

## Chapter 3

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# Identity and Individuation: Some Feminist Reflections

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There are, for Gilbert Simondon, many kinds of individualities, many kinds of subject, many kinds of object, but all share the processes of individuation, which may serve equally to explain the coming into being and the existence of beings of all kinds, material, organic, human, cosmic. Individuations are the processes that distinguish between inorganic and organic existences, between cultural and technological orders, between objects and subjects, as well as what enables these terms to be linked. His understanding of the processes of genesis of individualities of all kinds has surprising implications not only for philosophies of technology,<sup>1</sup> but also for forms of feminist, anti-racist and radical political thought. In providing models for understanding how things, including living beings, are brought into existence as cohesive individuals, Simondon opens up new ways of understanding identity, transformation and creation – all central ingredients in a radical reconceptualization of thought.

I want to discuss here how physical and biological individuals come to be, and what processes of becoming are involved in their genesis. What orders and materials – conceptual, natural, technological – are involved in the generation of individuality? What forces are at work forming, deforming and transforming individuality such that we can understand the forms of power, and the forces of resistance, that both enable and limit individuals? Can Simondon provide feminist and other modes of radical political thought with a different model by which to understand the concept of identity, not through a notion of the self-same, but through what is radically disparate and continually changing? Can we explain individuality through that which is itself not individualized, through processes of individuation?

## INDIVIDUATIONS

The question of how to think the coming into existence of individuals without presupposing the identity on which such individuality is based is one of a number of preoccupations that dominate Simondon's work. He aims to avoid the usual processes of reverse engineering, in which a given object's process of production is deduced from the identity of the constituted object in the present. Such a process can only move from identity to identity, from one individual to all those that precede it. Instead, Simondon is interested in understanding how pre-individual forces, the forces that constitute the condition for both natural and technological existence, not yet individuated, produce individuals of various kinds.<sup>2</sup> Instead of beginning with already existing individualities, it is pre-individual forces and processes that occupy much of the process of the becoming of individuals:

[T]he individual is to be understood as having a relative reality, occupying only a certain phase of the whole being in question – a phase that therefore carries the implication of a preceding pre-individual state, and that, even the single act of its appearance all the potentials embedded in the pre-individual state. Individuation, moreover, not only brings the individual to light but also the individual-milieu dyad. (300)

Pre-individual forces pre-exist and make possible the emergence of individuality, those forces which are actualized in the individual. They not only predate the individual, but also they constitute both the individual and the potentialities that the individual contains that sustain and transform it. The individual is always more than itself, for it is an individual with the ongoing potential to undergo further changes after it is constituted as such. These pre-individual forces also constitute the milieu within which the individual is located, which provide the ongoing virtualities with which the individual must engage. The individual is merely one phase in the process of individuation, which is surrounded both before and after its emergence by pre-individual forces, potentialities. Being is at once pre-individual, individuating and individuated; it becomes something, something emerges or erupts, but it leaves in its context or milieu a residue or excess that is the condition for future becomings.

The pre-individual state is the resource by which beings emerge from becoming. Individuation is the process by which this occurs. The pre-individual contains a wide range of disparate forces – virtual resources, potentialities, conjunctions, disjunctions which a being may, in its own

way, actualize. Becoming is the mode of being of beings that are not self-contained, that function through a kind of disconnection or syn-copation, that function as out of phase; it is the creation of a process of disparity that resolves itself and uses up some of the pre-individual resources in the constitution of an individual (whether an individual object, an individual technological object or a biological individual). Being results from a kind of solution to the disparities of becoming. Individuality is one kind of solution to emergent disparities:

becoming exists as one of the dimensions of being . . . it corresponds to a capacity beings possess of falling out of step with themselves, of resolving themselves by the very act of falling out of step. *The pre-individual being is the being in which there are no steps.* The being in which individuation comes to fruition is that in which a resolution appears by its division into stages, which implies becoming; becoming is not a framework in which the being exists; it is one of the dimensions of the being, a mode of resolving an initial incompatibility that was rife with potentials. (300–1)

In a paragraph that is itself rife with potential, it is worth clarifying Simondon's claims here: the pre-individual is not static or inert but fundamentally dynamic. It generates forces which act upon each other, which generate tensions, points of excess, the development of a tipping point or form of emergence, forms of becoming that coexist at best uneasily. These points of instability are the sites around which individuality may emerge. These sites may be understood as problems, questions, which do not seek a solution so much as address an emergent force. Being, individuality, cohesion, a provisional ability to work amidst and to bring together certain forces, erupts from the pre-individual to bring together these otherwise ever more tense relations in a unity, whether organic or inorganic. It is not a solution to the problem but a response, a new kind of order and organization that provisionally integrates what was formerly a source of tension. Individuality is not given but engendered, prompted by instability, and is itself a reordering at a different level and in a different manner of instability.

The individual resolves this tension or instability by operating at a different level; but also, the individual is marked and shaped by the particular forces or tensions that enable its emergence. The individual is a mode of management of instability or excess rather than its overcoming. Individuality is thus not one type of being, but one *phase* of being, a period, a movement, neither an origin nor an end. It becomes, once it exists, a phase (or many) in what would otherwise have no phases, stages or steps; the pre-individual is 'supersaturated', filled with potentialities,

forces, becomings that come to fruition in a level of organization that can harness, but not exhaust, some of these forces. This process for the elaboration and emergence of individuality or being from becoming or the pre-individual is an ontogenesis: that is, ‘the becoming of the being insofar as it doubles itself and falls out of step with itself in the process of individuating’ (301).

Such a being must be considered, not as a stable phenomenon, one at rest or equilibrium, where all a system’s virtualities have been actualized. Simondon insists that the pre-individual is *metastable*, form-taking, oriented to certain types of organization, and that it generates provisional resolutions that maintain the ongoing genesis of ever-new and commonly unactualized virtualities. Both material *and* ideal, the pre-individual cannot adequately distinguish between terms that only apply to what has identity; it is supersaturated, always rife with potential. Its virtualities engender many actuals – individuals, processes, actions and events – but these virtualities are incapable of exhaustion; they always renew and transform themselves through the actualizations they engender and the energetic potentials they produce. This real is full of potential energy, energy never able to be drained to form an exhausted or stable point, and always able to generate more becomings.

Individuation doubles the pre-individual; it is this doubling, the duplication of the forces of the real within the emergent individual at a different level or order, that both produces new levels and orders within the real and enables the individual produced to intervene in and transform the pre-individual as its milieu. The pre-individual is both individual and collective, both wave and corpuscle, both matter and energy, both form and matter, both space and time, both conceptual and material. It can be expressed equally through either term, though each then entails the other as its necessary milieu. Like the doubling of the image that constitutes stereoscopic vision, each image is the image of the other; but each is slightly different, askew, and it is their non-coincidence that produces the possibility of three-dimensional vision, of depth.

This is a process of disparation. It is only when two series, two events, two processes or images double each other with a slight difference that the possibility for the eruption of a new level, the production of a new order of metastability, opens up. The individual doubles some of the processes within the pre-individual, in its own unity, bringing into being a new order that resolves at a higher level the disparation of the lower. Concepts are themselves the disparation of the matter they address. They address and express only individuated beings, only the pre-

individual reinscribed in a different order. Thus the concept and matter, space and time, individual and collective are each expressions of what is individuated and not what is individuating.<sup>3</sup> The disparity between the processes of individuation and the individual they generate is the condition for an ongoing becoming of the being. This disparity generates the being of becoming.

This disparity, the differential between principles organizing various forms and levels of the real, requires a mediation. Individuation is that process of mediation which requires both the existence of a tension or duality of terms, levels or orders of magnitude, and an initial 'absence of interactive communication' (304) between these two. The generation of individuals of various types invents a way of communicating or interaction between these two orders that enables a provisional stabilization of their tensions and the forces that orient them in two or more pre-individual directions. Individuation mediates between two incompatible orders, inventing a way of bringing them together piecemeal, actualizing contrary forces in the pre-individual by making them complementary, two elements or features of one and the same real. An individual emerges, a metastable being, which carries within itself the pre-individual forces from which it was produced, which remain the potential for ongoing individuations even within this constituted individual. The virtual forces of the pre-individual, in not being entirely used up by processes of actualization, remain an ongoing source of transformation, the generation of new virtualities and new paths of actualization. These constitute a kind of 'memory', an inherence of the past in the present and of the virtual in the actual, an inherence within the individual of the pre-individual resources whose disparity brought it into existence and which remain to regulate its ongoing individualizations.<sup>4</sup>

Individuality is thus the establishment of a mode of resonance among disparate forces that otherwise coexist only with tension. It is the constitution of an internal resonance that brings together its elements, as well as being part of a larger order within which the individual is itself a fragment within other individuations. The disparation between two orders, two forces or energies, induces a process, an individuation, that produces from these forces a system or an order that magnifies their force without exacerbating their tensions. The system formed, whether the unity or identity of a tool or machine, of a material object or process, or of a living being, draws on these disparities, forms itself through them and is marked by their particular forces, and thus preserves many of their qualities while transforming them into a cohesive individual:

What one assumes to be a *relation* or a *duality of principles* is in fact the unfolding of being, which is more than a unity and more than an identity; becoming is a dimension of the being, not something that happens to it following a succession of events that affect a being already and originally given and substantial. (311)

The being is more than a unity, more than an identity, for it is also the possibility for the transformation and even the undoing of unity and identity, as well as the milieu within and against which any unity or identity establishes itself. The being engendered by pre-individual forces continues to be engendered and continues various becomings in its own ways. In reducing being to an identity or unity, not only are the forces of becoming reduced to forms of equilibrium, but also the milieu is regarded as background instead of as constitutive, a part of the being, represented not only as its exterior but also that with which it must internally resonate.

### TRANSDUCTION

This movement of individuation, the ontogenesis of the individual, is generated by a movement that Simondon calls 'transduction'. Transduction is a process in which an activity generates itself, elaborating and structuring a region in its vicinity as its domain. It is a movement through different forces that transforms them through the elaboration of dimensions, magnitudes, vectors, by enabling a being to exist amidst their contrary and competing forces. Transduction crosses through the pre-individual to structure it so that some thing can emerge, can create itself from the resources and forces of the pre-individual.<sup>5</sup>

Transduction is the process by which the various pre-individual forces move out of step with each other, generate a disparation, a problem, which individuation addresses through the creation or discovery of a process, event, dimension or object that enables a new order to emerge at another level; it is the generation of relations that individuate. The movement of individuation is transductive, in so far as it cuts across many forces, strata, dimensions to generate momentary or longer alignments that temporarily structure the chaos of the pre-individual.

The processes of transduction not only generate the coming together of heterogeneous forces into a provisional unity, but they also explain the structuring of that which surrounds the being or entity, its milieu, thus producing a mode of territorialization or spatialization, a mode of production of a field or terrain that surrounds and enables the being and

its transformations. Transduction generates the creative leap from the past and present of the pre-individual to the unknown future, as well as fields, regions, regimes which surround and enable the being in and as its milieu. It thus generates its own kinds of temporizations and spatializations (perhaps even colonizations). It is a kind of problem-solving force, just as induction and deduction attempt to solve certain kinds of problems (problems linked to already individuated terms rather than terms in the process of their production). It is a movement through the specifics of a real, like Bergsonian intuition, that discerns the natural contours of the real rather than its logical or abstract forms and uses these natural contours to develop a being that directly expresses them.

Transduction addresses singularity and particularity, the forces of the real in its nuanced specificity, rather than general rules as do deduction and induction. It is a 'logic' for the emergence of objects, things, processes rather than a mode of generating conclusions. It is the 'logic' of eruption, the coming into being of beings where before there were forces. Simondon claims that in some respects it functions like the dialectic, conserving and reconciling contradictory forces; but unlike the dialectic, there is no residue abandoned and left behind in superseding the opposing terms. Further, as Simondon notes, the dialectic presumes an already existing history and temporality, where transduction explains without assuming the genesis of time: '*time comes from the pre-individual just like the other dimensions that determine individuation*' (315, emphasis in the original). It thus articulates a logic of invention, of creativity, a mode of bringing into being something that sustains its own internal resonances while functioning within a milieu. This is not the logic of an inventor or a creator, but the logic of the invention of processes, objects and practices that produce themselves.

Transduction must take into account the form-producing qualities of various types of matter, the tendency within material systems for emergent order and the cascading effects of new modes of emergence on further forms and higher degrees of emergence. Simondon has articulated the mode of coming into being of all kinds of objects, not simply through humans who invent them (though he does address this too), but what it is that human inventors must capitalize on in order to invent – natural forces, laws, principles, materials, and their potential modes of mutation and transformation. But it must also take into account the mind-forming activities in which matter is also implicated, the ways in which the coagulating and transforming relations of matter generate problems to which the creation of mind, mentality, conceptuality is a kind of solution or mode of address. It is thus not a knowledge of

individuation that Simondon seeks but a knowledge as individuation, a knowledge that is itself the transductive effect of processes preceding and exceeding knowledge.<sup>6</sup>

Transductive or transforming forces transmit energy even as they transform it from one type to another; and they inform matter, make matter meaningful, capable of new energies and resources that move them into another movement or order. Transductions generate metastable positions, those which individuals occupy. These individuals may be 'physical, biological, mental or social' (313), but what they share is the bringing together of disparate orders and forces to generate a particular being, which is contingent on the order and organization of lower-level beings. The biological individual requires, in order for it to exist, physical individuals; and mental individuals, concepts, ideas, thoughts, images require that biological individuals pre-exist them, just as social individuals – neighbourhoods, factories, workshops, cities, nations, and collectives of all kinds, whether human or animal – require a certain conceptual and perception cohesiveness of biological and conceptual individuals.

Each is, as it were, conditioned on the emergence of an order which it elaborates and intensifies. And each is directed by the maximal rehar-nessing of pre-individual forces in ever more inclusive ways, in ways that internally direct the emergent individual. Individuality is an ongoing and changing consequence of the ever more intense and close integration and transformation of 'elements' of the pre-individual into the inner operations of the constituted individual. This provides something like an open-ended entelechy for the being, a direction or orientation, not toward an end, but toward the maximization of the forces and processes which gave rise to the being. Beings are under an imperative to evolve, to harness and put to work ever more efficiently resources that are not resources until they find a way of being channelled. This is their becoming – to include what is outside and before into what is inside and becomes with the being.

### MATTER / INFORMATION

What Simondon describes as individuation is a process of materialization that is not exclusively material. Materiality in its pre-individual state neither is distinct from conceptuality, nor is it to be identified with material objects – that is, with material individuals. If the pre-individual is material, it is the material without discernment, without the operation of a distinction between matter and its others, mind, spirit, soul; it is a



materiality that includes ideality, conceptuality, mentality. Matter has a positive property immanent in any of its particular characteristics – it is capable of being modelled, formed. Matter has what Simondon understands as plasticity, the capacity to become something other than what it is now, as its positivity, its openness, its orientation to transformation.

The pre-individual is material only in this sense – that its resources, its contents, have not yet distinguished between terms that, when they become terms or entities, will be opposed. It is, in short, metastable. It is marked by singularities, specificities, particular forces, specific locations, singular potentialities. It is the order of pure difference, of difference without distinction, of disparity, a ‘mobile overlapping of incompatible wholes, almost similar, and yet disparate’.<sup>7</sup> This pre-individual is the real, the world, the universe in its unordered givenness. What is given are singularities, specificities, tendencies, forces but not yet modes of ordering and organizing them into systems, levels, dimensions or orders. Chaos. A plethora of events but without outline, distinction, discernibility. Such matter is precisely not formless, pure unformed matter waiting for the Idea to take on form. Rather, matter is multiformed, for it has the potential or virtuality, the capacity, to take on a number of forms, not an unlimited capacity, but a capacity by virtue of, and limited to, its singularities.

Simondon’s rejection of hylomorphism is by now quite well known. He rejects both terms in the hylomorphic schema, both the notion of matter as unformed indetermination and the notion of form as what actively imprints a model on the inert passivity of matter, a schema that has long been invested in the active / passive and masculine / feminine oppositions that have marked Greek philosophy and its heirs. His claim is not that matter is formless, but that it contains the potential for many different kinds of forms, many different kinds of individual. It is only by taking into account the particular configurations of informed matter and their potentials that new kinds of being are generated through new orders of becoming. These potentials are the possibilities precisely for disparate forms, for disparate modes of organization to erupt from materiality in this broad sense.

Simondon is interested in the capacity for emergence or evolution that this pre-individual real holds, its form-taking positivity. This is the self-organizing capacity of metastable states. Matter is the capacity to be organized in various limited but not contained forms. It is an openness to reordering, to transformation in its relations with other forces and forms in its vicinity. The processes of individuation can only begin when there is a provisional resolution of the disparity or tension between

forces in relative proximity, not through logic but through the creation of a mode of interaction, a form of communication, created by actualizing some of the potential energy of the pre-individual. Disparation is the problem for which individuation is an attempt to provide a solution: how to draw the disparities together in some kind of higher-order resolution that maximizes and proliferates the potentialities from which they result? This is the 'experimental' task of the various orders and forms of matter, a task provided without a controlling consciousness and without any external mediation. It is the task internal to matter itself, its entelechy, its forms of orientation.

Individuation is the process initiated by the disparation of 'material' forces; it is a mode of resolution of the disparity through the constitution of a relation which draws together these differences, this misalignment. Individuation has two complementary effects: it generates an internal resonance between forces, the condition under which an individual as such might emerge; and it generates information, a relation of communication or exchange between the two disparate orders, in which one order brings in the forces of the outside, while the other provides from within itself a form. Individuation thus materializes new orders of information, where matter and information cannot be understood as separable (unlike in cybernetic models), but where each order marks the other and is in turn enhanced by it. Individuation takes place *between* matter and form in this new sense. Matter is not in-formed. Rather, its forms evolve, change, and contest the boundaries of its potential through its encounters with what resists, what itself forms and is formed.

#### LIFE

Life is not a special kind of substance, a vital force that must be definitively distinguished from matter. Rather, for Simondon as for Bergson, life is a deviation of matter, one of the forms that matter generates. In other words, life too, as much as matter, is a consequence of the same forces of individuation. Physical and vital individuations not only share the same pre-individual resources, but also the nuances by which life elaborates itself are to some extent already contained in physical individuations. The vital is an order of elaboration of the physical, which is itself the expression of the resolution of 'material' or pre-individual tensions or disparities.

What is so fascinating and relevant about Simondon's work for us now is his insistence that the modes of organization that characterize life are not all that different to the modes of organization that characterize

physical systems. Physical and vital systems both retain a relation of constructive deformation and transformation between forms of matter and systems of information. Each retains its own relations of internal resonance and external force. Each is linked to the dual modes of elaboration that matter retains in materializing life itself. Life is a mode of matter's actualization. It therefore carries within it the laws of matter, along with the capacity to attenuate these laws (as the second law of thermodynamics affirms, life only returns to entropy at its termination).

Life is not a difference in kind from matter (as Bergson suggests) but a difference in degree; the living never attain the cohesion and unity of the material individual that 'crystallizes' all it needs of its pre-individual forces at once. There is no moment of attaining an individual, self-identical or stable state which dramatically transforms pre-individual forces, the disparities in potential energy between incommensurable and non-communicating forces, into fixed individuals, as occurs chemically in quantum-type leaps of molecular reorganization. In life, the processes of individuation never cease; they coexist with the duration of the living organism itself – the organism never fully coincides with itself, or attains an identity in which it is what it is. The living organism is more a singularity than an individual; and ironically, it is material individuals that attain the self-identity for which we assume a subject strives.

For Simondon, life is differentiated from the non-living by three principal differences. First, the living being's individuality is coextensive with a permanent process of individuation, whereas in the case of a physical object individuation may be effected through a single encounter, and through the reiteration of an initial encounter between two incompatible forces or orders of energy. In the case of the living being,

individuation is no longer produced, as in the physical domain, in an instantaneous fashion, quantum-like, abrupt and definitive, leaving in its wake the duality of milieu and individual [as in the case of the movements of individuation that form a crystal from a super-saturated liquid] – the milieu having been deprived of the individual it no longer is, and the individual no longer possessing the wider dimensions of the milieu. It is no doubt true that such a view of individuation is valid for the living being when it is considered as an absolute origin, but it is matched by a perpetual individuation, like the crystal or molecule, but is a veritable theater of individuation. (304–5)

Second, the living being produces individuations from an internal resonance, and not simply through the disparity between internal and external forces, a disparity between its internal qualities and its external

milieu – it thus grows not only at its extremities, the points of surface contact with its outside, but from within, through an internal organization. Unlike the crystal which elaborates itself at its surface, the border between it and its milieu, the living being elaborates itself from within, through the forces of its internal resonances:

the entire activity of the living being is not, like that of the physical individual, concentrated at its boundary with the outside world. There exists within the being a more complete regime of *internal resonance* requiring permanent communication and maintaining a metastability that is the precondition of life. (305)

And third, the living individual engenders continuous individuations from within itself. It directs itself to problems, provocations not only through adaptation, but also through the potential to reconsider its own internal organization, through its own individuating interiority, the condition for the eruption of conceptuality itself:

The living being resolves its problems not only by adapting itself – which is to say by modifying its relations with its milieu (something a machine is equally able to do) – but by modifying itself through the invention of new internal structures and its complete self-insertion into the axiomatic of organic problems. *The living individual is a system of individuation, an individuating system and also a system that individuates.* (305)

Life modifies itself, where the physical individual is modified by its milieu. Life exists within itself and not only at the borders of its engagement with its milieu. Life elaborates itself through the ways in which its engagements with its milieu reconstitute or reframe its internal resonances. Life resonates, as it translates information. It exchanges energy and information, in the same manner as matter but at a different level or dimension, and directed at different problems.

The crystal, a favourite image for the individuating process for Simondon but one that privileges the formation of the physical individual, is produced at the boundary between itself and its milieu. It accrues through iteration rather than transformation; it grows outward, but only at its surface; its inner resonances are its outer forces at work. Whatever internal resonance it has is established through the direct impact of its pre-individual forces. It solves the problems it addresses – the problems of the differential potential energies within the pre-individual forces from which it emerges – once and for all, in one action. The physical individual is, for Simondon, ‘perpetually ex-centric, perpetually peripheral in relation to itself, active at the limits of its own terrain’ (305), while the living individual, by contrast, is fundamentally a kind

of attunement between its modes of internal resonances and the forces that make up its environment or context. Each 'element' of its interior is in contact with all of its interiority.

Life becomes self-organizing through the prolongation and resonance of an internal disparity, an out-of-phase-ness<sup>8</sup> with itself that it shares with matter. Life remains indebted to the pre-individual to the extent that the resources for all its becomings, all its future individuations, self-actualizations, must be drawn from these singularities which its own must incorporate. The 'phases' of life, from fertilized egg to corpse, are internally structured, organized through the forces that enable life to elaborate itself; they are part of the permanent processes of individuation that occur even when an individual has already been produced. Life does not emerge as a self-driven force; rather, it is possible only to the extent that it perpetuates but also finds a further form of elaboration and development of the pre-individual and of physical individuality.

The emergence of life from the self-organizing properties of matter provides the conditions for a series of ongoing becomings, becomings that elaborate and experiment with the forms of life and their immanent conditions for transformation and for the emergence of new self-organizing states and properties. The eruption of the psychic individual from the living individual is one such emergence. The concept, conceptuality, mind, consciousness and the unconscious are themselves the emergent properties of particular affective modes of organizing living beings.

They are the properties or capacities of a being that is unable to resolve or adequately address problems of the living being, problems carried within life and within materiality already, in other ways. The psychical is the elaboration of a problematic, a context that raises questions, which a living being is able to address through the constitution of itself as a subject. A psychical order, an order of interiority in which the living being is the subject, is the consequence of a form of internal resonance that elaborates itself at a higher order than that from which it emerged:

The living being, which is simultaneously more and less than a unity, possesses an internal problematic that is capable of being an element in a problematic that has wider scope than itself. As far as the individual is concerned, participation here means *being an element in a much larger process of individuation* by means of the inheritance of *pre-individual reality that the individual contains* – that is, due to the potentials it has retained. (306)

The living being elaborates the conditions for the emergence of a psychical individual. Such an individual is only possible when the living

being can think itself as a unity and can represent its activities to itself. The living being elaborates both perception and affect entwined, not as separate dimensions, but now brought together in a new dimension. Thought, conceptuality, modes of addressing the problematic by representing one's own inner states and practices coincide with the emergence of a new order, not itself singular or directed by logic but rather by practical imagination, another doubling of the pre-individual but this time through the concept, through ideality.

It is the generation of another order of problems, again a residue of unspent or unactualized forces from the pre-individual, that also constitutes the possibility of collective individuation, the coming into being of an entity that is larger than but inclusive of the individual – the possibility of ensembles, groups, collectives, the eruption of transindividual relations. Transindividual or collective relations are themselves the consequence of a transduction, the transformation at a higher level of a problem encountered in the relation between informed matter and transmitted information. Transindividual collectives address problems that psychic individuals are unable to – they create a mode of higher-order resolution and utilization of the tensions that remain unresolved from the pre-individual.

Collective relations are largely mediated by technical objects which elaborate and contribute to psychical cohesion.<sup>9</sup> Psychical and collective individuations are modes of emergence, forms of quantum-like leaps, that are each conditioned on prior individuations that have themselves not exhausted either their own potential for transformation or those of the pre-individual from which they have come. The transindividual, whether in the form of thought itself, or in the form of supraindividual collectives, both exceeds and extends the individual. It is both part of the individual and beyond it. Psychical and collective life each have metastable states capable of actualizing previously unelaborated potentials or resources; each is a surprising but conditioned outcome of the production of further metastabilities, each a kind of resolution to the problem of the relations between material form and information.

This is, for Simondon, a kind of ethics of actualization, an ethics of the transformation of information and materiality: '*Ethics* exists to the extent that there is information, in other words, signification overcoming a disparation of the elements of being, such that what is interior is also exterior.'<sup>10</sup> Ethics is the movement that includes and incorporates more and more of the pre-individual, not in its pre-individual states of tension and potential, but through forms of actualization. Such an ethics reverses the movement of the dialectic; instead of superseding and leaving behind

that which it cannot incorporate or resolve, it aims eventually, through the opening up of the future, to aspire to the maximization of actualization, the maximum incorporation of pre-individual potentials, disparities, into the individuals and supraindividuals that emerge.

#### SIMONDON TODAY

Simondon's work is remarkably prescient in light of many of the technical and particularly informational elaborations that have occurred since his texts were originally written. He has not only anticipated how we are to understand the developments that have occurred in genetics, the human genome project and evolutionary biology more generally, he has also provided a remarkable anticipation of the unfolding of computer networks that constitute the worldwide web and have provided communication networks that are themselves gigantic networked collectives, traversing the globe. He has become something of a visionary figure within the philosophy of technology and in the philosophy of science, but his relevance for social and political thought, for theories of subjectivity, identity, sexuality and sociality, has been less clear.<sup>11</sup> I would like to address this question at least briefly.

I am not the first to ask the question of Simondon's relevance to feminist and anti-racist theory.<sup>12</sup> In looking at how his work may inform feminist and other radical political projects, I am not suggesting that his work in any way anticipates the emergence of second-wave feminism or feminist theory; clearly it does not. And moreover, one must understand feminist theory as itself the unexpected emergence of a trajectory that may have had some force in earlier theoretical positions but was elaborated in entirely new and unpredictable ways only after many of Simondon's texts were written. Nevertheless, for readers of Simondon's work today, his work may provide some new concepts and ways of thinking that may enhance how we understand individuality, both in the material sense of the individuality of things, and in the biological sense of the individuality of living beings. This concept has long been the centre of various political and social struggles, and Simondon's work promises to revitalize our understanding of its openness.

Feminism itself has long been based on the assumption of something like a theory of the social or representational construction of identity, the constitution of identity as a form of ideology, or a historical construct that represents the interests of dominant social forces and not always the individual constituted. Theories of the constitutive or performative power of representations (whether psychical systems

or cultural systems of representations) have framed much of feminist thought over the last three decades or more. Poststructuralist feminism has emphasized the power of images and representations in constructing the real, in producing nature as the retroactive condition of culture, created only by culture, and in establishing the lived body as a cultural rather than a biological body.

While these claims were perhaps a necessary corrective to the assumption of a masculine and feminine nature or essence, they rendered impossible the notion of a pre- or non-representational real, seeing in biology only fixation and resistance to change, and regarding what is creative as what is consciously created by human intentionality. In affirming many of these broad principles, feminist, anti-racist and postcolonial discourses become more remote from and disinterested in conceptualizing the real, in understanding forces that run below or beneath consciousness, before or beyond culture. They lose the ability to explain the development of cultural and representational systems and to see the limits of representation, that which representation is unable to order or understand. Feminism's commitment to structuralist and poststructuralist accounts of the integral relation between language and human culture, and the constitutive relation that language has in the constitution of subjectivity has meant that many other questions about materiality and ideality, about the ways in which language and culture develop in the prehuman and from the precultural, about the reality of the body and its various processes, about natural and material forces, are all pre-empted.

Simondon's work may serve as a corrective to this corrective! By returning to the work he developed in the 1950s, precisely at that moment when poststructuralism was elaborating itself through its meandering trajectory through developments in cybernetics and general systems theory, phenomenology and Marxism, psychoanalysis and structural semiotics, through Lacan's linguistic interpretation of Freud to the birth of deconstruction, we can reorient some of the central questions of feminist thought. Perhaps feminist theory, instead of orienting itself so thoroughly to the elaboration of these models of representation, could now elaborate itself in different terms that may capitalize on Simondon's insights regarding the processes of individuation. Instead of the prevailing conception, emerging (in its most recent incarnation – for it is, in fact, a reborn form of Platonism) in nascent form in the 1950s, that matter is unformed, non-meaningful, without orientation, purpose or direction and in need of meaning, form, purpose and value which must be brought to it from the outside, through human intervention, through the intervention of impersonal systems of meaning or significa-



tion, Simondon has demonstrated that matter, the pre-individual in its non-oppositional states of differences or singularities, is always already formed, oriented, laden with its own forces of emergence, its own instabilities and potentialities which enable it to unfold and elaborate itself without external intervention. It does not require representation in order for its processes of self-organization to begin because they are always at work. Moreover, representation itself is an emergent phenomenon or capacity, something that is conditioned on thousands of prior orders of individuation, that can only be actualized to the extent that material, biological and psychic individuality frames and enables it. This is not the intervention of a system, an order of meaning, a structure on unformed matter; rather it is the inner elaboration of informational forms that come from the disparity of forces or potentials. It is the operation of a myriad of microforces of self-organization and orientation without the need of an inventor, an animator, a purpose-giver, forces that are prehuman (and will continue long after the human).

What Simondon offers feminist and other forms of radical thought is a new way of understanding a world that is not ultimately controlled or ordered through a central apparatus or system, that has no inherent or necessary hierarchies, that does not require animation or coordination by culture but instead enables and makes culture itself possible. He offers feminism a way of understanding subjectivity or personal identity, not as an attainment, a given, something of fixed value, a category that will enable one to be definitively identified as something, a member of a group, with certainty. Rather, subjectivity is nothing but the elaboration of a new order of object that is now able to take its own operations, its own forms of inner resonance as its object and mode of addressing problems. Subjectivity is not the centre of political life, not the conditions under which political struggles are waged, but the condition under which social and collective life is possible. Subjectivity can never be identified with a particular identity – a singularity – for singularities exist only at the level of the pre-individual. Subjectivity is instead the internal enfolding of a multiplicity of bodily and conceptual operations, never finished or finalized, never reducible to a thing, never identifiable with any of its stages, never complete, never determinate, always in the process of becoming-more and other. Subjective identity is not the stable and abiding identity that founds a politics, whether it be a politics of recognition or an egalitarian politics of formal similarity.

Simondon understood a world in which unities and stabilities are always capable of further elaboration and evolution; unities and stabilities were never unified or stabilized enough to remain unchanging

universals. Only in their elaboration and enhancement can we understand the most fundamental qualities and forces that populate the pre-individual. And it is only through these processes, which are also the processes of increasingly elaborate and inclusive orders of individuation, well beyond the order of thought itself, that individuals, subjects and objects, natural entities and cultural artifacts, can emerge and complexify themselves.

The division of humanity into genders, races, classes, ethnicities and so on, the primary concern of many forms of social activism, can be explained in quite open and surprising ways, if we understand that these categories are neither structures nor forms, neither intersected nor singular and self-identical. They are social collectivities, transindividual groups, that cohere not only because they share a common milieu (the environment of various forms of oppression) but also because they share some kind of internal resonance, some form of informational coding that brings together their members, in various degrees of adhesion, to social / political collectives. These are systematic groupings of different orders; what is usually understood (or misunderstood) as gender is, in fact, the overcoding and transformation of relations of sexual difference that result from sexual selection (as I have argued in other work<sup>13</sup>) that take on and elaborate what is an emergent condition for vital individuation.

Cultural 'gender' is the transcription, at another level, of the tensions and sources of upheaval posed by sexual selection at the level of animal or vital existence. In this sense, it functions in different terms from all other forms of social collectives; it is a problem, an irresolvable tension of animal life that is animated and transformed, negotiated, in socially variable ways. Race, class and ethnicity, while each involves various forms of transduction and individuation from vital or animal existence, nevertheless address and produce modes of differentiation, quasi-stable forms of collective identity that can operate only *beyond* the level of biological existence. They have few animal antecedents and cannot be understood as an inheritance or a given. These collectivities are culturally produced, the effects of various complex relations between technologies, proximities / geographies, forces and modes of regulation. They are not stable products but are themselves metastable, prone to forms of becoming and transformation, open in their ongoing forms.

Simondon may not provide solutions to the ongoing problems facing feminist theory and practice. This may require a different kind of inventiveness. Instead, his works may be regarded as provocations to feminist and other forms of radical thought to continue to question the dominant

assumptions that structure thought at a particular moment in time, to question the assumption that individuals, whether biological, social or collective, are given and that their characteristics are static rather than evolving, self-transforming and milieu-transforming elaborations. Simondon provokes us to rethink the most basic assumptions about what it is to be a subject in a world of pre-given objects, and in doing so, he stimulates us to think in new terms about unresolved problems, problems about the real, about forces, about forms of power, and to open up these problems to new modes of address.

### NOTES

1. See, for example, Bernard Stiegler, *Technics and Time, 1: The Fault of Epimetheus*, trans. Richard Beardsworth and Gregory Collins (Stanford: Stanford University Press, 1998).
2. Simondon describes his goal as ‘to grasp the entire unfolding of ontogenesis in all its variety, and to understand the individual from the perspective of the process of individuation rather than the process of individuation by means of the individual’ (Gilbert Simondon, ‘The Genesis of the Individual’, in J. Crary and S. Kwinter (eds), *Incorporations* (New York: Zone, 1993), pp. 297–317; p. 300). All further references to this essay will be left in-text and are the only in-text references in this essay.
3. Brian Massumi suggests that the distinction between thought and matter, fundamentally Platonic, is itself an effect of individuation:
 

[Simondon’s] key concept of ‘individuation’ asserts the primacy of ontogenesis, a primacy of the processes of becoming over the states of being through which they pass. Further, Simondon approached the question of epistemology as a function of ontogenesis. There is an individuation of thought, he said, by the same token by which there is an individuation of matter, on the physical plane and from there on to the plane of life, and following – or prolonging – the same constitutive principles. (Brian Massumi, ‘“Technical Mentality” Revisited: Brian Massumi on Gilbert Simondon’, with Arne De Boever, Alex Murray and Jon Roffe, *Parrhesia*, 7 (2009), pp. 36–45: 37)
4. [T]he process of individuation does not exhaust everything that came before (the pre-individual), and . . . a metastable regime is not only maintained by the individual, but is actually borne by it, to such an extent that the finally constituted individual carries within it a certain inheritance associated with its pre-individual reality, one animated by all the potentials that characterize it. Individuation, then, is a relative phenomenon . . . There is a certain level of potential that remains, meaning that further individuations are still possible. The pre-individual nature, which remains associated with the individual, is a source of future metastable states from which new individuations could eventuate. (306)
5. Transduction occurs when there is activity, both structural and functional, which begins at a center of the being and extends itself in various directions from this center, as if multiple dimensions of the being were expanding around this central point. It is the correlative appearance of dimensions and structures in a being in a state of pre-individual tension, which is to say, in a

being that is more than a unity and more than an identity, and which has not yet passed out of step with itself into other multiple dimensions. (313)

6. Massumi argues that Simondon understands epistemology in the same terms as he understands being. Knowing is only possible because it too undergoes an ontogenesis, it too is individuated and organized along principles that are not self-produced but the effects of its pre-individual precursors. See Massumi, ‘“Technical Mentality” Revisited’.
7. Gilbert Simondon, *L’Individuation à la lumière des notions de forme et d’information* (Grenoble: Jérôme Millon, 2005), p. 233.
8. In the living being, . . . the interior plays a constitutive role, whereas the frontier plays this role in the physical individual; and in the latter case, whatever is located on the inside in topographical terms must also be thought of as genetically prior. The living individual is its own contemporary with regard to each one of its elements; this is not the case with the physical individual, which contains a past that is radically “past”, even when it is in the throes of growth. The living being can be considered to be a node of information that is being transmitted inside itself – it is a system within a system, containing within itself a mediation between two different orders of magnitude. (305–6)
9. The technical object taken according to its essence, that is, the technical object insofar as it was invented, thought and willed, assumed by a human subject, becomes the support and the symbol of this relation that we would call *transindividual* . . . Through the intermediary of the technical object an interhuman relation that is the model of *transindividuality* is created. (*Du mode d’existence des objets techniques*, pp. 247–8, quoted in Jean-Hughes Barthélémy, “‘Du mort qui saisit le vif’: Simondonian Ontology Today”, *Parrhesia*, 7 (2009), pp. 28–35: 30.)
10. Simondon, quoted in Gilles Deleuze, ‘On Gilbert Simondon’, *Desert Islands and Other Texts 1953–1974*, trans. Michael Taormina (Los Angeles: Semiotext(e) Foreign Agents Series, 2004), p. 89.
11. There have been many texts, however, that have at least attempted to indicate the potential relevance of Simondon for the humanities rather than the sciences. These include Miguel de Beistegui, ‘Science and Ontology. From Merleau-Ponty’s “Reduction” to Simondon’s “Transduction”’ (included in this volume); Mark Hansen, ‘Internal Resonance, or Three Steps Towards a Non-Viral Becoming’, *Culture Machine*, 3 (2001); Brian Massumi, ‘“Technical Mentality” Revisited’; and Olivia Harvey, Tamara Popowski and Carol Sullivan, ‘Individuation and Feminism. A Commentary on Gilbert Simondon’s “The Genesis of the Individual”’, *Australian Feminist Studies*, 23:55 (2008), pp. 101–11.
12. See Harvey, Popowski and Sullivan, ‘Individuation and Feminism’; they have also addressed Simondon’s possible relevance for feminist thought, though in terms that seem fundamentally to misunderstand Simondon’s account of individuation. For example, they critique what they argue is an opposition in Simondon between material and living beings without recognizing the crucial role that relative levels, dimensions or orders of magnitude play in Simondon’s writings. Living being emerges from material being; there is not the slightest suggestion in Simondon that their relation is oppositional. This problematizes their claims about Simondon’s relevance to feminism; it is no longer clear, if his account of the emergence or evolution of the living being is problematic, why it should be of interest to feminist thought.
13. Most particularly in the final sections of *Becoming Undone* (Durham, NC: Duke University Press, 2011).