

**A State of Becoming:**  
**Exploring Selfhood and its Ontogenetic Nexus with Memory, Mapping, and Material**  
**Engagement in Autobiographical Visual Art Practice**

Research Paper

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### **Abstract**

This paper explores the challenges faced in autobiographical visual art practice by artists who attempt to represent a selfhood that is in a state of becoming. It is examined within the context of memory, mapping, and material engagement, all of which are ontogenetic in nature. Combining theoretical enquiry with reflective artistic practice, this paper situates its discussion within the framework of post-structuralist philosophical thinking from Simondon, Deleuze and Guattari; the theory of reconstructive memory in experimental cognitive psychology; post-representational cartography; and Malafouris' material engagement theory. It then considers the implications in artistic practice by reflecting on the consequences of the observer effect that suspends the very process artists are trying to capture, and by questioning whether a self in flux can be captured through a static or moving image, concluding that this represents an ontogenetic impossibility. It proposes that artists can only ever achieve a momentary representation of the self - an archaeological trace of what once was. Finally, it develops the concept of the transformational loop in which artists, memory, mapping and materials are engaged in a perpetual cycle of lived selfhood, where each iteration of the self prompts further enquiry, response and transformation. The loop lies at the nexus of selfhood, memory, mapping and materiality, providing a richly dynamic and creative space in which the act of making becomes indistinguishable from the act of re-making. This paper proposes that this space is where artists should seek to inhabit, where process is preferred to product, and where artists have the unique ability both to observe and to participate in the ongoing process of their own becoming.

**Keywords:** Ontogenesis, selfhood, memory, mapping, material

## Introduction

An artist has got to be careful never really to arrive at a place where he thinks he's at somewhere. You always have to realise that you're constantly in a state of becoming, you know, and as long as you can stay in that realm, you'll sort of be alright. (Bob Dylan, *No Direction Home*, 2005, 02.11.47 )

Defending his refusal to be labelled the 'voice of a generation', Dylan cautions against imposing a sense of identity; doing so denies the artist the ability to develop, transform, and ultimately create. In contemporary theory, the state of becoming to which Dylan refers is known as '*ontogenesis*', from the Greek '*onto-*' meaning 'being' and '*-genesis*' meaning 'generation'; *the generation of being*, or more particularly, the continuing process of emergence and development of the self through individual experience and social context.

Artists have long explored selfhood through diverse methods within visual autobiographical art practice, from observational self-portraiture to using personal stories to create works of art, as well as a methodology to investigate the everyday world thereby exposing hidden narratives (Sharma, 2020, p. 32). Through reflection, artists reach a contextual understanding of selfhood – a process of mapping that provides a coherent framework within which to explore memory, narrative, and identity. In making visual representations, artists enact selfhood while engaging with materials.

This paper will briefly explore how selfhood, memory, mapping, and material engagement can all be considered to be ontogenetic in nature. In doing so, it will focus on contemporary philosophical and academic discourse that supports ontogenesis, particularly post-representational cartographic theory, post-structuralism, and material engagement

theory. It will then argue that whilst the desire of artists to represent selfhood encounters ontogenetic impossibility, this itself enables a recursive and processual form of creative self-becoming.

## Ontogenetic Processes

### Selfhood

Across Eastern and Western traditions, selfhood resists being fixed. Buddhist and Tao philosophies conceive the self as a process of relational flow, while Western thinkers, from Heraclitus to Deleuze and Guattari, equally emphasise flux and transformation.

Buddhism teaches the idea of ‘no self’ involving a dynamic process of five impermanent *skandhas*. Similarly, Tao philosophy views the self as an emergent and changing process in constant flow, harmonising with the Tao as an ongoing transformation. This perspective is mirrored by Heraclitus’s view that “everything flows” (van Hoorn, 2021) and Hume’s later argument that the self is simply a bundle of ever-changing perceptions and experiences that rapidly succeed each other in a perpetual flux. He asserts that “[o]ur eyes cannot turn in their sockets without varying our perceptions” (Hume, 1739-40, Book 1, Part 4, Section 6).

Contemporary philosophers have further developed this understanding by considering selfhood, not as a stable entity, but as an ontogenetic process. Simondon’s individuation theory proposes a continual open-ended process of becoming. He likens this to the formation of a crystal from a metastable solution - neither stable nor unstable, but that is full of potential – which he calls the ‘pre-individual’. A seed crystal is formed by a disturbance within the metastable solution; it then grows layer by layer in a dynamic and recursive process in which both the crystal and solution are altered. Transformation occurs at the outer layer so that the

crystal is not distinct from the solution, and vice versa. The process continues until it reaches stability, but there is still potential for further transformation under the right conditions.

In this analogy, the self can be seen as the crystal and its environment (or milieu), as the solution. However, the individuation of the self is unique in that it involves transformation not only at the outer surface but also from within. Furthermore, the process is open-ended because the self and its milieu are inseparable, each shaping the other in a recursive loop (Bluemink, 2020).

Deleuze and Guattari subsequently adopted and reframed Simondon's principle of individuation in their theory of assemblage. Their focus is on how diverse elements - people, practices, technologies, spaces, languages - connect to create flexible networks that generate new possibilities within numerous overlapping milieux, giving rise to change and evolution. A specific assemblage is the *rhizome*, where elements connect in multiple directions in a non-hierarchical manner, always becoming something other than what they were, but still maintaining sufficient coherence to support ongoing action and experience (Holland, 2013).

If selfhood is perpetually becoming, how do artists maintain a sense of continuity across time that allows recognition of the self? The intuitive answer must be memory.

## **Memory**

The neuroscientific particulars of the formation, storage and retrieval of memories are beyond the scope of this paper, as is the issue as to the accuracy of the memories once formed. It is enough to understand that memories are created in three stages: encoding, storage and retrieval. It is the fundamental nature of the act of retrieval that is relevant to the concept of ontogenesis.

Memory is ontogenetic in nature – it is not an archive from which past experiences can be recalled unaltered. “Pure memory” does not exist (Mindich, 2017). Instead, memory is a creative and dynamic process of maintaining, updating, and actively reconstructing events. As Bartlett observed, “[r]emembering is not the re-excitation of innumerable, fixed, lifeless and fragmentary traces” but rather “an affair of construction rather than mere reproduction”, an “imaginative reconstruction, or construction, built out of the relation of our attitude towards a mass of organised past reactions or experiences” (Bartlett, 1932, cited in Roediger, 2020, p. 160).

Fragments of memory are interwoven with “assumptions and preferences” to form a coherent story (McDermott & Roediger, 2025, Retrieval section para 11). According to Ricoeur, it is an act that is born out of the natural tendency of humans to seek meaning by organising information and making sense of it in the form of a narrative. He says that “[i]t has always been known and often repeated that life has something to do with narrative; we speak of a life story to characterize the interval between birth and death” (Ricoeur, 1991, p. 20) and that “[a] life is no more than a biological phenomenon as long as it has not been interpreted [and] in interpretation, fiction plays a mediating role.” (Ricoeur, 1991, pp. 27 & 28 ).

This dynamic reconstruction opens up the possibility for embellishment, including “poetically” recreating the self, because “we compose stories to understand who we are and the world that we live in”, and thus we are “the stories we tell, the narratives we compose, and the truths we bring forth” (Mindich, 2017).

The reconstruction of memory through narrative is intrinsic to the work of the artist, A R Hopwood (also known as Al Hopwood). In his *The False Memory Archive* (Fig. 1.), he “reflects on the way we creatively reconstruct our sense of the past” by questioning the stability and veracity of memory (Freud Museum London, 2014). His *WithTV* project invites

people to commission the fictionalisation of personal experiences, affording the opportunity to remake memories in more acceptable or desirable forms (WithTV, 2021).

Janet Cardiff's audio walks, such as *The Missing Voice (Case Study B)*, (Cardiff, 1999) can be seen as blurring the distinction between memory and narrative. While Cardiff does not explicitly connect her work to memory reconstruction, but rather to responses to locations and the desire to dramatize her life (Cardiff, 2002), her use of fragmented voices and storytelling embodies a reconstruction of memory in real time, prompting the listener to question what is real, what is fiction, and what is their own perception.



Fig. 1. *The False Memory Archive*, Freud Museum London. (2014)

These artistic treatments reinforce the concept that each time we remember, our memories are remade and shaped by past experience, present context, external influences, and the present self, with its unique set of beliefs, aspirations, and emotions. Our past is transformed along with our present and future. Each act of remembering remaps our memories, and in doing so, remaps the self.

## Mapping

Not only do we seek to understand ourselves, but also the world we inhabit and our position in it. “[H]umans have an urge to map – and ...this mapping instinct, like our opposable thumbs, is part of what makes us human’ (Harmon, 2004, p. 10).

While artists map and create maps, both figuratively and metaphorically, the distinction between the act of mapping and the creation of the map as an artefact has lost its significance. Post-representational cartographic theory treats both maps and mapping as co-existing components of a dynamic process.

This processual approach departs from traditional theory which assumed that the world could be represented objectively within a known tolerance, rendering maps complete and absolute documents of truth (Kitchin, Perkins & Dodge, 2009, p. 4). In reality, inevitably maps are imbued with the values and judgements of their makers and reflect the culture from which they are produced. Maps are social constructs that produce, and are the products of power (Harley, 1989 pp.11-12). Nevertheless, it was thought that they could still reveal the truth of the landscape if looked at in context, and with the knowledge of the underlying ideology (Kitchin & Dodge, 2007, p. 332); the problem was not maps themselves, but how they were used (Wood, 1983 p. 50).

Post-representational critique has since rejected the assumption of ontic knowledge in maps, instead questioning their ontological stability, and deriving influence from Simondon’s concept of individuation. “...[M]aps are ontogenetic (emergent) in nature. Maps have no ontological security, they are of- the- moment; transitory, fleeting, contingent, relational, and context-dependent”, and so mapping becomes a process of constant remapping of territory

(Kitchin & Dodge, 2007 p. 340; p. 331). Each engagement with a map – being read, annotated or used to give instructions - produces new meaning (Kitchin & Dodge, 2007, p. 335). Not only is the map remade, but also the user’s understanding of the world (Kitchin, 2010, p. 9) which, in turn, also remakes their sense of self.

Kitchin and Dodge maintain that “[m]aps are practices – they are always *mappings*; spatial practices enacted to solve relational problems” (Kitchin & Dodge, 2007, p. 335).

Therefore, any artistic act, whether conceptual, material, or performative, in which mapping practices are used to solve spatial and relational problems can be said to be a mapping

Both Grayson Perry and Tracey Emin exemplify mapping processes in their work.



Fig. 2. *A Map of Days*. Perry, Grayson. (2013)

Perry’s large-scale etching *A Map of Days* (Fig. 2) is a self-portrait depicting himself as a walled city. He echoes the concept of the ontogenetic self when he says: “The ‘self’ I think is not a single fixed thing but a lifelong shifting performance. My sense of self is a tiny

man kicking a can down the road” (Perry, 2013). Perry has a long-standing fascination with maps, and he acknowledges that maps contain human bias that can “emphasise desirable features and leave out the undesirable” (Perry, no date, as cited in the National Portrait Gallery, no date). His approach to mapmaking resonates with Ricouer’s view; he considers the making of maps to be “symptomatic of our desire to make sense of the unpredictable and irrational in our lives” (Perry, 2019, as cited in Royal Academy of Arts, no date).

Emin’s work, which is predominantly autobiographical, can be interpreted as mapping her lived experience – a personal geography that places Margate as an integral landmark to her sense of self. Her appliquéd blanket, *Hotel International* (Fig.3), forms an autobiographical map positioning people, experiences, and places as coordinates in a spatial and temporal representation of her childhood. Similarly, her tent, *Everyone I’ve Ever Slept With 1963-1995* (Fig. 4), is inscribed with “an intimate cartography of human connections in all their forms” (Lancelin, 2025).



Fig. 3. *Hotel International*. Emin, T. (1993)



Fig. 4. *Everyone I've Ever Slept With (1963-1995)*, Emin, T. (1995)

Materiality is also crucial; Perry chooses to engage with materials that undermine the traditionally dismissive view of craft, while Emin chooses to work with vintage textiles and the direct and immediate method of mono-printing to map her personal narrative. Both use materials that reinforce the embodied and processual nature of mapping the self through art practice.

### **Material Engagement**

Material Engagement Theory (“MET”) is a framework developed by Lambros Malafouris, a professor of Cognitive and Anthropological Archaeology, that radically reconfigures the boundaries of traditional understandings of human becoming and material agency. While MET has attracted criticism for rejecting the conventional separation between mind and matter, its principles closely align with the concept of ontogenesis and, for that reason, it is adopted in this paper.

The theory focuses on human *becoming*, rather than ‘becoming human’. Malafouris describes this as “an ongoing human becoming which remains unfolding – one that could be seen as an incomplete process rather than an end product called *Homo sapiens*” (Templeton Foundation, 2018). He actually favours the term *homo faber*, arguing that humans are inseparable from the artifacts that they create: not only do humans make things, but they are also made by them (Templeton Foundation, 2018).

Through creative interaction with the material world, humans become and are shaped by the things that they create, influencing their development and how they live in and experience the world (Malafouris, 2021, p. 43). Humans engage in creative “*thinging*” which is Malafouris’ term for thinking and feeling “with, through, rather than simply about things” (Malafouris, 2021, p. 43; p. 40). “Thinging” is the co-constitutive act of thinking and

becoming. For instance, the traditional approach to cognition would assume that when a potter makes a vase it is formed by preconceived thoughts in the potter's head. However, MET reframes the process by asserting that "the boundaries of the mind cannot be delimited and defined...rather they need to be discovered in action" so that forming and thinking are inseparable (Malafouris, 2019, p. 6). The dialogue between the hand and the clay is a dynamic non-linear continuous process; a collaboration between hand and material, each responding to the other, participating in each other's existence, taking responsibility for and feeling the effect of each other's acts, and ultimately feeding back to the brain (Malafouris, 2021, p. 51).

Malafouris contends that the 'self is more than a brain' with cognition and selfhood co-constituted in the process of human becoming. A self cannot emerge apart from a process of material engagement (Malafouris, 2008, p. 1998). Like Simondon, he rejects the idea that the self is entirely distinct from its environment, instead advocating for "a self that is located neither inside nor outside the brain/body, but is instead constantly enacted in-between brains, bodies and things and is thus irreducible to any of these three elements taken in isolation" (Malafouris, 2008, p. 1997). The boundaries of the self are perpetually changing by material engagement; the self "constantly projects and extends itself beyond the skin, actively engaging and incorporating its material surroundings via the interface of the body" (Malafouris, 2008, p. 1997).

This mutual transformation of human and material is not novel to art practice. James Elkins describes painting as an alchemical process in which both painter and paint are transformed (Elkins, 1999). Like Malafouris, Elkins emphasises the inextricable link between hand, material and brain, dismissing the assumption that materials are vehicles for preformed

ideas. He describes paint as “liquid thought” and “a cast made of the painter’s movements, a portrait of the painter’s body and thoughts”. For Elkins, the act of painting is “an unspoken and largely unrecognised dialogue where paint speaks silently in masses and colours and the artist responds in moods” (Elkins, 1999, p. 5). This centres on the materiality of paint; its physical nature – its chroma, texture, viscosity and behaviour in the hands of the painter – and the transformational dialogue between paint and painter.

### **Implications in Practice**

The attempt of artists to capture a visual representation of the ontogenetic self raises several issues.

Firstly, there is the matter of the observer effect, that is, “the fact that observing a situation or phenomenon necessarily changes it” (Baclawski, 2018). The ontogenetic self exists not only in the moment of becoming but also *within* the process of becoming. As soon as artists step outside of that process to observe and document the ontogenetic self, the flow of becoming is interrupted. When a pianist is in a flow state whilst immersed in playing, any conscious thought interrupts and stops the flow and intuitive playing comes to an end.

Similarly, the knowingly observed self will cease to become naturally, its flow having been interrupted. By trying to represent the self in a state of becoming, artists freezes the very process they are trying to capture.

Secondly, is it possible to represent a state of becoming in static form? Bergson’s view is that “no image can represent duration’ because ‘an image is immobile while duration is ‘pure mobility’” (Bergson, 1903, p. 165 as cited in Lawlor & Moulard-Leonard (2025) paras 14-16). Even when using dynamic imagery such as video, the mere act of recording inevitably produces individual static representations of the self which become obsolete the

moment they are made because of the inherent time lag between the ongoing becoming of the self and its representation, however slight. While video may offer a more fluid form of representation than a static image, it nonetheless documents what has been, not what is becoming.

An unrecorded, direct live feed of artists living life, entirely unaware of being observed might seem to offer a solution. However, this approach introduces ethical concerns, removes artists' agency and authorship, and arguably still only relays a mediated version of selfhood subject to the limitations of technology and perspective. Furthermore, it is difficult to see what artistic purpose it would serve if artists are necessarily excluded from the process to avoid the consequences of the observer effect.

Finally, this paper has explored the individual ontogenetic nature of selfhood, memory, mapping and material engagement, and the manner in which each of these individual elements interact is illustrated in *Ontogenetic Relationships* (McCalmont-Woods, 2025) (Fig.5.). Not only do these elements overlap at a single point - the nexus - but there are also discrete intersections between each of them. This model produces a complex and highly dynamic environment in which not only is selfhood being continually transformed by acts of memory retrieval, mapping processes and material engagement, but also the elements are each simultaneously affecting one another in a recursive cycle that feeds back into the nexus.

The nexus is unstable; memory, mapping and materials collaborate and co-evolve concurrently as the artist undergoes transformation. This produces a perpetual cycle of lived selfhood, in which each iteration of the self prompts further enquiry, response and transformation, in an ongoing process which is destined never to be completed; the act of making being indistinguishable from the act of re-making. From this transformational loop

emerges a selfhood that is not the selfhood which was originally the subject of the representation, and which has been frozen, but a new iteration which becomes through engaging in art practice and the act of making, and which can similarly never be fixed or represented.

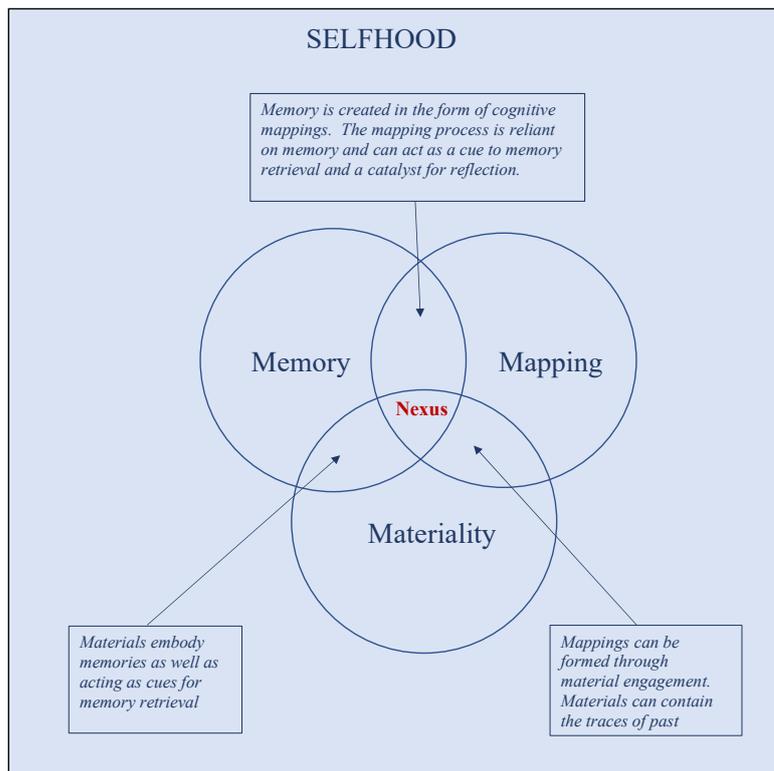


Fig. 5. *Ontogenetic Relationships*, McCalmont-Woods, K. (2025)

### Conclusion

In attempting to represent the self, artists inevitably confront a set of challenges that appear insurmountable within the framework of ontogenesis as explored in this paper. While future technological advances might offer new ways of addressing them, this paper concludes that artists can only ever capture what the self has become - creating archaeological traces of what once was, palimpsestic representations of relationships that used to exist between past

selves, that have already transformed into another. Artists must accept, therefore, that while it is possible to articulate a historic selfhood through retrospective sense-making, it is enacted in the uncertainty of the present in accordance with Kierkegaard's observation that "life is lived forward" (Maden, 2024). This state of becoming is incapable of being reduced to a visual representation.

This position echoes Dylan's urge to artists never to be 'at somewhere' or 'to arrive at a place', but to stay in the 'realm' of becoming. In this sense, a way forward would involve embracing the ontogenetic nexus of selfhood, memory, mapping and material engagement and repositioning it not as a problematical barrier, but as a dynamic 'realm' of artistic growth and transformation. By doing so, the Sisyphean pursuit of representing ontogenetic selfhood can be abandoned in favour of processual practices that embrace and actively foster the ongoing transformation of selfhood, shifting the focus from observing and documenting, to participation in becoming.

By adopting methodologies that extend beyond personal narrative and position the exploration of selfhood within the wider, rigorously examined contexts of culture, politics and society - as employed in autoethnographical art practice – artists can privilege process over product. Unlike others, artists are uniquely fortunate to have the opportunity of being able to engage actively with the creative process of becoming as both observer and participant in their ongoing transformation.

## Bibliography

- Bachmetjevas, V. (2020) 'Imaginary construction and lessons in living forward' *PhilArchive*. Available at: <https://philpapers.org/rec/BACICA>
- Baclawski, K. (2018) 'The Observer Effect', Paper presented at *Conference on Cognitive and Computational Aspects of Situation Management*, 2018. Available at: <https://ken.baclawski.com/pub/2018/21/public.pdf>
- Bergson, H. (1903) *An introduction to metaphysics*. Translated by T.E. Hulme. Available at: <http://www.realfuture.org/wordpress/wp-content/uploads/2010/11/Introduction-to-Metaphysics.pdf>
- Bluemink, M. (2020) 'Gilbert Simondon and the Process of Individuation', *Epoché Magazine* 1 March. Available at: <https://epochemagazine.org/34/gilbert-simondon-and-the-process-of-individuation/> (Accessed: 20 October 2025)
- Cardiff, J. (1999) *The Missing Voice (Case Study B)* [Audio walk] Commissioned by Artangel. Available at <https://www.whitechapelgallery.org/about/blog/janet-cardiff-the-missing-voice/> (Accessed: 3 November 2025)
- Cardiff, J. (2002) 'Janet Cardiff' [Interviewed by Atom Egoyan], *BOMB Magazine*, April 1 Available at: <https://bombmagazine.org/articles/2002/04/01/janet-cardiff/> (Accessed: 3 November 2025)
- Elkins, J. (1999) *What Painting Is: How to Think About Oil Painting, Using the Language of Alchemy*. Routledge.

Figure. 1. *The False Memory Archive exhibition photo* (2014) [Photograph]. Freud Museum London. Available at: <https://www.artforum.com/events/carroll-fletcher-freud-museum-206248/> (Accessed: 3 November 2025)

Figure. 2. Perry, G. (2013) *A Map of Days* [Etching]  
<https://www.royalacademy.org.uk/art-artists/work-of-art/a-map-of-days> (Accessed: 3 November 2025)

Figure. 3. Emin, T. (1993) *Hotel International* [Appliquéd blanket]  
<https://www.whitecube.com/artworks/hotel-international> (Accessed: 3 November 2025)

Figure. 4. Emin, T. (1995) *Everyone I've Ever Slept With (1963-1995)* [Appliquéd tent]  
<https://blog.artsper.com/en/a-closer-look/contemporary-art/tracey-emin-everyone-i-have-ever-slept-with/> (Accessed: 3 November 2025)

Figure. 5. McCalmont-Woods, K. (2025) *Ontogenetic Relationships* [Diagram]

Freud Museum London (2014) *A.R.Hopwood – The False Memory Archive*. Available at: <https://www.freud.org.uk/exhibitions/a-r-hopwood-the-false-memory-archive/> (Accessed: 3 November 2025)

Harley, J.B. (1989) 'Deconstructing the Map', *Cartographica*, 26(2), pp. 1-20. Available at: [https://web.archive.org/web/20170809023738id\\_/http://lazarus.elte.hu/~zoltorok/oktat/Kuhn/Deconstructing%20the%20Map.pdf](https://web.archive.org/web/20170809023738id_/http://lazarus.elte.hu/~zoltorok/oktat/Kuhn/Deconstructing%20the%20Map.pdf)

Harmon, K. (2004) *You Are Here – Personal Geographies and Other Maps of the Imagination*. Princeton Architectural Press.

Holland, E.W. (2013), *A thousand plateaus: a reader's guide*, Bloomsbury Academic

Hume, D. (1739-40) *A Treatise of Human Nature* Available at: <http://www.public-library.uk/pdfs/9/417.pdf>

Kitchin, R. (2010). *Post-representational Cartography* Available at: <https://kitchin.org/wp-content/uploads/2019/04/losquaderno-post-representational-cartography-2010.pdf> (Accessed: 16 June 2025)

Kitchin, R. & Dodge, M. (2007) 'Rethinking Maps', *Progress in Human Geography*, 31 (3) pp 331-344. Available at: <https://doi.org/10.1177/0309132507077082>

Kitchen, R., Perkins, C. & Dodge, M. (2009) 'Thinking About Maps' in Dodge, M., Kitchin, R. & Perkins, C. (eds) *Rethinking Maps: New Frontiers in Cartographic Theory* pp. 1-25. Routledge. Available at:

[https://www.researchgate.net/publication/242489881\\_Thinking\\_about\\_Maps](https://www.researchgate.net/publication/242489881_Thinking_about_Maps)

Lancelin, H. (2025) 'Tracey Emin: The Raw Art of a Survivor', *ArtCritic*. Available at: <https://www.artcritic.com/en/tracey-emin-the-raw-art-of-a-survivor/> (Accessed: 3 November 2025 )

Lawlor, L. & Moulard-Leonard, V. (2025) 'Henri Bergson', Winter 2025 Edition, *Stanford Encyclopedia of Philosophy*, in Zalta, E. & Nodelman, U. (eds) Available at: [https://plato.stanford.edu/entries/bergson/?fbclid=IwAR002\\_KBzmUYIHjyIWhuaf-wI422ePgJv49jfAXVgA8AX1-fonusAmrD1TI](https://plato.stanford.edu/entries/bergson/?fbclid=IwAR002_KBzmUYIHjyIWhuaf-wI422ePgJv49jfAXVgA8AX1-fonusAmrD1TI)

McDermott, K.B. & Roediger, H.L. (2025) 'Memory (Encoding, Storage, Retrieval)', in Biswas-Diener, E. (ed.) *Noba textbook series: Psychology*. Champaign, IL: DEF publishers.

Available at: <https://nobaproject.com/modules/memory-encoding-storage-retrieval>

(Accessed: 20 October 2025)

Malafouris, L. (2008) 'Between brains, bodies and things: *tectonoetic* awareness and the extended self', *Philosophical Transactions of the Royal Society*, 363,

<https://doi.org/10.1098/rstb.2008.0014>

Malafouris, L.(2019) 'Thinking as "thinging"- Psychology with Things', *Current Directions in Psychological Science* 29(1) Available at: [https://ora.ox.ac.uk/objects/uuid:e71d73cf-](https://ora.ox.ac.uk/objects/uuid:e71d73cf-2b31-4c6f-a324-61897bd5c95a/download_file?safe_filename=Malafouris_2019_thinking_as_thinging_psychology_with_things.pdf&type_of_work=Journal+article)

[2b31-4c6f-a324-](https://ora.ox.ac.uk/objects/uuid:e71d73cf-2b31-4c6f-a324-61897bd5c95a/download_file?safe_filename=Malafouris_2019_thinking_as_thinging_psychology_with_things.pdf&type_of_work=Journal+article)

[61897bd5c95a/download\\_file?safe\\_filename=Malafouris\\_2019\\_thinking\\_as\\_thinging\\_psychology\\_with\\_things.pdf&type\\_of\\_work=Journal+article](https://ora.ox.ac.uk/objects/uuid:e71d73cf-2b31-4c6f-a324-61897bd5c95a/download_file?safe_filename=Malafouris_2019_thinking_as_thinging_psychology_with_things.pdf&type_of_work=Journal+article)

Malafouris, L. (2021) 'Making hands and tools: Steps to a process archaeology of mind', *World Archaeology*, 53(1), pp. 38-55. <https://doi.org/10.1080/00438243.2021.1993992>

Mindich, W. (2017) 'Autobiographical Memory and the Art of Storytelling and Narrative Identity: A Poetics of the Self', *The Other Journal*, 27. Available at:

<https://theotherjournal.com/2017/05/autobiographical-memory-art-storytelling-narrative-identity-poetics-self/#easy-footnote-15-11364>

National Portrait Gallery (no date), *Grayson Perry ('A Map of Days')* by Grayson Perry.

Available at: <https://www.npg.org.uk/schools-hub/grayson-perry-a-map-of-days-by-grayson-perry#acc396> (Accessed on: 3 November 2025)

*No Direction Home* (2005) Directed by M Scorsese. 02.11.47 Available at: Qello Concerts (Accessed: 20 September 2025)

Perry,G. (2013) *A Map of Days*. Paragon Press. Available at:

<https://paragonpress.co.uk/works/map-of-days> (Accessed: 3 November 2025)

Ricoeur, P. (1991) 'Life in quest of narrative', Wood, D. (ed) *On Paul Ricoeur: Narrative and Interpretation*, Routledge, pp.20-33. Available at:

<https://www.scribd.com/doc/55054747/Ricoeur-Life-in-Quest-of-Narrative>

Roediger, H.L. (2000) 'Sir Frederic Bartlett: Experimental and Applied Psychologist', in Kimble, G.A. & Wertheimer, M. (eds.) *Portraits of Pioneers in Psychology Vol IV*, American Psychological Association. Available at:

<https://books.google.co.uk/books?hl=en&lr=&id=bIZ5AgAAQBAJ&oi=fnd&pg=PA155&ots=Olq5Ncj03E&sig=sxAj3mgEVzm8yfhDg5AxyywiQKQ#v=onepage&q&f=false>

Royal Academy of Arts (no date) *A Map of Days*. Available at:

<https://www.royalacademy.org.uk/art-artists/work-of-art/a-map-of-days> (Accessed: 3 November 2025)

Sharma, M. (2020) 'Unpacking the self: Autobiography as a means to find hidden narratives', *Forum+*, 27(3), pp. 29-37 Available at: <https://doi.org/10.5117/FORUM2020.3.005.SHAR> (Accessed: 2 November 2025)

Templeton Foundation. (2018) 'SelfBound: The Making of Human Consciousness. Available at: <https://www.templeton.org/grant/selfbound-the-making-of-human-consciousness> (Accessed: 20 October 2025)

van Hoorn, S. (2021) 'Everything Flows, or Does It? Heraclitus on Everything', *Antigone*. Available at: <https://antigonejournal.com/2021/11/heraclitus-everything-flows/> (Accessed: 20 October 2025 )

WithTV (2021) Available at: <https://www.withtv.co.uk> (Accessed: 3 November 2025)

Wood, J. (1993) 'The Fine Line Between Mapping and Map-making', *Cartographica: The International Journal for Geographic Information and Geovisualization*, 30(4), pp. 50-60

Available at: <http://www.deniswood.net/content/papers/Fine%20Line.pdf>

### *Acknowledgments*

#### *Artificial Intelligence*

I acknowledge the use of AI to the extent that I considered the AI Overview in Google Search results.

I also acknowledge the use of *Perplexity AI* in the following ways:-

- to assist me in carrying out my research by identifying relevant focus areas within the several disciplines covered by the scope of this paper. I evaluated each of the suggestions made, verified the sources, and where I considered them to be of value, carried out further detailed research myself.
- I brainstormed the idea that the very act of attempting to make a representation of the self would cause the process of becoming to stop by virtue of the observer effect, as discussed on pages 14 and 15. Please see the prompts and responses in *Appendix 1*.
- I used *Perplexity AI* to verify my understanding of Simondon's theory of individuation and transduction. Please see *Appendix 2*.

#### *Human Intelligence*

I acknowledge the contributions made by my supervisor, Janet Waring Rago.

## Appendix 1

Thinking about the research on self, memory, mapping and materiality and its ontogenetic nature, as soon as the artist becomes observer does the process of becoming stop even just temporarily eg because of the observer effect? Also if at that stage the artist makes a visual representation does that represent an iteration of the self which is unlike past or future iterations ie it is unique? Please be brief in your response.

Perplexity Research Sources

Yes, when the artist shifts to observer, the process of becoming pauses temporarily—analogueous to the observer effect, where the act of observing interrupts the natural flow of the system being observed. This interruption is not permanent but marks a suspension of immersive, processual selfhood in favor of reflective distance.

At this moment, any visual representation created constitutes a unique iteration of the self—distinct from both past and future versions. Each iteration captures the self at that specific temporal, material, and ontogenetic juncture, shaped by the particular memories, materials, and relational mappings active at that moment. Because memory is ontogenetic (continually reconstructed), the self is never accessed or represented in the same way twice—every iteration is singular.

Once the artist returns to immersive practice, the process of becoming resumes, generating new iterations through ongoing material engagement and transformation.

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### A bit more detail

Perplexity Research Sources

#### The Observer Effect and Ontogenetic Pause

When the artist assumes the observer position, the process of ontogenetic becoming does pause temporarily—but this pause is itself part of the ongoing becoming. This is analogueous to the observer effect in physics and phenomenology: the act of observation fundamentally interrupts the natural, immersive flow of the system. In ontogenetic terms, this means the self's continuous transformation halts at the moment of reflective distance, creating what might be called a "phase closure"—a provisional endpoint that allows the self to be examined, but at the cost of interrupting its fluid becoming.

This pause is temporary, not absolute. Once the artist returns to immersive practice and material engagement, the process resumes—but it resumes as a new phase, not a continuation of the interrupted one.

#### Iteration as Unique Representation

Yes, the visual representation created during this pause constitutes a unique, singular iteration of the self—fundamentally unlike all past and future iterations. This uniqueness arises from several ontogenetic principles:

**Temporal Specificity:** The iteration captures the self at a precise moment in its developmental trajectory, shaped by the particular constellation of experiences, memories, and material engagements active at that juncture.

**Memory's Ontogenetic Nature:** Because autobiographical memory is itself ontogenetic—constantly reconstructed and remapped rather than simply retrieved—each time the artist accesses memory to inform the representation, memory is re-formed. This means the representation encodes not the "original" self but a newly-constituted version of memory, making the iteration genuinely unrepeatable.

**Material Contingency:** The materials used in the representation (paint, clay, fiber, digital tools) actively participate in shaping the iteration. Material engagement theory suggests that the self is co-constituted through material interaction, so each artwork using specific materials embodies a materially-particular version of selfhood.

**Relational Mapping:** If the representation involves mapping practices—whether spatial, autobiographical, or conceptual—the act of mapping at that moment encodes unique relational patterns between self and world. Future mappings will generate different relational configurations.

#### Discontinuity and Continuity

Crucially, while each iteration is unique and singular, it is not isolated. Each iteration becomes part of a larger biographical and artistic sequence, carrying traces of prior iterations while opening possibilities for subsequent becomings. The artist's practice thus consists of a series of distinct self-versions, each pausing and fixing selfhood temporarily, yet collectively forming an archive or chronicle of ongoing ontogenetic transformation.

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### Would each iteration be like a layer on Simondon's crystal?

Perplexity Research Sources

Yes, precisely. Each iteration of the self formed during the pause in ontogenetic becoming functions very much like a successive layer on Simondon's crystal—where each new layer actualizes potential from the metastable milieu and becomes the structural basis for future growth.

#### The Crystal as Model for Iterative Selfhood

In Simondon's crystallization analogy, "each already constituted molecular layer serves as an organizing basis for the layer currently being formed". The crystal grows through **transduction**—a progressive structuring where each completed layer provides the template and foundation for the next. Crucially, "each new layer in the crystal structure actualises the potential of the metastable, preindividual potentiality within the solution surrounding the crystal seed".

When applied to artistic selfhood, each visual representation or self-iteration functions similarly: it crystallizes one phase of becoming, actualizing potential from the preindividual reservoir of memory, experience, and material engagement. This iteration then becomes part of the artist's ongoing structure—a completed layer that informs and conditions subsequent iterations, but does not exhaust future potentials.

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### Key Parallels

**Sequential Structure:** Just as the crystal's interior layers are "the result of past activity" that "remains closed upon itself", each past self-representation becomes a fixed record—no longer active in the present moment of becoming, but foundational to what comes next. [uni-hildesheim +1](#)

**Amplifying Structure:** The crystal produces "an amplifying reticular structure" as it grows—similarly, serial self-representations create an accumulating archive of iterations, each building on previous versions while remaining distinct. [parrhesiajournal +3](#)

**Incomplete by Nature:** Critically, "a crystal is endowed with an indefinite power of growth; a crystal can have its growth arrested, but never completed"—mirroring how the ontogenetic self is never finished, always capable of generating new iterations when returned to a metastable state (immersive practice). [ladeleuziana](#)

### Distinction from the Living

However, there's an important caveat: Simondon distinguishes physical individuation (crystal) from biological/psychic individuation (living beings, artists). In the crystal, individuation occurs only at the surface or limit, and the interior is essentially inactive. But in living and psychic individuation, "all the content of the interior space is topologically in contact with all the content of the exterior space"—meaning the entire self, including past iterations stored as memory, remains active and can be reworked. [fractaontology.wordpress +1](#)

So while each self-representation is layer-like in being a distinct iteration, the artist's ontogenetic process is more dynamic than crystal growth: past layers (memories, prior artworks) can be revisited, reinterpreted, and reconstituted.



**But if the artist's intention is to capture a representation of the self in its state of becoming, the very act of trying to do this stops the process of becoming from happening, doesn't it? A brief answer please.**

[Perplexity Research](#)

Yes, exactly. This is the fundamental paradox: the intention to capture the self in its state of becoming requires the artist to observe and represent it, which necessarily interrupts and halts the very process they seek to capture.

It's like trying to observe yourself sleeping—the act of observation ends the state you're trying to observe. The moment the artist shifts from immersive becoming to reflective representation, the flow stops and what emerges is not becoming itself, but a fixed trace or iteration of a self that was becoming.

This is why representation of ontogenetic selfhood is considered an ontological paradox or impossibility in strictly mimetic terms—you cannot capture process-as-it-happens without transforming it into product.

**If selfhood, memory, mapping and materiality all transform each other in an unending cycle - a feedback loop? - how does this fit in with your previous responses?**

[Perplexity Research](#) [Sources](#)

This feedback loop model actually reinforces and deepens the previous responses. Selfhood, memory, mapping, and materiality continuously transform each other in an ongoing cycle—and this is precisely what makes each iteration unique and the process fundamentally ontogenetic.

When the artist pauses to observe and represent, they interrupt one cycle of the loop—halting the immersive, automatic feedback between these elements. However, the act of creating the representation itself initiates a new cycle: the artist engages with materials (materiality), which shapes how they understand themselves (selfhood), which influences what they remember (memory), which determines how they organize and express relationships (mapping).

Each iteration—each artwork—is both a pause in one feedback loop and the initiation of another. The "layers" on Simondon's crystal aren't static deposits but nodes in an ongoing transformative system where past iterations remain active, feeding back into future becomings through memory reconstruction and material reengagement. [uni-hildesheim](#)

So the loop never truly stops—it shifts registers between immersive becoming and reflective making, with each iteration capturing one moment in the cycle while simultaneously generating conditions for the next.



**So the artist might as well give up on trying to make a visual representation of the ontogenetic self and just fully participate in the feedback loop of processual becoming?**

[Perplexity](#)

Not necessarily—giving up on visual representation is not the only logical outcome. Rather, the impossibility of fully capturing the ontogenetic self points to a shift in artistic intention: from representing a stable, finished self to enacting, witnessing, and materializing aspects of the processual feedback loop itself.

Contemporary approaches in autobiographical and process-based art embrace this paradox—artists create works that highlight transformation, layering, erasure, and reconstruction, making visible the traces and folds of selfhood, memory, mapping, and materiality as they interact. The artwork becomes a material index of engagement with the loop rather than a definitive image of the self at one point in time.

So, the artist's task is not to abandon representation, but to shift from capturing the process to inviting the process to inscribe itself in/as the work. Art can then embody and reveal the feedback loop—becoming process, not product. This aligns with theories of material engagement, where meaning and self are performed and transformed through ongoing artistic practice rather than simply depicted.

### Yes but they are still static representations of a process - they don't capture it as it is taking place

Perplexity Sources

You are correct: any visual or material outcome produced by the artist—no matter how process-oriented or self-reflexive—remains a static trace, a residue of a dynamic becoming, not the process-as-it-unfolds itself. Even "process art," durational works, or iterative layers can only present the aftermath or evidence of ontogenetic becoming; they cannot fully embody the immediacy or flux of living transformation.

This is the ontological limit of all representation in relation to processual selfhood: representation fixes, abstracts, or reifies what is essentially fluid and ongoing. The process is always ahead of the product; what is captured is no longer the becoming itself, but only one of its crystallized moments or effects. [pismowidok](#)

However, by foregrounding process, embracing instability, and making the work itself provisional or incomplete, the artist can critically expose this limit—paradoxically making the static work function as an invitation or portal to renewed engagement in the feedback loop, rather than as a closed narrative about the self.

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### Is it possible that there might be technology in the future which could capture the state of becoming of the artist which would avoid the problems of the observer effect and static representation of iterations of self?

Perplexity Sources

Current technology can record and visualize aspects of process (such as bodily motion tracking, physiological data, or algorithmic changes in digital identity), but even the most sophisticated interactive and real-time systems do not truly capture the immediate, lived state of ontogenetic becoming in a way that escapes the observer effect or completely avoids iteration as a static product. [pmc.ncbi.nlm.nih +3](#)

Live-streamed and AI-mediated environments can blur the boundaries—e.g., using "live keying" and algorithmic transformation to project an artist's moving image into digital spaces, continuously altering and remapping identity in real time. Some models, like the Projective Consciousness Model, aim to unite first-person experience, emotion, memory, and agency within adaptive, dynamic frameworks, and algorithmic systems are already shaping selfhood as a co-constructed, data-driven process. [frontiersin +2](#)

However, philosophical and neuroscientific research agrees that as soon as a state is captured, modeled, or represented—even if by machines—the process becomes mediated and is subject to new forms of observer effects and interpretation. Technology might approach richer, more continuous representations of dynamic selfhood, but total, uninterpreted immediacy—ontogenetic becoming itself, untouched by mediation—remains beyond its reach for now. [journals.sagepub +2](#)

### And also if the artist knows that the data is being collected and used etc the knowledge could affect the way the artist becomes akin with the observer effect?

Perplexity Sources

Yes, absolutely. The artist's awareness that their data or lived process is being collected and used introduces self-consciousness that alters the process of becoming—just as the observer effect shapes behavior, thought, and experience. [frontiersin](#)

The act of being observed—whether by another person, a camera, or an algorithm—creates a feedback loop where the artist adapts, performs, or modifies their actions, intentions, and states in anticipation or response to this observation. Knowing they are being recorded, the artist's selfhood and actions become oriented toward the watching or recording system, which invariably shifts the natural flow of ontogenetic becoming toward modes of presentation, curation, or evasion. [pmc.ncbi.nlm.nih +2](#)

Thus, technology-mediated observation is subject to the same fundamental limitation as direct observation: the process it records is already transformed by the knowledge and anticipation of being seen or measured. The ontogenetic self, in these conditions, cannot be separated from the context of its observation and mediation. [frontiersin +1](#)

## Appendix 2

Have I understood Simondon's individuation and transduction correctly? Is the pre-individual the potentiality of the solution which is metastable ie neither stable nor unstable. When there is disturbance eg seed crystal, the solution individuates and the crystal is formed layer by layer. The process of the layering is transduction. There comes a point when the crystal is formed but there is enough potential in the solution and crystal for further individuation in the right circumstances. This relates to the self in the sense that the crystal is the self and the solution is the self's environment, its milieu. Please answer briefly.

Perplexity Research Sources

### Understanding Simondon's Individuation and Transduction

Yes, you've grasped the core concepts quite accurately. Your understanding demonstrates a solid grasp of Simondon's challenging framework.

The **pre-individual** is indeed a state of metastability—neither stable nor unstable—characterized by supersaturation and tension, holding potentials that are incompatible but capable of resolution. This metastable equilibrium contains potential energy that can be actualized when conditions change, such as the introduction of a seed crystal.

**Transduction** correctly refers to the layer-by-layer process of structuring. As Simondon describes it, transduction is "an operation by which an activity propagates itself from one element to the next, within a given domain, and founds this propagation on a structuration of the domain that is realized from place to place". Each already-constituted molecular layer serves as the organizing basis for the next layer being formed, creating an amplifying reticular structure.

Your insight about ongoing potential is particularly astute. The crystal never exhausts all pre-individual potential—it can continue growing in new supersaturated solutions, and Simondon emphasizes that "a crystal is endowed with an indefinite power of growth; a crystal can have its growth arrested, but never completed". However, the crystal's interior becomes closed and no longer participates in transduction.

**Regarding the self and milieu:** your analogy is fundamentally correct. Individuation always produces the **individual-milieu pair** simultaneously, not the individual alone. The individual is relative "because it is not all of the being, and because it is the result of a state of the being in which it existed neither as individual, nor as principle of individuation". This co-individuation means no individual exists without its milieu arising at the same time from the individuation process.

For living beings (including the self), the process differs significantly from crystals: biological individuation is a "perpetual individuation" and "theatre of individuation" rather than a singular event. Living beings maintain internal resonance and metastability as the precondition of life itself, with activity occurring throughout the interior rather than only at the surface boundary.

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### So the individual and milieu effectively co-constitute each other?

Perplexity Research Sources

#### Co-constitution of Individual and Milieu

Yes, precisely. The individual and milieu **co-constitute** each other through the process of individuation—they emerge simultaneously and reciprocally from the same metastable preindividual field.

Simondon insists that "what does the appearing in individuation is not only the individual, but the individual-milieu couple". The individuation process doesn't produce the individual alone but rather the **individual-milieu pair** as an inseparable unity. This is fundamental to his ontology.

The relationship is one of **mutual conditioning**: the individual exists only in relation to its associated milieu, which arises at precisely the same moment and at the same order of magnitude as the individual itself. As one source explains, the individual and its associated milieu "co-exist in a reciprocal relation which involves aspects of interiority and exteriority".

This differs from thinking of an environment as pre-existing and separate. The **associated milieu** isn't simply "out there" waiting for the individual—it comes into being through the very act of individuation. The individual is "relative" in a double sense: it's not all of being (there remains preindividual potential), and it exists only through its constitutive relation with its milieu.

For living beings especially, this co-constitution means the individual maintains a "problematical relation" with its milieu—one that fuels ongoing becoming and transformation of both. The individual cannot be isolated from its milieu without losing its essential nature. They are **mutually co-defined** through their ongoing individuation.

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### How does the indefinite power of growth in the crystal sit alongside the possibility of its growth being arrested?

Perplexity Research Sources

Yes, for Simondon, a crystal has an **indefinite power of growth**—it is never truly complete, and can always continue to grow if placed back into a metastable supersaturated solution. Growth is only ever "arrested" provisionally, when the preindividual potential in the milieu is depleted, or when the crystal is removed from the conditions that allow further individuation.

This means the crystal's power to grow is always an open virtuality—it can be actualized again in the right milieu, and new layers will propagate at the boundary between the crystal and solution. However, when the environment no longer offers metastable potential (for example, the solution is no longer supersaturated, or the crystal is removed from it), individuation and growth stop but do not finish.

Thus, according to Simondon, there is no absolutely final or completed individual in the physical sense—a crystal can always resume growth in a new context, but growth can be arrested if potential energy or milieu conditions cease to support individuation. This underlines Simondon's ontology of being as processual, always open to further individuation.

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So if an individual was placed in an environment which cannot support growth eg solitary confinement would that arrest growth just as when the crystal is removed from the solution?

Perplexity Sources

Yes, according to Simondon, if an individual is placed in an environment that cannot support further individuation—such as the extreme deprivation of solitary confinement—the process of growth and individuation is arrested, much like a crystal removed from a metastable solution. The individual's capacity for ongoing becoming is fundamentally tied to availability of preindividual potential and an associated milieu that supports continued transformation and relational activity. [journals.sagepub +4](#)

In such an impoverished environment, individuation is no longer dynamically supported; the relational processes that foster psychic, social, or biological development become stunted or frozen. Simondon explicitly rejects the view that autonomy means independence from milieu; autonomy, rather, is the ability to sustain individuation through active relations with an associated milieu. When these relations are radically restricted—as in solitary confinement—autonomy and growth become blocked, and the individual becomes "arrested" in their development, with only residual potential carried forward awaiting a more favorable milieu. [epochemagazine +3](#)

Thus, your analogy is valid: both the crystal and the human individual rely on supportive milieus for growth, and the deprivation or absence of such conditions leads to a cessation, not a completion, of the individuation process. [ndpr.nd +3](#)