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INTRODUCTION

The disparity between culture & technics

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ABSTRACT

This essay serves as an introduction to the Special Issue entitled 'Culture & Technics: The Politics of Simondon's *Du Mode'*. This issue follows the pivotal and important translation of Gilbert Simodon's supplementary dissertation, *On the Mode of Existence of Technical Objects,* which offers a rich and layered approach to technics which, through his other works, we see integrated into an entire philosophical approach. This Issue seeks to consider how we might read Simondon today in what is a completely transformed technical epoch from his own, faced with new technological and global challenges. After briefly introducing, first, some comments on Simondon's account of the process of *disparation,* this essay will make some observations on how Simondon conceptualised the relation between *culture* and *technics.* It is the space between these two latter notions – and the potential for their systematic, open, and processual integration – in which this introduction contextualises this Special Issue.

1. Disparation: resolution & invention

In his principal dissertation, *Individuation in the Light of the Notions of Form and Information,* Gilbert Simondon describes the genesis of perception – which is also the genesis of *form* – in a manner through which it cannot be reduced to the (passive or active) phenomenological reception of general *qualia*, of the particular properties of objects, etc.; i.e., in a manner through which perception cannot be reduced to an already individuated and substantialised subject deploying a preconstituted faculty of perception in relation to a world of passive objects with their properties and *qualia* pregiven. The ontogenesis of perception is, instead, to be traced to a process of *invention* (of a form) which is at the same time a *solution* to the disequilibrium between organism and milieu, manifested in some level of psychic tension. Perception is an act of individuation as well as invention, indissociable from the organism's vitality, affective field and emotion, its metastability, sensory history and relation to the world (Mills 2016: 78–9; Simondon 2017a: 229–31). One of Simondon's favourite examples of this is the resolution of binocular disparity (or retinal asymmetry) in the production of depth perception and binocular vision, denoted with the term *disparation* (Simondon 2017a: 204). In binocular vision, one does not perceive or feel either the image of the left or right eye in isolation, but instead the resolution of

their disparity.[1] Tri-dimensionality is the inventive solution to the problem of bi-dimensional difference: the resolution *is* the meaning (*sens*) of the difference between the two data (Mills 2016: 80; Simondon 2017a: 222). Or, as Simondon elsewhere puts it, whenever the two disparate realities are systematically integrated, forming a new resolutive dimension, the signification that emerges from this inventive process is precisely the relevant *information* (2009: 9–10). This information is *conserved* in this process, but is experienced in a new dimension (and this informational conservation combined with new dimensions is the sense of Simondon's concept of transduction (2009: 12)).[2] The disparity between the images of the left eye and right eye are transductively integrated into a new dimension in binocular resolution.

While the ontogenesis of perception is described in terms of the invention of form, Simondon seeks to replace the notion of *form* with that of *information*. The notion of information 'presupposes the existence of a system in a state of metastable equilibrium that can individuate itself; information, unlike form, is never a unique term, but the signification that springs from disparation' (2009: 12). Disparity is as such a disequilibrium harbouring potential for a systematic informational resolution from a metastable state of problematicity and potentiality. As Anne Sauvagnargues notes:

> Disparation is […] simultaneously "problematic" and creative. "Problematic" refers to the disparity, the difference, between the retinal images in so far as this difference is not reduced, but, on the contrary, provides the opportunity for the constitution of a new dimension. (2016: 63)

For Simondon, information is both 'interactive and ontologically constitutive' (Hayward and Geoghegan 2012: 7). Two caveats on Simondon replacing of the notion with that of *information* are, first, that part of the central motivation for this is, of course, motivated by his critique of hylomorphism, as well as, second, his nuancing of and continuous engagement with cybernetic approaches to information.

On the first caveat. Simondon rejects the hylomorphic (1) reduction of matter to indeterminacy and the elevation of form as determining; (2) assumption of pre-existence and pre-constitution of form and matter prior to their relation; and (3) the connected treatment of the principle of individuation as being outside of or anterior to the relation (Scott 2014: 5; 31). Simondon seeks instead, as hinted above, to grasp the *operation* of individuation through exploring the *obscure zone* of their relation and becoming (Chabot 2013: 77; Scott 2014: 5; Mills 2016: 42). Exploring the zone of their relation is precisely what Simondon also famously calls going *into* the mould: his ontogenetic approach is one that seeks to follow the operation of form-taking, contrasted with the hylomorphic

[1]On this, Simondon is engaging with Maurice Merleau-Ponty's own discussion of binocular vision in his *Phenomenology of Perception*. Discussing what he calls the *synthesis* of the two distinct retinal images, Merleau-Ponty underlines the importance and role of the 'open and indefinite' 'unity of the body schema' (2014: 242) in visual perception, where the constitution of binocular vision (or in the visual perception of what he calls a binocular object) is described in terms of an embodied process of perceptual synthesis in which the binocular object is the synthetic absorption of disparate monocular images (2014: 241–2). For more on the relation between Merleau-Ponty and Simondon on this point, see Scott (2014: 46–9; 58–9) and Bardin (2015: 39–43).
[2]It is, of course, this notion of the disparate that Gilles Deleuze takes on and attaches (differentially) to his own notion of the *dark precursor* in *Difference and Repetition*: the dark precursor is at once a force of communication and a force of difference ('every system contains its dark precursor, which ensures the communication of peripheral series' (Deleuze 2014: 152)). Deleuze folds this notion of the dark precursor, of difference in itself, as well as relative difference all into one term, the *disparate,* just prior to his first footnote to Simondon in this text where his importance in this conceptualisation is acknowledged (2014: 153, 168).

approach which remains outside the mould, outside the workshop, only considering what comes in and what comes out (Simondon 2017a: 46; also see Thomas 2007).

On the second caveat. Simondon's notion of information, and his informational ontology broadly speaking, importantly develops on and differentiates from cybernetic approaches to the notion. However, the clarification of this term in early cybernetic approaches is not always clear. Claude Shannon's key work in this context, 'The Mathematical Theory of Communication' (originally published in 1948) links information with entropy (putatively at the suggestion of John von Neumann), statistical unpredictability, and uncertainty (Shannon and Weaver 1998: 18–22). A message sent through a channel with more information is in this sense both more uncertain and more entropic (in contrast to the redundant message – it has less information insofar as it is more predictable). Norbert Wiener uses different terms, and conceptualises information as connected to the *degree of organisation* (a more organised system is one with more information), in which entropy becomes a measure of the *degree of disorganisation* (Wiener 1961: 11). Whereas Wiener's approach appears to generate a duality between noise (entropy) and information (negentropy), Shannon's is one which actually creates space *within* the concept of entropy for both information *and* noise, insofar as *both* information and noise are elements of uncertainty. Cécile Malaspina's lucid discussions of this is further clarified by her point that this distinction is one that operates primarily at the *discursive level* as, she notes, both were in agreement with regard the mathematical method and even acknowledge and compliment each other (Malaspina 2018: 15–21).[3] For Andrew Iliadis, Simondon's entire approach to individuation cannot be dissociated from how he develops from and engages with cybernetics and the place and status of information, situating Simondon in that cybernetic lineage of Shannon, Weaver, and Wiener. Iliadis discusses Simondon's 'open informational schema' (2013: 5) or 'informational ontology' (2013: 10) in which information is, as was prefigured above, not simply pregiven, but related to the process of invention, transduction, problem-resolution, disparation, or the move from metastability to (temporary) stability. Simondon offers a more open, processual, and inventive account, as much a contribution to ontology as to cybernetics. Information is conserved through transductive operations, in successive resolutions of *problematic fields* of metastability, whether discussing the resolution of binocular disparity in the ontogenesis of depth perception or describing the history of technics.

In the introductory note to *On the Mode of Existence of Technical Objects* (METO or *Du Mode*), Simondon highlights this in the introduction of his ontogenetic approach to the technical object. The evolution or concretisation of technical objects 'takes place through a schema of relaxation and not of continuity: there is a preservation throughout the successive cycles of evolution of technicity as information' (Simondon 2017b: xv). The concretisation of the technical object is to be associated with its *openness* and its *sensitivity* to 'outside information' (2017b: 17) (also described as its margin of indeterminacy), a question not just of the configuration of the technical object 'itself', but also the way in which it is integrated into the milieu in question and how this integration structures its operation. What concerns Simondon are *operations,* the convertibility between structure

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[3]On this point, Simondon, of course, famously described Wiener's *Cybernetics* as a 'new *Discourse on Method*' (2017b: 120). The point on the relationship between Shannon and Wiener's approaches to the relationships between entropy, information, and noise remains one in discussion. Hui (2019: 17–9), for example, also disputes any fundamental contradiction between the two.

and operations; the theory of such operations is what he attempts to develop with his *allagmatic* approach, or universal cybernetics (2017a: 529–36). In *Recursivity and Contingency*, Yuk Hui describes *recursion* as being both structural and operational: in the relation between being and becoming, being is situated as a 'dynamic structure whose operation is open to the incoming of contingency: namely, becoming' (2019: 5). The allagmatic approach is one which moves between structure and operation ontogenetically and through problems which, for Simondon, is vital in the creation of new values and for their unification with practice (Hui 2019: 192–3).

To be more specific. Philosophy, Simondon claims, is faced with the task of realising 'the integration of the reality of technics into culture' (2017b: 176). While such an integration may never be complete, Simondon situates philosophy as having to pursue this task in terms of inventing a *second analogue* to the 'magical unity' (2017b: 174): that subjectless, objectless, original mode of being in the world that for Simondon prefigured the original phase shift into technics and religion, themselves being the genetic conditions of science and ethics. It is this allagmatic and ontogenetic perspective and investigation itself which, for Simondon, is the appropriate approach to philosophy's integrative task as it pertains to the disparity between culture and technics.

2. The culture-technics disparity

> Culture and technics cannot complement one another while remaining in a static position; they can become complementary only through a kinematic process of oscillation and inversion, according to a regime whose appropriation or adequation to each problem is perhaps the highest task philosophy can assume. (Simondon 2015: 23)

The relationship between culture and technics constitutes therefore a key *problematic field*, a metastable state requiring the invention of new psycho-social and transindividual dimensions and modes of relation. In the introduction to METO, the problematic of this relation between culture and technics is centralised within the famous opening statements of the text:

> Culture has constituted itself as a defense system against technics; yet this defense presents itself as a defense of man, and presumes that technical objects do not contain a human reality within them. (2017b: 15)

What does it mean for culture to constitute itself as a *defense system* against technics? It is, first and foremost, the denial of the human reality of the technical object. It is, second of all, our attendant alienation from the technical object, which is an alienation borne from a misunderstanding, an incomplete mode of relation, and omission of technics from culture. *We* alienate ourselves with respect to technics.[4] This culture-technics tension manifests itself most prominently in two *attitudes* or *modes of relation*. First, there is that attitude which treats technical objects as 'pure *assemblages of matter*' (2017b: 17): such an attitude excludes technics from the world of culture and reduces their role to that of utility. Second,

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[4]One cannot help but see a similar diagnosis made decades prior to this by Lewis Mumford in his *Technics and Civilization*, originally published in 1934, where his language also appears to lament the false opposition between culture and technics:

> No matter how completely technics relies upon the objective procedures of the sciences, it does not form an independent system, like the universe: it exists as an element in human culture […] The machine itself makes no demands and holds out no promises. (2010: 6)

there is that attitude of fetishisation which either *fears* technics (supposing that they 'are animated by hostile *intentions* towards man' (2017b: 17)) or raises technical objects the status of *sacred objects* through an 'idolatry of the machine' (2017b: 16). Both modes of fetishisation (though this is a term Simondon does not use here) give rise to technocratic dangers: the fearful fetish producing the desire to control and subdue machines and place them in the complete service of the human, and the sacralising fetish leading to the pursuit of the creation of the robot, in the hope that it will allow a life of unlimited power, free from danger, anxiety, weakness, and so on, proceeding also via the subjugation of machines and similarly charged by *ressentiment*. Both are dismissed by Simondon.[5] In his later essay, 'Culture and Technics', the relationship of tension between these two terms is returned to, and described as one in which (a given) culture becomes the repository of values, constituting a 'kingdom of ends, while technics tends to be a kingdom of means that must sustain a being under the authority of the kingdom of ends' (2015: 18). The positioning of technics under the domain of means is culture's practicing a sort of self-alienation. Technics as means applies perhaps only to pre-industrial technics, insofar as pre-industrial technics consisted largely of short-term and minor technical gestures which effectuated only slight or no environmental modifications, and thus instituting no long-term feedback effects. We have surpassed, Simondon claims, the time where technics could be positioned as a mere means; industrial technology's vast environmental modifications continue to have extensive long-term feedback effects, the momentum of which appears unceasing, and further, the feedback effects of such environmental modifications make technics a veritable component in evolution. When culture, as a system of ends, positions technics as a system of means, it thereby attempts to keep 'technical activity in a state of tutelage' (2015: 21). Culture cannot – and especially not in an age of post-industrial technics, where technical development is a continuous and permanent environmental intervention with long-term consequences and each isolated technical activity can thus be read as an engagement with the future in a way the isolated technical activities of pre-industrial technics cannot in the same way – contain technics. Technics has reached a new order of magnitude. The tension between culture and technics is in this sense a problem that must be resolved at the level of the individual and the collective, at the psycho-social and transindividual in relationship to the technical.[6]

The creation of the technical object is at one at the same time a *relation to* the milieu and a *modification* of it, with successive modifications transforming the milieu itself and therefore the conditions of action for those within it. A transformed milieu creates new problems, stimulating further modifications. Technical objects are themselves subject to evolution through human mediation, and the evolution of culture seems indissociable from the history of technics. What Simondon calls the *major* (or *pure*) *technical gesture* is 'an act of culture in the true sense of the term: it modifies the living species' environment, and arouses an evolutionary process' (2015: 19). Such major gestures – and Simondon entertains the example here of spaceflight – shift culture and transform the given 'ends' a culture may entertain. This is one of the key senses for which we cannot, for

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[5]Simondon claims that the robot is 'quite evidently and inevitably represents a purely mythical and imaginary being' and that he would like to show in METO 'that the robot does not exist' (2017b: 16).

[6]In the work of Bernard Stiegler, drawing on and developing Simondonian concepts, it is technics that is the very condition of what he calls transindividuation, through which the 'I' and the 'We' co-constitute from the metastable and problematic field constituted by the extant psycho-social and technical conditions (2016a: 484).

Simondon, elevate culture to ends and subjugate technics to means: insofar as the evolution of technics, as with major technical gestures, themselves *transform* ends. (It is the minor technical gestures which can more appropriately be described as utilitarian.) To enclose culture within a preconstituted kingdom of ends is only possible if one ignores or represses technics and their potential to continuously transform potentiality and normativity.

It is at this juncture where we can begin to think about the role or status of *politics* within this problematic field of the technics-culture relation. When considering the potential of spaceflight as a major technical gesture, for example, Simondon nonetheless laments how such projects are still marked by both the particular cultures from which they emerge and from the competition that spurred that effort (2015: 20). In this sense, Simondon could be read as situating the political as an aspect of an enclosed culture (focused in the intra-cultural transmission of tradition) alienated from technics, and thereby as a *blockage* to major technical gestures and the reintegration of culture and technics.

At the same time, however, it is not so simple to claim that Simondon was simply anti-political or approached it as a blockage to technics. Indeed, in the introduction to METO Simondon explicitly indicates that his ontogenetic approach to the technical object and his proposals for a new approach to culture and its regulative role in relation to technics holds 'political and social value' (2017b: 20). In addition, the two aforementioned modes of how culture can constitute itself as a *defense system* against technics (as reduction to matter or fetishisation), also discussed in the introduction to METO, are difficult to parse from the question of the political in this problematic field of the technics-culture relation. This is so in two senses. First, insofar as the distribution of access to technics is a political question: the technocratic danger is indissociable from the question of access to technics (and access to technics is also a question of Simondon's *encyclopedism,* which will be touched on below).

Second, insofar as any harmonious or resonant technics-culture relation for Simondon is one in which technics are not reduced to subjugation or utility, but rather would involve a level of integration, reciprocity, and mutuality comparable to the conductor-musician relation (2017b: 17). The language Simondon uses here is often politically intonated. If there is a reign of the human over technics, such a technocratic reign is one he describes as one 'inspired by the unbridled will to conquer' (2017b: 141). Further, at the beginning of Part II of METO ('Man and the Technical Object'), Simondon goes as far as to make the political and normative claim that there ought to be a sort of *equality* between humans and technics:

> The prime condition for the incorporation of technical objects into culture would thus be for man to be neither inferior nor superior to technical objects, but rather that he would be capable of approaching and getting to know them through entertaining a relation of equality with them, that is, a reciprocity of exchanges; a social relation of sorts. (2017b: 105)

'Approaching' and 'getting to know' technical objects, here, is about going *into the mould.* In addition, and on this occasion discussing the human's alienation from technics, Simondon notes that:

> the true path toward the reduction of alienation would not be situated within the domain of the social (with the community of work and class), nor in the domain of the inter-individual relationships that social psychology habitually envisages, but at the level of the transindividual collective. (Simondon 2017b: 254)

Simondon thus seeks a sort of culture-technics egalitarianism as well as the pursuit of dis-alienation through the transindividual collective. Culture *must* 'incorporate technical beings in the form of knowledge and in the form of a sense of values' (2017b: 15) in order for the false culture-technics tension reach a new resolution, and such an incorporation can also be intersected with the development of a transindividual relation which incorporates the cultivation of technical activity and knowledge of technical objects according to what Simondon calls their 'essence' (2017b: 252). It is important to underline how this resolutive process is an ongoing one, insofar as the disparity of culture and technics is problematic, creative, metastable. Relating to the technical objects according to their essence (i.e., in terms of that object's ontogenesis, its structure and operation) is what Simondon calls the *medium* or *support* of the transindividual relation. Relating to the technical object in such terms is to relate to the technical object as a carrier of *pure information*. The integration of culture and technics is thus to be associated with the individuation of knowledge about technics.[7] Simondon envisages an *encyclopedism* as a pedagogical (and thus to do with psycho-social initiation) and, we claim, political project for the integration of culture and technics, envisaging a re-enlivening of a universal encyclopedic spirit. Seeking that second analogue of the magical unity in this integration, is of note that Simondon describes the encyclopedia or the encyclopedic spirit in terms of magical initiation, maturity, freedom, and objectivity:

> The *Encyclopedia* also manipulates and transfers forces and powers; it too performs an enchantment and draws a circle like the magic circle […] The *Encyclopedia* makes initiation universal, and thereby produces a sort of rupture in the very sense of initiation […] The *Encyclopedia* is a magic cipher [*voult*] and is all the more efficient as it has been built with a more precise, more exact and more objective representation of its model […] Each individual capable of reading and of understanding possesses the *voult* of the world and of society. Magically, everyone is master of everything, because he possesses the *voult* of the whole […] from a psycho-sociological point of view, every manifestation of the encyclopedic spirit can appear, within a society, as a fundamental movement [*mouvement de fond*] expressing the need for attaining a state of freedom and adulthood. (2017b: 111–2)

It is in fact a new (technological) encyclopedism which will bring an end to our alienation, and even our liberation (or more precisely – a meditation), for Simondon (2017b: 117–9). Having entered a new technical epoch with the advent and continuous intensification of digitalisation, the question of political economy in this space between technics and culture is of crucial importance in the directions these technologies are taken, and for what purposes and ends. The digital presents new opportunities and new dangers, as a number of authors in this issue highlight.

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[7]Simondon describes an example of this in METO as such:

> There is more authentic culture in the gesture of a child who reinvents a technical device, than in a text where Chateaubriand describes the "terrifying genius" of Blaise Pascal. We are closer to invention when we seek to understand the cog-wheeled adding device used in Pascals calculating machine (arithmetic machine) than when we read the most oratorical passages relating to Pascal's genius. To understand Pascal is to reconstruct a machine identical to his with one's own hands without copying it, even transposing it where possible to an electronic adding device, so as to have to reinvent it by way of actualizing it, rather than reproducing Pascal's intellectual and operational schemas. To cultivate oneself is to actualize real human schemas analogically, paying scant attention to the stir that this or that invention or publication caused among its contemporaries, which is inessential, or at the very least cannot be grasped other than with reference to an original thought, to invention itself. (2017b: 123)

3. The issue

It is a key starting point in this Special Issue that the question of the *politics* of Simondon's *Du Mode,* and the some of the problems in this field gestured towards above, is a lively starting point for thinking on how we might read Simondon today, in milieus in processes of digitalisation. The political, and the question of our relations with each other and with technics, occurs in this space between culture and technics, in both exacerbating and potentially resolutive vectors. Following from the 2017 publication of the long-awaited and anticipated translation, by Cécile Malaspina and John Rogove, of *Du Mode*, this Special Issue seeks to contribute to what will no doubt follow in the years to come, that is, a surging of interest in Simondon's fascinating and rich work which crosses and intersects at various points with philosophy of technology, process philosophy, ontology, the history of philosophy, and political theory, to name some examples. While Simondon has been an important figure in French philosophy – particularly in the works, already mentioned, of Gilles Deleuze[8] and Bernard Stiegler[9] – Anglophone work has repeatedly lamented the lack of a translation of this text. There have been recent studies on and developments of Simondon's work either in or translated into English,[10] but there remain 'gaps in the literature'. With this long-awaited translation published, this special issue seeks to make an initial and, hopefully significant, contribution to the further establishment and study of Simondon's work in English.

The authors in this Special Issue each approach Simondon in a singular way, deploying specific concepts in the resolution of problems outlined. In addition, and as has already been gestured towards in the preceding sections, it is not at all the case that we can easily delimit the field of analysis for what constitutes 'politics' within such an inquiry – traversing as this theme does technical objects, their genesis and concretisation, to the individuation of knowledge, to the level of the transindividual collective. We thus remain focused on this thematic of the culture-technics relation, and some of its multiple entryways are how the papers in this issue can be considered when taken together. There are a variety of points of interaction between the papers, and the structure and ordering deployed here is suggestive of one possible reading vector.

The first subsection, *Information,* begins with a paper by Cécile Malaspina which develops and investigates one of the points mentioned above: namely, Simondon's elusive ascription that the technical object is a carrier of *pure information.* This curious claim by Simondon forms the starting point for Malaspina's investigation, in terms not simply of the question of the integration of culture and technics, but also, of the relationship between information and entropy, as well as between the subject and the collective

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[8]Deleuze's approach to *individuation* builds on Simondon's own, in which the process of individuation can be described as the partial resolution of a problematic field (Deleuze 2014: 322; also see Voss, 2018).

[9]As already hinted at in a previous footnote, Stiegler's philosophical system centralises and integrate *technics* and *technical objects,* a project which, while departing from Simondon at various points, is unthinkable without Simondon. See Stiegler (1998, 2009, 2011). Stiegler's organological approach is a combined analyses as it is a combined analysis of psycho-somatic organs, technical objects or organs, and social organisations, and the inter-relations between them, in which none are conceived of as developing independently from each other. Stiegler also takes up the aforementioned question of a technically informed political and pedagogical perspective on the question of education (Heaney 2020).

[10]In addition to those already cited, also see, for example: Barthélémy (2015), Combes (2013), De Boever, Murray, Roffe, and Woodward (2012), Fisch (2018), Hui (2016b), Lapworth (2016), Massumi (2002), Toscano (2006), Virno (2009), and Wark and Sutherland (2015).

through the notions of axiomatic saturation, ordering, and closure (to name some examples).

Following this, Mick O'Hara's piece explores some aspects of thinking about what it is to go 'into the mould', folding together Simondon's critique of hylomorphism with embodied and enactivist account of processes of energetic transformations, which is developed towards thinking about the materialisation of digital objects. O'Hara continues the Simondonian critique of hylomorphism as an inadequate conceptualisation and practice of how we relate to and produce objects, but takes this into the digital context through both the question of information and the increasingly relevant issue of what he calls – developing on Hui's work on the digital object (2016a) – the *digitalised object*.

The second subsection, *Technics and Practice,* continues the Special Issue with Stefano Mazzilli-Daechsel's exploration of Simondon's work in combination with his research on *makerspaces,* i.e., spaces where makers investigate, explore, and participate in the ontogenesis of technical objects. He explores the ways in which we might think of the ways in which such makerspaces constitute the type of educational spaces of technological literacy for which Simondon calls for in the resolution of the culture-technics disparity, as well as exploring the limitations of these spaces.

Following this, Juho Rantala considers the intersection of Simondon's concept of the *transindividual* – which, as was noted above, is the precise level where Simondon thought that the combat against our *alienation* can be conducted – alongside blockchain technology and the related processes and practices that have developed alongside it (such as smart contracts). To what extent could such technology form the basis for inclusive financial institutions and practices, or as informational commons? Could this technology be put to work in the service new political and economic projects combatting alienation and towards the integration of culture and technics?

The third and final subsection is entitled *Control, Critique, and the Digital,* which builds from the already indicated point that, of course, we exist today in a completely transformed, and continually transforming, technical epoch from Simondon's own. Given this, can Simondon's work still be used in the attempted reintegration of culture and technics? Do his concepts still pertain to this era of the increasing cyberneticisation of everyday life (Hörl 2013: 123) and of digital objects? What of the question of political economy, and the relation between culture and technics from the perspective of new forms of control and new modalities of power?

A number of papers in this Special Issue confront different dimensions of this problem. Mercedes Bunz asks us to consider technical objects in relation to developments in Artificial Intelligence (AI), and the ways in which AI is becoming increasingly used to 'calculate meaning' (itself usually the domain of *culture* rather than *technics*). The impressive lists of feats that AI can perform are growing simultaneously with general further *integration* of AI with our lives (indeed, this is precisely one aspect of the cyberneticisation of everyday life). Bunz asks us to approach the status of AI, and its blending of technical and aesthetic functions, with care and criticality: the *ontogenesis* of AI remains to be explored and adequately critiqued, while its integration into our lives continues. The role and status of AI is fast becoming a node of increased political importance to think critically.

The second paper in this subsection is from Daniela Voss, who raises the issue of the relation between Simondon and Marx, or between Simondon's account of the genesis and

invention of technical objects and the social, political, and economic context in which such genesis takes places. Voss argues for the centralisation of this context, giving close consideration to processes of invention, casting suspicion of some aspects of Simondon's own account which fails to take this into consideration.

In the following piece, by Pierluca D'Amato, a different approach is taken, in which Simondon's work is deployed as a precursor to Deleuze's famous late work on control societies (1992).[11] This piece pays particular attention to the *topological* configuration of the milieu, to the move from Euclidian to Riemannian spaces, a *smoothening* which describes our current era of modulation and control. This analysis confronts digitalisation through thinking of the *dividual* in its hybrid individuation, an individuation which functions as a mechanism of control of our own individuations. The digital, D'Amato argues, inverts the relationship between who is monitoring what in the relationship between humans and technics.

In the last piece of the section and of the issue, Anne Alombert takes up the precise question of alienation mentioned a number of times throughout this introduction, as well as Simondon's hopes for an integration of culture and technics, and her consideration of this is developed through working at the intersection of Simondon and Stiegler's recent work (2016b) on automation and the future of work, as well as with related work such as Rouvroy and Berns's (2013) on algorithmic governmentality. Alombert centralises Stiegler's attempts to develop upon Simondon's project, focusing on how this could be leveraged towards not simply the combat against *proletarianisation,* but also the creation of new economic and political forms and processes which *adopt* and invent in response to the contemporary technological, political, and economic context.

These different entry-points into the evolving reception of Simondon's thought and on the thematic on the culture-technics relation, it is hoped, can play some role in the coming years where Simondon's thought will have continued and growing relevance, faced with a disparity between culture and technics in both theory and practice in need of new inventions, new dimensions, and new modes of resolution.

Acknowledgements

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[11]For a further consideration of Deleuze and Simondon, see Del Lucchese (2009)

possible the total upload of the conference on the University of Kent's *Centre for Critical Thought* YouTube channel. The generative and constructive discussions of this conference convinced me that the tentative idea of the Special Issue ought to be pursued, and it was, first, Greg Hainge whose enthusiastic (and patient) support of the idea got it off the ground, and second, Christopher C. Barnes, the finest and most generously thorough editorial assistant one could wish for (and whose patience with my own rhythm was tested on numerous occasions), who enabled the resolution of this problematic. Each author put in hours of their time, creativity, and energy over a lengthy period. All the peer reviewers who were open to making their invaluable contributions in the Spring and Summer of 2019 played an indispensable role. Each of those named or listed, and many more, were key nodes without whom this process of psychic and collective individuation would not have been possible.

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