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HYPERSTRUCTURALISM'S NECESSITY OF CONTINGENCY

Necessity and Contingency Today

During the last decade, philosophy has experienced a dramatic resurgence of interest in the question concerning necessity and contingency, which profoundly undermines the very possibility of continuing to conceive these traditional notions in a dual manner. Such rethinking has affected some among the most diverse fields of continental and analytic speculation. Interestingly enough, this convergence of theme evidences major theoretical dividing lines which are, by and large, internal to the two allegedly opposite sides, rather than directly amenable to their confrontation. On the one hand, philosophy of mind's growing infatuation with issues of causality and probability both reflects and disavows the virulent battle that is currently taking place in cognitive science between those who claim, in a 'Bayesian' fashion, that 'it seems increasingly plausible that human cognition may be explicable in rational probabilistic terms' since 'human cognition approaches an optimal level of performance," and the supporters of the so-called 'accidental mind' or 'kluge' theory, whose main Darwinian tenet is suboptimal evolution, that is, 'the fact that the brain is not an optimized, generic problem-solving machine, but rather a weird agglomeration of ad hoc solutions that have accumulated throughout millions of years of evolutionary history."2

On the other hand, today's amalgamation of (post-)post-structuralist thought under the banner of a materialist ontology capable of sustaining a renewed politics of emancipation conceals a more basic theoretical disagreement with regard to the strategic function of debates on necessity and contingency. Even a cursory comparison of Giorgio Agamben's and Slavoj Žižek's respective positions on this matter

2. D. J. Linden, *The Accidental Mind. How Brain Evolution Has Given Us Love, Memory, Dreams, and God* (Cambridge MA: Belknap Harvard, 2007) 3. Linden is Professor of Neuroscience at the Johns Hopkins School of Medicine

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^{1.} G. Marcus, *Kluge: The Haphazard Evolution of the Human Mind* (London: Faber and Faber, 2008) 7. Marcus, a Professor of Psychology at New York University whose research on the origins of the human mind integrates psychology, linguistics, and molecular biology, strongly criticizes this approach.

proves revealing. While both acknowledge the importance of a critical discussion of these notions, they develop it for conflicting purposes (genealogical in the first case, programmatic in the second). According to Agamben, the 'merging into one another' of necessity and contingency provides an exhaustive explanation for some of the most blatant manifestations of contemporary governmental biopolitics—such as the implementation of the infamous theory of war 'collateral damages'—in terms of a historical-ontological 'fulfilment' of the Christian doctrine of Providence.³ For the same reason, we are also invited to abandon altogether this equivocal vocabulary insofar as it would inherently perpetuate, in spite of secularism's ostensible triumph, the inability of modern political philosophy—and of politics *tout court*—to overcome the paradoxes of Western theology.

Contrary to this stance, Žižek's re-launching of a 'communist hypothesis' remains inextricable from an original recuperation of Hegel's thought on necessity and contingency, and, more to the point, of his philosophy of Christianity. The latter should function as nothing less than a model for materialism. Only a return to the true implications of the dialectical gap between the necessity of contingency and the contingency of necessity would allow contemporary atheists to appropriately define their political agenda.⁴

In this disorienting scenario, the work of two French thinkers, Jean-Claude Milner and Quentin Meillassoux, deserve particular attention. The latter's 2006 book, After Finitude-whose subtitle is, significantly enough, An Essay on the Necessity of the Contingency-has ignited passionate discussions about the obsoleteness of the split between analytic and continental speculation, as well the dubious motives for its preservation. Meillassoux's unsettling relevance to the philosophy of causality and the foundations of probability can immediately be grasped as soon as we focus on his innovative treatment of what he calls 'Hume's problem'; as he puts it, the question is no longer exclusively 'whether or not it is possible to furnish a reason for causal necessity' but rather 'whether causal necessity actually exists or not.'5 In parallel, the demonstration of the related principle according to which 'contingency alone is necessary' refutes the very presuppositions on which the entirety of post-Kantian philosophy rests, both its continental and linguistic/philosophy of mind variants; if it can be shown that contingency is absolutely necessary, then thought can access an 'in-itself'-absolute contingency-that exists independently from thought. In short, Meillassoux's investigation of necessity and contingency

^{3.} Giorgio Agamben, Il Regno e la Gloria (Vicenza: Neri Pozza, 2007) 314

^{4.} See especially, Slavoj Žižek, 'The Fear of Four Words: A Modest Plea for the Hegelian Reading of Christianity,' in S. Žižek & J. Milbank (eds.), *The Monstrosity of Christ* (Cambridge MA: MIT Press, 2009). For a close reading of this text aimed at challenging Žižek's appropriation of Hegel's philosophy of religion, see Lorenzo Chiesa, 'Christianisme ou communisme? L'hégélianisme marxien et le marxisme hégélien de Žižek,' in R. Moati (ed.), *Autour de Slavoj* Žižek: *Psychanalyse, Marxisme, Idéalisme Allemand* [Actuel Marx Confrontation series] (Presses Universitaires de France, 2010) 44-67.

^{5.} Q. Meillassoux, After Finitude (London: Continuum, 2008) 90.

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builds a solid bridge between analytic and continental philosophies while, with the very same move, it disqualifies some of their deepest assumptions. Last but not least, it uncovers their inadequacy before contemporary science, which is perfectly capable of advancing statements on both the 'acausal universe' and 'events anterior to the advent of life as well as consciousness.[%]

With regard to Milner, I would argue that his great merit is to have autonomously resumed the enquiry into necessity and contingency at a time when-the mid-1990s-it had almost completely disappeared from European thought. Ever since, especially in books such as L'Œuvre claire (1995) and Le périple structural (2002; 2008), his research has been guided by a reflection on 'the necessity of thesei,' the necessity of conventions as different from the necessity of phusei (or things that are 'according to nature')7 and irreducible to it; the fact that, to put it simply, 'men create necessity' as well as develop a scientific discourse on it.8 More specifically, for Milner, it was structuralism and, in particular, Lacanian psychoanalysis as 'hyperstructuralism,' that thoroughly problematized the traditional philosophical relation between nature and conventions, necessity and contingency, as inherited from the Greek world and mediated by Galilean science. In his own words, 'the greatness of structuralism consists in the following: it formulated a hypothesis according to which the dilemma [between phusei and thesei] no longer existed. It claimed in its doctrine and demonstrated in its practice that vast sections of what had always been attributed to thesei could be the object of a science in the Galilean sense of the term. And it did this without bringing thesei back to phusei, which is where its true novelty lies." Furthermore and most importantly, by thinking scientifically 'the necessity of pure *thesis*,' the structuralist programme operated a redistribution of the proportion between physis and necessity, on the one hand, and thesis and contingency, on the other, which gave rise to a 'modal paradox' while, at the same time, providing an answer to it. With structuralism and thanks to it, it becomes imperative to accept the necessity of thesei as a 'given' which 'combines together two modalities that are apparently opposed: a necessity that is as binding as the necessity of nature and a contingency that is as subject to variations of place and time as the thesis of the Ancients.'10

Milner's contention is that post-structuralism, negatively defined as that which followed in thought the collapse of structuralism in the late 1960s, would not philosophically live up to the challenges opened up by its predecessor; it has so far proved unable not only to cogitate further on the necessity of *thesei* but also to fully appreciate what the structuralists and, especially, Lacan achieved theoretically by means of the modal paradox. Although I cannot dwell on it here, Milner's

^{6.} After Finitude, 9; 92.

^{7.} Jean-Claude Milner, Le périple structural (Lagrasse: Verdier, 2008) 280.

^{8.} *Le périple structural*, 362.

^{9.} Le périple structural, 300.

^{10.} Le périple structural, 301.

evaluation of late 20th century analytic philosophy, which given his background in linguistics he often brings into play, turns out to be equally severe.

It should be clear by now that Milner's and Meillassoux's converging critiques of all modes of contemporary philosophy presuppose and, at the same time, foster a common interest in science. I would claim that what is primarily at stake, for both, by means of a resumption of the question concerning necessity and contingency is the promotion of a new form of thought that could think theoretically what science-natural and social-already thinks at the empirical level. And yet their similar projects seem to be aimed at opposite objectives. Meillassoux unequivocally prompts for a new alliance between philosophy and natural science; the former should be able to conceive the meaning of the latter as 'a discourse which construes the relation to the world-that of thinking and/or living-as a fact inscribed in a temporality within which this relation is just one event among others, inscribed in an order of succession in which it is merely a stage, rather than an origin.^{'11} To put it briefly, philosophy should think the relativity of thought as the main assumption on which science operates and produces results. On the contrary, Milner deems philosophy to be both resistant to modern science and constitutively incompatible with it. Following closely Lacan's own pronouncements, he claims that psychoanalysis alone-understood as 'anti-philosophy'-can speculate on modern science, and-as praxis-expand and challenge it from within. Structuralism and, a fortiori, Lacanian psychoanalysis qua 'hyperstructuralism' amounts to an 'extended Galileanism'¹² [galiléisme étendu] that, while suspending the schism between the social and the natural because of its inherence to the natural, also prevents the reduction of thesis to physis.

For Milner, the whole discourse of psychoanalysis revolves around a crucial issue, namely, the 'passage from the moment in which the speaking being could be infinitely different from what he is—in his body and thought—to the moment in which, on the basis of his very contingency, he has become similar to an eternal necessity',¹³ although Milner does not mention it, we should refer here especially to the ontogenetic import of the Oedipus complex. Most importantly, unlike philosophy, which is itself primarily concerned with anthropogenesis (in terms of the emergence of the transcendental), psychoanalysis rules out the possibility of abstracting oneself from this threshold; there is no 'outside-universe'¹⁴ [*hors-univers*], hence man's passage from contingency to necessity cannot be totalized adopting an external pacified perspective, nor can it be understood chronologically. Psychoanalysis thinks the *absolute contingency* of the speaking being. It is for this reason that, along with the necessity of *thesei*, ontological non-totalization—the fact that the One and Being must be separated—and synchronic temporality—as different

^{11.} After Finitude, 10.

^{12.} See for instance, Jean-Claude Milner, L'Œuvre claire (Paris: Seuil, 1995) 111.

^{13.} L'Œuvre claire, 152.

^{14.} L'Œuvre claire, 153.

from contemporariness—constitute the three major legacies of structuralism, in particular of Lacanian psychoanalysis, to contemporary thought.

My overall claim is that, despite their seemingly contrasting predictions about the future of philosophy, Meillassoux's speculative realism relies on an appropriation and (for the most part unsuccessful) resolution of the threefold legacy of structuralism as understood by Milner.¹⁵ In this paper I will, however, focus only on the notion of the necessity of *thesei* as developed by Lacan's psychoanalytic hyperstructuralism and the role played by science in such context.

Structuralism as Extended Galileanism

According to Milner, structuralism amounts to the fulfilment of the scientific paradigm that originates from the Galilean revolution; structuralism brings Galileanism to its extreme consequences, rendering explicit some of the most far-reaching presuppositions on which modern science has always tacitly founded itself. First and foremost, these concern the notion of nature, the scope of mathematics, together with the redistribution of the functions of necessity and contingency. Galileanism replaces the ancient notion of nature as *physis*—i.e. the order of the world that exists independently of man's conventions-with the modern notion according to which it is nothing else than the empirical object of science. The formal precondition of this change lies in the complete mathematization of science. In other words, after Galileo, 'nature does not have any other sensible substance [substance sensible] than that which is necessary to the right functioning of science's mathematical formulas.'16 This leads to an epochal shift in the way in which the superimposition of the 'for-us' onto the 'in-itself' is being understood. On the one hand, for ancient science, *physis* is as such sensible and qualitative, but man's own perception is nonetheless required to distinguish between what is eternally necessary-and consequently mathematical—and what is transitorily contingent—and only occasionally mathematizable. The 'in-itself' inherently gives itself to us while, at the same time, as constitutive components of the 'in-itself,' we are needed to discern in it what is necessary from what is contingent. On the other hand, modern science eliminates nature's perceivable qualities in favour of an abstract notion of matter, yet this also paradoxically results in the fact that the natural object liable to be mathematized is now understood as man's mere correlative. Givenness is not a property of the 'in-itself' while, at the same time, the discourse of mathematical necessity must be relegated to the field of what is *contingently given* to us. To put it differently, modern science does not contemplate establishing whether something is 'as such' necessary or contingent. Milner insists on this point: unlike ancient science, for modern science, 'there can be mathematization of what is [as such] imperfect, temporal,

15. A full discussion of this will appear in Lorenzo Chiesa, *For Lacan: Science, Logic, Politics* (Cambridge MA: MIT Press, forthcoming 2012).

^{16.} Le périple structural, 287-8.

and contingent just as much as of what is [as such] perfect, eternal, necessary.¹⁷ More precisely, we could say that, for modern science to be able to operate, it is *necessary* to regard nature *qua* the mathematizable object of science as indifferent to the supposed difference between necessity and contingency in the 'in-itself.' Thus, with specific regard to the role of mathematics, or better mathematical necessity, modern science '*requires* the mathematization of the object; it does not require that the object be a mathematical essence. Therefore, it does not require that it be eternal and perfect'; rather, we could go as far as suggesting that, 'on the contrary, it aims at grasping, by means of mathematization, that which in it [object] might be different from what it is; that which it has of empirical, contingent, repeatable and thus temporal.'¹⁸ Independently of whether the object is 'in-itself' necessary or contingent, modern science's mathematical necessity focuses on the contingency of the object's 'for-us.'

On the basis of this discussion of the paradigmatic change from ancient to modern science, Milner draws an important conclusion: the greatest achievement of the Galilean revolution consists in the fact that, insofar as science reduces nature to nothing else than its objective correlative, the latter can no longer simply be inscribed within the dichotomy physis/thesis, what is according to natural necessities and what is according to man's conventions. At this stage, the neat division between the two poles (natural and cultural) has already been compromised. Any scientific discourse on nature is-or, at least, might hypothetically be-itself conventional. However, modern science, has never really accepted this state of affairs; it has not yet renounced the ancient division between *physis* and *thesis*, in spite of the fact that it has itself emptied *physis* of any signification. Conventions, customs and traditions-that is, in short, the sphere of man-are still deemed to be, by definition, un-mathematizable. But, eventually, the only way in which modern science could domesticate the anti-dualistic impact of the Galilean revolution was by promoting a form of naturalist reductionism which, precisely in order to preserve the polarity *physis/thesis*, has contradictorily ended up submitting it to the *physis* pole. To put it simply, today, conventions are by and large deemed to be natural; thesei can be integrated into *phusei*; there is a possible definition of man that potentially mathematizes him in his entirety, yet only at the cost of transforming him into a 'segment of nature.'19 Milner convincingly suggests that the current success of statistics and genetics-as well as, we could add, the increasing tendency to turn politics into (statistical and genetic) bio-politics-witnesses to the pragmatic efficiency of this solution.

In this ongoing scenario, for a couple of decades in the second half of the twentieth century, structuralism offered a plausible alternative to naturalist reductionism, one that uncovered the real roots of the Galilean revolution. It rejected altogether the *physis/thesis* conundrum demonstrating that *thesei* could themselves be the ob-

^{17.} Le périple structural, 291.

^{18.} Le périple structural, 289 (my emphasis).

^{19.} Le périple structural, 299.

ject of a mathematized science in a Galilean sense. Milner's main argument here is that, in focusing on the necessity of *thesis without*, literally, incorporating it into physis, structuralism extended Galileanism. Because of this, the necessity of thesis should be considered as the crucial theoretical innovation of structuralism and directly provides us with its 'five key hypotheses.'20 First, the necessity of thesis needs to be assumed as a given; as the social sciences of the nineteenth century, in primis Marxism, already concluded, man creates necessities which are both imposed on him and modifiable by him. Second, the necessity of *thesis* is not only a given but must also become a scientific object; the notion of 'structure' designates it in this regard. Third, the necessity of language (as convention) is the most evident necessity of thesis, hence linguistics should work as a model for the other sciences of man; insofar as the latter are all based on linguistic necessity, they present common traits which can be analysed through a common methodology. Fourth, the necessity of thesis is scientific only insofar as it is not reduced to physis. Fifth, we must not enquire into the origins of a given necessity of thesis; as we have seen earlier, the modal paradox suspends chronology.

Following closely Milner's own reasoning, I would add three more basic propositions as corollaries to the second, third, and fifth hypotheses; they are all derived from the central tenet of the necessity of thesis and help us to pave the way to our discussion of Lacan's hyper-structuralism. In relation to the second hypothesis, we should specify that structuralism, understood as an extended Galileanism, entails an extended use of mathematization, one which is not usually acknowledged as mathematical by mathematicians. More precisely, such extension of mathematization amounts to an 'indiscriminate handling of letters. Pure literality: letters are posed without a substantial definition; rules are posed which define what one is allowed to do with these letters; and, on this basis, deductions are possible to which empirical predictions can be related.²¹ With regard to the third hypothesis, it is important to emphasize that the sciences of man that rely on structuralism are, properly speaking, theories of difference. At the level of both intra- and interdisciplinary empirical knowledge, elements are individuated through oppositions starting from a clear-cut separation of the notions of identity and resemblance, which are, on the contrary, always coupled by traditional epistemologies. Finally, concerning the fifth hypothesis, the formal idea of origins is to be substituted with that of 'break' [coupure]. If scientific structuralism, in all its variants, always interrogates the a-chronological threshold between thesei and phusei, then the necessity of thesis it encounters on this very threshold as a given presents itself in the 'pure form' of the break.22

Milner also believes that the basic hypotheses of structuralism contain a series of inherent impasses which, once again, involve primarily the role of mathematics and the notion of science. We can summarize them by means of two related ques-

^{20.} Le périple structural, 301.

^{21.} Le périple structural, 305-6.

^{22.} Le périple structural, 335-6.

tions: isn't structuralism's innovative use of mathematization eventually a form of de-mathematization, which would automatically exclude from the field of modern science the very endeavour of extending Galileanism? Conversely, isn't structuralism's epistemological minimalism-its insistence on the 'unicity and specificity of the object'23 (i.e. the necessity of thesis characterizing each human science, which is finally always reducible to linguistic necessity)-an endorsement of an ancient model of *ideal* science? Interestingly enough, while the first question insinuates that the innovations introduced by extended Galileanism are as yet less than scientific, the second retorts the same accusation to traditional (non-extended) Galilean science. We could suggest that structuralism compromises itself by posing, at the same time, as both too ground-breaking and too conservative for modern science. Let's dwell on each of these problems. On the one hand, not only has the kind of mathematization adopted by structuralism not been recognized as mathematical by mathematicians, but also its use of letters parts ways with any acceptable mathematical logic. To put it simply, structuralism cannot be inscribed in any kind of formalism which might currently be regarded as scientific. On the other hand, structuralism's epistemology aims at the formulation of a minimal axiomatic system-based in the end upon the axiom of the primacy of difference over identity-which ignores the fact that, especially after Popper, Galilean science has considered itself as resolutely anti-minimalist. In short, science requires empirical falsification-the logical possibility that a statement could be demonstrated to be false by a particular observation-and therefore a multiplication, not a reduction, of its hypotheses.²⁴

I think Milner is at his best when he illustrates the way in which these tensions converge on the very notion of 'structure' and make it vacillate, if not implode altogether. The latter is characterized by both maximal extension (the necessity of thesis originally developed into a scientific structure by linguistics should be applied to all human sciences) and minimal comprehension (all human sciences are at last dependent on just one fundamental axiom of linguistic necessity predicating the differential and oppositional-i.e. ultimately non-linguistic-nature of language). As Milner rightly contends, the intersection of these two coordinates exposes the Achilles' heel of structuralism: 'if the comprehension of the notion [of structure] is reduced to excess,' in other words, as I would put it, if extension is the only content of comprehension, 'the risk of the void threatens it [structure].'25 In order to try to avoid such risk, structuralism needs to ask itself one crucial question, namely, 'is it possible to enumerate the necessary and sufficient conditions for there to be a structure?'26 According to Milner, one of the few, if not the only, thinker who offered a positive and persuasive answer to this query, and thus temporarily prolonged and reinforced the structuralist project, was Lacan. It is

^{23.} Le périple structural, 340.

^{24.} Le périple structural, 338-40.

^{25.} Le périple structural, 341.

^{26.} Le périple structural, 341.

precisely in this sense that Lacanian psychoanalysis should be understood as a hyper-structuralism.

Hyper-structuralism, or, The Subject as Structure's External Inclusion

At the core of his redevelopment of Freudian psychoanalysis, Lacan postulates that *any* structure—that is any 'necessity of *thesis*' as ultimately reducible to linguistic necessity—must have minimal properties which are themselves *necessary*.²⁷ The emergence of the *subject* is one of these essential properties of any structure. While Milner does not tackle this point openly, we are also led to believe that, for Lacan, such emergence is not only necessary but also sufficient for there to be a structure. Unsurprisingly, the fact that the subject as such—whose function structuralism is usually supposed to have marginalized or even eliminated—should be regarded as *the* structural property of structure creates a paradox, to which I shall return later in greater detail, and which we could tentatively phrase as follows: any minimal structure contains the subject through a relation of 'external inclusion.'²⁸

For the time being, it is worth dwelling on the way in which Lacan comes to conjecture the reciprocity of structure and subject. His basic operation consists of a further development and complication of structural linguistics' minimalism. What Milner calls 'the risk of the void' pending on the latter could be better appreciated by means of a tripartite division. As we have already partly explained, from the point of view of its theory, structural linguistics aims at formulating a minimal number of fundamental axioms (and thus remains pre-modern); from that of its object, it considers language only as a differential system of oppositions (and thus somehow empties it out); finally, from that of the properties of its object-or better, of the properties of the object's elements-these are reduced to relations of difference which are entirely determined by the system itself (and thus cannot be thought as discrete properties). In other words, in structural linguistics, 'difference is given first, it is that which authorizes properties,²⁹ which are then just differential relations. But, as a consequence of this, difference alone cannot be posited as the necessary and sufficient *condition* for there to be a structure, since it cannot be considered to be a structural property in the first place. Rather, difference is the structure tout-court, which thus remains completely undetermined as a notion.

Lacan's hyperstructuralism originates precisely in a confrontation with this impasse. I would claim that it supplements structural linguistics' equation of structure with difference with the theory of the reciprocity of structure and subject according to which the subject is the necessary property of structure while, at the

27. Milner's formulation of this point in French is extremely effective: 'La structure quel-conque a des propriétés non-quelconques' (*Le périple structural*, 346; *L'Œuvre claire*, 104).
28. *L'Œuvre claire*, 105. Milner is thus right in emphasizing that Lacan's own relation to structuralism is itself, given his identification of the subject as *the* structural property of structure, one of paradoxical 'external inclusion' (*L'Œuvre claire*, 9).
29. *L'Œuvre claire*, 99.

same time, he remains distinguishable from it. If, on the one hand, Lacan does not pronounce judgement on structural linguistics' axiomatic minimalism, on the other, he both preserves and radicalizes its concepts of minimalism of the object and of properties in an attempt to avert the disappearance of the very notion of structure. More specifically, from the standpoint of the object, psychoanalysis conceives the unconscious as a minimal differential system, a *unidimensional* chain that is always in praesentia, or, as Milner clearly explains, can be 'grasped at one glance, in one instant,'30 without any need for stratification. Going beyond Saussure's division of language into two axes-syntagmatic and paradigmatic; actual and virtual-this is precisely what Lacan tries to convey with the motto 'there is no meta-language': the unconscious should not be reified into an absent entity, not even if the latter is understood linguistically; rather, the unconscious perfectly coincides with its linguistic formations (symptoms, jokes, slips of the tongue, etc.).³¹ The same kind of extreme minimalism is developed at the level of properties. Not only does Lacan follow structural linguistics in reducing the properties of the elements of the chain-called signifiers-to differential relations induced by the structure, but also acknowledges that, in doing so, the structure as such is conceived as a *cause* of its own properties. In other words, 'the signifier does not have properties, but makes them: it is action,³² the very unfolding of the chain.

At this stage, Lacan's radical structuralism-his radicalization of structural minimalism-summons the subject as a determinable structural property of pure undetermined action and, as a result, turns into hyperstructuralism. The differential and active chain supports itself thanks to an external term, the subject, which sustains the irreducible differentiality (or non-identity with itself) of each of the chain's terms, including its own. The subject thus becomes itself one of the terms of the chain: inasmuch as, in the minimal chain, any hierarchy between system, term and property has disappeared, the property of a term is itself a term.³³ Milner is very accurate on this point: 'The subject becomes an inherent property of the chain [...]: every signifying chain, as such, includes the subject; but the subject himself can only be defined as the term Y in a ternary relation where X is a signifier and Z is another signifier.³⁴ In Lacanian jargon, this means that the subject is simply that which a signifier represents for another signifier, and, as such, always vanishing. Here, we should also be able to appreciate better in which sense the reciprocity of structure and subject in Lacan's hyper-structuralism gives rise to a paradox: the subject allows representation-i.e. the possibility of conceiving each differential term of the chain as identical with itself-by remaining included externally in the chain-or, following Jacques-Alain Miller's formulation in his seminal 1966 article

^{30.} Le périple structural, 216-7.

^{31.} See Le périple structural, 216-7.

^{32.} L'Œuvre claire, 103.

^{33.} See Le périple structural, 228-9.

^{34.} L'Œuvre claire, 105-6.

'Suture,' by 'figuring [in the chain] as the element which is lacking, in the form of a stand-in; for, while there lacking, it is not purely and simply absent.'³⁵

Having said this, as Milner notices, hyperstructuralism's overcoming of the 'risk of the void' inherent to structuralism comes at a high cost. The reciprocity of structure and subject, the external inclusion into structure of the subject as structural property of structure, is, in the end, tautological. To put it simply, the subject amounts to the structural property of structure because, as we have just seen, he can be deduced from it: he 'could not be different from what [he] is without structure ceasing to be a structure, and this by logical necessity (the logic of the signifier).³⁶ This logically necessary relation between structure and subject, the fact that the subject must always be a subject of the signifier and the minimal structure can never have non-subjective properties, is what Milner calls the 'vanity'37 of Lacan's hyperstructuralist re-elaboration of Saussure, but also the cornerstone of its legacy, which Chomskyan linguistics-and also, more generally, post-structuralist thought-has ignored. Against structuralism's theory of the homology of structures, Chomsky insists on the specificity of language, 'that through which language does not resemble to anything else';38 at the same time, in diametrical opposition to Lacan, he assumes that its essential characters should not be deduced from an alleged notion of structure and regarded as necessary, but rather considered as contingent, that is, empirically falsifiable-'they could be different from what they are without logical contradiction.'39 This eventually leads Chomsky to a complete re-naturalization of language (its well-known equation with an 'organ') which in addition to confining the structuralist speculation on the necessity of *thesis* to the field of *physis* also, and more importantly, begs the question posed by hyperstructuralism's innovative identification of structure (the necessity of thesis) with the real as such-that is to say, a real which is irreducible to the concept of nature taken as the object of empirical science. As Lacan unequivocally puts it in the second lesson of Seminar XVI, 'structure is to be understood in the sense that it is that which is most real, it is the real itself [...] I stress that this is in no way a metaphor.⁴⁰

This is a crucial matter that needs to be approached with caution. For now, I will limit myself to suggesting that, according to Lacan, the reciprocity between structure and subject is logically necessary only because it directly expresses the real—to be distinguished yet not separated from the reality with which empirical science operates—as *absolute* contingency. Milner fails to make this connection when, opposing Chomsky's empirical contingency to Lacan's logical necessity, he simply

^{35.} J.-A. Miller, 'Suture: Elements of the Logic of the Signifier,' in *Screen* 18 (Winter 1978): 24-34.

^{36.} Le périple structural, 347.

^{37.} Le périple structural, 352.

^{38.} Le périple structural, 351.

^{39.} *Le périple structural*, 352.

^{40.} Lacan, Le séminaire. Livre XVI. D'un Autre à l'autre (Paris: Seuil, 2006) 30.

argues that, for the latter, logic is the 'science of the real,^{%1} a statement which could easily be mistaken as an indicator of subjective idealism. Yet, Lacan is certainly not an advocate of radical necessity. There are countless instances in which he binds the subject of the signifier to the subject of modern empirical science, and as a consequence of that, understands him as 'a correlate of contingency'— in another context, Milner himself coins this expression to throw light on Lacan's debt to Popper.⁴² Nonetheless, such definition of the subject turns out to be insufficient to counter the accusation that hyperstructuralism amounts to a form of idealism: correlational contingency could still well denote a dialectical stage of absolute necessity's self-deployment. What remains to be explored to fully rebut it is the difference between the absolute contingency of the real on which the logical necessity of the subject as structural property rests and the notion of empirical contingency adopted by modern science's subject/object correlationalism.

Psychoanalysis and Science

In what sense can Lacan overlap the unconscious subject of the signifier (as structural property) with the subject of modern science (as historical figure)? What does the phrase 'subject of science' mean more precisely? In the last three decades, the import of this notion has been investigated from several conflicting perspectives and with various degrees of clarity.⁴³ I think Milner's contribution remains among the most commendable for two main reasons: first of all, he convincingly shows how Lacan's pronouncements on modern science do not simply constitute a theory of science or an epistemology but what he calls a 'doctrinal de science,' that is, a 'conjunction of propositions on science and on the subject';44 secondly, he dispels the widespread opinion that such conjunction promotes historicism. Milner believes that Lacan formulates a basic axiom of the subject-'there is a subject, distinct from any form of empirical individuality'-which should not be confused with the hypothesis he puts forward concerning the subject of science-'modern science, insofar as it is a science and insofar as it is modern, determines a modality of constitution of the subject'-since the latter results from the former, of which it is a specification.⁴⁵ In brief, this means that the *doctrinal de science* does not aim at reducing the subject *tout-court* to the subject of modern science; rather, it intends to delimit the field of operation of hyperstructuralist psychoanalysis as the discourse which both fully meets the original demands of modern science and remains the most faithful to the axiom of the subject. Lacan's well-known claim according to which 'the subject

45. L'Œuvre claire, 33-4.

^{41.} Le périple structural, 353.

^{42.} L'Œuvre claire, 61.

^{43.} For a general introduction to this debate, see J. Glynos & Y. Stavrakakis (eds.), *Lacan and Science* (London: Karnac, 2002). In a non-Anglophone context, it is worth singling out for its originality Rado Riha's work on the relation between Lacanian psychoanalysis, Kantian philosophy and the 'ethical dimension' of science.

^{44.} L'Œuvre claire, 42.

upon whom we operate in psychoanalysis can only be the subject of science' should be interpreted in this context.⁴⁶ On the one hand, hyperstructuralism resists any attempt to reduce the subject to the ego as an empirical individuality: the subject of the unconscious discovered by Freud and remodelled by Lacan's theory of the signifier is an impersonal 'it thinks' deprived of any quality. Precisely for this reason, on the other hand, hyperstructuralism also maintains itself within the Galilean-Cartesian revolutionary programme of a minimalist mathematized physics which eliminates the sensible from nature and thus requires a corresponding minimal subject without qualities. Philosophy betrayed this agenda as soon as Descartes himself determined his *cogito* as a unity of ontological self-consciousness.

Moving from these premises, I would argue that Milner is correct in claiming that the only pertinent scientific question concerning psychoanalysis is not 'is psychoanalysis a science?' but rather 'what is a science that includes psychoanalysis?,⁴⁷ or also, I suggest, what would contemporary empirical science look like if it preserved-and developed-its original Galilean minimalism? As partly anticipated in the previous section, my claim is that Lacan's succinct answer to such query is: a science able to include psychoanalysis must be a science that acknowledges the real as the absolute contingency presupposed by the minimal logic of the signifier. This is precisely what the great majority of current science-based as it is on probabilistic causality and the anti-minimalist method of falsification-cannot afford to do and, consequently, also the reason why it excludes psychoanalysis from its sphere. In this regard, Milner seems strangely hesitant: the fact that the contingency of the subject of science can also be derived from Popper's methodological model should not lead us to suppose that contingency as such is reducible to empirical contingency or that, conversely, Popperian science could regard hyperstructuralism's theory of the subject as a form of empiricism. If the axiom of the subject exceeds the hypothesis about the subject of science, then the subject as distinct from any form of empirical individuality is not entirely explainable as the contingent correlate of the object of science.

What is even more surprising is Milner's avoidance of any direct engagement with Lacan's virulent critique of the discourse of empirical science, especially as exposed in 'Science and Truth' (1966). It is accurate yet not sufficient to observe that hyperstructuralist psychoanalysis fights against the 'ideal of science'—science as an unreachable paradigmatic point of reference at which scientists aim asymptotically—as well as, even more fiercely, its concrete embodiment into the variable prescriptive norms of 'ideal science,' and substitutes both for 'an ideal of psychoanalysis for science' (epitomized, as we have remarked, by the question 'what is a science that includes psychoanalysis?').⁴⁸ Beyond all that, for Lacan, science goes as far as foreclosing the subject as truth—i.e. the subject as suspension of all knowledge—which is another way to say that it repudiates the absolute contingency of

^{46.} J. Lacan, 'Science and Truth,' in Écrits (New York/London: Norton, 2006) 729.

^{47.} L'Œuvre claire, 37.

^{48.} L'Œuvre claire, 35-6.

the logic of the signifier (as truth of the subject). Let me dwell on this delicate issue by returning to the motto 'the subject on whom we operate in psychoanalysis can only be the subject of science.' Although Milner extensively comments on it at the very beginning of his discussion of the doctrinal de science and the axiom of the subject, he omits to report an important specification, thus underrating its broadest consequences. Lacan's text reads as follows: 'to say that the subject upon whom we operate in psychoanalysis can only be the subject of science may seem paradoxical.³⁴⁹ What is the apparent paradox Lacan is referring to? On the one hand, psychoanalysis uncovers the structural division of the subject of modern sciencethe subject that originates historically from the Galilean revolution and the Cartesian cogito-between knowledge and truth. On the other hand, it aims to found itself as a non-historicist science (hyperstructuralism), and, with the same move, refound science as such on the very basis of the historically determined subject of science as a (more generally) divided subject. The apparent paradox is therefore twofold: it involves not only the relation between psychoanalysis and science, but also that between structure and history. We should explore this in more depth.

According to Lacan, modern science attempts to 'suture' the subject of science, unify him empirically as a closed set of knowledge, but it fails, as demonstrated, for instance, by the very possibility of formulating Gödel's theorem of incompleteness or Cantor's notion of the transinfinite. Consequently, 'the subject [of science] remains a correlate of science, but an antinomic correlate since science turns out to be defined by the deadlocked endeavour to suture the subject.³⁰ This passage from 'Science and Truth,' which Milner does not take into consideration, is possibly even more significant than the one we have just scrutinized: the subject of science as a structural property that surpasses the way in which he is determined by modern science is an 'antinomic correlate' of science, or, more precisely, of its empirically contingent object. In other words, it is precisely science's failure to suture its subject, or better to saturate him-Lacan uses both verbs in 'Science and Truth'-that allows the emergence of the subject of psychoanalysis. The latter is therefore the subject of science insofar as he is not saturated. The subject of psychoanalysis, that is, the subject of the unconscious, and the subject of science are both the consequence of a historically definable division between knowledge and truth, which itself presupposes a more structural 'external inclusion' of the subject into the logic of the signifier. They are the two sides of the same coin: modern science forecloses truth in history, yet truth then re-emerges historically at the level of structure in the signifying constructions that psychoanalysis finds in symptoms and the other formations of the unconscious.⁵¹ This means that psychoanalysis has to question 'the conditions of the truthful'52-i.e. re-enact the Cartesian doubt as a refusal of

^{49. &#}x27;Science and Truth,' 729 (my emphasis).

^{50. &#}x27;Science and Truth,' 731.

^{51.} See J. Lacan, Seminar XII, 'Problèmes cruciaux pour la psychanalyse,' 1964-1965, unpublished, lesson of June 9, 1965.

^{52.} J. Lacan, Seminar IX, 'Identification,' 1961-1962, unpublished, lesson of November 29, 1961.

acquired knowledge—first and foremost because it is the historical product of the subject of science's *own* renewed quest for truth: to put it bluntly, it is the analysand who demands to know the truth about his symptom, a formation that often does not make any sense for scientific knowledge. Here we encounter the apparent paradox of psychoanalysis' relation with science in its purest form: 'the *science* of psychoanalysis,' as Lacan often defines it, cannot be equated with scientific *knowl-edge*. On the contrary, the very object of psychoanalytic science, the object *a* to be understood as the inextricable correlate of the divided subject—and as the concept by way of which hyperstructuralism formalizes what resists science's endeavour to saturate the subject—is precisely what challenges the notion of scientific knowledge as such.⁵³

But how should we understand such division between knowledge and truth in relation to the identification of structure with the real I evoked earlier? Crucially, Lacan concludes that, if science at last does not manage to saturate the subject, it is because there is no meta-language, no totalizing truth of language, since language and the symbolic structures it creates are structurally incomplete. In other words, the emergence of the differential logic of the signifier is concomitant with the introduction of a void. This is the only truth, whose consequence is nothing else than the Spaltung between consciousness and the unconscious. Most importantly, as both Milner and Miller promptly notice in their discussions of the signifier's 'action,'54 Lacan interprets the truth of incompleteness in causal terms: the 'truth as cause,' as he calls it, is co-substantial with the existence of structure. Lacan specifies that this cause—i.e. the logical necessity of structural causality—is not a mere 'logical category' but that which 'caus[es] the whole effect':55 in short, it is real. And this is valid both in the ordinary sense that, on some level, the cause belongs to the 'external' world as a material 'substratum' of the signifying structure,⁵⁶ independently from the latter's existence, as well as in the more specifically Lacanian acceptation of the term for which it marks the illogical limit, or antinomy, of the logic of the signifier (i.e. the external inclusion of the subject); the two meanings are here inseparable.

55. 'Science and Truth,' 738.

56. It is in this sense that Lacan can claim elsewhere that '*nature* provides us with [...] signifiers, and these signifiers organize in an inaugural manner human relationships, giving their structures, and shape them' (J. Lacan, *The Four Fundamental Concepts of Psychoanalysis* [London: Vintage, 1998] 28, my emphasis).

^{53.} See 'Science and Truth,' 733. Having said this, psychoanalysis cannot do without organizing itself into knowledge: as Lacan has it, 'Freud' and 'Lacan' are proper names that functioning as Master-Signifiers inevitably end up advancing a new 'truth about truth.' Psychoanalysis thus repeats the *two* oscillations of the Cartesian *cogito*. Having uncovered the 'sore' or 'breaking point' of truth, psychoanalysis formulates a *knowledge* that, like Descartes,' knows that truth cannot be reduced to knowledge ('Science and Truth', 737). Obviously, psychoanalysis no longer anchors such knowledge on the meta-Master-Signifier 'God.'

^{54.} Miller's most important contribution to this question remains his 1968 article 'Action of the Structure,' now in *The Symptom 10*, Spring 2009.

It is precisely in this context that Lacan also founds his theory of discourses: in a few words, a discourse amounts to the particular configuration assumed by structure-the signifier's representation of the subject for another signifier-with regard to its inherent real causality. If, on the one hand, truth as structural cause (or real void of structure) is to be regarded as the basis of every historically determined discourse, on the other, the knowledge promoted by specific discourses opposes truth as structural cause in different ways. This means that foreclosure is not a necessary outcome of history, but the particular product of the discourse of modern science's confrontation with incompleteness, the real void of structure. Science considers truth only as a *formal* cause, that is to say, it reduces truth to the knowledge of the laws that are supposed to account for it. Thus, the subject of science as a divided subject caused by truth aims to exclude himself from his symbolizations, which are ideally deemed to be totalizable (what Milner aptly names the perspective of 'outside-universe'),57 Lacan emphasizes that, for this reason, modern science's refusal to acknowledge the incommensurability of truth with knowledge is even more radical than that of magic and religion⁵⁸ On the other hand, in conceiving of truth as a material cause, psychoanalytic discourse keeps it separate from knowledge. Psychoanalysis recognizes that the emergence of the signifying structure in concomitance with a real void which is inherent yet irreducible to it should be conceived of as a material process: as Lacan writes in 'Science and Truth,' 'th[e] material cause is properly speaking the form of impact [incidence] of the signifier.³⁹ Or, as he rephrases it more lucidly in a contemporary article dedicated to philosophy students, 'the signifier is matter that transcends itself into language."

At this stage, we still need to show how this notion of a materially real causality, as such indiscernible from the logical necessity of the minimal structure, is associated with and sustained by an absolute contingency that must be neatly separated from the empirical contingency of probabilistic causality with which science operates. We have already argued that science's empiricism relies on a rejection of incompleteness, the adoption of the perspective of 'outside-universe' that allegedly allows one to totalize nature by means of knowledge. But, precisely for this reason, as Meillassoux rightly remarks in a chapter of *After Finitude* that begins with a critique of Popper's falsificationism,⁶¹ science functions on the basis of *chance*, not contingency; it 'proceeds by *extending the probabilistic reasoning* [...] that is *internal* to our universe (the throw of the dice and its result) to *the universe as such*,⁵⁶² counting it as one. In doing so, it already presupposes that the laws of nature are unchangeable, that is, it tacitly replaces their apparent stability, which can be observed em-

^{57.} See 'Science and Truth,' 739-40

^{58.} Indeed, the religious man knows that he does *not* know what the truthful God knows, while, as anthropologists have shown, the shaman knows that the efficacy of his action relies on a *deceptive* practice.

^{59.&#}x27;Science and Truth,' 743.

^{60. &#}x27;Réponses à des étudiants en philosophie,' in Autres écrits (Paris: Seuil, 2001) 209.

^{61.} After Finitude, 85.

^{62.} After Finitude, 97.

pirically, with a priori necessity. In other words, science does not ever ask itself the question 'Is there such thing as causal necessity in nature?, 63 it forecloses it.

Lacan develops the distinction between chance (i.e. empirical contingency) and absolute contingency in a couple of well-known lessons of Seminar XI that, more generally, aim at instituting psychoanalysis as anti-idealist realism. Drawing from chapters four and five of Aristotle's *Physics*, he claims that there are two kinds of contingency, automaton and tyche. The first belongs to the logic of the signifier at which level arbitrariness is ultimately always apparent since the synchronic structure promotes 'preferential effects' in the diachrony of the subject, it makes him play with a stated deck [carte forcée].64 The second should instead be associated with the real, or better its irruption into the symbolic structure, and is pure and unconditional. However, unlike science, psychoanalysis posits that language is notall, cannot be totalized, and consequently that automaton as probabilistic chance within the network of signifiers is made possible, sustained, and, at the same time, constantly undermined by tyche, the absolute contingency of the void of structure to be understood as its material cause. I believe that what is at stake here is not just a confirmation of Meillassoux's and Milner's converging critique of the scientific obfuscation of contingency by means of (statistical) probability-as Ray Brassier writes, for the former, 'at the logical level, possibility is governed by contingency, not probability'-65 but also a more explicit thematization of the very condition of possibility of possibility as such, what Lacan called, in 'Science and Truth,' the cause of 'the whole effect' and, in Seminar XI, the 'accident' starting from which 'development is animated in its entirety.'66

This examination of contingency is resumed and further complicated in the very lesson of Seminar XVI in which Lacan introduces the equation between structure and the real we quoted earlier. In a few dense pages, most of what I have discussed so far comes together, though in a rather convoluted manner: we are provided with a definition of structuralism; a critical evaluation of science's positioning with regard to causality; a renewed distancing of (structuralist) psychoanalysis from both idealism and naïve realism; an account of the relation between the materiality of language, its non-totalizability, and the function of mathematical logic. First of all, maintaining that, as we have seen, structure as linguistic structure is that which is 'the most real' means, according to Lacan, 'aiming' at the 'cause of discourse as such.³⁶⁷ There is no other—putatively realist—'valid discourse' outside of such task, 'it is not worth talking of anything else than the real within which discourse as such has consequences': one could call such talking 'structuralism.³⁶⁸ This concerns

^{63.} After Finitude, 90.

^{64.} The Four Fundamental Concepts of Psychoanalysis, 79.

^{65.} Ray Brassier, *Nihil Unbound: Enlightenment and Extinction* (Basingstoke: Palgrave, 2007) 81.

^{66.} The Four Fundamental Concepts of Psychoanalysis, 74 (my translation).

^{67.} Le séminaire. Livre XVI, 30.

^{68.} Le séminaire. Livre XVI, 31.

especially science, which acquires meaning as a discourse about the real to the extent that it leaves aside the naïve realist and materialist argument for which 'nature is always there, independently of whether we are there or not.⁶⁹ While this fact cannot be contested easily, it is also the case that science does not have any consequence on nature as such but only within a discourse about it. For instance, 'energetics is not even conceivable if not as a consequence of [the] discourse' of physics. This of course entails that physics as a discourse on nature that has consequences is inextricable from the existence of physicists, which is not to embrace idealism as long as we assume that 'it is the discourse of physics that determines the physicist, not the opposite.⁷⁰

Although these grandiose statements would need to be further unpacked-it proves difficult to support them as they stand beyond the tautological level for which a discourse about the real is really a discourse only insofar as it involves discursive reality-I would like to dwell on the cursory yet incisive considerations Lacan makes in this very context about contingency and necessity. We should not lose sight of the fact that structure, 'the real within which discourse has consequences,' such as those studied by science, remains at the same time 'the most real [...] real in itself' in a non-metaphorical way.71 In other words, the 'very notion of consequence with its varieties, of the necessary and the contingent'-i.e. the automaton as probabilistic chance-is coextensive with a certain 'reduction' of the 'material' of language operated by scientific discourse (in primis linguistics), that is to say, with the forgetting of its 'natural reality,' which it nonetheless continues to preserve in toto.⁷² We are offered here with a new and unexpected perspective on what 'Science and Truth' defined as science's foreclosure of the material dimension of causality and psychoanalysis' complicit unmasking of it. There is no consequence as such, and therefore no distinction between necessity and contingency, not only in non-linguistic nature but also at the level of language as *natural* language; that is to say, the-non-discursive and discursive-universe is a-causal. In fact such distinction, Lacan specifies, requires the introduction of a totalizing 'métalangue,' i.e. mathematical logic, that, by attempting to compensate for what appears to be the lack of a 'métalanguage' in language as natural language, ends up carrying out a 'discursive cleavage,' since no 'logic can encircle all language.'73

But, developing Lacan's fragmented arguments further, we should add that the absence of consequence (the revocation of the principle of causality) and the subsequent indistinction between necessity and contingency—as opposed to their discernability in the *automaton*—should *not* themselves be inevitably considered as an index of absolute contingency *qua* necessity of contingency alone. The a-causal universe could hypothetically also issue from absolute necessity; as Lacan states

^{69.} Le séminaire. Livre XVI, 33.

^{70.} Le séminaire. Livre XVI, 32-3.

^{71.} Le séminaire. Livre XVI, 30-1 (my emphases).

^{72.} Le séminaire. Livre XVI, 34.

^{73.} Le séminaire. Livre XVI. 34.

once in a later seminar, although 'it is more than improbable that the Universe is constituted [as] One,' we will simply never know it for certain.74 Non-totalizability might be totalizable from outside universe; eliminating this possibility-as Meillassoux does-amounts to a supreme form of totalization, hic et nunc, operated from inside universe as if one were outside of it. To put it differently, absolute contingency qua necessity of contingency alone is not to be located in nature as such but rather corresponds to the emergence of linguistic necessity, the very possibility of consequential, or logical, structures arising out of a (seemingly) a-causal nature. However, everything is complicated by the fact that language-and hence also absolute contingency as well as the difference between empirical contingency and empirical necessity in the automaton-remains itself, as we have just seen, natural. Perhaps, pushing Lacan's reasoning to its limit, we could advance that only natural language as logical necessity can be said to be absolutely contingent, not natural language as real structure; or, also, from yet another different angle, that the identification of structure with the real refers to the materially contingent causality of the emergence of structure (and its maintenance), while it does not insinuate (or, conversely, rule out) that nature is as such structured. To sum up, Lacan seems to be replacing the a priori of the 'truth of the causal necessity' on which science tacitly rests,⁷⁵ with the 'truth as cause,' the absolute contingency of structure's necessity. Better said, he posits the contingency of the necessity of contingency (the necessity of thesis)-i.e. the contingency of logical necessity tout-court-as the only possible necessity that does not entail the adoption of (the deceiving) God's 'outside-universe' point of view; because of all this, such real logic of the signifier, the only materialist logic able to update Descartes via Cantor, has path-breaking ontological and temporal implications, which I intend to address in the near future.

^{74.} J. Lacan, *Le séminaire. Livre XXIII. Le sinthome* (Paris: Seuil, 2005) 64. Another passage from the same Seminar sheds further light on this point: 'I would say that nature presents itself as not being one. From this then follows the problem of which logical procedure [we should adopt] in order to approach it' (*Le sinthome*, 12). If eventually the Universe were One, this means that there would be a metalanguage of language as natural language; I think Lacan is evoking this unlikely hypothesis when, in Seminar XVI, he wonders whether, before its historical invention, mathematical logic resided in 'divine understanding [*comprenoire divine*]' (*Le séminaire. Livre XVI*, 36). 75. *After Finitude*, 90.