figure 10. Volute as a spiral form used in architecture (the vertical movement suggestion is terminated on both ends by the spiral “eyes”)

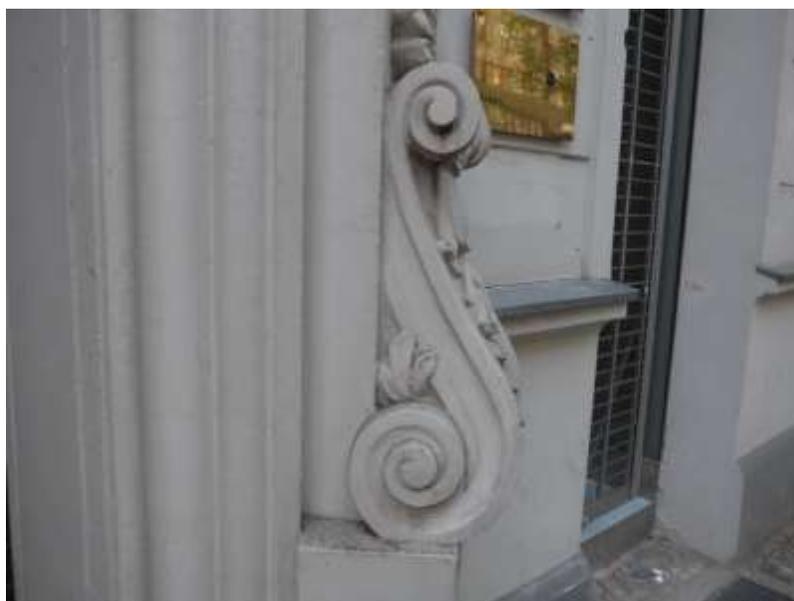


Figure 10 is an example of a *volute*—an architectural form of curvilinear orientation where the endings take the form of a spiral. It is a regular feature of Ionian style columns, and is used widely in decorating different buildings. Spiral forms are widespread in nature and have become used in architectural ornamentation. A *volute* can be seen as a structure where a linear form, horizontally or vertically placed—ends in spirals on both ends triggers an impression of unity of movement and non-movement. Imagination of the move between the spiral endings can be infinite—yet the ends truncate the imagination.

I argue (Valsiner, in preparation) that such spiral forms are the material encodings of the psychological processes of tension between open and closed infinities. I claim that by saturating our ornamented worlds by images of spirals our feeling into the world (and into ourselves) acquires a melodic rhythm of action and its diminishing into the infinite miniscule nature of the “eye” of the spiral. Spiral forms—examples of curvilinearization of topologies of our living—are widely present in various forms of ornaments that surround us. Such visual and musical (Klempe, 2016, 2018) forms in our lives can be seen as organizers of the movement towards its end states, some of which entail emergence of novelty.

Where can one see the phenomenological reality of such truncated imagination? Zittoun and Sato (2018) made an effort to enter into the life-world of people who had been displaced from their homes due to a catastrophe (Fukushima nuclear plant explosion). While visiting the home of an elderly displaced person (Ms. S) the researchers’ team noticed a photograph on the wall with a team of relief workers—in impressive anti-radiation protective clothing—marching on the road towards some destination (Zittoun and Sato, 2018). In the background one could see a mountain (Figure 11).

Figure 11. The meaningful mountain (from Zittoun and Sato, 2018, p. 200)



For our purposes here, two features about this concrete observation are important. First, the fact that this kind of a photograph—depicting the Fukushima disaster relief effort—is put onto the wall of Ms. S’s temporary home. Secondly—what is important is the personal meaning of the act of putting *that* (rather than any other) photograph onto the wall. In interview with Ms. S. it was revealed (and corroborated by other evidence—funeral urns maintained in her house, and explicit verbally expressed needs) that it is the depiction of the mountain in the background (of the place where old cemetery is located) rather than the gloriously marching relief workers (in the foreground) that is the personal focus for Ms. S. It is the presence of a symbolic resource (photograph on the wall) that is set up to catalyze the relations of the past (generations in the graveyard, life before the disaster) and the imagination for the future, while the person is in limbo in a temporary home. Even while being in such liminal state after a disaster, the active search for meaning is the vehicle to counter the trauma of loss. In theoretical terms,

...trauma can be seen as a disjunction between post hoc imagination and future imagination. In contrast, recovery from trauma demands to reconnect imagination of the past and that of the future, which are both relevant in the making of a person’s life course *as far as they enrich each other*. (Zittoun and Sato, 2018, p. 202)

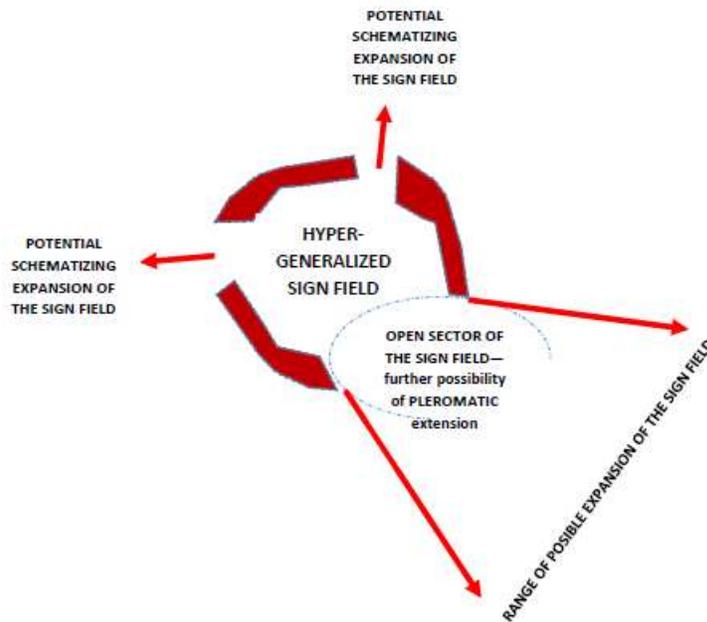
The Reversal Points (RP) in Figure 9 are the loci for turning the deleterious effects of trauma into new strengths—through new ways of connecting the two forms of imagination.

In terms of methods construction, the Fukushima example leads us to prioritize the traces of real meaningful actions over reports about such actions. This means that our first focus can be on “silent” visual and acoustic images in the *Umwelt*- pictures, wallpaper, furniture arrangements, window coverages (and decorations—stained glass windows), background musical tunes-- are all catalytic conditions for feelings about “being here” in relation to the imagination processes oriented both to the past and to the future.

### ***Openness within closedness: approximately structured sign complexes***

The unity of opposites confined into the same whole can take various forms. A sign complex (hyper-generalized sign) needs to be both stable and flexible at the same time. This can be accomplished by the nature of the borders of the complex—parts of these rigid, other parts open to either schematizing or pleromatizing extensions (Figure 12)

Figure 12. A structural model of a semi-open hyper-generalized sign



How can an approximately structured sign complex organize the *psyche*? As an example I here re-analyze the “Babaji Interview” (Shweder and Much, 1987)- an empirical account that can be considered to be an *experimentum crucis* for psychology of higher psychological functions. It is an encounter between the researcher and the researchee that indicates opposite directionality of the major premises while still communicating to find a solution to a life problem.

The “Ashok Dilemma<sup>10</sup>” that Richard Shweder gave to Babaji (an Oriyan car driver and mechanic, in his 30s, member of a “clean” caste, literate with 5 years of schooling) turned out to be a discussion base for applicability of higher level notions (stealing,

<sup>10</sup> This Indian equivalent of Lawrence Kohlberg’s “Heinz Dilemma” of moral reasoning was given to set up tension between the acts of stealing and solving problem in other ways:

“A woman suffered from a fatal disease. To cure her doctors prescribed medicine. That particular medicine was only available in one medicine shup. The pharmacist demanded 10 times the real cost of the medicine. The sick woman’s husband Ashok could not afford it. He went to everyone he knew o borrow money. But he was able to borrow only half of the price. He asked the pharmacist to give him the medicine at half price or to give it to him on credit. But the pharmacist said “*No I will sell it at any price I like. There are many persons who will purchase it*” After trying so many legal ways to get the medicine her husband considered breaking into the shop and stealing the medicine.” (Shweder and Much, 1987. p. 235)

dharma) in a hypothetical setting of saving the life of the wife of the main personage (Ashok). The tension between fixed normative direction (“stealing is sin”) and contemplation of allowable potential solutions to the life-saving task—go hand in hand. Yet it is not the polar opposite “choice” between either steal or lose the wife’s life (as the original “Heinz Dilemma” was set up by Kohlberg), but a field of semi-closed system of meanings where new solutions can be negotiated.

During the interview Babaji persistently refused Shweder’s suggestion that Ashok should steal the drug to save his wife’s life, citing two mutually linked claims:

- (1) People don’t live forever and the drug does not necessarily prolong her life
- (2) How long we live is not in our hands but in God’s hands

If Ashok were to insist on getting the drug, stealing would be inappropriate, but other ways— selling property or selling oneself (repeated as a solution twice in the interview) to the service of someone—could be considered.

In terms of Figure 12, we can depict the refusal of stealing as schematizing extension that reinforces the boundary of the sign complex. Stealing was strictly outlawed in Hindu Dharma— this claim was given by Babaji as a strong assertion—stealing would be a *sin*. Shweder’s counter-claim (“but doesn’t Hindu dharma prescribe that you try to save a person’s life?” p. 235) was countered by the suggestion of *sacrificing* one’s blood or selling oneself, but not stealing. A second counter-claim (“wouldn’t it be a sin to let her die?” p. 236) was countered by suggestion to give the wife shamanistic treatment to cure her. Yet there came a twist

Our sacred scriptures tell that sometimes stealing is an act of dharma. If by stealing for you I can save your life, then it is an act of dharma. But one cannot steal for his wife or his offspring or for himself. If he does that it is simply stealing (p 236)

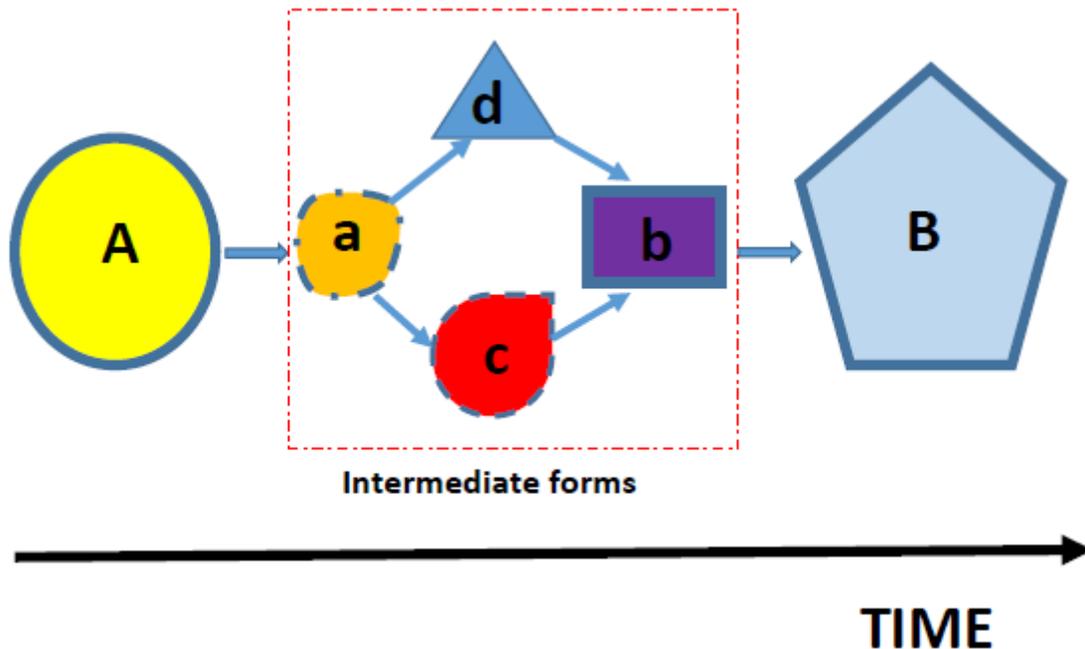
The borders of “himself” extend to include his wife and offspring—for whom stealing is disallowed. The inclusion into the ‘self’ includes closest relatives. Furthermore—the borders of the self can be dynamically re-organized to include more (or less) of the social “others” in that personal construction. The Babaji case gives us evidence of the role of semi-structured hyper-generalized sign used in negotiating—within oneself and with others—the normative domain of human existence.

### ***Context-Facilitated Microgenesis***

Microgenesis (*Aktualgenese* – the genesis of the actual) is a methodological development from the 1920s co-initiated by Friedrich Sander, Günter Ipsen and Heinz Werner (Valsiner and van der Veer, 2000, chapter 7). The central focus of the methodological direction was the observation of formation of the Gestalt over time. This could happen in the form of discovery of a form already fixed (e.g. experiments with increasing exposure times to enable stepwise clearer recognition of the object—Abbey and Valsiner, 2004) or construction of a form that has not existed before. In both cases the focus is on the intermediate forms—which are no longer the ones presumed before but not yet the ones that subsequently become fixed (Figure 13). Between A and B are forms a-b-c-d out of

which a will vanish, and end Gestalt b->B emerges, The side emergence of c and d is temporary—they will vanish too.

Figure 13. The focus on intermediate forms in Gestalt formation



The focus on microgenesis—in particular on the intermediate Gestalts results in the change of focus in the THEORY<>METHOD relations within the Methodology Cycle to developing a class of methods that trace the emergence of a new form through the products of imagination that will not be preserved in the new form. The “creative explosion” of the intermediate forms (a-b-c-d in Figure 13) is the birthplace of innovation where the prospective and retrospective imagination processes converge.

In its original versions the *Aktualgenese* research did not utilize activity settings as part of the tools to bring out the processes in transition. It was a strictly experimental domain of research where “interventions” into the setting were considered as “noise”—to be reduced and eliminated, rather than amplified. In contrast, cultural psychology’s use of the *Aktualgenese* general orientation can make use precisely of the amplification of tensions through introduction of border-related actions through specifically meaningful normative settings. An example of a use of such settings is Marsico’s (Tateo and Marsico, 2014, pp. 85-87) microgenetic analysis of young women’s trying various versions of lipstick in an interview setting. Body decoration—of which lipstick use is a widespread example—is an intimate process the outcomes of which are for personal and public display—after the mask (lipstick) is put on. Yet the process of putting it on is a self-

dialogue where others' presence creates an additional border<sup>11</sup>. It is an act of building up the semiotic skin (Nedergaard, 2016)—a self-making process.

Lipsticks (and other cosmetics) are masks—minimal masks of everyday use, where often the goal is to have a mask that looks so natural as to not look like a mask. In contrast, most other masked occasions in human lives and in social rituals use actively exaggerated forms of masks. The *Aktualgenese* of personal feelings is linked with these exaggerations—it is the setup of theatrical performance that guides human meaning-making process (Zittoun and Rosenstein, 2018). By ritualizing everyday life and inventing masks—minimal or maximal—we are involved in our own development through forward-moving constructive confabulation.

### ***Constructive Confabulation***

An extension of the tracing of the joint work of two imagination processes can be found in the work on “reconstructive memory” that—triggered by Frederic Bartlett’s efforts in the first decades of the 20<sup>th</sup> century (Wagoner, 2017)—have led to simple innovation of methods by asking persons to re-tell a particular story in a number of times (Valsiner, 2017a, chapter 7).

In making sense of Bartlett’s work we can observe the impact of meta-level classification onto the thinking of researchers. As it is usually presented as work on memory, Bartlett’s findings become presented as *decay* of accuracy of remembering as a particular story is re-told a number of times. Yet the story of the origin becomes transformed into a new version—and hence the crucial value of Bartlett’s simple methodological innovation (re-telling the story multiple times) gives us an example of the class of methods we could label **Constructive Confabulation**. It is not the decay, but gainful reconstruction of the previous story that becomes the target of analysis. “Errors” (mis-fitting reconstructions of the original) become indications of creativity.

Constructive Confabulation mimics the realities of human living forward—facing the future. Creating specific methods to study the processes of imagination here is unlimited as any aspect of *Umwelt* modification can be used. Meaning construction about buying new clothes, putting on new body decorations (lipstick—Tateo and Marsico, 2014, pp. 86-87), re-arranging one’s living space while moving to new place—are all potent activity domains within which techniques of constructive confabulation can be created.

### ***Emerging narrativity***

Narratives are usually treated as givens—texts that have their own ontology. They exist after they have been created. Their analysis usually proceeds in the direction of their contents, and ends up with one or another categorization scheme. In such schemes it is the schematizing aspect of meaning construction that is highlighted, while the pleromatization processes vanish from the analysis.

The microgenetic alternative is to look at the production process of a narrative- or treat an already created story as a narrative in the making. Diaries (such as June’s—

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<sup>11</sup> A respondent putting on lipstick feels unfomfortable “...to put on make-up before other people... not my friends... a kind of trying something in a shop...and then they look at me.. yes.. I do that but I do feel a bit uncomfortable” (Tateo and Marsico, 2014, p. 86)

Zittoun and Gillespie, 2015) can be analyzed by locating in them first transitions to a new experience, followed then by process analysis of that transition. It is here where poetic instants (Lehmann, 2017) can be the locus for access to psychological processes of synthesis of the new feeling. For example, in a microgenetic sequence a poetic instant (E) may suddenly occur, followed by mundane continuation (F, G, etc.)



The “affective rupture” (E) is the specific marker the nearest neighbors before (C→D) and after (F→D) constitute the chain of emergence of an affective take and its normalization.

In analyzing the progression of the narration in the story, the researcher as-if enters the progressing life experience of the diary writer and tests different hypotheses about the affective organization of the transition. The key in looking at narratives as accounts of constructive unfolding is to find the relevant moments of first transitions to new states.

Biographies, diaries, and autobiographies become relevant data sources in these efforts. “Baroness Elsa” was a flamboyant woman who participated actively in the artist circles since 1890s and was linked with Jugendstil and Dadaist and other art movements in Europe and North America in the 20<sup>th</sup> century. Born as Else Hildegard Plötz in 1874 she was drawn into the art world after various love affairs, she married (in 1901) August Endell—the Berlin architect who linked psychology with architectural practices<sup>12</sup>. Around February 1902 Elsa meets Felix Paul Greve—her next husband-to-be (of many to come). Her retrospect of that first encounter is a testimony of the borders in the affective mind that are instantly constructed:

I perceived F.P.G. with his polite—icy unmoved critical—“secretly impudent” air-- I *violently*—hated him! But—I was married—I – to all my knowledge—*belonged* to my interesting-respected husband, a highly esteemed “coming” *Kunstgewerbler* [applied artist] architect—refined—in high—good taste—I hated this cool – impudent “veiled” young man—*because* he was veiled. [...] Having a husband—being faithful—what could I do as respond in hate—this feeling of interest? Unveil—I could people—*men!* Only in sex intercourse—at once—or gradual—and—I was content—yes—sparklingly proud of the husband I had! I didn’t want another—though—it was true—sexually he was punk. (Gammel, 2003, p. 117-118, added underlining)

The borders were soon overcome—Elsa conquered Greve after some months<sup>13</sup>, moving then on to divorce August Endell and succumbed to the marriage with Greve (in 1904).

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<sup>12</sup> August Endell (1871-1925)—one of the founders of the München side of the *Jugendstil* movement-- was the only architect to study with Theodor Lipps in München in the 1890s. He brought Lipps’ architectural psychology into practice (Hackesches Hof 1 in Berlin).

<sup>13</sup> In her own terms „I threw myself on him with my arms around his neck [...] I felt his whole frame tremble. He did not embrace or touch me. But I did not mind. I knew now—I had him” (Gammel, 2003, p. 126). The

After immigration to America, and many other love conquests, she married Baron von Freytag-Loringhoven (which made her into “Baroness Elsa”), and ended up dying in Paris in 1927.

The example above is Elsa’s retrospect of her prospective meeting with a new person whom she had not known before, and the reconstruction of affect involved in her subjective world at that time. The unfolding of the *Gegenstand*—involving “hating” the new man on her horizon together with desire to “unveil” him (prospective imagination loop) on the background of “belonging” to another man in a conventional marital role (retroactive imagination) reconstruct the complexity of the meaning construction process that would fit the TEM/TEA model for further analysis (Zittoun and Valsiner, 2016)

In contrast to June (Zittoun and Gillespie, 2015; Gillespie and Zittoun, 2015), Elsa is not the woman worrying about her social role (“I am not that kind of a woman...”—Nedergaard, Valsiner and Marsico, 2015) but quite the opposite. In her young years prior to marrying Endell she went through active proliferation of her sexuality as a means of exploration of the world (cf. “only with sex intercourse” could she “unveil” a man). She was approaching the boundary of “that kind of woman” from the other side than June—through throwing herself into sexual experimentation with members of the bohemian art-world with feelings of “conquest” rather than “sharing”. She presented herself—to others and to herself—precisely as “that kind of woman” for whom every new male acquaintance is a challenge for understanding through all levels—from body to poetry—of inquiry.

### ***Methodological lessons from “Baroness Elsa”***

The example I have chosen is a subjective retrospect of the first encounter with another person narrated in subjective terms and indicating clear borders set by social norms and personal desires. It is one single transitional experience that is proven in its aftermath as linking with life course (microgenesis to ontogenesis transition). Locating and analyzing such autobiographical traces of processes that antedated life course changes is one of the values of the idiographic science techniques put into service of generalization (Valsiner, 2015b). Contrasting different individual life course trajectories—preferably extreme opposites (like June and Elsa) would allow us to chart out the variability map of life individual life courses in a particular social unit (family, kin group, community, etc.)

### **General Conclusion: Freedom of thought through new methodology**

The motivation for creating this chapter came from my deep feeling that cultural psychologies would become yet another passing fashion in psychology unless new methodology that fits the “meaningfulness first” focus is created. Psychology over the 20<sup>th</sup> century has successfully alienated itself from human phenomena (Kvale, 2003). In an increasingly consuming-focused society such alienation is no surprise. Yet it creates a barrier against making sense of complex psychological processes of an existential kind—desire, devotion, commitment, grief, and many other higher level hyper-generalized

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meaning of “having” dominates the physical encounter which is still based on sexual explosion of female desire.

psychological guidance systems. It is a chance for cultural psychology to return to the basic complexities of the *psyche*.

It is a small step—after the methodology elaboration (Valsiner, 2017a)—further in this direction. If the axiomatic side of the Methodology Cycle are in place, then appropriate methods can be constructed easily. Yet the realities of methods construction in psychology tell us a different story—the construction and use of methods becomes a carefully watched process that bears institutional marks (“standardized methods”, used together with application of “consent forms” after the procedures are accepted by “institutional review boards”). Our discourses about methods are limited by the social representations of what kinds of methods are (or are not) “scientific”.

I claim that nothing can be more detrimental for science than social censorship—based on normativity of the human ways of living. Here is the basic paradox-- we want to discover ourselves (in psychology) but it is precisely ourselves who set up conditions that make that inquiry complicated. Back in 2013 in the beginning of our Niels Bohr Project, I pointed to the microstructure of feeling free:

...the answer to the question, where does freedom start?, is simple. It begins precisely where it ends—on the border. And as the border is constantly moved forward, it never ends, without a restart. The border is synthesis of the inevitable constraints of time—the present, which is the border between the past and the future—and the constant tension between participation and non-participation. While facing the future, we hesitate at the threshold of moving from the spectator role to that of the actor, and vice versa. (Valsiner, 2014, p. 191)

Indeed, hesitation in the construction of new methods would delay innovation. This look at freedom is important for methodology innovation in cultural psychology. Psychology involves many borders for the making of methods—keeping them separate from theoretical guidance—that need to be overcome. Cultural psychologies—by way of entering into new content domains—can innovate methods in accordance with the needs of the phenomena. Yet the efforts towards new methods are hampered by historically set normativity—keeping researchers in the liminal space between *appearing* “scientific” and *being* it. Psychology in its confusion between being a “moral science”—in contrast to morality-inclusive science—has been masking itself to keep up the appearance of science. In contrast, cultural psychology as morality-inclusive science finds ways out of the liminal state by focusing on the rights of the researchers to do that kind of research that illuminates the very basic issues of being human.

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