Abstract
One of the fundamental questions in post-Fregean philosophy is how to account for the normativity involved in assertoric claims once the traditional subject-object view of thinking is rejected. One of the more productive lines of inquiry in the contemporary literature attributes normativity to second nature, which is presented as a *sui generis* space of reason giving and receiving distinct from the space of nature studied by the natural sciences. In this paper I suggest an alternative account by drawing from Castoriadis’s philosophical interpretation of autopoiesis. For Castoriadis, the idea of second nature protects the modern conception of nature from undergoing the radical critique it requires, for it restricts normativity to the anthropic sphere. In contrast, he proposes an autopoietic account of the subject that grounds the capacity to know that one knows in the activity of the living being. Castoriadis demonstrates that the normativity of assertoric claims is not a vertical break from nature but rather a horizontal transformation of the biological capacity for self-referentiality.

Keywords
autonomy, autopoiesis, Cornelius Castoriadis, John McDowell, second nature

La question du sujet n’est pas la question d’une ‘substance’, mais la question d’un projet. (Castoriadis, 1990: 118)

I Introduction
One of the fundamental questions in post-Fregean philosophy is how to account for the normativity involved in assertoric claims once the traditional subject-object view of
thinking is rejected. The subject-object view holds that our perceiving that things are thus and so carries normative force – an implicit claim that others ought to agree – on the basis that things really are thus and so. The powerful intuition behind this view is that nature ought to serve as the tribunal for our judgments about it. Yet by taking something outside of the epistemic situation as the tribunal, the subject-object view assumes what Wilfred Sellars described as the ‘Myth of the Given’, the illusory idea that what is given to us as impressions or appearings is sufficient for knowledge. The Myth of the Given is illusory, according to Sellars (1997: 20), for it occludes the formation of associations and the acquisition of stimulus-response connections that render sensations intelligible to the knower. Put simply, Sellars’s (1997: 19) claim is that epistemic facts cannot be reduced to non-epistemic facts ‘without remainder’.

Yet if we remove the object from our account of cognition, it seems that we are forced to choose between two problematic alternatives. We can explain how our conceiving is constrained from the outside, such as an evolutionary process that has directed our capacity to discriminate salient phenomena. Or we can attempt to define conceiving according to a form of coherentism controlled exclusively from the inside. The former view removes the normativity of perception and replaces it with a probability calculus. The latter retains a form of normativity unconstrained by how nature is. The question is whether we have any justification to move from ‘it looks this way’ to ‘it is this way’; from merely perceiving something to be thus and so to the claim that it is thus and so.

Over the past few decades an increasing number of philosophers have returned to Kant as a middle way between the traditional subject-object view and its thoroughgoing rejection. This begins with Sellars’s critique of the given, which reintroduced Kant’s transcendental position of reflection to epistemology. According to Sellars, Kant rejects the traditional subject-object view for the reason that while our experience is made up of perceptible facts, that ‘things are thus and so’ cannot appear to us a fact. In place of an empirical description of judgments of facts, Sellars (1997: 76) proposes that judgments occur in ‘the logical space of reasons’, which allows us to characterize ‘a state as that of knowing’. The normative context of the space of reasons is thus the ineliminable starting point of philosophical reflection, for it is a prerequisite for being in touch with the world at all. John McDowell (1994: 99–102) takes this idea further by rejecting what he terms Kant’s ‘subjectivism’, that is, Kant’s insistence on the non-natural status of reason, which owes nothing to our empirical nature and issues commands based on its own authority. While Kant demonstrates that judgments cannot be adjudicated by empirical facts, he simultaneously determines nature as a disenchanted sphere such that conceptual content must be somehow projected onto it, leaving us with no grounds to expect that nature answers to reason. In contrast to Kant’s transcendental starting point, McDowell (1994: 115–16) adopts a position closer to Hegel’s speculative philosophy, casting the normativity of assertoric claims in continuity with nature by appealing to the intentionality of sense-experience. Nature is not limited to the sphere studied by the modern sciences but includes second nature, a spontaneous orientation to the world mediated through reasoning and explaining our actions to each other. That our reason giving and receiving has any purchase on nature is precisely because it is a natural achievement whereby human beings qua rational animals have contested and negotiated their lived
experience in such a way that has produced the logical schemata and inference rules that we possess.

While McDowell defends the priority of the normative on the grounds that it is necessary for our being in touch with nature at all, he nevertheless accepts a hierarchical distinction in which the space of reasons elevates the rational animal from the space of law. Note carefully his language: ‘Human beings acquire a second nature in part by being initiated into conceptual capacities, whose interrelations belong to the logical space of reasons’ (McDowell, 1994: xx). The implication is that human beings, qua animals, are part of first nature, while human beings, qua rational or socialized animals, are ‘free’, ‘above the pressure of biological need’, and thus ‘have an orientation to the world’ (McDowell, 1994: 116). Because he rules out the law-governed space of nature as a starting point, McDowell (1994: 78) employs the rational concept of ‘actualization’ to connect the space of reason with nature. If we recognize that our formation ‘actualizes some of the potentialities we are born with’, the space of reasons need not be ‘a mysterious gift from outside nature’ (McDowell, 1994: 88).

In this paper I suggest an alternative response to the post-Fregean problem of normativity by drawing from Cornelius Castoriadis’s philosophical interpretation of autopoiesis. This may come as a surprise, for Castoriadis’s work – if it is known at all – is not normally associated with Anglophone epistemology but rather with the radical left publication Socialisme ou Barbarie and his later writings on revolutionary democracy. Yet Castoriadis’s relentless efforts to defend a robust conception of the political sphere ‘after the subject’ led him to Kant for a theory of judgment capable of maintaining the normative force of our claims despite rejecting the subject-object view. This move bears several similarities with Sellars’s and McDowell’s attempt to reframe contemporary epistemology from a Kantian standpoint. Yet in Castoriadis’s view, the idea of a second nature prevents the modern conception of nature from undergoing the radical critique it requires, for it saves normativity by insulating it within an anthropic sphere that somehow actualizes the first natural stratum. While Castoriadis mirrored Sellars’s and McDowell’s attempt to free Kant’s rejection of the subject-object view from the subjectivism that lingered in Critique of Pure Reason, his strategy is not to seal the spontaneity of thought from the encroachment of nature but rather to identify a prior locus of subjectivity that grounds the capacity to ‘know that one knows’ in the activity of the living being.

The paper is divided into three sections. The first section examines Castoriadis’s conception of closure in Imaginary Institution of Society (1987 [1975]), which draws from Critique of Pure Reason to articulate a conception of the social as the spontaneous self-instituting of the ontological conditions of knowing and doing. I note that this position falls prey to two objections, voluntarism and psychologism, for it presents the symbolic order of human making and doing as a vertical break from the first natural stratum. In the second section I turn to the philosophical interpretation of autopoiesis Castoriadis developed in the 1980s as a response to these objections. Through examining ‘The State of the Subject Today’ (1989 [1986]), ‘Pour-soi et subjectivité’ (1990) and the 1986–7 lecture series on human creation published posthumously as Sujet et vérité (2002), I argue that Castoriadis develops an account of subjectivity in which the living individual is understood as a project of self-creation. In the final section I outline the
implications of Castoriadis’s autopoietic account of the subject for cognition. I argue that the normativity of cognition for Castoriadis is not a vertical break from nature but rather a horizontal transformation of the biological capacity for self-referentiality.

II Organizational closure

Let us begin with Castoriadis’s critique of identitary logic in The Imaginary Institution of Society (1987 [1975]). Castoriadis’s neologism ‘identitary logic’ refers to the system of logical relations that ascribes identity to individual objects and to collections of objects in ensembled sets. It is expressed in forms of making and doing that maintain the priority of the determinacy of nature (physis) over and above the creation of form (nomos) that cannot be accounted for by its natural preconditions. Castoriadis argues that the socio-philosophical tradition of thought that inherits the priority of physis over nomos ‘has constituted, developed, amplified and refined itself on the basis of this thesis: being is being something determined (einai ti), speaking is saying something determined (ti legein)’ (Castoriadis, 1987 [1975]: 221). Identitary logic constitutes the world according to causation, function and structure, predetermining that natural events are intelligible according to their necessary and sufficient conditions. It is manifest in the fact that mathematics has offered the model of a true demonstration (Castoriadis, 1987 [1975]: 222). When placed against the demand for completeness, the non-mathematical, contingent strata of being – in particular, the political and organic spheres of making and doing – are seen to be ontologically deficient.

Castoriadis’s critique of identitary logic bears similarities with McDowell’s critique of ‘bald naturalism’. Bald naturalism, according to McDowell (1994: 67), is the view of nature that denies that ‘the spontaneity of the understanding is sui generis’ and endorses an empirical description of human thought in which events can be reduced to their physical properties. Yet in contrast to McDowell, who defends the need for an alternative sphere of giving and receiving reasons free from the determinacy of the first natural sphere, Castoriadis attempts to discern the spontaneous activity of self-creation within the closure of identitary logic. To choose just one example, Castoriadis examines the development of set theory at the end of the 19th century. 1 Consider the exchange between Georg Cantor’s definition of sets and Bertrand Russell’s critique of its internal paradoxes. A set, according to Cantor, is ‘a collection into a whole of definite and distinct objects for our intuition or of our thought’ (Cantor, 1883; cited in Castoriadis, 1987 [1975]: 223). Russell famously labelled this theory ‘naïve’, for by refusing to identify the foundation of mathematical sets in a logical stratum it assumes that each set is grounded in another set, thereby raising the internal paradox of the ultimate set. For Cantor, however, it is not despite but because of its undefined terms and circular formulation that his definition is fundamental, for it reveals the undefinable character of the initial terms of set theory. For Castoriadis, Cantor’s refusal to identify the foundation of mathematics in a presupposed logical stratum ‘exhibits the indefinable within the definition of the definite, the ineliminable circularity within every attempt at a foundation’ (Castoriadis, 1997a: 292). What is significant about Cantor’s definition – what makes it more philosophically important than Russell’s critique or later developments in category
theory – is that it rejects previous attempts to derive the theory axiomatically and, instead, accepts its circular and undefinable terms.\(^2\)

By accepting the circular character of set theory, Cantor’s definition draws our attention to several schemata rules that it presupposes. First, his definition clearly presupposes that one must be able to distinguish between objects. These objects belong to the sphere of perception and are posited not as singular occurrences but as definable according to set relations. Second, Cantor’s definition presumes a schema for both separation and union. Only with such schemata can objects be posited as both distinct and as being assembled into a whole. Because Cantor’s definition makes it clear that the application of these schemata rules presupposes the possibility of separation and unification, it reveals that such relations are not logically but transcendentally grounded. In Castoriadis’s (1987 [1975]: 224) words, one presupposes that ‘each of the terms collected together in this way to form a whole has already been implicitly posited as collected together into this whole which it itself is, that the diversity of features defining it and distinguishing it […] has been united in order to posit/form/be this very object.’

Cantor’s definition of the operation of numerical sets opens the question of the justification of their starting point, ‘implying, therefore, that this [starting point] is external to the discourse at hand and that it is posited from somewhere else.’ Castoriadis (1987 [1975]: 222) concludes that Cantor ‘explodes’ the search of justification by unveiling the groundlessness implicit in all logical systems.

The notion of groundlessness uncovered by Castoriadis’s critique of identitary logic has opened his work to two objections. The first is that groundlessness entails voluntarism, for it denies any friction between formal categories and nature (Callinicos, 1990; Heller and Fehér, 1991). Voluntarism would supposedly undermine Castoriadis’s project of rejuvenating a robust account of political judgment, for it would collapse the political sphere into a conservative echo-chamber where claims are relative to convention. In his efforts to ensure that institutions and rules of inference have some friction with nature, Castoriadis introduced the Freudian notion of ‘leaning on’ (Anlehen) – ‘the leaning of the social-historical institution on the natural stratum’ (Castoriadis, 1987 [1975]: 186) – to explain how the spontaneous creation of nomos is not completely unconstrained. Castoriadis’s notion of ‘leaning on’ operates in a similar way to McDowell’s concept of actualization, and yet it lacks a teleological dimension that would ensure that nomos has any purchase on physis. Precisely how the social-historical sphere leans on the first natural stratum – how nature could give rise to normativity – is left undeveloped. The second objection is that groundlessness reduces philosophy to psychology, for it implies that epistemic claims do not carry normative force but are rather psychical and social forms of self-expression (Habermas, 1987). Once more, this objection would seriously undermine Castoriadis’s project, for it would subjectivize the common sphere of making and doing. Taken together, these objections identify a problem with Castoriadis’s philosophical programme as it stands after The Imaginary Institution of Society: namely, it refuses to grant a source of normativity beyond the sui generis magmatic flux of the radical imagination, which incessantly brings new form into being. These objections do not trouble McDowell’s account of normativity, for it is the space of reasons that is sui generis on his account, not the non-rational spontaneity of the imagination.
In the following section I suggest that Castoriadis’s turn to autopoiesis during the 1980s and 1990s can be seen as a response to the problems of voluntarism and psychologism. This is by no means a rejection of the radical imagination, I argue, but rather an attempt to situate the creativity of the imagination within nature. It is important to note that in his reading of Cantor’s set theory, Castoriadis does not deny that sets bear a relation to nature; he simply offers the vague notion of leaning on. His appraisal of naïve set theory aimed to show that 20th-century logic reopens Kant’s schematic account of thought, for it reveals that identity logic can be formulated if and only if sets exist in the sense that Cantor defined. The application of sets presupposes that they have been applied before we use them, meaning that we experience sets as transcendentally necessary to the extent that they precede our thinking them. Their ground is their prior application, which is to say that they are historical, a practice of convention. Castoriadis’s shift to autopoiesis can be seen as an attempt to situate the self-creating subject within *physis* understood as self-creation, thereby collapsing the distinction between first and second nature.

III The for itself

In *The Imaginary Institution of Society*, Castoriadis set out to answer a question that is, in part, shared with McDowell. How does a commitment to an ideal or goal – what McDowell calls ‘claim to reason’ – become part of the fabric of a form of life? Castoriadis’s response was to theorize *nomos* as a horizontal break from *physis*, a process that McDowell describes as the actualization of second nature. He claims that by leaning on the first natural stratum, the second stratum of being bears some kind of normative force. Yet because the magmatic flux of the radical imagination is non-rational, the coordination of *nomos* and *physis* lacks the teleological structure of McDowell’s actualization thesis and is thus open to the voluntarist objection.

Following the publication of *The Imaginary Institution of Society*, Castoriadis began to search for the conditions of social and subjective closure not simply in the necessary assumptions of doing and making but in a revised account of the *nomos*/*physis* dynamic. One source was a renewed discovery of pre-Socratic poetry, which gives voice to a self-animated conception of *physis* that self-creates through the interplay of chaos and cosmos (Castoriadis, 2004). Here Castoriadis sought to rediscover the creativity of nature that spontaneously gives rise to forms that are neither fully ordered nor fully rational (Adams, 2011: 137). A second source was his encounter with the francophone debates over the notion of autopoiesis, inspired by Humberto Maturana and Francisco Varela’s landmark text *Autopoiesis and Cognition* (1973). Castoriadis discovered in Maturana and Varela an alternative to the total rejection of the subject in post-structuralism, for their account of autopoiesis identified the continuity of the living being and nature while denying that emergent form can be reduced to or predicated on its antecedents. In contrast to his former theorization of *nomos* as a horizontal break from *physis*, Castoriadis developed a general ontology of *physis* as self-creation (Adams, 2007: 76). On Castoriadis’s interpretation, autopoiesis implies that being is radically temporal, for it stands as a creative event in which subject and object are codetermined. In contrast to his former hierarchical ordering of *nomos* as a sui generis level of normative relations, the
living being is marked by what he terms self-finality (*autofinalité*). The subject cannot be rejected, he claims, for it is neither a concept nor a substance but the concrete activity of the living being. This activity defines a region of being Castoriadis terms the *for itself* (*le pour soi*). Taking the living being as the basic expression of the *for itself*, Castoriadis (1990: 120–2) is able to determine three ‘real conditions’ of subjectivity: closure, finality and self-referentiality. While these conditions draw from Varela’s *The Principles of Biological Autonomy* (1979), Castoriadis rejects Varela’s claim that autopoiesis is sufficient for autonomy. In contrast to the real conditions of the *for itself*, autonomy for Castoriadis is a form of self-creation, for it requires three horizontal modifications of the functional closure of the living being, which he defines through the psychoanalytic terminology of defunctionalization, sublimation and autonomization. The region of the *for itself* marked by these three modifications, according to Castoriadis, is the human being.

Let us begin with the three real conditions of the *for itself*. Castoriadis (1990: 120) builds on Maturana and Varela’s original account of autopoiesis by defining the living being as a mode of existence in and through closure. As we saw in the previous section, Castoriadis’s endorsement of Cantor’s set theory aimed to diagnose, from the inside, the drive of identitary logic to exhaust all of being as being something determined. Determinacy was presented as a constituent part of Greco-Western ontology to the extent that it actively forecloses the possibility of creation. In the context of autopoiesis, however, determinacy takes on a fundamentally different meaning (Castoriadis, 1989 [1986]: 382–3). Determinacy no longer features on the level of *nomos* as creation, a social-imaginary institution that legislates all being in the model of production. Rather, determination is correlative with the aims of the *for itself*, which achieves closure within the physical stratum of nature. Determinacy is thus a constituent feature of *physis* understood as autopoiesis.

Castoriadis’s notion of closure also draws from Varela’s (1979) presentation of autopoiesis as a *sui generis* spatial region. According to Varela (1979: 55), the space of the living being is marked by autonomous self-organization, for the relationship between parts and whole are irreducible to infinite space:

> We shall say that autonomous systems are organizationally closed. That is, their organization is characterized by processes such that (1) the processes are related as a network, so that they recursively depend on each other in the generation and realization of the processes themselves, and (2) they constitute the system as a unity recognizable in the space (domain) in which the processes exist.

Organizational closure for Varela marks a localized space, constituted by the processes that produce the component parts of the system. Here we see that Varela’s autonomy and Castoriadis’s *for itself* do not simply capture the formal structure of the living being but also multiple regions of being of which the living being is the basic level. The *for itself*, Castoriadis explains, is (1) the living being (already at the cellular level), (2) the psychic, (3) the social individual (society’s transformation of the psychic) and (4) society itself. In each case, the closure of the *for itself* grounds its finality. By
virtue of organizational closure, the for itself can only be thought as spatially discrete from within.

This leads to the second condition of the living being: it ‘creates its own world’ (Castoriadis, 1989 [1986]: 383; cf. 2002: 59). As soon as we reach the cellular level, a living being presents, represents and sets into relation (mise en relation) that which is represented, thereby producing its Eigenwelt (Castoriadis, 1990: 120). What is ‘outside’ the living being is not bare information waiting to be gathered. The only grammar available to articulate what is outside is the placeholder ‘X’, which refers to that which occasions a Fichte\’s Anstoss or ‘shock’ (Castoriadis, 1989 [1986]: 383; cf. 1990: 123). From the negative vantage of Fichte\’s reflective position, to say anything more about the X would be to depart from the finality of the subject that must always be thought from within. Yet in contrast to Fichte, Castoriadis (1990: 123) claims that we can say more about the X, for we are able to take a positive position – something akin to Schelling\’s Naturphilosophie – which he terms the position of the ‘metaobserver’. The capacity to think the X is not simply the capacity to represent a not-I, and to set that not-I in a relation of opposition to the I. More significantly, it is a transformation of self-referentiality such that one can represent an ‘other’ for which finality is its mode of being. From the vantage of the metaobserver, one can observe at the same time this living being and what happens outside it: one can infer that an element X in our world triggers in a living being an element X of our world which he calls reaction Y of the living being (Castoriadis, 1989 [1986]: 383). If we refrain from projecting our own functionality onto the living being – if we reflect disinterestedly – we discover that what we have posited according to the placeholder X, to which no form can be attributed, cannot be without form: ‘The shock cannot be, in itself, absolutely undetermined and totally undifferentiated, for if that were the case we would be able to hear paintings and see perfumes.’ While we can say nothing constitutive about X, we can nevertheless say that it must be such that it allows for the ongoing existence of living beings in their staggering variety. What we discover from the position of metaobserver is that the X becomes ‘something’ not simply in relation to one\’s own self-finality (the I) but also in relation to the specific finality of a living being for whom self-reference is its mode of being.

Thus, on the most fundamental level of the for itself, information is created by a subject in its own manner (Castoriadis, 1989 [1986]: 381). It is not point-like but rather a presentation or ‘setting into images [mise en image]’ that can never be atomized but is always posited in relation. Following Maturana and Varela (1973), Castoriadis claims that the capacity for presentation can be termed the ‘cognitive function’, which entails both imaging (l\’imager) and relating (le relier), combining a sensorial and logical dimension. For Castoriadis (1989 [1986]: 381), there \‘is always a \‘logical\’ organization of the image just as there is always an \‘imaged\’ support for every logical function\’. Logic is proper to the living being, yet this logic \‘is neither explicit nor reflexive\’ (Castoriadis, 2002: 210). The setting of images into relation adheres to certain rules that are submitted to the finality of the living being, conditioning the possibility of its self-preservation. Here we see that the normative source of value is sui generis not as second nature but as the finality of the for itself: ‘What is presented must be valued in one manner or another, positively or negatively; it is \‘affected\’ by a value (good or bad, food or poison, etc.), and therefore it becomes support for an affect’ (Castoriadis, 1989
The affect has an intentional structure, for it leads to a corresponding action (advancement toward or avoidance, etc.) (Castoriadis, 1990: 122).

The first two conditions – self-finality and the creation of a world (auto-finalité et mond propre) – require each other in a reciprocal manner and assume a third condition we have already noted in passing: self-referentiality. To preserve itself as an entity, be it numerically (this dog) or generically (dogs), a living being must act and react in an environment. This implies that it is, in the most basic sense, aware of its environment. Again we encounter the normative level that appears for McDowell in the Sellarsian space of reasons. For Castoriadis (1989 [1986]: 395), self-reference implies, very weakly, ‘knowledge of its own state’. Even at the most primitive level, self-reference is not a direct form of indication that can be turned on and off as a switch. The immune system, for example, involves calculating, reckoning and the (fallible) capacity to distinguish the self from the non-self. All systems characterized by self-finality have self-reference, for to preserve a desired state the system must ‘actively’ refer to itself.

Castoriadis (2002: 61) stresses the fact that self-reference is highly selective. The living being leaves out an infinite amount of the nonperceived in both a quantitative and qualitative sense. Only that which can be presented is determined by the living being, and here ‘determined’ means ‘limited’ or ‘specific’. Castoriadis (1989 [1986]: 383) explains as follows:

The specific selectivity is obviously only correlative with the aims of the for-itself which is each time this specific living being and which depends on what it already is. A tree’s goal of preserving itself does not lead to the same sort of selections within the environment that a mammal’s goal of sexually reproducing itself does. Something else is selected each time, and is transformed each time in another fashion when it is presented.

While each living being creates its own world according to what it is, the creation of this world supports itself on a certain being thus and so of that which is. Castoriadis again employs the concept of leaning on to express this relation. Yet in contrast to the under-developed notion of leaning on offered in The Imaginary Institution of Society, Castoriadis now demonstrates that it is the ground of normativity. The living being leans on X to create what for it is information, which is to say that X is spontaneously classified, validated, assigned relations and set into reaction programs (Castoriadis, 1990: 121; cf. 2002: 79–80).

According to Castoriadis, our reflection on the living being as metaobservers marks a transition from the living being to the human being. This transition is not hierarchical but horizontal, for it involves the transformation by which subjective goals are detached from the functional goals of the living being (Castoriadis, 1989 [1986]: 386). This process of transformation can be understood according to three processes. The first is the ‘defunctionalization of psychical processes relating to the biological substratum of the human being’ (Castoriadis, 1989 [1986]: 386; cf. 2002: 21, 25). The instances of psychical life – preserving one’s self-image, pursuing a goal, etc. – are biologically non-functional, and yet are functional from another standpoint. Each instance works at preserving the world of the human being, whose image of what the human is is a constituent part of that world. The fact that this image can be valued above the biological
conditions of the living being reveals a second transformation, namely, the ‘domination of representational pleasure over organ pleasure’ (Castoriadis, 1989 [1986]: 387). The psyche is capable of transforming representational content into something pleasing, leading to the sublimation of organ pleasure for other symbolic pleasures, such as a cultural or political goal. Sublimation is horizontal to the extent that it is a redirection of pleasure rather that the replacement of organ for representational pleasure. The third transformation, which is presupposed by the first two, is the ‘autonomization of the imagination’ (Castoriadis, 1989 [1986]: 387). The result is the radical imagination, which designates a capacity that does not simply image, as a mirror, but that posits something that is not there. Imaging is presupposed everywhere the for itself is, which means that the imagination begins with the living being in general. While the living being makes this image according to the requirements of functionality, the autonomization of the imagination results in an ‘unlimited and uncontrollable representational flux, a representational spontaneity that is not subjected to an ascribable end’ (Castoriadis, 1989 [1986]: 387). The capacity for language leans on the radical imagination, for it enables the psyche to see something where there is something else: for example, ‘to “see” a monkey in the five phonemes and six letters of this word’.

The horizontal transformation that distinguishes the human being as a sui generis region of the for itself is that while it is organizationally closed, the psychical apparatus is a rupture of this closure. The rupture of the human being in the history of homo sapiens introduces a temporal dimension to Varela’s spatial presentation of autonomy, for it includes the dimension of psychical history. The instances or types of processes of the human psyche are constituted in and through a history, persisting in a contradictory and incoherent totality. The process of learning, and the corresponding logic by which instances are arranged, is thus grounded – like McDowell’s second nature – in the human being’s animal inheritance. And yet because these instances are instituted in terms of a rupture with the closure of the functional for itself, they are not exterior to each other or to the first stratum of nature but operate in a constant feedback relation. Thus, rupture is not the result of a system but rather a mode of coexistence with an ‘organization’ that contains fragments of other logical organizations, while not being reducible to any one of them (Castoriadis, 1989 [1986]: 391).

**IV From the empirical to the logical**

In contrast to McDowell’s account of our judicial-evaluative capacities, in which the space of reasons is the actualization of first nature, Castoriadis grounds the normativity involved in ‘knowing that one knows’ in the activity of the living being. The move from the groundless subject in *The Imaginary Institution of Society* to the autopoietic subject can be understood in parallel with the transition made by Kant from his first to his third *Critique*. As Hannah Ginsborg has elaborated at length, Kant’s analysis of the spontaneous, a priori categories in the first *Critique* left open the question of how we are warranted to consider our judgments of perception as normative for others. According to Ginsborg (2014: 183), Kant proposed an answer this question in *Critique of the Power of Judgment* by accounting for our awareness of our ‘own appropriateness to the object perceived’. Kant’s goal is to explain the part of our way of perceiving things in which we
take *ourselves* to be perceiving them as we ought. This ‘ought’ is the normativity that underpins cognitive claims. For cognition to be possible, ‘our natural perceptual and imaginative responses to the world must incorporate a primitive claim to their own normativity; a claim which, while legitimate, is not itself cognitive, and does not admit of cognitive justification’ (Ginsborg, 2014: 4). While the primitive claim is not itself cognitive, it entitles us to rely on what is given as appearance, that is, to take that our responses to objects that affect our senses stand in normative relation to them. Ginsborg argues that Kant’s discovery of judgment’s a priori saves his account from relying on the subjectivism rejected by McDowell, for it grounds the possibility of intersubjective claims not in reason’s demand but in ‘the same a priori principle which [Kant] takes to underlie empirical scientific enquiry’ (Ginsborg, 1990: 63). This principle is the principle of the suitability of our cognition to nature; in Kant’s words, ‘the concept of a purposiveness of nature in behalf of our faculty for cognizing it’ (Kant, 2000: 20:202).

Castoriadis would certainly agree with Ginsborg’s identification of the normative claim as a prerequisite for cognition. Yet as we saw in the previous section, he argues that a purely reflective standpoint occludes the historical character of our schemata rules and rules of inference, for it refuses to grant to nature a role in their creation. Ginsborg refrains from grounding the primitive claim to normativity in nature, for, like McDowell, she retains the transcendental split between nature understood as the space of law and the mind as the space of reasons. In contrast to Kant’s argument in the third *Critique*, Castoriadis does not ground the normative force of taking to be true in judgments about living beings. Rather, he locates it in a positive conception of the living being itself. By moving from transcendental reflection to the position of the metaobserver, Castoriadis identifies the transition from the living being to the psychic whereby knowing that one knows – a relation shared across all levels of the *for itself* – becomes a matter of reflection.

In what follows I present Castoriadis’s conception of normativity as a moment within his broader account of cognition. This account, I suggest, can be understood according to four steps that transition from the empirical to the logical without requiring a vertical rupture or the teleological notion of actualization. While the normative force of judgment does not presuppose existing rules, self-finality serves as the ground of a normative attitude to them. The four steps are outlined below, each of which is made available from a distinct standpoint of analysis. I use the personal pronoun ‘we’ to indicate the region of *for itself* that is sufficiently autonomized to call its schemata rules and rules of inference into question.

1. We form dispositions to associate this X with previous Xs, thereby constituting sets (empirical/psychological level).
2. We have cultural and biological constraints on the way our dispositions pick out objects and subsume them into sets (anthropological level).
3. When we form such a disposition, we take it that our disposition is as it ought to be (normative level).
4. To cash out (3), we require schemata rules and rules of inference (logical level).
Let us walk through each step in turn. (1) is a purely descriptive step that presents the impulse to form ensembles. Whether these dispositions are truth-tracking due to the evolutionary development of cognition, a ‘happy accident’ between our ensembles and the world, etc. – i.e. whether we can adopt a normative attitude toward them – is not yet on the table. The first step is limited to reflection from an empirical/psychological standpoint. Step (2) identifies the dispositions that are enabled by specific biological conditions, and the way that these conditions have been expressed symbolically in a particular cultural environment. Stimulation is selectively received and presented within an *Eigenwelt* according to biological ends, such as the acquisition of energy sources that are appropriate to certain biological functions. The manner in which this world is created is specific to the learning, associations and stimulus-response patterns in which the subject has been formed. As we saw in Castoriadis’s account of *for itself*, there is a quasi-normative dimension to (2) to the extent that these processes operate according to the finality of the living being. Yet the normative dimension only becomes a matter of reflection once the subject acquires a relation to the content of perception other than inclination or desire.

Step (3) provides this vital move, capturing the normative dimension of cognition. Here we grant to our dispositions the status ‘ought to be seen as’; our attitude implies that others ought to discriminate and unify the manifold in the way that we do. While both Kant and Castoriadis identify this step prior to the application of rules, for we must assume the similarity of our own cognitive faculties to those of our fellow judgers if we are to make any claim to objectivity, each identifies a different ground for this claim. Kant (on Ginsborg’s reading) argues that judgments of beauty open us to a primitive claim that does not issue from the pre-established categories of the understanding but from the feeling of vitality (*Lebensgefühl*) we experience as living, embodied beings when the natural sphere appears hospitable to our epistemic endeavours. A similar process occurs when we judge living beings as if their form was the actualization of an inner purpose. The primitive claim is that one *ought* to experience the object in the way that I am experiencing it if one had the same cognitive constitution, thereby enabling the judger to extend her claim to the entire sphere of those who judge. Castoriadis, in contrast, refuses to place the burden of the primitive claim entirely on the subject. A philosophy that thinks it can ‘furnish the “conditions of possible experience” by looking uniquely at the subject’, he provocatively claims, ‘is one of the most astonishing absurdities ever registered in the history of great thought’ (Castoriadis, 1997c: 345). Such a philosophy is absurd, according to Castoriadis, precisely because the origin of the claim is ‘undecidable’, which is to say that even for the near-perfect observer the question of what is contributed by the subject and what by the object cannot be accurately discriminated. The problem is that any attempt to isolate the content of knowledge in the knowing subject overlooks the fact that subjectivity first and foremost belongs to the living being, which constantly creates itself as history. Already at the most basic level of the *for itself*, self-finality implies a limited self-awareness to the extent that self-maintenance requires that one is aware of the state one is in. This self-awareness is ‘the possibility that the activity proper to the “subject” becomes an “object,” the self being explicitly posited as a nonobjective object or as an object that is an object simply by its being posited as such and not by nature’ (Castoriadis, 1989 [1986]: 395). In the human
being, this capacity is transformed through the autonomization of the imagination, making it possible to reflect on one’s judgment from the nonfunctional, disinterested position of another. The claim ‘ought to be seen as’ is normative to the extent that it is the demand that other beings of the kind that I am should also see it as thus and so.

Step (3) does not complete the account of cognition, for we must cash out how our normative claims are to be used. To do so, we form schema rules, such as what can be designated as wholes and parts, and rules of inference, encompassing what kinds of relation the schemata can be situated within. This is step (4). The awareness of ourselves as living beings reveals that the logical system of (4) does not find its basis in nature understood as self-actualizing ground but rather as ontological genesis. The creative imagination, the productive faculty capable of cashing out schemata and inferential rules, leans on ‘the organizable being-thus of nonliving nature’, creating itself as living being by creating a world (Castoriadis, 1997c: 351). While the world of the living being leans on X, the relation between subject and object is neither one of determination nor chaos but rather one of co-creation. While X can be organized, selected and related only if it is organizable, selectable and relatable, there is no single way in which these processes must occur (Castoriadis, 1990: 121; cf. 1997b: 366). This is precisely what grounds step (3): on the primitive assumption that nature is amenable to our ordering, we are able to grant our dispositions the status of ‘ought to be seen as’ for the kind of being that I am.

Because the for itself posits itself as a necessary and complete whole, philosophy, understood as the defunctionalized reflection on the conditions of presentation, features as a specific sociohistorical rupture that seeks to problematize the immediate, functional presentation of the world and to recast it as an open project. Philosophy for Castoriadis is an institution of human thinking that begins from the acknowledgment that our hold on nature involves a process of codetermination; it begins by limiting our cognitive aspirations to claims that are justifiable given the self-grounding edifice of (1)–(4). It is thus a constituent element of autonomy, which is not, as Varela suggests, the achievement of a closed, self-organizing whole but rather a collective project of opening up to what is ‘other’ in the fullest sense of the term.

V Conclusion

In this paper I have argued that Castoriadis’s autopoietic account of the subject offers an alternative response to the problem of normativity in post-Fregean philosophy. McDo- well (1994: 115) calls for a re-enchanted conception of nature such that second nature ‘opens our eyes’ through training and leaning to the demands of reason. Once our eyes are opened, the shape of our lives ‘is no longer determined by immediate biological forces’, for the understanding achieves spontaneity and, by rising above the ‘pressure of what impinges on us from the world’, obtains an ‘orientation’ to the world. In contrast, Castoriadis argues that orientation does not begin once one has arisen ‘above the pressure of biological need’ (McDowell, 1994: 116), for orientation features already on the level of the living being. The question of normativity only poses a challenge if one remains in the reflective position, which restricts normative claims to the space of reasons. To begin with the living being is to begin from the positive vantage of the
metaobserver wherefrom one can abstract the logical structure of the for itself and discover the ground of one’s own finality. In contrast to McDowell’s actualization thesis, Castoriadis proposes a conception of physis as self-creation whereby subjectivity is grounded in the living being as for itself. The human being is sui generis to the extent that the functional intentionality of the living being is sublimated into a representational scheme in which logical rules can be applied explicitly and examined reflectively.

Since Castoriadis’s initial engagement with Maturana and Varela’s account of autopoiesis in the 1970s, the biology of developmental systems has greatly advanced in both experimental practice and theoretical sophistication. Recent work in biosemiotics, niche construction, phenotypic plasticity and epigenesis has made significant progress in redefining the role of the living being in the evolutionary process, leading some to announce a new theoretical synthesis in the biological sciences (Laland et al., 2015). Castoriadis’s account of the subject provides a way of interpreting these developments not simply as the expansion of modern biology but also as a relief to the philosophical anxieties that motivate McDowell’s response, for they offer a renewed awareness of the living being as a spatially and temporally discrete subject in the evolutionary process. Within the creative instability of contemporary biology, Castoriadis’s account of the for itself stands as a signpost, not a completed theory but a framework in which to understand the subject as the ground of normativity. This account invites us to discover in every instance of subjectivity – in each other and throughout the natural world – a possible mode of self-creation that is not a matter of freeing ourselves from our natural constraints but of cultivating a transformed relation to them.

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**Notes**

1. Castoriadis refers to a number of other examples, including Greek tragedy, Athenian democracy, axial societies, folk music and relativity theory.
2. Cantor’s naïve set theory was superseded by the set theories of Russell and Frege, and then by the category theory of Samuel Eilenberg and Saunders Mac Lane. Yet Castoriadis is concerned with the epistemological implications of set theory’s initial impulse, suggesting that axiomatic set theory and category theory build from Cantor’s approach. In Castoriadis’s view, Russell’s paradox turns set theory in a direction concerned with the coherence of logical systems rather than the epistemological insight that grounds set theory understood as a project.
3. While the contrasting positions of constructionism and logicism lie outside the scope of this paper, it is important to note that the emphasis Castoriadis places on the groundlessness of sets stands in opposition to the logicism of Russell and Whitehead. Russell’s paradox entails that Cantor’s naïve set theory is logically paradoxical. Following Russell’s discovery, set theory was faced with the problem of revising the intuitive (or naïve) ideas about sets and reformulating them in such a way as to avoid inconsistencies. For Castoriadis, the drive of logicism is to heal the abyss between thought and reality, thus occluding the challenge that Cantor’s set theory poses to our understanding of logic.
4. For an account given by Castoriadis of how Varela’s presentation of autopoiesis effected his intellectual trajectory, see Castoriadis (2011: 59–60).

5. In ‘Pour soi et subjectivité’, Castoriadis (1990: 119–20) presents six regions which include the human levels, separating society into the human subject, society itself (understood as an organic whole) and society understood as active self-institution. In Castoriadis (2002: 57–60) we find four levels that are ‘simply real’ (the living, the psychic, the individual, the social) and two further levels which are a ‘project’ and a ‘becoming-being’ (the human subject for whom subjectivity is a right, and society understood as the project of autonomy).

6. These emerging fields examine the capacity of organisms to modify their environment and thereby influence their own and other species’ evolution. For example, biosemiotics focuses on the semiotic structure of living creatures. According to Marcello Barbieri (2008: ix), the study of the genetic code suggests that ‘the cell itself has a semiotic structure, and the goal of biosemiotics [is] the idea that all living creatures are semiotic systems’. Niche construction provides an alternative to the exclusive focus on the effects of environment on the variation in gene frequency by examining the ‘organism-induced changes in selection pressures in environments’ (Kendal et al., 2011: 785). It expands the neo-Darwinian account of evolution by ‘recognizing that the evolution of organisms is co-directed by both natural selection and niche construction’.

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