

Gilbert Simondon, *Imagination and Invention*. Trans. Joe Hughes and Christophe Wall-Romana. University of Minnesota Press 2022. 240 pp. \$28.00 USD (Paperback 978-1-5179-1445-5).

After a long wait, and thanks to the sheer effort and determination of often unsung translators, the patience of English readers was finally rewarded with the recent translations of Gilbert Simondon's two major philosophical texts: *On the Mode of Existence of Technical Objects* (hereafter *METO*, 2017) and *Individuation in Light of Notions of Form and Information* (*ILFI*, 2020). Now, with this translation of *Imagination and Invention* (the first of six lecture courses currently available in French), we have our first glimpses of the innovative ideas and approaches Simondon was developing during his time teaching general psychology at the Sorbonne in the mid-1960s. For existing readers of Simondon, the publication of *Imagination and Invention* is an important event, one which not only helps enhance our understanding of Simondon's major works, but which might also serve as one of the potential bridges between the hitherto unconnected accounts of vital and psycho-social individuation set out in *ILFI* and the unique conception of technical evolution developed in *METO*. But even for those who are new to Simondon's philosophy, and given that the book is based on course notes intended to be distributed to university students, *Imagination and Invention* also offers a compelling introduction to the nature and implications of Simondon's 'genetic method' (xi).

Like in his previous studies of nonliving materiality, vital organisms, and technical objects, the aim of this text is to develop an *ontogenetic account* of both 'imagination' and 'invention,' one which conceives them as two related 'phases of the same cyclic, genetic process: that of the image' (xiii). In contrast to traditional ontological frameworks based on static models of individuality and substance, Simondon's philosophy of ontogenesis refuses any account that begins from the presumption of the initial givenness of the terms it seeks to explain. Instead, Simondon is interested in exploring the pre-individual and material processes through which different forms and individuals emerge and become-other. In the opening pages of the Introduction, Simondon explicitly targets both the psychology faculty and Sartre's theory of the imagination for foregrounding the representing consciousness of an already-constituted subject as the source of images. This attachment of the image to the subject, he argues, 'tends to exclude the hypothesis of a primordial exteriority of the image in relation to the subject' (7). This independence and exteriority of the image is an intuition that Simondon traces back to thinkers of Antiquity—like Homer and Lucretius—for whom images 'make manifest a certain power, an intention, or reality, that isn't anchored in the subject, but which, on the contrary, comes to him and seeks him out' (8). As Jean Yves-Chateau highlights in the preface, it is also an intuition famously found in the philosophy of Bergson, whose ontological conception of the image as an intermediary reality between thing and representation, subject and object, and past and future is another vital source of inspiration here for Simondon. What Simondon sets out in this text is therefore a radically pre-subjective and non-phenomenological conception of the image that refuses to reduce its reality to the categories of either consciousness or subjectivity. In other words, and following Simondon, it is not subjects that produce images; rather it is the ontogenesis of the image that produces subjects.



Following the Introduction, the rest of the book is divided into four main parts, each corresponding to one of the successive phases that Simondon argues constitutes the genetic cycle of the image. Each phase in turn relates to a specific dominant type of activity: namely, anticipation, experience (perception), systematization (memory), and invention. Part One discusses the *a priori*, ‘motor-image of anticipation’ that ontologically precedes the actual experience or perception of an object. Simondon notes that these images come to shape adaptive patterns of response to environmental stimuli, being composed by bundles of pre-reflexive motor tendencies that ‘have already been prepared by an activity of the organism during its growth’ (29). Such images produce projections and desires that actively call forth our future encounters with specific objects. In Part Two, Simondon shows how, in the present moment of experience, these anticipatory motor-images ‘organize and stabilize themselves in internally correlated groups according to the dimensions of the relationship between the organism and the milieu’ (19). Here, the image becomes a mode of reception of information coming from the milieu and a source of schemata for responding to these stimulations. It is in this phase that the organism can move beyond anticipation to develop a rich perception of the present state that is drawn to the singular, novel, and differential elements of a situation or object (as in the Shepherd who intuitively knows when animals are missing from the flock).

The third phase of the cycle, set out in Part Three, takes place after the perception has passed as the image now becomes charged with an ‘affective-emotional resonance’ that enables the organism to relive past experiences and situations (95). Here, we see the production of ‘memory-images’ as the affective imprints of singular encounters, which, as they gradually accumulate over time, generate incompatible tendencies that are resolved by the formation of a ‘symbol’ (124). These symbols (which can sometimes take the form of intermediary or analog objects, like the ‘souvenir’) are images that become ‘detached from the empirical situation of their emergence, yet having preserved their power, their capacity of expression, their capacity to indicate potentials’ (136).

Invention, the focus of Part Four, comprises the final phase of the image’s genetic cycle. Invention, Simondon writes, emerges when the systematization of perceptive and affective images reaches a point of ‘saturation,’ generating incompatibilities that mean the organism is no longer able to receive new information and experiences from the environment. As a creative response to this problematic tension between the organism and the environment, the act of invention can emerge in the form of ‘detours, the fabrication of instruments, and the association of operators [that] all represent different means of re-establishing intrinsic and extrinsic compatibility’ (139). What distinguishes invention from the previous phases is that the image no longer stays ‘within the living being as a component of its mental equipment, but steps over the spatio-temporal limits of the living to connect with the milieu it organizes’ (186-7). This process, Simondon argues, underlies the fabrication of technical and aesthetic objects, which when inserted in the world can produce unexpected transformations in the anticipatory, perceptual, and affective capacities of the organism. And thus, the cycle begins anew.

Like with the concept of the image, Simondon’s understanding of invention challenges orthodox understandings of the term in philosophy in two main ways. First, invention is not ‘an absolute and sudden novelty’ (131). As the final phase of a cycle, it is instead reimagined as a progressive

development of partial solutions to the material force of problems in specific domains, as Simondon's illuminating discussion of the evolution of the camera and photography shows (167-9). Second, Simondon argues that invention is not solely a human activity but is also a phase in the image-cycle characterizing the lives of animals as they negotiate and transform their milieus. The difference between animal and human inventions is more accurately a 'difference in degree' (rather than kind), with the 'orders of magnitude made to communicate and interact' by the inventive act being much larger in humans than animals (189). Simondon's non-anthropocentric concept of invention may therefore speak in interesting ways to philosophical debates emerging today around questions of nonhuman agency and creativity.

Simondon—who was a great admirer of the “new encyclopedism” of French Enlightenment authors like Diderot and Alembert—firmly believed that a philosophy of ontogenesis demands a radically transdisciplinary kind of knowledge. Readers of *Imagination and Invention* will be struck by the wildly eclectic range of sources that Simondon draws on in constructing his arguments. Fairy tale monsters, experimental animal psychology, the ergonomic design of toys, psychoanalysis, science fiction, Shirley Temple, the development of cinema, and the musical compositions of Iannis Xenakis all weave their way into Simondon's innovative account of the genetic cycle of the image. New readers will also undoubtedly be struck by his notorious writing style, which is characterized by lengthy (sometimes paragraph or even page-length) sentences broken up by the frequent use of semi-colons. This style (which the translators note was crucial for Simondon in attempting to express thought as a process of becoming) occasionally produces quite turgid and dense prose that can make it difficult for a reader to maintain a grip on an overall sense of the argument. In this regard, the inclusion of Chateau's introductory preface from the original French edition is much welcome, offering a helpful summary of the key elements in Simondon's rethinking of the relation of imagination and invention as 'a genetic unity founded on a transductive dynamism of the image' (xii). It also offers some excellent contextualization of Simondon's thinking on the image in relation to other thinkers (such as Sartre, Berson, Bachelard, and Taine), as well as useful points of orientation for how to situate this text in relation to Simondon's previous work on technical invention and psychic and collective individuation.

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