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# The Trace of Time: A Critique of Vitalism

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## **Abstract**

This article develops Derrida's logic of the trace in relation to the concept of time and the revival of various forms of vitalism. Through a critical interrogation of Bergson's notion of duration, I show how the logic of the trace articulates an originary co-implication of time and space, which also entails a co-implication of the animate and the inanimate, the event and the machine. Refuting any vitalist conception of life, the deconstructive logic of the trace allows one to reckon with the philosophical implications of Darwinism.

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The revival of 'life' as a central category during the last decade of continental philosophy belongs to a more general turn away from questions of language and discourse, in the name of a return to the real, the material, and the biological. If Saussure and linguistics once were an obligatory reference point, Darwin and evolutionary theory have increasingly come to occupy a similar position. Alongside this development, the status of deconstruction has been downgraded. Derrida's work is largely seen as limited to questions of language or as mortgaged to an ethical and religious piety.

As I argue in my book on Derrida, *Radical Atheism*, such an assessment of deconstruction is deeply misleading (Hägglund 2008). One does not have to look farther than to *Of Grammatology* to find Derrida articulating his key notion of 'the trace' in terms of not only linguistics and phenomenology but also natural science. Indeed, Derrida defines the

structure of the trace as a general co-implication of time and space—as the becoming-space of time and the becoming-time of space—which he abbreviates as spacing (*espacement*). Such spacing is the condition for both the animate and the inanimate, both the ideal and the material.

The crucial question, then, is how one can legitimize such a generalization of the structure of the trace. What is the methodological justification for speaking of the trace as a condition for not only language and experience but also for processes that extend beyond the human and even the living? This is a question that has been posed to me in various versions since the publication of *Radical Atheism*. The distinction that is needed, I have come to contend, is one between *the logical* and *the ontological*. The trace is not an ontological stipulation but rather a *logical structure* that makes explicit what is implicit in the concept of succession. Succession should here *not* be conflated with the chronology of linear time. Rather, succession accounts for a constitutive deferral and delay that is inherent in any temporal event. A temporal event can never be present as such, since it comes into being only by becoming past and becoming related to the future. It is this structure of the event that Derrida analyzes in terms of a necessary spacing or tracing of time.

To account for the logic of the trace I therefore set out to demonstrate how the necessity of spacing can be deduced from the philosophical problem of succession. This deduction concerns the *concept* of time, showing that you cannot think any concept of time without presupposing the co-implication of time and space that Derrida articulates in terms of the structure of the trace. To insist on the logical status of this structure is not to oppose it to ontology, phenomenology, or science, but to emphasize that the trace is a metatheoretical notion that elucidates what is entailed by a commitment to succession in either one of these registers. The logical structure of the trace is expressive of *any* concept of succession—whether ontological, phenomenological, or scientific—and it is by virtue of this logical/expressive status that the structure of the trace can be generalized. Such generalization does not assume the form of an ontological assertion (“being is spacing”) but rather the form of a metatheoretical claim, namely, that any discourse which depends on a notion of succession necessarily depends on a notion of spacing. Deconstruction, on my account, is dedicated to making explicit what is implicit in this condition of spacing.

Now, it is precisely here that the legacy of Darwinism comes in. Derrida always made clear that Darwinism was not only a scientific but also a philosophical event. In *Glas*, for example, Derrida emphasizes that of the three traumas to human narcissism recounted by Freud—the

ones inflicted by Copernicus, Darwin and Freud himself—the most significant and the one that according to Derrida ‘will have been resisted for the longest time’ is the one inflicted by Darwin (Derrida 1990, 27). Unlike current versions of neo-realism or neo-materialism, however, deconstruction does not authorize its relation to Darwinism by constructing an ontology or appealing to scientific realism but rather by articulating a logic that is compatible with the philosophical implications of evolution. Thus, the arguments in Derrida that are most pertinent to the insights of Darwinism—that the living is essentially dependent on the nonliving, that animated intention is impossible without mindless, inanimate repetition, and that there can be no essential demarcation of humans from other animals—these arguments in Derrida follow from the logic of the trace. The exact status and logic of the trace therefore needs to be elucidated, and that is what I will set out to do in this essay.

The most important text for the purpose of such elucidation is the essay ‘Ousia and Grammè’, where Derrida addresses the relation between his conception of time and the one proposed by Heidegger in his ‘destruction’ of traditional ontology in *Being and Time*. On the one hand, Derrida maintains the ‘Heideggerian breakthrough’ (*la percée heideggerienne*) as ‘the only thought in excess of metaphysics as such’ (Derrida 1982, 62). For Derrida, the Heideggerian breakthrough consists in recognizing that the *meaning* of being always has been determined in terms of presence and in challenging this determination by raising the question of time. When we assume that *to be* means to be present we are employing a temporal category to determine the meaning of being, yet without thematizing the status of such temporality. What Derrida calls the Heideggerian breakthrough consists in questioning this link between presence and time. On the other hand, Derrida’s debate with Heidegger concerns precisely how the metaphysical determination of being as presence should be understood and how it relates to the concept of time.

According to Heidegger, the metaphysical determination of being as presence stems from a ‘vulgar’ concept of time, which understands time as a succession of nows. He distinguishes this ‘inauthentic’ or ‘improper’ (*uneigentlich*) concept of time from an ‘authentic’ or ‘proper’ (*eigentlich*) understanding of time in terms of ecstatic temporality. For Derrida, by contrast, it is precisely the problem of succession that allows one to challenge the determination of being as presence. To demonstrate this, Derrida undertakes a close reading of the two philosophical texts that Heidegger singles out as the most important and influential elaborations of the ‘vulgar’ concept of time: Aristotle’s *Physics* and

Hegel's *Philosophy of Nature*. While Aristotle holds that to be is to be present, his own account of succession shows that it is incompatible with presence in itself. For one moment to be succeeded by another, it cannot *first* be present in itself and *then* cease to be. Rather, every temporal moment ceases to be as soon as it comes to be. Developing this insight in his *Philosophy of Nature*, Hegel argues that time is nothing but negativity. The past is no longer, the future is not yet, and the present itself can come into being only by ceasing to be.

Yet to insist on the negativity of time is far from sufficient. While the passage of time requires the negativity that is intrinsic to succession, it also requires that something remains to record the passage of time. Indeed, the succession of time could not be marked without a synthesis that relates the past to the future. The question for any philosophical account of time is thus how the synthesis of succession is possible. The traditional solution is to anchor the synthesis in a consciousness that relates the past to the future through a structure of memory and anticipation. Yet this solution must assume that consciousness itself is given in the form of the present and thereby exempt from the negativity of time. In contrast, I show in *Radical Atheism* how the structure of the trace allows one to account for the synthesis of time without grounding it in a presence or a consciousness that is exempt from negativity. Given that every temporal moment ceases to be as soon as it comes to be, it must be inscribed as a trace in order to be at all. This is the *becoming-space of time*. The trace is necessarily spatial, since spatiality is characterized by the ability to remain in spite of temporal succession. The spatiality of the trace is thus a condition for the synthesis of time, since it enables the past to be retained for the future. The spatiality of the trace, however, is itself temporal. Without temporalization a trace could not remain across time and relate the past to the future. This is the *becoming-space of time*. In order to remain—even for a moment—a trace cannot have any integrity as such but is already marked by its own becoming past and becoming related to the future. Accordingly, the persistence of the trace cannot be the persistence of something that is exempt from the negativity of time. Rather, the trace is always in relation to an unpredictable future that gives it both the chance to remain and to be effaced.

Let me here emphasize that the structure of the trace should not itself be understood as a *temporal* process, where time becomes space and space becomes time, but rather designates a *logical* co-implication of time and space. This logical co-implication is already implicit in the basic formulation of the problem of succession, namely, that the moment

comes into being *at the same time* as it ceases to be. As Derrida points out, ‘this locution [*at the same time* or *hama* in Aristotle] is first neither spatial nor temporal’ but rather articulates ‘the complicity, the common origin of time and space’ (Derrida 1982, 56).

Through a close reading of Aristotle, and an exposition of Hegel, Derrida thus seeks to show how the necessity of the trace structure can be read in their own accounts of how the moment is negated *at the same time* as it comes to be. I will not address the specificity of these readings here, but will rather seek to formalize the insights they yield concerning the relation between the concept of presence and the concept of time. It would be a grave mistake to think that the metaphysics of presence is limited to the idea of a punctual presence. Both Aristotle and Hegel – and virtually every other philosopher who has thought seriously about the problem of time – clearly understand that the now cannot be a point, since it is never given in itself but immediately passes away. What Derrida describes as the metaphysical move is rather the subordination of the negativity of time to the presence of a dynamic movement. The self-negation of the now is thus sublated in a movement that itself is conceived to be indivisible, holding beginning and end together in a dynamic temporality. For the same reason, the now is ultimately regarded as inadequate for thinking the being of time, since it is a mere *potentiality* that only comes into being through the *actuality* of a movement that is the proper presence of time.

Proceeding from his analyses of Aristotle and Hegel, Derrida proposes a ‘formal rule’ for how to read the problem of time in the history of philosophy (Ibid. 62). On the one hand, Derrida locates in the self-negating structure of the now ‘the hidden passageway’ (*le passage dissimulé*) that leads from the problem of presence to the structure of the trace (Ibid. 34). By thinking time on the basis of the now, even the texts that appear to privilege presence open the passageway to thinking the structure of the trace, since the now is self-negating and dependent on the spatial inscription of the trace. On the other hand, any attempt to formulate *another* conception of time, which would not be thought on the basis of the now, will turn out to reproduce a version of the metaphysical conception of a dynamic movement that is present in itself. This ‘formal rule’ is in my view one of Derrida’s most important contributions to our understanding of the history of philosophy. Nevertheless, his own articulation and demonstration of the formal rule remains incomplete. Derrida does show how the self-negation of the now holds the key to unearthing the structure of the trace in the texts of Aristotle and Hegel, thus deconstructing the

‘metaphysical’ commitments espoused by these same texts. However, Derrida does *not* demonstrate how the texts that claim to leave behind the metaphysics of Aristotle and Hegel—his examples are Bergson and Heidegger—end up reproducing a version of the metaphysical conception of time as dynamic movement by subordinating, suppressing, or sublating the problem of the now.

The omission is especially striking with regard to Heidegger, since Derrida’s essay is organized around the claim that one cannot oppose a proper or authentic conception of time to the ‘vulgar’ concept of succession. Yet, Derrida does not devote *any* space to analyzing or even quoting Heidegger’s conception of authentic, ecstatic temporality. What Derrida would need to show is exactly how Heidegger’s conception of authentic temporality reproduces a version of the metaphysical conception of time as dynamic movement. While Heidegger, in my view, is not susceptible to such a critique, Derrida’s formal rule is still illuminating for pursuing the basic philosophical problem regarding the constitution of the now. To assess the stakes of Derrida’s argument it is therefore instructive to turn to Bergson, who is the other example invoked by Derrida but again without any sustained attention devoted to his alternative conception of time as duration.

Bergson is an instructive example, since he explicitly starts out from the problem of the relation between succession and synthesis. On the one hand, there is no time without a *distinction* between before and after (succession). On the other hand, there is no time without a *relation* between before and after (synthesis). In accounting for this synthesis, Bergson repudiates the traditional solution to the problem, which would ground the synthesis of time in an act or instance that itself is not temporal. Bergson emphatically maintains that there is no act or instance that is exempt from time. Rather, he argues that the passage of time entails an immanent synthesis through its own movement (duration).

In Bergson’s first major work, *Essai sur les données immédiates de la conscience*, duration is aligned with immediate consciousness (Bergson 2007a), in his second major work, *Matière et mémoire*, duration is identified with an ontological past that preserves everything that happens without mediation (2008a), and in his third major work, *L’évolution créatrice*, duration is aligned with the movement of life itself, the *élan vital* (2008b). The common denominator for these different versions of duration is that they all describe a dynamic, indivisible movement that is free from negativity. In Bergson’s own words, duration is ‘a perpetual present, although this perpetuity has nothing in common with immutability, [it is an undivided present, although this] indivisibility [has

nothing to do] with instantaneity. What we have is a present which endures' (Bergson 1941, 170). Thus, while Bergson rejects the idea that there could be a *moment* that is present in itself, he nevertheless ends up reconstituting a metaphysical notion of presence as dynamic duration. This happens precisely because he suppresses the problem of the self-negating now in the name of an alternative conception of time, thus confirming Derrida's formal rule.

We need to be more specific, however, and show exactly how Bergson's notion of duration is predicated on a failure to think through the implications of succession. Bergson clearly understands that succession cannot be thought in terms of a transition from one discreet state to another. Rather, even the most immediate temporal state is itself in transition and therefore always already involved in succession. As Bergson puts it, 'there is no essential difference between passing from one state to another and persisting in the same state', since 'the truth is that we change without ceasing, and that the state itself is nothing but change' (Bergson 2008b, 2). By appealing to this notion of ceaseless change, Bergson seeks to elucidate the fundamental difference between space and time. The spatial can remain the same, since the simultaneity of space allows one point to coexist with another. In contrast, the temporal can never remain the same, since the succession of time entails that the present immediately passes away. For Bergson, however, this passage of time does not involve any negation or negativity. The temporal moment passes away, but it does not disappear or cease to be. On the contrary, it immediately belongs to the continuous movement of duration. This duration provides an absolute ground for the synthesis of succession, since it includes all of the past in an '*undivided* present' and continues to assimilate everything that happens in 'a *perpetual* present' that never ceases to be but rather constitutes 'an eternity of life' (Bergson 1941, 170; 177).

By thus denying negativity, Bergson effectively denies time. If the past has not ceased to be it is not past but present and by the same token there is no passage of time. To be sure, Bergson maintains that the perpetual presence of duration is not immutable, since it is always in a process of change. But given that nothing ceases to be in duration, there is nothing that can distinguish the past from the present. Symptomatically, Bergson holds that the absolute continuity of duration is like the continuity of a melody, provided that one effaces all the differences between sounds and all the distinguishing characteristics of the sound itself (Bergson 2007b, 41–42). A melody without sounds would not be a melody at all, however, just as a time that were absolutely

continuous would not be temporal at all. Bergson himself grants that the constitution of time requires the distinction between ‘a *before* and an *after*’, since ‘time is succession’ (Ibid., 66). If duration were absolutely continuous it would therefore eliminate the very condition of time, since it would eliminate the difference that distinguishes before from after. This necessary difference is not a positive spatial difference but the negativity of time, which undermines *both* the idea of a discrete moment *and* the idea of an absolute continuity. Only if something is *no longer*—that is, only if there is negativity—can there be a difference between before and after. This negativity must be at work in presence itself for there to be succession. If the moment is not negated in being succeeded by another moment, their relation is not one of temporal succession but of spatial co-existence.

Despite his indictments of philosophical accounts that confuse time with space, Bergson’s notion of duration thus eliminates the succession of time and absolutizes the spatial attribute of coexistence. Bergson himself confirms this by emphasizing that all of the past *coexists* with the present in duration. Of course, he emphasizes that this coexistence is not actually spatial, since it does not depend on any external, material support to retain the past. Rather, the coexistence of past and present is a virtual coexistence that is internal to duration itself. Given that the past never ceases to be, it preserves itself and everything that happens without relying on anything other than itself. For the same reason, however, the duration of the past is not temporal at all but an eternal substance. It exists absolutely in itself and is not susceptible to destruction.

Bergson’s vitalism is an effect of his notion of duration, since the latter commits him to privileging dynamic, vital movement over any form of negativity that would make it dependent on mediation and material support. In contrast, the structure of the trace enables us to think what I call the ‘arche-materiality’ of time. Precisely because every temporal moment negates itself, the duration of time can never be given in itself but depends on the material support of spatial inscription. Without the latter inscription nothing could persist and there would be no movement or passage of time. By the same token, however, even the most vital, dynamic movement will always be compromised from within by the inanimate repetition that makes it possible. As Derrida emphasizes in *Of Grammatology*, the structure of the trace ‘marks *the dead time* within the presence of the living present, within the general form of all presence’ (Derrida 1976, 68). The tracing of time is not something I can appropriate as my own but what disappropriates me



from the beginning, in cutting me off from any internal spontaneity or dynamic and making me dependent on external support for my own persistence.

In one of his most remarkable late essays, 'Typewriter Ribbon', Derrida articulates this cut as originary: not as something that happens to us but as what enables our survival from the beginning. While it may appear as though the trace 'cuts me off from my own initiative, from my own origin, from my originary life, therefore from the present of my life' (Derrida 2002, 135), he goes on to argue that there is no life whatsoever without the cut of survival, which allows something to remain beyond the present that ceases to be. As Derrida writes: 'I could not even desire, expect, or see coming without this cut, without this survival, without this beyond-the-living-present' (Ibid. 135). The cut is thus 'at once a wounding and an opening, the chance of a respiration' (Ibid. 134). Yet these organic metaphors of the cut should not lead one to misconstrue the cut of survival as a movement of life rather than death. On the contrary, the cut of survival articulates the co-implication of life and death, the organic and the inorganic, which Derrida also describes as the co-implication of the event and the machine. Derrida first defines the event as presupposing organic life (an animated sensibility that is receptive to what happens and a capacity for autoaffection that can respond to what happens), whereas the machine is defined as inorganic repetition (automatic and inanimate, without spontaneity, intention, or desire). Yet Derrida's point is not to oppose the event to the machine but to think their co-implication. Thus, Derrida emphasizes that even in 'the vivid experience of the living present' the cut of survival is operative like a 'quasi-machine' (Ibid. 134), in the sense of a 'power of repetition, repeatability, iterability, serial and prosthetic substitution of self for self' (Ibid. 133).

Derrida himself does not provide the logical justification for this argument, but I have sought to demonstrate how it is provided by the passageway that leads from the problem of time to the structure of the trace. Even the most elementary autoaffection of time presupposes the heteroaffection of space and the concomitant dependence on a material trace that in principle can remain or be repeated without oneself and without any animated intention. Already in *Of Grammatology*, Derrida insists that this structure of the trace 'must be thought before the opposition of nature and culture, animality and humanity' (Derrida 1976, 70). According to Derrida, 'all living things are capable of autoaffection [*tout vivant est en puissance d'auto-affection*]' (Ibid. 165), but this autoaffection presupposes the structure of the trace that is 'the

opening of the first exteriority in general, the enigmatic relation of the living to its other and of an inside to an outside: spacing' (Ibid. 70).

Yet while Derrida—from his earliest to his latest works—sought to articulate the co-implication of the animate and the inanimate, he never (to my knowledge) thematized the necessary asymmetry of this co-implication. As soon as there is animation it is inhabited from within by the inanimate, but the inverse argument does not hold. If there were animation as soon as there is the inanimate, we would be back to another vitalist conception, where life is already at work in matter. In contrast, the notion of arche-materiality allows one to account for the minimal synthesis of time—namely, the minimal recording of temporal passage—without presupposing the advent or existence of life. The key point here is that the trace is a general logical structure: it explicates that time must be spatially inscribed but it does not decide on the nature of the necessary material substrate: the latter may be human or inhuman, organic or inorganic. Following the logic of arche-materiality, then, one can make explicit that the structure of the trace is implicit both in our understanding of the temporality of living processes and in our understanding of how time is recorded in material structures. That is how I account for how the trace structure can be expressive not only of linguistic and phenomenological experience but also of the temporality of evolutionary processes and material structures.<sup>1</sup>

In addressing the philosophical problem of the synthesis of time, the notion of arche-materiality can thus accommodate the asymmetry between the living and the nonliving that is integral to Darwinian materialism (the animate depends on the inanimate but not the other way around). Indeed, it is precisely by virtue of its account of temporality that the notion of arche-materiality is *metatheoretically* compatible with the most significant philosophical implications of Darwinism: that the living is essentially dependent on the nonliving, that animated intention is impossible without mindless, inanimate repetition, and that life is an utterly contingent and destructible phenomenon. To pursue the thought of arche-materiality is thus to have done with any form of vitalism and instead begin to think the movement of living on in its essential dependence on the lifeless, inorganic, and mechanical repetition of arche-material temporality.

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## Note

1. For an elaboration of this argument, see Hägglund 2011.

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