

Paper Proposal : Philosophy of Science

Information, Disparation and Affectivity: the Pre-Individual Field of Singularities in Simondon, Ruyer and Deleuze

On the importance of disparate series and their internal resonance in the constitution of systems, see Gilbert Simondon, L'individu et sa genese physico-biologique, Paris: Presses Universitaires de France, 1964, p. 20. (However, Simondon maintains as a condition the requirement of resemblance between series, or the smallness of the differences in play: pp. 254-7). [Gilles Deleuze. [Difference and Repetition](#). Trans. Paul Patton. New York: Columbia, 1994. fn. 25, p. 318.]

On depth, stereoscopic images and the 'solution of the antinomies,' see Raymond Ruyer, 'Le relief axiologique et le sentiment de la profondeur,' Revue de metaphysique et de morale, July 1956. On the primacy of 'disparateness' in relation to opposition, see Gilbert Simondon's critique of Lewin's 'hodological space' in L'individu et sa genese physico-biologique, Paris: Presses Universitaires de France, 1964, pp. 232-4. [Gilles Deleuze, [Difference and Repetition](#). Trans. Paul Patton. New York: Columbia, 1994. fn. 12, p. 330.]

Raymond Ruyer, La genese des formes vivantes, Paris: Flammarion, 1958. pp. 91 ff.: "The mystery of differentiation cannot be elucidated by making it the effect of differences in situation produced by equal divisions...". Ruyer, no less than Bergson, profoundly analysed the notions of the virtual and actualisation. His entire biological philosophy rests upon them along with the idea of the 'thematic.' See Elements de psycho-biologie, Paris: Presses Universitaires de France, 1946, ch. 4. [Gilles Deleuze, [Difference and Repetition](#). Trans. Paul Patton. New York: Columbia, 1994. fn. 28, p. 328.]

The entire world is an egg. The double differentiation of species and parts always presupposes spatio-temporal dynamisms. Take a division into 24 cellular elements endowed with similar characteristics: nothing yet tells us the dynamic process by which it was obtained— 2×12 , $(2 \times 2) + (2 \times 10)$, or $(2 \times 4) + (2 \times 8)$...? Even Platonic division would lack a rule with which to distinguish the two sides, if movements and orientations or spatial lines did not provide one. Thus, in the case of fishing: entrap the prey or strike it, strike it from top to bottom or from bottom to top. It is the dynamic processes which determine the actualisation of Ideas. But what is their relation to this actualisation? They are precisely dramas, they dramatise the Idea. On the one hand, they create or trace a space corresponding to the differential relations and to the singularities to be actualised. When a cellular migration takes place, as Raymond Ruyer shows, it is the requirements of a 'role' in so far as this follows from a structural 'theme' to be actualised which determines the situation, and not the other way round. The world is an egg, but the egg itself is a theatre: a staged theatre in which the roles dominate the actors, the spaces dominate the roles and the Ideas dominate the spaces. Furthermore, by virtue of the complexity of Ideas and their relations with other Ideas, the spatial dramatisation is played out on several levels: in the constitution of an internal space, but also in the manner in which that space extends into the external extensity, occupying a region of it. For example, the internal space of a colour is not to be confused with the manner in which it occupies an extensity where it enters into relations with other colours, whatever the affinity between these two processes. A living

being is not only defined genetically, by the dynamisms which determine its internal milieu, but also ecologically, by the external movements which preside over its distribution within an extensity. A kinetics of population adjoins, without resembling, the kinetics of the egg; a geographic process of isolation may be no less formative of species than internal genetic variations, and sometimes precedes the latter. Everything is even more complicated when we consider that the internal space is itself made up of multiple spaces which must be locally integrated and connected, and that this connection, which may be achieved in many ways, pushes the object or living being to its own limits, all in contact with the exterior; and that this relation with the exterior, and with other things and living beings, implies in turn connections and global integrations which differ in kind from the preceding. Everywhere a staging at several levels.

On the other hand, the dynamisms are no less temporal than spatial. They constitute a time of actualisation or differentiation no less than they outline spaces of actualisation. Not only do these spaces begin to incarnate differential relations between elements of the reciprocally and completely determined structure, but the times of differentiation incarnate the time of the structure, the time of progressive determination. Such times may be called differential rhythms in view of their role in the actualisation of the Idea. Finally, beneath species and parts, we find only these times, these rates of growth, these paces of development, these decelerations or accelerations, these durations of gestation. It is not wrong to say that time alone provides the response to a question, and space alone provides the solution to a problem. [Gilles Deleuze, [Difference and Repetition](#). Trans. Paul Patton. New York: Columbia, 1994. pp. 216-17.]

We speak of differentiation in relation to the Idea which is actualised. We speak of explication in relation to the extensity which 'develops' and which, precisely, determines the movement of actualisation. However, it remains literally true that intensity creates the qualities and extensities do not in any way resemble the ideal relations which are actualised within them: differentiation implies the creation of the lines along which it operates.

How does intensity fulfill this determinant role? In itself, it must be no less independent of the differentiation than of the explication which proceeds from it. It is independent of the explication by virtue of the order of implication which defines it. It is independent of the differentiation by virtue of its own essential process. The essential process of intensive quantities are individuating factors. Individuals are signal-sign systems. All individuality is intensive, and therefore serial, stepped and communicating comprising and affirming in itself the difference in intensities by which it is constituted. Gilbert Simondon has shown recently that individuation presupposes a prior metastable state—in other words, the existence of a 'disparateness' such as at least two orders of magnitude or two scales of heterogeneous reality between which potentials are distributed. Such a pre-individual state nevertheless does not lack singularities: the distinctive or singular points are defined by the existence and distribution of potentials. An 'objective' problematic field thus appears, determined by the distance between two heterogeneous orders.

Individuation emerges like the act of solving such a problem, or—what amounts to the same thing—like the actualisation of a potential and establishing of communication between disparates. The act of individuation consists not in suppressing the problem, but in integrating the elements of the disparateness into a state of coupling which ensures its resonance. The individual thus finds itself attached to a pre-individual half which is not the impersonal within it so much as the

reservoir of its singularities. In all these respects, we believe that individuation is essentially intensive, and that the pre-individual field is a virtual-ideal field, made up of differential relations. Individuation is what responds to the question 'Who?', just as the Idea responds to the questions 'How much?' and 'How?'. 'Who?' is always an intensity...Individuation is the act by which intensity determines differential relations to become actualised, along the lines of differentiation and within the qualities and extensities it creates. The total notion is therefore that of: indi-differnt/ciation (indi-drama-differnt/ciation). Irony, as the art of differential Ideas, is by no means unaware of singularity: on the contrary, it plays upon the entire distribution of ordinary and distinctive points. However, it is always a question of pre-individual singularities distributed within the Idea. It is unaware of the individual. Humour, the art of intensive quantities, plays upon the individual and individuating factors. Humour bears witness to the play of individuals as cases of solutions, in relation to the differentiations it determines, whereas irony, for its part, proceeds to the differentiations necessary within the calculation of problems or the determination of their conditions.

The individual is neither a quality nor an extension. The individual is neither a qualification nor a partition, neither an organisation nor a determination of species. The individual is no more an infirma species than it is composed of parts. Qualitative or extensive interpretations of individuation remain incapable of providing reasons why a quality ceases to be general, or why a synthesis of extensity begins here and finishes there. The determination of qualities and species presupposes individuals to be qualified, while extensive parts are relative to an individual rather than the individuation and differentiation in general. This difference in kind remains unintelligible so long as we do not accept the necessary consequence: that individuation precedes differentiation in principle, that every differentiation presupposes a prior intense field of individuation. It is because of the action of the field of individuation that such and such differential relations and such and such distinctive points (pre-individual fields) are actualised—in other words, organised within intuition along lines differentiated in relation to other lines. As a result, they form the quality, number, species and parts of an individual in short, its generality. Because there are individuals of different species and individuals of the same species, there is a tendency to believe that individuation is a continuation of the determination of species, albeit of a different kind and proceeding by different means. In fact any confusion between the two processes, any reduction of individuation to a limit or complication of differentiation, compromises the whole of the philosophy of difference. This would be to commit an error, this time in the actual, analogous to that made in confusing the virtual with the possible. Individuation does not presuppose any differentiation; it gives rise to it. Qualities and extensities, forms and matters, species and parts are not primary; they are imprisoned in individuals as though in a crystal. Moreover, the entire world may be read, as though in a crystal ball, in the moving depth of individuating differences or differences in intensity [Gilles Deleuze. [Difference and Repetition](#). Trans. Paul Patton. New York: Columbia, 1994. pp. 246-47.]

The focus of this study will revolve around Deleuze, especially his [Difference and Repetition](#) (for here is quite possibly the best integration of Ruyer and Simondon). The conceptual exercises that will be engaged here involve the construction of an axiomatic for solving problems in

different types of individuation (psychic, social, biological, cosmological). This axiomatic is constructed with relation to the integration or folding of solutions onto their problematic fields. The mathematical philosophy of Lautman is extremely important for abstracting this conceptual apparatus purely into the domain of the relation of problematics and axiomatics (thoroughly addressed in [Difference and Repetition](#)).

On the one hand, Ruyer has established different paths of approaching the question of morphogenesis in his main works, especially *The Genesis of Living Forms*, which is the work of Ruyer's that Deleuze most frequently cites. In conjunction with this, his book on *Cybernetics* is a necessary complement to the questions of information feedback and the self-alteration of the process of individuation (from the pre-individual milieu conceived as a virtual field of singularities, a "reservoir" of singularities which a being taps into in order to organize intensive differences from a dimension superior to the individual in order to organize an inferior dimension).

These concepts work well with the recent complexity theory (Thom) and questions of entropy and information (even Baudrillard's [Simulacra and Simulation \(The Body, In Theory: Histories of Cultural Materialism\)](#) addresses points of this nature). It is my wager that tapping into the reservoir of singularities (similar to Deleuze and Guattari's statement in section 3 of [A Thousand Plateaus: Capitalism and Schizophrenia](#) that the organism exists in a suffocated state until it taps into an energy source) is a necessarily ongoing process of the individuation, if the organism is to thrive and have potential energy on which to feed (without it, it dies). It is also my contention that Deleuze's schema for internal resonance of signal-sign systems (in Appendix 1 of [The Logic of Sense](#) and in the conclusion of [Difference and Repetition](#)) is due to his engagement with Simondon on various levels.

So on the other hand, the signal-sign system in Deleuze (which will be unpacked in the paper) is in many ways inspired by Simondon's concept of transduction or disparation. Disparation is the double movement of internal resonance wherein the signal forces differences without resemblance to communicate, and the sign flashes across the levels ensuring the communication of the different levels to a sufficient degree. Without the system, there is no communication of initially non-communication orders.

Moreover, the concept of affectivity within the process of individuation is central to Simondon's work, especially in his [L'individuation psychique et collective: A la lumiere des notions de forme, information, potentiel et metastabilite \(L'Invention philosophique\)](#). This concept resonates with Deleuze's [Cinema 1: Movement-Image](#) especially, where he writes that the affect-image is a part of every image (meaning that, for a subject in the process of becoming—every subject beneath the threshold of death or 'completion' as Whitehead would say—every potential perception yields an affection within it, like a seed, that flourishes over time through the passive and active syntheses of memory). This memory has to be analyzed and fully engaged with in Deleuze's theory of memory (with its passive contemplative selves) in [Difference and Repetition](#) in order to fully understand the implications of what Whitehead calls "subjective aim." It is this subjective aim—linked directly to the concept of affectivity—that guides the process of the production of effects of the engagement with information coming from the pre-individual milieu (information which can be conceived as singularities or intensive differences).

The theoretical questions to be addressed in this paper include: How does the process of individuation and disparation function in terms of information related to fields of problems and solutions? Where are the strongest contributions of Ruyer and Simondon evident in the development of Deleuze's philosophy, and how can their (minor) voices be brought to bear upon the greater illumination of this difficult theory? Can the concepts of individuation and metastability be used to help illuminate other vague concepts in Deleuze (dark precursor, univocity, internal resonance of series, simulacra, virtual/actual, etc.). Also, what are the relations of time, entropy, and non-reversibility (including Chronos and Aion) to questions of morphogenesis, ontogenesis, and information-based individuation? Can the use of information through individuation be related to Deleuze's concept of sense, and if so, how is this relation best addressed in terms of a theory of events? Finally, how can Simondon and Ruyer help clarify Deleuze's theories of becoming (in [A Thousand Plateaus: Capitalism and Schizophrenia](#)) and deterritorialization of strata on the Body without Organs—especially considering that the Body without Organs thrives off of the intensive differences of affectivity?

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