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The Inter-Modal Pre-Construction Method (IMPreC): Exploring Hyper-generalization¹

Jaan Valsiner², Teppei Tsuchimoto³, Ikumi Ozawa⁴, Xiaoxue Chen⁵,
and Kikuko Horie⁶

Abstract

In this article, we present the blueprint for a new class of methods—inter-modal pre-constructive methods—uniting the value of moving across modalities of understanding (poetry, drawing, music, etc.) in a scheme of microgenetic construction of affective fields. For this purpose, the historical roots of this class of methods were reviewed, and two empirical demonstrations are provided. In the demonstration, the possibility of exploring hyper-generalized feelings was opened up by repeatedly producing the feelings while transforming the modality step-by-step. In addition, it was suggested that the modality of music could be used as the next possibility. The inter-modal pre-constructive methods are ways of triggering and increasing the difficulty of expression of the original feelings. The difficulty of switching the modality is a new synthesis while keeping attention to the feeling once felt. Alternatively, we felt the feeling of "understanding" about others' poetry. This implied that poetry, like painting, allowed for a new synthesis of the reader's experiences. The multiplicity of the synthesis through a particular medium can be called "pluri-synthesis." While such syntheses are unique to each person, we found that this diversity of meaning-making can be a catalyst for pleromatization through the communication of others' feelings.

Keywords: generalization, hyper-generalization, meaning-making, pre-construction, pluri-synthesis

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Human beings make sense of their lifeworlds through affective sign-fields (Valsiner, 2014, 2020) that guarantee mutual understanding in approximate—yet effective—ways. These sign fields allow for meaning construction at multiple levels of affective generalization of a personal relationship with one's *Umwelt* (Chang, 2009) that is built on the pleromatic channel of generalization and contextualization of meanings that complements the cognitive (schematic) pathway (Fig 1)

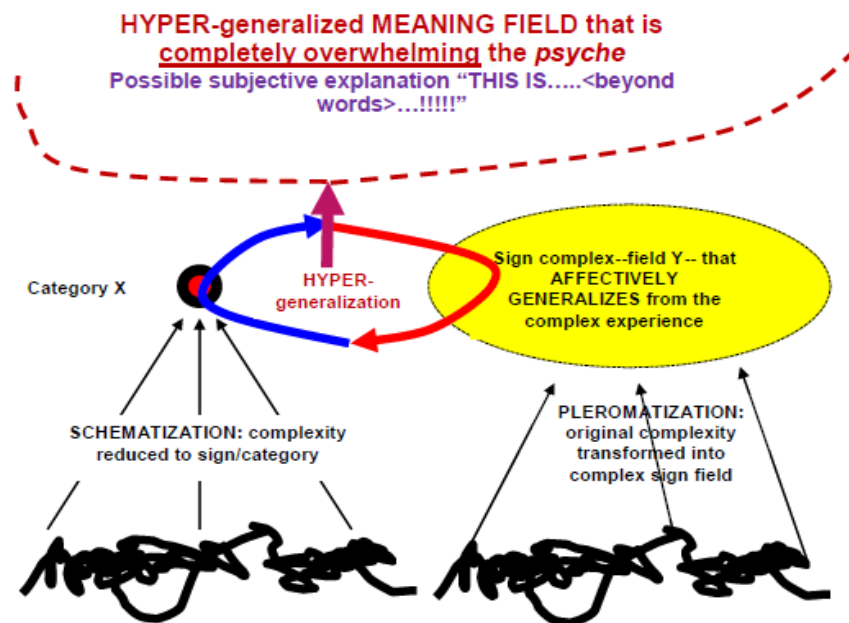


Fig 1 The process of affective generalization and hyper-generalization in Cultural Psychology of Dynamic Semiotics (Valsiner, 2006)

This figure includes the two possible generalization processes: schematization and pleromatization. Schematization is semiotization in a way that reduces the complexity of the phenomenon (bottom left), and pleromatization preserves the original complexity (bottom right). Both generalizations correspond to the function of generating more abstract signs from complex experiences, but the difference between them can be found in the vagueness of the emerged signs. Furthermore, in the tension between these signs, the affective meaning field can be pleromatically generated that is completely overwhelming the *psyche* (hyper-generalization; above; Valsiner, 2006).

The crucial innovation that the Cultural Psychology of Dynamic Semiotics brings to the meaning generalization process is the notions of *pleromatization* and *hyper-generalization*. The process of pleromatization involves abstraction of the general meaning from already complex affective experience (e.g., dropping a precious vase that breaks into pieces) to field-like generalization ("I am always so clumsy such losses happen all the time") and finally to generalized sign field of the generalized feeling of loss. The original object—the event of the broken vase—is replaced by the general field of feeling a loss. At the same time, on the side of schematization, the cognitive

understanding of the value of the broken object can be rationally contemplated. The affective field-like generalization—pleromatic generalization—is primary with the cognitive (schematic) counterpart.

The notion of *hyper-generalization* entails further generalization of the pleromatic field—in relation with the schematized category—that involves the disappearance of the previous opposites (point-like categorical and field-like pleromatic) into a new whole—an affective field that spreads over the whole psyche and begins to guide the whole relating with the world. It is intuitively available but analytically not accessible—it operates at Level 4 of meaning construction (Fig 2) where different large fields may relate with each other (Fig 3) but where verbal access (in terms of Level 2 or 3) is no longer available.

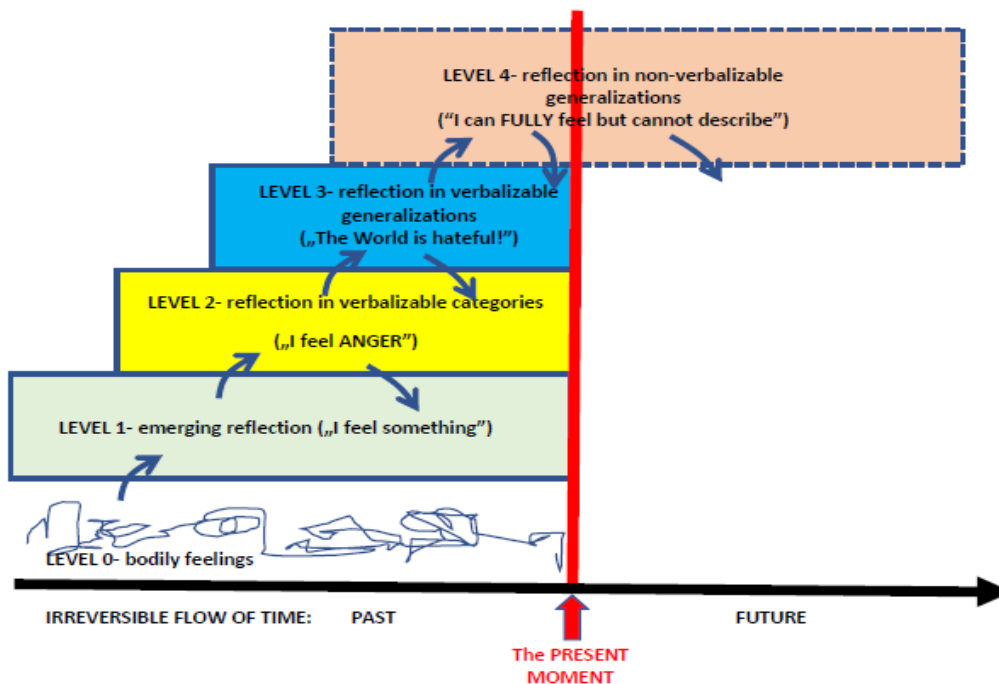


Fig 2 Levels of verbalizability in the hierarchy of signs

The important feature of Level 4 hyper-generalized sign fields is their extension beyond the border of the *present moment*. It means that human experience becomes encoded for future uses in the hyper-generalized forms of affective fields. These fields at Level 4 can relate with one another, enter into tension on their borders but cannot be expressed and analyzed in terms of lower (verbal) means of Levels 3 and 2. Fig 3 depicts the hyper-generalized fields in tension.

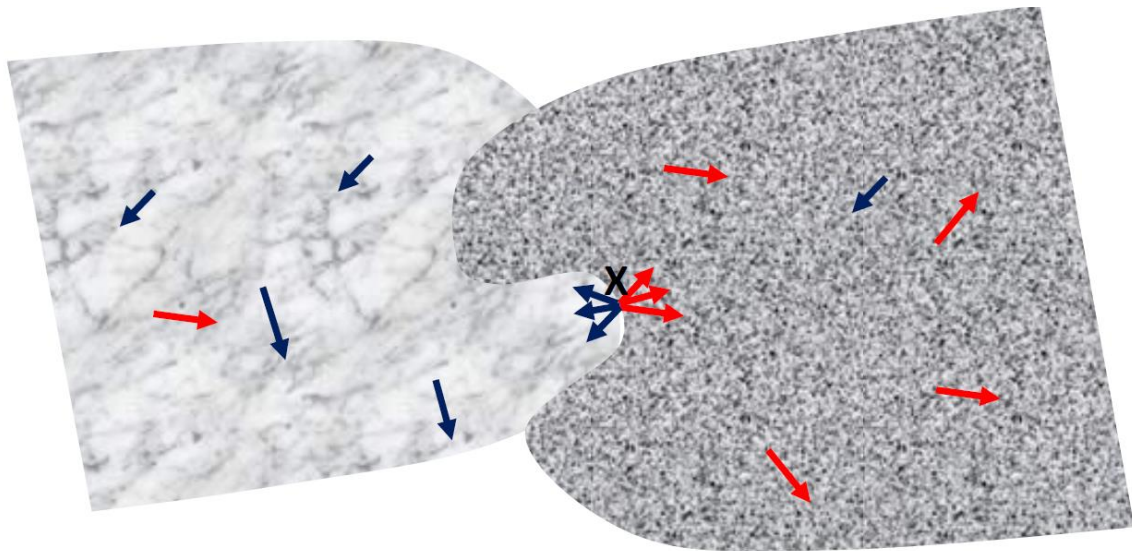


Fig 3 Relations of pleromatic sign fields in hyper-generalized minds (Level 4 in Fig 2)

The important feature of the relationship of the Level 4 fields in Fig 3 is the multiplicity of affective directions within the fields (indicated by arrows) that all together generate the *feeling of determining aboutness* of the dynamics of the field as a whole. Phenomenologically it means a clear understanding of the whole of the affective way of being (“*I feel somehow anxious but do not know why*” or “*I am filled with joy but at the same time afraid a sad cloud might come and kill it*”). The fields are subjectively recognized, their general orientation acknowledged—but further explicit referencing by verbal means (Levels 2 and 3 in Fig 2) is not possible. The reported feelings are located on the threshold of Level 4 hyper-generalized understanding.

Most human deeply personal meaning-making activities take place at that threshold between Levels 3 and 4. Some musical tones become meaningful for the whole life of a person so that even 40 years later, they let the psyche of the person flow in the affective bliss of that melody (Hillmann, 2018). Nostalgic returns to the music of the younger years at later life course are indicators of the survival of the hyper-generalized meaning fields in the remote storage facilities of the mind. Likewise, personal needs to write, recite, and read poetry or read novels is an activity on the threshold of Level 4. Searching for meaning in our lives is the constructive process of creating a personal culture (Valsiner, 2007) relating objects of one's Umwelt with hyper-generalized sign fields in mind. Music is one of the major cultural tools in that construction (Klempe, 2016). The feeling of home in a particular place one experiences—be it one's apartment, a theatre waiting for an opera to begin, one's bed, or a swimming pool— is a hyper-generalized higher feeling that is important for the person but not analyzable into its parts.

How is it possible to investigate hyper-generalized affective sign fields? It is clear that by their nature, these fields cannot be studied by methods that primarily rely on verbal accounts (Levels 2 and 3 in Fig 2). We need to find ways to access these – large, important, but at the same time nebulous fields in the soul—by techniques that

bypass the regular verbal overdetermination of the methodology of the human sciences (Valsiner, 2017). Our goal in this article is to set up the blueprint for a new class of methods—IMPreC (Inter-Modal Pre-Constructive Methods)—uniting the value of moving across modalities of understanding (poetry, drawing, music, etc.) in a scheme of microgenetic construction of affective fields (Wagoner, 2009). Our new approach is solidly based on classic work in the history of psychology, with a new synthesis of bringing the inter-modal task extensions together in a microgenetic procedure.

Historical roots of IMPreC

There are three distinct predecessors to the present invention: Frederic Bartlett's repeated and serial reproduction techniques, Heinz Werner's and Bernhard Kaplan's experiments of encoding meanings in graphic images, and Alexander Luria's work on rapid inter-modal integration in granting high-performance memory capabilities.

Bartlett's contribution

Bartlett developed methods that could capture and analyze remembering as a holistic, dynamic, and meaningful process (Wagoner, 2009). He conducted a series of experiments to identify how the repeated remembering of a particular material transformed (Bartlett, 1920, 1932).

Bartlett's method of *repeated reproduction* was inspired by Philippe (1897). Bartlett was not the first to use the method of repeated reproduction though he used it more productively than those who came before and after (Wagoner, 2007). Repeated reproduction is an experiment in which *a single participant* is asked to remember the original story repeatedly. He discussed how the series of reproductions from single-story omissions and transpositions transformed over a span of hours, days, weeks, months, and years. The material for this experiment was a North American folktale called "The War of the Ghosts." It is interesting to note that the transformation of the story remembering was suggested to be related to affective experiences, such as participants' war experiences (Bartlett, 1932).

Bartlett also experimented with the method of *serial reproduction*, in which many different participants were repeatedly asked to reproduce a single story or picture (Bartlett, 1920, 1932). The first person reads the story or observes the picture material and was asked to repeat it to a second person by memory, who then repeated it to a third person, and so on. In contrast to the repeated reproduction, which dealt with changes in a single participant's story, serial reproduction explored the combination of changes of individuals or the social characteristics of remembering. This method is a simple application of the repeated reproduction method, yet it is innovative as a method for clarifying social conventions and beliefs related to the reproduction of the memory.

Last but not least, the crucial value of Bartlett's simple methodological innovation gives us an example of the class of methods "Constructive Confabulation" (Valsiner, 2018). In the usual presentation in work on memory, Bartlett's findings are regarded

as a decay of accuracy of remembering (error) (Valsiner, 2018). However, Bartlett focused on the changes in replication when a material (folktale, picture, etc.) was repeatedly constructed. By exploring this, he focused on the constructive, imaginative, and creative aspects of remembering.

Werner and Kaplan's contribution

Werner and Kaplan, in their book "Symbolic Formation," focused on the general phenomena of *plurisignificance* and *arbitrariness* of symbolic vehicles. The former phenomena were "the use of one pattern to represent and refer to diverse contents"(Werner & Kaplan, 1963, p.352), and the latter was "the possibility of using quite different material patterns to refer to the 'same state of affairs'"(Werner & Kaplan, 1963, p.352). They discussed the phenomenon that one symbolic vehicle could represent many referents (plurisignificance) or that many vehicles could represent the "same" referents (arbitrariness), referring to the experiments of their students Cirillo and Bodansky. Below is a brief description of Cirillo's experiment on symbolic vehicles of plurisignificance based on Werner & Kaplan (1963).

Cirillo's experimental procedure can be summarized as follows: First, twelve subjects were asked to draw the line patterns of the following concepts: the outburst of rage, state of ecstasy, falling asleep, and running. Next, subjects were asked to identify five depictions that are "adequate" or "fitting" to their line patterns. For example, one subject described the "outburst of rage" shown in Fig 4 (a).

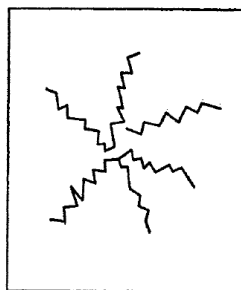


Fig 4 An example of a line drawing of "outburst of rage" by one subject (Werner & Kaplan, 1963)

Then, for the next pattern, the subject renamed five different concepts: "crash," "aimless, frightened kind of striving," "weakness," "vulnerability," and "lack of integrity." The remarkable point was that not only this subject, but all subjects could easily give new different names to their own patterns (Werner & Kaplan, 1963).

The important point is how the subject apprehended the pattern when a different name was given to the pattern (Werner & Kaplan, 1963). In other words, the pattern initially depicted as an "outburst of rage" was a physically invariant symbol, but it is important to know what kind of semiosis (semiotic process) was observed when a subject named the pattern differently. The subject renamed "outburst of rage" to "ideas," and Fig 5 shows the change in perceptual restructuring.

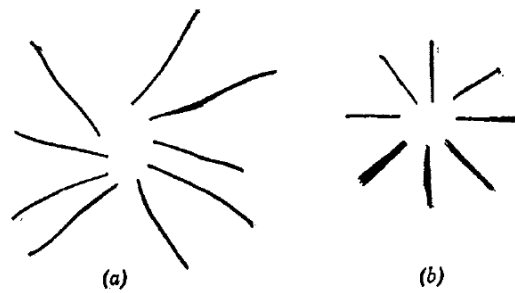


Fig 5 A subject's line pattern of "outburst of rage" (a) and "ideas" (b) (from Werner & Kaplan, 1963)

For this subject, "its explosive character and lack of direction" was important to express the "outburst of rage," but in renaming it as "ideas," the drawing lines were symmetrical around the central point. In this way, the pattern was imaginatively re-created through changes in vividness, incorporation of new features, and transformations (Werner & Kaplan, 1963). Cirillo's experiment is noteworthy as an example of an elaborate analysis of the process of inter-modal (concept→figure→concept→figure), dynamic reconstruction of symbols repeatedly.

Luria's contribution

Luria (1968) conducted thirty years of research on a man (called S.) with a vast memory. S. was a newspaper reporter when he first visited Luria's laboratory and later became a mnemonist. S. had synaesthesia and eidetic imagery, both of which enabled him to remember vast amounts of information. Synaesthesia is the function by which one sense of modality (e.g., vision) elicits another sense of modality (e.g., taste, smell and hearing). Eidetic image is generally a clear replay of visual images seen in the past. S.'s memory was unique and complex because the eidetic images (visual images) were integrated with other sensations through synaesthesia. For example, for him, the sound of bells (hearing) was complexly related to sight, touch, and taste.

I heard the bell ringing. A small round object rolled right before my eyes . . . my fingers sensed something rough like a rope . . . Then I experienced a taste of saltwater . . . and something white.

(Record of February 1936: from Luria, 1968/1987, p.81)

Luria's research was similar to the work of Bartlett and Werner, and Kaplan in that it illustrated the creativity of an individual in the remembering process. The above quote shows the immediate remembering of the senses, triggered by a bell ringing. In this process, complex sensations at all levels connected to a particular event are

synthesized in a rapid and intermodal manner. Luria's work was valuable not only for clarifying that inter-modal linkages of memories contribute to the vast memory capacity of individuals but also for elaborating the subjective synthesis of sensations in remembering.

Novelty in repetition

The common ground of the three historical roots of IMPreC is that the repeated production of semiotic products is not mere repetition. Since we are in the flow of "irreversible time," we can remember "similar" objects repeatedly but cannot produce the "same" ones (Sovran, 1992). The repetition of semiotic products could lead to something new that cannot be eliminated as "noise" or "an outlier." What is important for cultural psychology is to focus on the pre-construction - the process by which novelty is generated - rather than the reconstruction side.

The key to such novelty is art (poetry, drawing, etc.). In art, it is essential to "creatively overcome one's own feelings and find one's own catharsis" (p.248). The mechanism that Vygotsky called catharsis is "the transformation of these feelings into opposite ones and their subsequent resolution" (p.244). In other words, the integration of these ambivalent emotions and qualitative "jump" (Valsiner, 2015) - a process of pleromatization that Vygotsky struggled to refer to as "short circuits" - are realized through art.

The basic logic of IMPreC

The basic idea of the IMPreC class of methods is simple: as a person for repeated production of an affectively relevant general object, switching modalities between each new task. So—a poem can be turned into a drawing which is explained, then linked with music, which in its turns is explained (Fig 6)

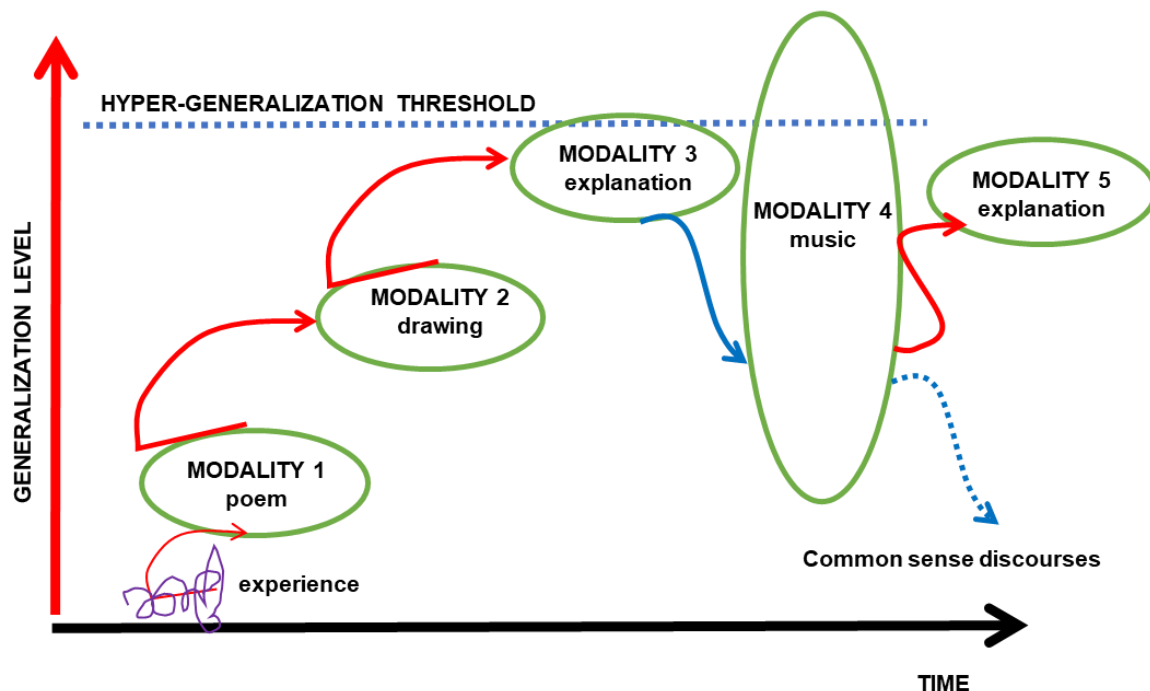


Fig 6 Inter-modal exploration of the hyper-generalization process

In this diagram, the vertical axis represents the level of generalization, and the horizontal axis represents time. The reason why the arrows go back in time during the course of each generalization of the modality is to indicate that all experiences are re-constructed in order to proceed to the next step.

The first step is to produce a poem using experience as the material. It is important to note that experience here includes not only the actual experience but also the imagination. Experiences that have "not happened" (imagination), such as experiences of loss or ruptures in one's trajectory, can often be crucial to one's experience.

It is difficult to construct a complex field such as a hyper-generalized field (in this case, love) as a product that represents a high level of generalization in the beginning. Therefore, it is worthwhile to start IMPreC with a poem that represents a level of generalization close to experience (*modality 1*). Although poetry writing is an activity on the threshold of Level 4, its product is basically language-based (levels 2 and 3 in Fig 2) and can be considered an effective first step.

After the poem is produced, it is possible to re-produce this poem in a different form (*modality 2*). Drawings are more pleromatic and allow higher levels of generalization than language. Drawings can depict images that cannot be schematically semiotized, or the movement of the mind, although it is more difficult to express specific statements or meanings than in language.

Drawings do not always convey a clear meaning, so it would be useful to add further verbal accounts of the drawing to understand the drawer's viewpoint (*modality 3*). Here, narratives reproduced from visuals are generated. The process of

reproduction is regarded as a translation from hyper-generalized meaning on level 4 into level 2 or 3 (verbal narratives). The notion that a drawing does not always convey a clear meaning leads to the advantage that it allows for a multitude of meaning-making together with the audience.

Although not shown in the demonstration of this article, it could be possible to reproduce and add a further explanation in the modality of music based on the above steps (*modality* 4 and 5). Music can be generalized on various levels. The component of music that is most proximal to hyper-generalized threshold is melody. Melody is a complex of affective symbolic sign, which can be hyper-generalized and have important meanings in personal culture (Valsiner, 2016). We can also deal with language as music lyrics at various levels of generalization. Regardless of the level of generalization, almost all music is deeply related to the hyper generalized meaning in some way.

However, a piece of music that was initially close to the hyper-generalized threshold may be used as a common-sense discourse after being commodified or reproduced, away from its original meaning. This phenomenon is often observed in artworks and architecture as well.

An empirical demonstration of a version of IMPreC

Our demonstration starts with a pointed task—a creation of a love poem. It is important for the first task to “push” towards the activation of hyper-generalized affective fields (images of love are of that kind)- yet let the task be carried out in terms of the use of words (Level 3). The crucial synthesis of feelings in a poem emerges from the meanings created in-between the words that are pleromatically (Fig 1 above) generalized.

Demonstration 1: IMPreC started from one's own poem

First, the participants wrote their poem about "love" based on their own experiences (Modality 1). Then, as the common language among the participants was English, they were asked to translate their poems in English (if they wrote the poems in a language other than English). For instance, the second author (Teppeï) wrote it in Japanese, which is his mother tongue, and provided its English translation, while the fourth author (Xiaoxue) wrote it in Chinese, which is her mother tongue, and then translated into both Japanese and English. The following are these two poems:

Teppeï's poem (ending)

[English]

She doesn't get upset when I buy a bonsai tree

She doesn't tell me

to throw away my books

Whether to eat cup noodles for lunch
...or making curry?
For that,
without anyone blaming
but there is no one think so fast.
Or we don't have to think.
Something that is nothing
is Love.

[Japanese]

盆栽を買っても
怒られず
本を捨てろと
言われず
晩ご飯にカップラーメンを食べるのか
カレーを作るのか
そんなことを
誰もせめることなく
かといってすぐに決まるわけではなく
考えなくてもいい
何でもないなにかが愛

Xiaoxue's poem

[English]

I said Goodbye to everyone again and again,
but for you, I didn't say anything.
It not because I have nothing to say to you,
I'm just afraid that,
if I said Goodbye,
it might be our forever separation.

[Japanese]

友達に「さよなら」を繰り返して言う
君だけと何も言わずに行っていた
何も言いたくないではない
もし「さよなら」と言うなら
君との永遠な別れになろう

[Chinese]

临行惜别声声切，与君相顾却无言。
非是此无衷肠诉，唯恐一别是经年。

In the next step of IMPreC (drawing), the authors were asked to create a drawing of the sentiments evoked by their poems (Modality 2). The detailed instructions were as follows: 1) try to DESCRIBE FEELINGS BETWEEN WORDS, 2) try to DESCRIBE THE FEELING of rising generalization of the feeling WHEN YOU READ, 3) DO NOT try to explain in WORDS!, and 4) DRAW a figure of your movement of feeling.

The drawings were then subjected to interpretations by the authors (Modality 3). We asked what drawing added to the feeling when they wrote or read the poems. This back-transfer to verbal analysis was important for keeping the verbalization of the fields to relatively impoverished (from a verbal point of view) of silence-filled Level 3 verbalization. The difficulty of verbalization and reliance on “feeling in” indicate the near threshold.



Fig 7 Teppei's drawing on his own poem

Teppei's interpretation

I drew the flow of my emotions from the top of the poem to the bottom. When I was drawing, I noticed that the emotions in Japanese and English are different, so I wrote the emotions when I re-read the poem in English in orange and the emotions in the Japanese poem in green. The poem presented here is part of the original, but I didn't intend to emphasize it much, so in English, I felt that it was too expressive (English is too much!).

Here, Tepei narrated he felt that the affective feeling evoked by the Japanese poem and by the English version are somehow different and drew those two in different colors. He generalized what he felt by reading both the original poem in Japanese and its English translation and finally summarized what he felt by just saying, "English is too much!" It was the maximum he could verbalize his hyper-generalized feeling that came out of the drawing⁷.

It is interesting to note that the original poem and the drawing were qualitatively different. In this case, the "flow of his emotions" was newly expressed when he turned the modality from poetry to drawing. This meant that "poetry" became a past experience at this moment, and the drawing was constructed from it towards the future (pre-construction). Furthermore, in his explanation, he mentioned that there were feeling left behind that could not be expressed in English. These qualitative transformations clearly showed that the switching of modality was not a "repetition" of the past but the creation of novelty in the flow of irreversible time.



Fig 8 Xiaoxue's drawing on her own poem

Xiaoxue's interpretation:

⁷ As will be discussed later, translating the poem from Japanese to English seemed to have worked as pre-construction in another modality for Tepei.

The sadness of separation is painted by blue and grey, layer by layer, soft like smoke, heavy like fog, and it becomes the sea that separated two people. But the tenderness toward someone is wider than the sorrow, just like the sky is wider than the sea.

Xiaoxue also drew an abstract image to express her feeling that emerged from her poem. Again, as demonstrated in Teppei's example, there was a clear qualitative transformation of turning poetry into a drawing and explanation. She explained what she felt using metaphors such as "soft like smoke, heavy like fog," which becomes "the sea which separated two people," "(tenderness and sorrow are) just like the sky is wider than the sea." That means she used words to generalize her affective feelings, but her way of saying still conveys pleromatic meaning. The use of such metaphors had the function of giving Xiaoxue's pictures a more dynamic movement.

Demonstration 2: IMPreC started from reading the other's poem

There were other participants who read the above poems and drew a painting on what they felt. Let us see how the IMPreC method works in this case.



Fig 9 Ikumi's drawings on Teppei's poem

Ikumi's interpretation of Teppei's poem

The first thing I felt was "understanding," understanding about the bonsai tree, throwing my books away, and so on. The yellow line came first as if it was saying "understandable, understandable" repeatedly and moved from right to left as it gradually drifted upward. Then the warm feeling came in, which was painted as a pink cloud-like shape. Beneath that, I drew Teppei and his girlfriend. I imagined they did not look at each other directly, but they were fine, comfortable, accepting each other or something like that, standing side by side, shoulder to shoulder, smiling. By looking at this drawing, I felt a sense of calm, warmth, and cheerfulness in the two being together. I felt as if I was beside them and felt a sense of warmth just by being next to them.

Ikumi tried describing her nonverbal feelings that emerged from the poem. As a result, she encoded the mutual understanding of the two persons with minimum verbal expressions such as “understanding,” “comfortable,” or “acceptance” together with the imageries. She started explaining her feeling by saying “understandable, understandable” and imagined warm feeling coming in, then the notion of mutual understanding emerged in her. We can say this is the movement to hyper-generalization of the feeling, and the IMPreC method made it possible to activate the hyper-generalization of the feeling as well as to describe the process. It should be noted that symbolic drawing and abstract drawing coexist not only in Fig 9 but also in most of the figures in Demonstration 2. There, the poem was understood in relation to the hyper-generalized feelings of the readers, but the initial drawings were hybrid (containing both schematic and pleromatic parts).

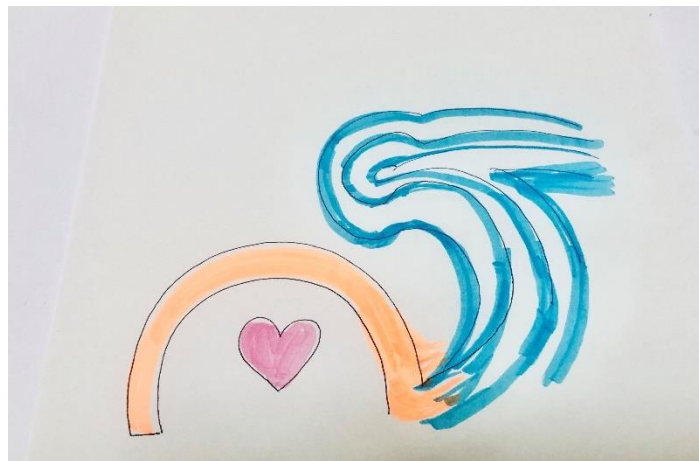


Fig 10 Kikuko’s drawings on Teppei’s poem

Kikuko's interpretation of Teppei's poem

Teppei sticks to his favorites with firm conviction, but at the same time, he feels guilty for his girlfriend with his being so. However, he finds her not saying anything (without complaining). He felt calm.

She seems to have a similar feeling, and the two create a relaxing atmosphere together. I felt they are compatible and get along well.

The orange "Kamakura"⁸ on the left side stands for safety, and the orange thread shows resonance. The blue lines show Teppei's guilt. The crossing of orange and blue lines means that his guilt turns into the joy of acceptance by her.

Kikuko constructed the feeling of reading the poem into a graphic form. Then she was asked to interpret it. She made the dialogical interpretation of feeling using

⁸ *Kamakura* is a Japanese igloo or snow hut in which Japanese children playhouse.

generalized feelings such as safety with guilt. Again, we can see the hyper-generalized feeling evoked by the IMPreC method.

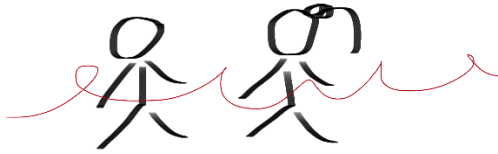


Fig 11 Xiaoxue's drawings on Teppei's poem

Xiaoxue's interpretation of Teppei's poem

Like the red string in the painting, the connection of two people is far below their verbal level, even thinking level. They won't get mad at each other easily because they are surrounded by this very soft, fine, but stable red string wherever they go. The space around them is empty but safe. With this red string, they can endure the emptiness and made it meaningful.

Xiaoxue reflected on the IMPreC method as *"Painting is much harder than writing for me. Although I've tried my best to express what I felt from the poem, there is still much more which is hard to express, even by words. Maybe it's something connected with my insufficient literal and painting skill."* It seemed difficult for her to express her feelings either in the poem or in drawings. However, from the above drawing and its interpretation, we can see the IMPreC pushed Xiaoxue forward to hyper-generalize her feelings. She drew a concrete image evoked by reading a poem, and by drawing, she generalized her feelings about the mutual relationship of lovers.

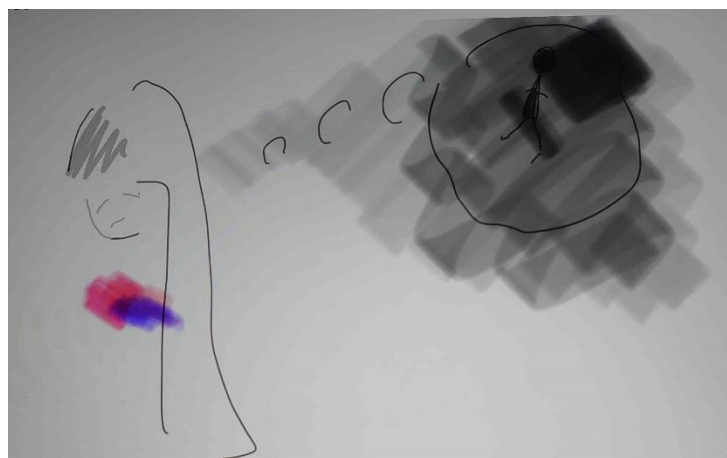


Fig 12 Ikumi's drawings on Xiaoxue's poem

Ikumi's interpretation of Xiaoxue's poem

I felt that Xiaoxue anticipated that this man in the shade would leave her in the future and that she would not see him again. He showed his back to her in her imagination. Since I felt she did not want to make it happen, I blacked out the bubble. She has a dark (sad) feeling inside her, and that darkness was getting stronger.

When I thought about it, I imagined she has pain or chilliness in her heart (painted in blue) and warmth or love (colored in pink) as well. And I thought Xiaoxue's face was gloomy and lonely.

The most general description of Ikumi's imagery may be the fear of separation from a loved one in the future. What she felt from the poem are complicated and pleromatic feelings than the verbal expression.



Fig 13 Kikuko's drawings on Xiaoxue's poem

Kikuko's interpretation of Xiaoxue's poem

It's easy for Xiaoxue to say goodbye to her friends, but not to someone special. It's a special feeling. On the one hand, she is looking forward to going to study abroad, but on the other hand, she has a painful reluctance as if she left her heart to her beloved one. I felt a feeling that she had her hair pulled back.

Kikuko felt a particular tension between the two, pleasure and sadness of separation, and she interpreted the hyper-generalization feelings on separation. When she reflected on the IMPreC demonstration, she said, "When I read other people's poems, emotion arises in me, which are different from theirs, but somehow connected." It means the pleasure and sadness of separation Kikuko felt was hers and not of Xiaoxue's, but they have something in common. In other words, Kikuko hyper generalized her feelings on separation evoked from Xiaoxue's poem.

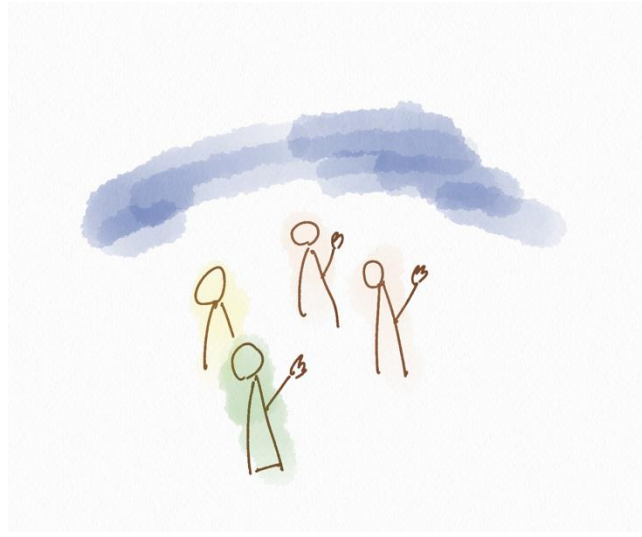


Fig 14 Teppei's drawings on Xiaoxue's poem

Teppei's interpretation of Xiaoxue's poem

The image came to me as if she were saying goodbye at school. While saying "goodbye" to her classmates, only the one she likes looks different from the others, which is important for her (I painted him in yellow and others in orange). I felt as if she were secretly hoping that he would ask her, just her alone, to go home with him instead of saying goodbye. And I just simply painted the landscape.

Teppei translated what he generalized from the verbal poetic materials into non-verbal representation, graphics with specific colors in this case. He referred to the difficulty of capturing his affective feelings that emerged from his poem into a concrete image, and he could only draw an abstract picture. It was quite interesting that he reported he could do it for the one that emerged from other's poems. It may mean that writing poetry activated his affective fields at a higher level of generalization than reading others' poems.

When I was asked to draw an image of myself reading my poem (as a work), I realized that my poem could not be drawn in an illustrative way but would be a movement like a line. That is because there is no specific subject or image in the poem that can point to "this" and can't be verbalized. On the other hand, I found it interesting that if it were someone else's poem, it would emerge as a concrete image.

Next possible steps: Music

As described above, the possibility of exploring hyper-generalized feelings was opened up by repeatedly producing the feelings while transforming the modality step-by-step. As the next possible steps, we can use the modality of music. This is because

music is hyper-generalized to each person. In a technical sense, it is difficult to compose music, but instead, the participants can choose the music that most closely resembles the feelings they are trying to express in their drawing. Furthermore, by asking the participants to explain, it is possible to deepen the understanding of the hyper-generalized feelings.

General Conclusion: What can we learn from expression difficulties?

In this article, we investigated the possibility of exploring hyper-generalized feelings by switching the modality of production, referred to as IMPreC. For this purpose, the historical roots of this class of methods were reviewed, and two empirical demonstrations were provided. The IMPreC method provides a new perspective for exploring the affective field on a microgenetic level.

We emphasized pre-construction as a sign construction in a movement towards the future that immediately faces us in the flow of irreversible time, rather than focusing on the repetition of the past. Switching modalities calls for the creation of new implications that express the ambiguous direction of hyper-generalized feeling. In the demonstration, we presented two examples of basic IMPreC (demonstration 1) and collective drawing of the poems of other people (demonstration 2). In Demonstration 1, Teppei and Xiaoxue created abstract drawings such as lines or clouds from concrete poems (Fig 7, 8). In Demonstration 2, we saw both abstract and concrete parts in each drawing. Each of these demonstrations showed a pre-constructive creative process, not a repetition of the past. However, the differences between these two demonstrations were obvious. In demonstration 1, Teppei, in his poem, described the flow of his "emotions from the top of the poem to the bottom." He reflected on this reason as follows:

When I was asked to draw an image of my poem, I realized that my poem is not something that can be illustrated. I didn't have a specific image of "this," or at least I couldn't verbalize it. On the other hand, I found it interesting that other people's poems came to me as concrete images.

Similarly, Xiaoxue also reflected on the difficulty of expressing her own poetry in a picture and words:

Painting is much harder than writing for me. Although I've tried my best to express what I felt from the poem, there is still much more which is hard to express, even by words. Maybe it's something connected with my insufficient literal and painting skills.

The IMPreC are ways of triggering and increasing the difficulty of expression of the original feelings. What is needed for switching of modality is a new integration while keeping attention to the feeling felt before. If a poem or a drawing about "love" is the product of an *affective synthesis* (Vygotsky, 1971; Valsiner, 2015), it would not be easily replaced by another different kind.

Interestingly, in Demonstration 1, both of the participants had difficulties in shifting the modality from poetry to drawing. This was because the participants constructed their products following the possible future direction in the hyper-generalized meaning field in the process of IMPreC. In other words, we can access this aboutness, but it is not possible to directly depict this field. Paradoxically, this difficulty expressed in the demonstration indicated an approach to the hyper-generalized threshold.

The pictures drawn in demonstration 2 were a mixture of both schematic and pleromatic parts. For example, in Fig. 10, the symbolic heart and Kamakura were depicted along with the feeling of guilt, which are difficult to symbolize. Also, in Fig. 12, "a dark (sad) feeling," which is a hyper-generalized feeling, was expressed by blacking out the bubbles. In other words, it is possible for us to understand the poetry of others based on our own feelings, in contrast to the difficulty of conversion of one's own poetry into a drawing.

The interesting point here is the feeling of "understandable" about poetry. This feeling implies that poetry, like painting, allows for a new synthesis of the reader's experiences. However, it indicated a different way of synthesis from that of the poem's author. According to Vygotsky (1971), "initially, an emotion is individual, and only by means of a work of art does it become social or generalized" (p.243). In other words, this article suggests the possibility of the method of IMPreC to find one's own catharsis while using the art of others as a "tool." The multiplicity of synthesis through a particular hyper-generalized field can be called "*pluri-synthesis*," following Werner & Kaplan (1963). While such syntheses are unique to each person and setting, we found that this diversity of meaning-making can be a catalyst for pleromatization through communication to others' feelings.

One of the limitations of this article is we did not consider the linguistic difficulties in IMPreC. Creating a poem in a second language may lead to the categorization of feelings and common-sense phrasing (level 2). While avoiding this, verbalizing feelings is a deeply affective process. In this article, we regarded English poetry as *modality 1*, but considering that language is also one modality, an additional step may have occurred for the participants in this demonstration as Teppei states, "English is too much!" There is room to deepen our understanding of the process of synthesis in translating such a language.

Last but not least, the process of creating a poem or drawing is a single moment that is connected to the construction of the future. The art may create novelty in the life trajectory in the future. However, it is not certain how it will guide the future of the person. As Vygotsky said:

Art is the organization of our future behavior. It is a requirement that may never be fulfilled, but that forces us to strive beyond our life toward all that lies beyond it. (Vygotsky, 1971, p. 253)

References

- Bartlett, F. C. (1920). Some Experiments on the Reproduction of Folk-Stories Stable. *Folklore*, 31(1), 30–47. <http://www.jstor.org/stable/1255009>
- Bartlett, F. C. (1932). *Remembering: A Study in Experimental and Social Psychology*. Cambridge university press.
- Chang, R. S. (ed.) (2009). *Relating to Environments: A New Look at Umwelt*. Information Age Publishing.
- Hillmann, P. L. (2018). A Melody Through Life: How Human Minds Wander. *SFU Research Bulletin*, 1, 46–57.
- Cirillo, L. (1962). A study of multiple meanings (plurisignificance) in a non-verbal medium. Unpublished master's thesis, Clark University.
- Klempe, S. H. (Ed.) (2016), *Cultural Psychology of Musical Experience*. Charlotte, NC: Information Age Publishing.
- Luria, A. R. (1968). *The Mind of a Mnemonist: A Little Book about a Vast Memory*. Basic Books.
- Philippe, J. (1897). Sur les transformations de nos images mentales. *Revue de Philosophie*, 43, 481–493.
- Sovran, T. (1992). Between similarity and sameness. *Journal of Pragmatics*, 18(4), 329–344. [https://doi.org/10.1016/0378-2166\(92\)90093-Q](https://doi.org/10.1016/0378-2166(92)90093-Q)
- Valsiner, J. (2006). The Overwhelming World: Functions of Pleromatization in Creating Diversity in Cultural and Natural Constructions. *Keynote Lecture at the International Summer School of Semiotic and Structural Studies, Imatra, Finland*.
- Valsiner, J. (2007). *Culture in Minds and Societies*, New Delhi: Sage
- Valsiner, J. (2015). The place for synthesis: Vygotsky's analysis of affective generalization. *History of the Human Sciences*, 28(2), 93–102. <https://doi.org/10.1177/0952695114559530>
- Valsiner, J. (2016). *An Invitation to Cultural Psychology*. SAGE.
- Valsiner, J. (2016). Series Editor's Preface: The Voice of Music in Cultural Psychology. In S. H. Klempe (Ed.), *Cultural Psychology of Musical Experience*. Charlotte, NC: Information Age Publishing (Amazon Kindle edition).
- Valsiner, J. (2017). *From Methodology to Methods in Human Psychology*. Springer.
- Valsiner, J. (2018). Beyond methods to open-systemic methodology in contemporary cultural psychologies. *6th Niels Bohr Lectures on Cultural Psychology*, 1–33.
- Valsiner, J. (2020). *Sensuality in Human Living: Cultural Psychology of Human Affect*. Springer.
- Vygotsky, L. S. (1971). *The Psychology of Art*. MIT Press.
- Wagoner, B. (2007). Overcoming psychology's methodology: Finding synthesis beyond the American and German-Austrian division. *Integrative Psychological and Behavioural Science*, 41(1), 60–74. <https://doi.org/10.1007/s12124-007-9003-1>
- Wagoner, B. (2009). The Experimental Methodology of Constructive Microgenesis. In J. Valsiner, P. C. M. Molenaar, M. C. D. P. Lyra, & N. Chaudhary (Eds.), *Dynamic Process Methodology in the Social and Developmental Sciences* (pp. 99–120). Springer. <https://doi.org/10.1007/978-0-387-95922-1>
- Werner, H., & Kaplan, B. (1963). *Symbol Formation*. Psychology Press (Digital Printing 2009).