

# Inheriting Cosmopolitics: Pericles, Whitehead, Stengers

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## Abstract

Isabelle Stengers' cosmopolitical proposal is an influential attempt by a European philosopher to transform the burdensome legacy of Western thought. Reconsidering her comprehensive engagement with the cosmology of the British mathematician and philosopher Alfred North Whitehead, this article reveals two concepts as foundational to Stengers' cosmopolitics: *civilization* and *commerce*. While not usually associated with a critical political theory, in her development of what we call a *commercial political ontology*, Stengers explores the modes of inheriting these ostracized notions. By tracing the genealogy of this political ontology back to Pericles' first explicit defense of persuasion as a requisite for civilization, we argue that Pericles' famous funeral oration provides the structure for Whitehead's cosmology, and, ultimately, Stengers' cosmopolitics. As such, we understand her cosmopolitical proposal as a dress rehearsal of a funeral eulogy for bourgeois society.

## Keywords

civilization, commerce, cosmopolitics, inheritance, political ontology, Stengers, Whitehead

## Introduction

As a veteran of the science wars, Isabelle Stengers saw the 'pleasant ideal of urbane, *civilized* conversations . . . meet its limits' and break down (2002: 237, our emphasis).<sup>1</sup> Conceiving of a 'cosmopolitics' capable of 'civilising modern practices' (Stengers, 2018a: 133) and, in the final instance, even civilizing modernity itself (Stengers, 2017),

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Stengers' project is rooted in a narrative of lost civilization. Most familiar versions of this Western story use the death of Socrates as a pivotal moment structuring the process of civilization. In their famous *The Story of Civilization*, Ariel and Will Durant collapse the personal fate of Socrates with the transmutation of the Athenian polis, noting that '[t]he Golden Age ended with the death of Socrates' (1939: 455). Eduard Zeller even laments that '[t]he Athenians in punishing him give themselves up as lost' (1877: 234). Consequently, attempts to rebuild the lost foundations of civilized conversation have frequently taken the form of a romantic return to the agora, to the *origin* of civilized and democratic conversation.

'Walking together with Whitehead', Stengers counters with a mischievous account of the founding myth of Western philosophy and depicts Socrates as an uncivilized figure dominated by the 'ideal of the dictionary' (2020: 38, 27, our translation). Instead of caring for their problems, Socrates forces his Athenian interlocutors to abstract from the situatedness of their knowledge in order to define terms on the level of generality, requiring every word to have a 'meaning independent of the "immediate reality" in which it participates' (Stengers, 2020: 27, our translation). Yet, removed from their concrete circumstances, every answer is swiftly dismissed as contradictory and his fellow citizens are reduced to a state of *aporia*. Returning to Socrates in order to gain access to an authentic figure epitomizing the art of a civilized conversation misses that the origin itself is already contaminated by one of the trademarks of uncivilized thinking: the incapability to take the other seriously.

Does this require us to abandon Socrates the way he abandoned the natural philosophers (see Diogenes Laertius II, 21)? As this paper will show, it is a basic tenet of Stengers' cosmological framework that one *must* inherit. Inheriting, however, does not imply a return but rather an always particular act of transformation (see Debaise, 2017: 1). The impossibility to refuse the inheritance of one's own tradition leads Stengers to frequently stress that, in her transformative endeavor, she conceives 'the "cosmopolitics" proposition as a European philosopher, not a decolonizing anthropologist' (2018b: 93; 2002; see also 2011b). Consequently, it is Immanuel Kant, the European philosopher *par excellence*, with whom Stengers' approach to *cosmopolitics* has often been contrasted (see Stengers, 2010: 79f.; Harrasser, 2016: 282; Watson, 2014: 87), taking at face value the common translation of Kant's '*weltbürgerliche* [world-bourgeois] *Absicht*' as the 'cosmopolitical plan' (cf. Kant, 1824). It indeed seems fitting that Kant would hold the legacy of Socrates in high esteem: Introducing the second edition of his *Critique of Pure Reason* he laureates the '*Socratic way*' for definitely destroying false prejudices 'by the clearest proof of the ignorance of the opponent' (1998: 117 [B XXXI]). Yet, even Kant, in a curious handwritten remark in his *Notes on Logic*, nuances his appreciation for Socrates: 'The Socratic dialogue is not a conversation, because one is always considered the teacher. In conversation, no one is teacher or pupil, instead they are *in commercio* of thoughts' (1924: 808, note 3383; our translation). According to Kant, the problem of conversation, rigorously addressed by Stengers, cannot be solved with the means provided by Socrates but instead leads him to the polysemantic term *commercium*.

Philip R. Conway has recently offered a reading of the explicitly political stakes of Stengers' approach by focusing on the figure of the diplomat to address the much-discussed chasm 'between oppositional and compositional modes of political praxis'

(2020: 25). Diplomacy – a notion which, as Conway rightly observes, is not elaborated before the final volume of Stengers’ *Cosmopolitics* – seems promising as it neither presupposes harmony nor creates ‘norm[s] with which everyone must comply, which everyone must recognize as transcending their own interests and values’ (Stengers, 2011a: 387) but rather aims at creating the conditions for a ‘possible peace, always local, precarious, and a matter for invention’ (Stengers, 2011a: 387). In elaborating on the role of diplomacy, Conway reconstructs Stengers’ reading of Deleuze and Leibniz. Through his careful engagement with Stengers, Leibniz emerges as the diplomat *par excellence*, his famous *Calculamus!* becoming the creed of a ‘*diplomatic political ontology*’ (Conway, 2020: 43, original emphasis). In this paper, we suggest a complementary genealogy of Stengers’ solution, one that proceeds not via Deleuze to Leibniz, but via Whitehead to Pericles. Instead of a diplomatic political ontology, this complementary genealogy reconstructs the foundations of a *commercial political ontology*.<sup>2</sup>

The argument proposed in this paper is structured around three deeply intertwined concepts: *commerce*, *civilization*, and *society*, which are all joined together through the single topos of *inheritance*. The first part of the paper draws out the often-neglected centrality of *commerce* in Stengers’ cosmopolitical reading of Whitehead, who conceives commerce broadly as ‘every species of interchange which proceeds by way of mutual persuasion’ (1939: 88). Explicitly distinguished from the Kantian ‘spirit of commerce’, it stages a first unification between ‘cosmo-’ and ‘politics’, and shows that, for Whitehead, the ‘useful function of philosophy’ lies in the promotion of persuasive agencies which he understands to be the hallmark of civilization. As it presupposes a certain level of persuasive agencies, Whitehead’s cosmology is shown to be not self-referential but pragmatically tasked with acting on specific historical and political circumstances which are themselves the condition for philosophy in the first place. The second part of this paper thus turns to those precise conditions in the inauguration of *civilization* which philosophy, beginning with Plato, would *a posteriori* seek to promote. As we will show, the genesis of the Whiteheadian constellation structured around *commerce*, *society*, and *civilization* begins with the Athenian general Pericles as the one whose civilizing funeral eulogy came *before* Plato.

Only after our reappraisal of, first, the concept of *commerce* and, second, of *civilization* can we, in the third part of the paper, reconstruct Whitehead’s cosmology as an original synthesis that, paradoxically, sees the effect selecting its own causes. To understand Whitehead’s cosmology, and its subsequent development into cosmopolitics, we highlight Pericles’ complex inheritance. We claim that the *epitaphios logos*, the Athenian funeral eulogy, is the most adequate form of cosmology after Whitehead. The *cosmo-* obliges us to inherit, but the *-logos* addresses the ‘how’ of this inheritance and, in the language of causality, is the act of selecting its own causes. Thinking about inheritance this way, our paper refocuses overtly ontological discussions of Whitehead’s cosmology on the *logos*.

In the final part of our paper we develop the political stakes of this reading of Stengers’ *commercial political ontology* through the notion of *society* as a cosmological category. This expands the question of inheritance beyond a simple relation to the past by including the relation to the future. As the complex and inherently political relation between past, present, and future, the act of inheriting brings together the three notions of

*commerce, civilization, and society* in a discussion of debt, gratitude, and obligation, following – once again – Pericles and his enigmatic use of  $\chi\acute{\alpha}\rho\iota\varsigma$ .

Inheritance thus permeates this paper on three levels: Methodologically, our genealogical reconstruction unearths Pericles' inheritance in Whitehead and Stengers. On the level of cosmology, Whitehead's cosmology is shown to find its most adequate expression in the Athenian funeral oration. And finally, on the level of politics, we understand Stengers' cosmopolitical proposal as an attempt to inherit the concepts of *commerce* and *civilization*. As such, it has to be read as the dress rehearsal of a funeral eulogy for bourgeois society.

## A Civilized Cosmology of Commerce

If one is in search of a linchpin for Stengers' highly dynamic theoretical output over the last 25 years, no author is more suitable than the English mathematician and philosopher Alfred North Whitehead. In a way, much of Stengers' work can be brought under the headline of her 1994 anthology: *L'effet Whitehead*. What characterizes this effect, which has produced multiple monographs that bear his name in the title – most notably, *Thinking with Whitehead* (Stengers, 2011c) – is that 'it claims no authority to mobilize and fight in its name; instead, it works through insinuation and transformative effects as an infectious lure for new creative contrasts' (Stengers, 2002: 245). The most succinct encapsulation of this project can be found in her latest work (Stengers, 2020), which engages in a thought experiment: Instead of Socrates, Stengers imagines Whitehead perambulating the streets of Athens. How would he approach his fellow citizens? Stengers suggests that Whitehead would take the answers (*réponses*) of his interlocutors at face value (Stengers, 2020: 12). As he is keenly aware that all their accounts are already abstract, he would not attempt to elicit even more general abstractions from them. Yet, Stengers' Whitehead is not satisfied with simply compiling different abstractions either. He rather sees the vocation of philosophy in saving that which is excluded by those abstractions which are effective within a society. Civilized philosophy, in that sense, maintains the outside of all differences and exclusions and brings to mind the price we pay for them.

Stengers presents Whitehead as a philosopher who is not interested in explaining away certain intuitions. Instead, he tries to develop a common framework which respects every experience and idea (cf. Whitehead, 1978: xii–xvi) and fulfils the fundamental requirement of being compatible with future novelty. The name for such a framework is cosmology. Its critical dimension does not consist in exposing the limits of any one metaphysical approach but rather to *include* as much as possible within metaphysics and to show the mutual dependency of concepts instead of their alleged independence and self-sufficiency (Stengers, 1994: 17f.). In accordance with Stengers' interpretation, Whitehead's explicit aim is 'to elaborate an adequate cosmology in terms of which all particular topics find their interconnections' (Whitehead, 1978: xii).

For Whitehead, philosophy as cosmology does not inaugurate a civilization, it does not give it an ontological grounding, but rather, the 'useful function of philosophy is to *promote* the most general systematization of civilized thought' (1978: 17, emphasis added). As a result, philosophy is grounded socially and, hence, not self-referential but pragmatic. In such a conception, philosophy has to act on specific

historical circumstances; yet as it is unable to produce its own *a priori* – persuasion – the circumstances are themselves the condition for philosophy.<sup>3</sup> Surveying the history of human thought and activity for the genesis of the presupposed persuasive agencies, Whitehead enquires into commercial relations ‘which naturally *promote* the persuasive reactions within society, and between societies’ (1939: 88, emphasis added).

Widening the notion of commerce ‘beyond the bounds of material things’ (Whitehead, 1939: 88), Whitehead capitalizes on the wide range of meaning associated with ‘commerce’ and the Latin *commercium*. Originally describing the structure peculiar to barter and exchange, the term was soon applied to religious and metaphysical contexts (Herz, 1958: 21f.) and even came to describe any relation of production (Spinoza, 1925: 16, note p). The linkage between these different levels is also a constitutive part of Kant’s treatment of the term *commercium* (see Kersting, 2009). Translated with the German term *Verkehr* (‘commerce’ in the French and English translations), it names the driving force promoting successive progress to a ‘*weltbürgerliche Verfassung*’ (Kant, 1923: 358), literally translated as ‘world-bourgeois constitution’, but usually translated as ‘cosmopolitan constitution’ (in Mary Gregor’s translation; Kant, 1996: 329) or ‘constitution cosmopolitique’ (in Jules Barni’s translation; Kant, 1853: 306).

Having set herself to rethink the connection between cosmology and politics, Stengers outlines the endeavor of her magnum opus against the Kantian approach of ‘[t]he possible unification of all people through certain universal laws involving their possible commerce [*le commerce*]’ (2010: 79; for French see 1997: 138). As such an approach always universalizes one set of norms by excluding other traditions, (necessarily partial) conceptions like the Kantian *Handelsgeist* (Kant, 1923: 368; ‘spirit of commerce’ in Gregor’s translation, 1996: 336) do not uphold their reputation as warrants of peace because they only become effective by forcibly suppressing other norms. In contrast, civilized cosmopolitics acknowledges the partial status of each framework because each norm is only relevant in accordance to specific requisites demanded by a concrete context. However, Stengers does not abandon the notion of commerce. To the contrary, the challenge of cosmopolitics is precisely ‘to give resonance to the obligations of such practice [the practice of commerce, MS/DB]’ (2010: 82f.).

The demand for a unique, positive conception of commerce is outlined in Stengers’ most explicitly political work, *Capitalist Sorcery*, co-authored with Philippe Pignarre, which addresses the need to ‘learn to renew one’s link with ancient practices that capitalism has dishonoured’ (2011: 117). To do so, it is no coincidence that Pignarre and Stengers provocatively choose precisely ‘a word like “commerce” [to] be thought anew’ (2011: 117). Rather than reducing it to the capitalist capture of the term, commerce should be recognized as ‘the art of negotiation’, as ‘an exchange of “good procedures”’ (Pignarre and Stengers, 2011: 117, 141).

‘Commerce’, as we will show, subsequently emerges as the crucial unifying link between ‘cosmo-’ and ‘politics’. Providing the hyphen between cosmology and politics, a transformation in the concept of commerce will equally alter the terms on either side. The rethinking of the entire triad thus means ‘to “think Whitehead down the middle”’ (Stengers, 2011c: 24). For Whitehead, civilized societies are fundamentally those that coordinate not through force but through persuasion. Fostering persuasion instead of force, commerce is thus a precondition for and, at the same time, one of the main tasks

of civilized philosophy. This speculative structure where the *a priori* of philosophy becomes its *a posteriori* is a foundational process in his philosophy of organism (Whitehead, 1978). Hence, Whitehead begins his larger ‘study of the concept of civilization’ (Whitehead, 1939: vii) with a sociological inquiry into the development of mutual persuasion through commercial relations. Yet, his sociological account turns out to be not particularly concerned with sociology at all. Instead, it moves him swiftly ‘beyond the topic of Commercial Relations to the function of a properly concrete philosophy’ (Whitehead, 1939: 126). The constellation between *civilization*, *society*, and *commerce* that Whitehead’s sociological account uncovers is not discarded in favor of a more metaphysical vocabulary but becomes the very model for his entire cosmology, ultimately dissolving the difference between sociology and cosmology into a ‘civilised universe’ (Whitehead, 1968: 105f.; the connection between sociology and cosmology as ‘*ontologie cosmologique*’ is further discussed in Breuvert, 1994: 152). Tracing this development back to the myth of the origin that Whitehead himself provides brings us not to Plato and Socrates engaging in speculative thought in an already established Athenian society, but to the problem of establishing a society in the first place. The genesis of the Whiteheadian constellation begins with Pericles as the one who came before Plato.

## The One Before Plato

Whenever Whitehead is associated with one of the great names of classical antiquity, it is usually with Plato. Not only has his characterization of the European philosophical tradition as ‘a series of footnotes to Plato’ (Whitehead, 1978: 39) become an often-quoted aphorism, his reputation was such that his obituary in *The Times* referred to him as ‘the last and greatest of the Cambridge Platonists’ (quoted in Emmet, 1948: 266). Before Plato, however, there is another classical figure whose weight bears on the thought of Whitehead: the famous general and Athens’ ‘first citizen’ Pericles (495–429 BC). Whitehead’s contemporary Lucien Price went as far as to identify his entire project with Pericles, when he concluded his introduction to the *Dialogues of Alfred North Whitehead* with the remark that ‘a figure worthy of the Periclean Age had walked into our epoch’ (1954: 20). In his advocacy for a *New Reformation*, Whitehead himself prominently (and provocatively) proposed to replace the final book of the New Testament with ‘the imaginative account given by Thucydides of the Speech of Pericles to the Athenians’ (1939: 219). Whitehead’s treatment of Pericles as the one who came *before* Plato and the polis – and its contemporary recurrence in the works of Stengers – is fundamental to the connection of politics and cosmology in this current of speculative philosophy.

While there is doubtlessly a *realpolitik* element to Whitehead’s appraisal of Pericles’ statesmanship,<sup>4</sup> his influence should not be limited to the field of day-to-day politics. Rather, Whitehead attributes to Pericles ‘the first explicit defence of social tolerance, as a requisite for high civilization’ (1939: 64). In his treatment of the material, Whitehead narrowly focuses on the most famous episode: Pericles’ funeral oration after the first year of the Peloponnesian War as reported by the 40 years younger Thucydides (see Whitehead, 1939: 64, 219; Thucydides, 1902: II, 35–46). Commemorating the fallen, Pericles uses the occasion to deliver a eulogy for Athenian democracy, rallying his fellow citizens around the ideal of the democratic polis. The authenticity of the speech is still debated

today (Marincola, 2011: 300f.) and revolves around Thucydides' ambiguous declaration that he lets his speakers say 'what was especially *required* [τὰ δέοντα] in the given situation' (Thucydides, 1998: 13 [I, 22, 1], emphasis added). Independent of how one interprets that sentence historically, the 'deonta', the 'thing[s] needful or proper' (Liddell-Scott-Jones) find their echo in Whitehead's use of the notion of *requisite*. Stengers in particular has emphasized the fact that Whitehead distinguishes between 'requisites' and 'conditions' (cf. 2011c: 48). Conditions are generic reasons which are given in order to explain a state of affairs *ceteris paribus*, independent of specific circumstances. Requisites, on the other hand, are highly context based and 'immanent to the problem raised' (Stengers, 2011c: 48).

Despite its necessarily concrete and situated character, Pericles' oration stages the general principle for (re)producing tolerance as a requisite of civilization. Pericles' tolerance towards the 'activities of the individual citizens' (Whitehead, 1939: 65), (re)created Athenian society not by force or decree but by disclosing alternatives as an emotional lure. Against the 'intellectual barbarism' of imposing one's own will, the Periclean ideal achieves civilization by 'weaving itself into a texture of persuasive beauty' (Whitehead, 1939: 65). Through tolerance, Pericles – in one fell swoop – initiates the path towards civilization, as civilization is marked by the 'victory of persuasion over force' (Whitehead, 1939: 31).<sup>5</sup> Force, as Whitehead clarifies at the end of *Science and the Modern World*, 'mean[s] *antagonism* in the most general sense' (Whitehead, 1929: 258, original emphasis).

Given her harsh critique of the modern 'master word' tolerance, which comprises the final volume of *Cosmopolitics (VII: Pour en finir avec la tolérance)*, Pericles seems an unlikely ally to Stengers. Yet, because Pericles 'enabled [the Athenians] to rise to the height of the occasion [. . .] they became what they were from the cosmic viewpoint: incompatibilities demanding an interpretation to reconcile them, not in general, but here and now' (Stengers, 2011c: 497). It is this transformational dimension of Whitehead's work in which Stengers finds a model for her concept of cosmopolitics:

Pericles's speech to the Athenians produced a *contrasted unity* among them, weaving together and not denying their diversity. And the fragile, collective experience he activated is the very possibility Socrates ignored, the possibility of addressing the partial, conflicting, commonsense truths of the inhabitants of the city in such a way that they be enabled to embed these truths in the wider experience of their need of each other in order for each to rejoice in the value experience of being an Athenian. (Stengers, 2014: 201, emphasis added)

The 'development of Persuasive Agencies in the communal life of mankind' (Whitehead, 1939: 87) following Pericles marks the 'slow drift of mankind towards civilization' and takes center stage in Whitehead's work from *Adventure of Ideas* onwards. In her own attempt to define Whitehead's use of 'civilization', Stengers stresses its partial and vitalistic character. 'What Whitehead calls civilization is what one might call a particular, always particular, milieu of culture for the adventures specific to human life, a milieu of culture within which traditions are problematized in the face of life' (Stengers, 2017: 161, our translation).<sup>6</sup> Intensifying her references to the concept over the course of her recent publications, Stengers highlights that Whitehead's conception allows for a

distancing from the concept of ‘modern civilization’ (Stengers, 2020: 189). Avoiding any understanding of civilization as rigid or stable, ‘to be civilized’ today is the obligation to adjust to a context where nothing is simply self-evident. Ultimately, Stengers reinforces Whitehead’s conception of civilization as a mode of inheritance which is sensitive to the openness of the future without neglecting the often-devastating impact of the present (see Stengers, 2020: 191).

Despite Stengers’ emphasis, ‘civilization’ never found a comfortable place<sup>7</sup> in subsequent engagements with Whitehead. While only a few authors (Breuvert, 1994; Johnson, 1962; Rohmer, 2010; Sehgal, 2014) have treated the concept directly, the centrality of the term is usually eschewed for a brief reference to its problematic nature (i.e. Halewood, 2014). But it is not just that the term is now, following the 20th century, ‘resounding with disturbing echoes’ (Morris-Suzuki, 1993: 526) in a scholarly discourse that ‘has become increasingly critical of the concept’ (Mazlish, 2004: 143). Part of the problem is the vagueness, or rather, the self-evidence with which Whitehead employs the term. While it certainly – *self-evidently* – covers ‘more than the product of a Harvard undergraduate degree’ (Kraus, 1998: xvi), Whitehead’s view of what was meant by civilization was undoubtedly that of a progressive, scholarly gentleman of the early twentieth century. The ‘simple, general definition’ pithily summarized in *Whitehead’s Philosophy of Civilization* describes that ‘[a] man [sic], or a society, is civilized if *truth, beauty, adventure, art, peace* are the *dominant* qualities’ (Johnson, 1962: 1, original emphasis).

In his late lectures, especially in *Civilized Universe* (Whitehead, 1968), Whitehead places civilization at the core of pragmatist thought. Pragmatism ‘appeals to the wide self-evidence of civilization, and to the self-evidence of what we mean by “civilization”’ (Whitehead, 1968: 106). This *doubling* of self-evidence holds together both the difficulty (and circularity)<sup>8</sup> as well as the centrality that we can associate with Whitehead’s treatment of civilization. Aiming at nothing less than, as Stascha Rohmer has put it, an ‘epistemology of civilization’ (2010: 224), Whitehead sees self-evidence as synonymous with understanding (Whitehead, 1968: 47–52). ‘Philosophy’, Whitehead makes unmistakably clear, ‘is either self-evident, or it is not philosophy. The attempt of any philosophic discourse should be to produce self-evidence’ (1968: 49). The punchline of this definition lies in the fact that self-evidence is achieved through the critical task of rendering visible the evidence excluded by our abstractions and, therefore, preserving the society from narrowness (Whitehead, 1929: 73). The notion of self-evidence allows Whitehead to understand civilization and philosophy as mutual requisites for each other.

As a result, it is not possible to dismiss one part of Whitehead’s description as historically specific (‘the self-evidence of what we mean by civilization’) and purge the general, philosophical conception of civilization (‘the self-evidence of civilization’) from this cumbersome particularity. Rather, it brings us back to Pericles’ persuasive civilization and the notion of commerce as simultaneously historically specific and a general cosmological mechanism. For Whitehead, ‘[c]ommerce developed adventurously’ is ‘essential for a prosperous civilization’ (1939: 98). Conceptually, as ‘the great example of intercourse in the way of persuasion’ (Whitehead, 1939: 106) commerce becomes nothing less than the key articulation of the principle of civilization – ‘the victory of persuasion over force’ – itself. Here, Whitehead is clearly following the long-established

argument about *doux commerce*.<sup>9</sup> ‘Civilization’, Whitehead holds, ‘is the maintenance of social order, by its own inherent persuasiveness’ (1939: 105).

As in every situation ‘there may be half a dozen seeds of the future’, tolerance is crucial for the long-term coherence of a civilization as ‘there is no knowing out of which seed the future will sprout’ (Whitehead, as recorded by Price, 1954: 267–8). But more than softly tolerating the conditions for the emergence of novelty, commerce itself is generative of alternatives: ‘The novelty of experience *promoted* by Commerce suggests alternatives in ways of production’ (Whitehead, 1939: 107, our emphasis).

In contrast to many proponents of *doux commerce*, Whitehead specifically admires its ability to upset an equilibrium. Precisely because, ‘on the whole, Commerce is unstable’ (Whitehead, 1939: 107), it can become a principle of civilized life: A completely stable social order would be incompatible with life in general, as life ‘is an offensive, directed against the repetitious mechanisms of the Universe. [. . .] [T]he aim [of life] is always beyond the attained fact’ (Whitehead, 1939: 102). Commerce, then, is at the heart of the progressive plasticity that life demands. Because every ‘organism requires an environment of friends’, an order built purely on antagonism – ‘the Gospel of Force’ – cannot provide a stable basis for social life (Whitehead, 1929: 258). Yet, ‘equally dangerous is the Gospel of Uniformity’ as it no longer helps human beings to adventurously ‘ascend in the scale of being’ and leads to a ‘confusion between civilization and security’ (Whitehead, 1929: 258–9). Walking the tightrope between the Gospel of Force and the Gospel of Uniformity, commerce is the principle that seems most suited to navigate the simultaneous demands of stability and openness.

## Cosmology after Pericles

Comparing Pericles’ oration with the dialogues of Plato, Whitehead notes that the former ‘puts forth the conception of the organized society successfully preserving freedom of behaviour for its individual members. Fifty years later, in the same social group, Plato introduced deeper notions from which all claims for freedom must spring’ (1939: 64). Thus, saying that Pericles comes before Plato has a significance besides the questions of chronology. For Whitehead, Plato’s general cosmology is not self-sufficient but has its requisite in the tolerance defended by Pericles. Plato takes the specific act of Pericles but ‘entertain[s . . .] notions of large adequate generality. Such a habit of mind is the very essence of civilization. It is civilization’ (Whitehead, 1968: 3). What the undoubtedly valid description of Whitehead as a Platonist tends to obscure is that Whitehead’s Plato is himself not very ‘Platonist’: not truth, but rather persuasion is at the core of his metaphysics. It is no coincidence that, alluding to ‘Timaeus’ 48a, Whitehead paraphrases Plato’s cosmology with exactly the same phrase he used to summarize Pericles: ‘The creation of the world – said Plato – is the victory of persuasion over force’ (1939: 105).

In *Process and Reality* Whitehead characterizes his own cosmology as the attempt of rendering compatible Plato’s ‘Timaeus’ with ‘the cosmology of the seventeenth century’ (1978: xiv, see 93). For Whitehead, the term *cosmology* necessarily implies change and novelty. Therefore, *creativity* becomes the most general category which cannot be described or explained as such (Whitehead, 1978: 31). Instead of deducing

his cosmology from a fundamental principle, Whitehead proceeds in reverse: creativity is the most general notion because it is already instantiated in every entity and, therefore, ‘conditioned by its creatures’ (Whitehead, 1978: 20). Whitehead sets himself the task ‘to explain the emergence of the more abstract things from the more concrete things’ (1978: 20) by elaborating a conception which already describes creativity as something that derives from the most basic structural elements of cosmology which Whitehead terms *actual entities*, or, whenever<sup>10</sup> he wants to stress the event-character of his ontology, *actual occasions*.

Actual entities generate novelty insofar as they constitute their unity by selecting between actual entities already given: a process Whitehead names *concrecence* (see also Whitehead, 1978: 211). An actual entity always implies other actual entities from which it constitutes itself. As a result, actual entities build and at the same time break open the unity and closure of the world as they become an element of a new unification. Because of the highly dynamic succession of occasions that comprises the universe, it becomes difficult to explain the stability and perdurance of things on that ground. Referring to Plato once more, Whitehead notes that ‘[t]his conception of an actual entity in the fluent world is little more than an expansion of a sentence in the *Timaeus*: “But that which is conceived by opinion with the help of sensation and without reason, is always in a process of becoming and perishing and never really is”’ (Whitehead, 1978: 82).

It is here that the cosmology of the 17th century – most notably Locke’s discovery of two kinds of fluency necessary for a fluent world – bears on the succession of actual occasions. Generalizing Locke’s position, Whitehead gives us two ways to consider process: *concrecence* and *transition*. Whereas *concrecence*, as seen above, describes an actual entity as ‘the constitution of the novel “one”’ (Whitehead, 1978: 211), *transition* grasps it as ‘perpetually perishing’ (Whitehead, 1978: 210). *Transition* is therefore identified with the *efficient cause* (‘the “power” of the past’) whereas *concrecence* ‘moves towards the *final cause*, which is its subjective aim’ (Whitehead, 1978: 210, emphasis added). In achieving its aim, the actual occasion becomes itself an object for further prehension and, thereby, enjoys *objective immortality* (see Whitehead, 1978: 223). How is it possible that the perished and at the same time immortal *continually* gives rise to novelty? The universe, pictured as a succession of actual occasions, ‘is always new’ (Whitehead, 1978: 232) precisely because each individual occasion adds through its subjective form an original unification of the past. The past only has power insofar as it is prehended by the new actual entity; for itself the past is settled. Yet, the settled world (the objective datum) as actively prehended by the new actual entity is the efficient cause of the new actual entity that prehends it. This conundrum brings out Whitehead at his most inventive: It is the effect which selects its causes.<sup>11</sup>

This seemingly paradoxical structure raises the question of how a relation between the actual entity and its past can be possible beyond the impact of the efficient cause and, hence, beyond a mere repetition of the already transpired (see Debaise, 2017: 92). In a truly speculative endeavor, Whitehead conceptualizes *eternal objects* as the condition of possibility of such a relation. Eternal objects are relational as they can be present as determinant in both the actual entity and its past: ‘In this sense the solidarity of the universe is based on the relational functioning of eternal objects’ (Whitehead, 1978: 164, see also 62, 291; see also Debaise, 2017: 93; Stengers, 2011c: 189). Without eternal objects,

it would be impossible to specify the form of the relation between the actual occasion and its immediate past. However, being only externally related to their ingression into actual entities (see Whitehead, 1929: 199), eternal objects are independent of their actualization and thus pure potentialities. By virtue of their identity, eternal objects are able to explain the continuity of certain contents despite their constant perishing.

Yet, the whole network of eternal objects cannot be realized at once because its relata are incompatible with each other (see Whitehead, 1929: 198). Every actual entity can thus select eternal objects which are not realized ‘in the inherited data’ (Whitehead, 1978: 104) constituting its subjective form (Whitehead, 1978: 291). ‘In this sense, every occasion is a synthesis of *being* and *not-being*’ (Whitehead, 1929: 202, original emphasis). This, as Stengers highlights, is further responsible for the significant differences between actual entities as they can eliminate *eternal objects* from their ingression via *negative prehension* (Stengers, 2011c: 304f). Because *eternal objects* are only abstract possibilities (see Whitehead, 1978: 220) which do not strive for their realization, every actual occasion can select them freely. Actual occasions cannot realize possibilities *ex nihilo* but as ‘synthesis of a pure abstraction with a real fact’ (Whitehead, 1978: 276) depending on the content of the universe. This content is augmented by every actual occasion which ‘halts its process, so that by transcendence it passes into its objective immortality as a new objective condition added to the riches of definiteness attainable, the “real potentiality” of the universe’ (Whitehead, 1978: 223).

From the perspective developed here, Whitehead’s cosmological project is imbued with melancholia: It is necessary for any process that its next phase is able to inherit its immediate past. Yet, in order to inherit, the past has to die first, only for the new actual entity to be itself perpetually perishing. Cosmology, as opposed to pure chaos, is an unending series of funeral orations.<sup>12</sup> At their core all funeral orations – from the *epitaphios logos* to contemporary eulogies – ask the question how the present can honor and relate to past deaths. What obligations does the past place on the present? And how does the past still affect the present? They try to persuade the survivors that ‘[t]he memorial is the future of the world’ (Whitehead, 1948: 129).

## Civilized Society

What this cosmology inscribes in politics is the *a priori* impossibility of declining to inherit. The onus is placed on the act of inheriting itself, the specific form in which the inheritance is *a posteriori* executed, which is no longer an ontological given progressing from an efficient cause but the question of politics. Both realms become meaningful through their relation as cosmo-politics. When Whitehead proposed to replace the final book of the New Testament with Pericles’ funeral oration, he was not just concerned with raising the problem of the present’s relation to the past in the abstract but with hinting at an alternative conception of cosmopolitics. John’s description of the apocalypse as the absolute end of everything that is old – including death itself (John 21.4) – and the beginning of that which is completely and incomparably new (John 21.5; see Ellul, 1975) discloses a radical rupture in cosmo-politics itself. Stipulating the genesis of a new *a priori*, it forecloses the relation of politics and cosmology insofar as its relata become temporally separated within the process of salvation.

Pericles' oration begins 'by indicating how each generation of Athenians built upon the achievements of those before them, [ . . . ] [but then makes] it incumbent on his contemporaries not only to preserve, but also [ . . . ] to *augment* the legacy they had inherited' (Colaïaco, 2001: 86, emphasis added; see esp. II, 36 and II, 44 in Thucydides). Pericles treads a fine line between honoring tradition on the one hand and appealing to the energies of the living on the other. While the Athenians 'will often have reminders of them through the happiness of others' (Thucydides, 1998: 96 [II, 44, 2]), the dead achieve real *objective immortality* through the persistence of the Athenian polis (Castoriadis, 2011: 153). This overarching task of relating to past 'tradition' is for Whitehead explicitly the problem of connecting the efficient cause (the tradition) with the final cause (the originality of the life of each inheriting entity) (see Whitehead, 1978: 104).

The task of cosmopolitics is a perpetual pronouncement transforming each act of inheritance: Pericles' *epitaphios logos*, its specific way of inheriting from the dead, is what is pivotal for creating and maintaining a *civilized* Athenian society. Pericles' answer to the situation imposed on him by the precarity of Athens' future in the face of a dying generation is to mobilize the obligations of the past to weave the Athenians into a contrasted unity, to persuade each of them to be Athenians as Athenians. The peculiarly Athenian tradition of burying dead soldiers at home and not 'where they fell' (Gomme, 1956: 94) makes the city 'the ultimate authority of all memory' (Loroux, 1986: 3). On the level of temporal succession, Pericles considers the city to be 'an example (παράδειγμα) to some [other cities]' (Thucydides, 1998: 92 [II, 37, 1]) and therefore something continual that is not exhausted by its members. However, the content of this paradigm is not an abstract idea or method which the individuals have to pursue but the paradoxical exhortation to become one's own example and, in doing so, 'self-sufficient' (αὐταρκές in Thucydides, 1998: 94 [II, 41, 1]). Because autarchy is only possible within the polis, Pericles is able to persuade the citizens to 'become lovers of her' (ἐραστὰς γιγνομένους [II, 43, 1]) and, hence, creates a complex relational structure to maintain the polis, where each citizen relates to the polis and only through it is related to each other as citizens.

Pericles prefigures a solution that we re-encounter in Whitehead, whose cosmological efforts are not directed at explaining creativity, novelty, and process; these are taken for granted in his ontological commitment. Rather, it is enduring objects that his cosmology, constituted solely from irreducible actual occasions as the source of novelty, struggles to account for. If every new temporal instance as final cause is just that – *new* – then the persistence of things is what cannot simply be assumed but must be explained. Whitehead finds a solution to this conundrum precisely in his conception of society (Lango, 2007): the temporal – or, more accurately, genetic – dimension that binds together all individual members provides endurance (Whitehead, 1978: 90). For Whitehead, as soon as we are thinking about any concrete object, we are not thinking about an *actual entity* but about a society (1978: 198). Society is therefore by no means understood as a human endeavor but as a truly metaphysical category. This becomes especially clear when he describes an electron as a 'society of electronic occasions, and each proton [as] a society of protonic occasions' (Whitehead, 1978: 91). Other societies that are referred to as such in the course of *Process and Reality* include an atom and a living cell, a stone as well as our entire cosmic epoch, Socrates, the Roman emperor Caesar, and a chair.

Despite their obvious differences, all of these objects have in common that they owe their endurance to the fact that over time actual entities succeeding each other share ‘a common element of form’ (Whitehead, 1978: 34). While ‘the genetic relations between its own members’ (Whitehead, 1978: 90) can only account for the transmission of a certain form, they cannot explain the origin of the form itself. ‘A society does not in any sense create the complex of eternal objects which constitutes its defining characteristic. It only elicits that complex into importance for its members, and secures the reproduction of its membership’ (Whitehead, 1978: 92).

While this appears to reduce the constitution of societies to the actualization of a ready-made pattern, Stengers emphasizes the fact that *actual entities* are the only selection principle of eternal objects, which for themselves ‘have no power to impose their ingression’ (Stengers, 2011c: 319). As a result, the onus of transmitting the ingression of the eternal object is completely put on the actual entities, and for that reason Whitehead is able to refer to them as ‘self-sustaining’ (Whitehead, 1978: 89). Because a society can exist only by virtue of its members sharing a specific past, the question is how *actual entities* are able to draw from the past the prospective persistence of the society they adhere to. Even in the most general sense, any civilized society is constantly struggling to organize coherence over time without denying its spontaneous energies through violently enforcing tradition. Pericles’ answer to the conundrum of society was to coordinate through persuasion, through an emotional lure, rather than through the force of the sovereign. As we have shown, Whitehead argues that reproduction qua persuasion is established by *commerce* (see Whitehead, 1939: 90).

Commerce is often considered as exchange on the basis of private preferences which are already set beforehand. Aiming at a perfect equilibrium between all participants, as neoclassical economics has it, the act of negotiation must be performed in ignorance of the preferences of the other players and, thus, be mediated by an independent auctioneer (Orléan, 2014: 44). Pericles is not interested in creating the kind of exchange where everyone gets their share (and, hence, is independent of the others), but in perpetuating a dynamic disequilibrium: ‘He who bestows a favor is more reliable on condition that he maintains the gratitude owed [to the giver] by benevolence to the one to whom he has given. The one who is indebted is less zealous, knowing that he is not returning the good deed out of gratitude but out of indebtedness’ (Thucydides, 1902: II, 40, 4, our translation).<sup>13</sup>

Significantly, Pericles describes the relation between the one who gives and the one who receives, between the debtor and the creditor, not from the perspective of repayment and, hence, not as a mere confirmation of the creditor’s faith in the debtor’s ability to repay. It is not the debtor who is accountable for the amortization of the debt-relation; from the very outset the onus is on the creditor to prevent his favor from becoming a debt. Drawing on the double meaning of the Greek χάρις (favor and gratitude), Pericles stresses that reliable creditors dispense their debtors from being *obliged* to pay back their debt. It is exactly this obligation which would render the receiver unable to give something based on his own goodwill. Every act could be nothing more than the repayment of the initial debt. However, the creditor who preserves the moral integrity of her debtor is reliable insofar as she is aware of the paradoxical structure of gratitude (χάρις) to which one can never be indebted without losing the ability to act out of gratitude. The gratitude

of the debtor has to be preserved by continually impeding the repayment of the favor and, hence, preventing the favor from becoming a mere debt.<sup>14</sup>

Whitehead's non-anthropocentric societies equally owe their existence to an eternal object shared by all members. The generalized concept of society thus has a structure analogous to Pericles' exclusively human society. Because eternal objects are indifferent to their realization, they are the perfect present. However, being unable to give themselves, eternal objects must be handed down by the members of the society. Whitehead terms that mode of transmission civilized which preserves freedom for the successor who, due to the transitive character of the temporal process, will not be able to give something back but only to provide something for the future. Because actual entities are unable to interact (causally) within the present, every form of direct reciprocity becomes impossible. This civilized cosmology is at the heart of Stengers' cosmopolitics, as for her, there is no question that in '[o]ne way or another, the inhabitants of the ruins will inherit what we leave them, even though we cannot predict what they will do with that legacy' (Stengers, 2020: 191, our translation). To think commerce through the lens of Pericles and Whitehead reveals its complex temporality: The present is indebted by the past to render itself credible in order to be able to persuade the future. As a result, commerce sets free cosmology and politics from their obsession with simultaneity and, at the same time, establishes a productive difference between cosmo- and politics.

In contrast, Kant develops his version of the *ius cosmopoliticum* taking the whole earth into consideration simultaneously, which then becomes a common ground shared and divided among all people (1914: 352 [§62]; cf. Stengers 2005). As a result, the mutual point of reference constructed by the perspective of the present obliges all people to commercially interact with each other because they are already related. However, the fallacy of simultaneity is not restricted to the prioritization of the present. Rather, displacing the primacy to the past or the future leads to the same one-sidedness. As a result, cosmology and politics pose the problem of how to organize the relation between past, present and future. Whitehead terms those societies civilized which are able to develop an answer that keeps the three levels of time apart and binds them together, in the same moment. The operator for such an endeavor is *commerce* which combines and differentiates past, present and future.

Writing in the ruins 'under the sign [. . .] of grief when the loss is irretrievable' (Stengers, 2020: 196, our translation), Stengers' way of inheriting from Whitehead stays true to the melancholic conception of cosmopolitics outlined above. She makes it clear that the relevance of concepts is highly restricted because 'once they have done their job, once they have transformed the way in which a situation raises a problem, they disappear without leaving a trace other than this transformation itself' (Stengers, 2011c: 17). It is no coincidence that her engagement with Whitehead is framed by the fable of the 12th camel, where an old man dies and leaves his heirs an impossible will. While he has only 11 camels, his wish is for the eldest to inherit half the camels, the second a quarter and the youngest a sixth. To resolve the obligation placed on the sons by the will of their father, a sage gifts them with a 12th camel to make everything add up, which they are able to return to him. This subsidiary camel is not absorbed or sublated but – due to the ratio between the shares defined by the father's last wish ( $1/2$  ;  $1/4$  ;  $1/6$ ) – set free at the end. As a result, the twelfth camel is firm ( $\beta\acute{\epsilon}\beta\alpha\iota\omicron\varsigma$ ) in the sense of

Pericles because it does the math without being counted on. Is it possible to count on commerce in the same sense?

## Coda

Certainly the aunt whose estate one wants to inherit must first be dead; but one can have a very good look round the room beforehand. (Bloch, 1991: 5, translation adapted)

In equal parts cynical, utopian and pragmatic, these lines from the 1934 preface to Ernst Bloch's aptly named *Heritage of Our Times* were written from exile in Switzerland. What was there even left to inherit? While something certainly seemed to be coming to an end, and the act of inheritance would indubitably be transformative, Bloch was sure that the 'end will not be bourgeois' (Bloch, 1991: 1). The lines of thought re-traced in this paper, however, operate with a different horizon. Looking around the room, it is precisely the hallmarks of bourgeois society that are preselected as legacies: commerce, society and civilization. While certainly transformative, the logic of cosmopolitics does not manifest as the end of the bourgeois, but rather the remodeled realization of the world-bourgeois, that is, the cosmopolitical.

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## Notes

1. The authors would like to thank everyone who has read earlier drafts of this paper, especially Belen Prado and Mathias Denecke for their detailed feedback as well as Sunil Manghani and the four anonymous reviewers for their generous and helpful comments.
2. As Stengers presents the diplomat as the figure who is capable of achieving peace by inventing 'a form of commerce' (Stengers, 2011a: 386), those two approaches are closely related.
3. Reconstructing the notion of abstraction elaborated in *Science and the Modern World*, Alberto Toscano has argued that Whitehead's critique is necessarily limited because it solely problematizes abstraction as a pernicious result of a flawed cosmology and, hence, as a problem of thought (see Toscano, 2008: 62, 66). Instead, Toscano draws on Alfred Sohn-Rethel in order to show that every ideal abstraction is grounded in the real abstractions (re-) produced within society (p. 69). Focusing on Whitehead's later works and his notion of commerce, he appears to be much closer to Sohn-Rethel than Toscano's account suggests.
4. Pericles embodied a golden mean that Whitehead deemed desirable: 'a head of state [that is] reasonably secure, but not *too* secure' (Whitehead as recorded by Price, 1954: 39, original emphasis).
5. This general identification of civilized behavior with the renunciation of violence is a common characteristic associated with civilization in its most prominent theories (i.e. Elias, 2000; Jaeger, 1985). Describing civilization by referring exactly to the type of situation Pericles faced is also present from very early descriptions, as, for example, in Constantin-François de Volney's *Éclaircissement sur les États-Unis* (see Mazlish, 2004: 15).
6. If this presentation in fact contrasts with the traditional European notion of civilization is up for debate. In *Black Marxism*, Cedric Robinson argues that the 'tendency of European civilization through capitalism was [. . .] not to homogenize but to differentiate' (Robinson, 2000: 20).

7. A perhaps uncomfortable place, however, is as an epigraph to the second chapter of Friedrich August von Hayek's *The Constitution of Liberty* (Hayek, 1960: 22), which is all the more noteworthy as Hayek begins his book with a long epigraph by Pericles.
8. Over and over again this circularity reappears, i.e. when speaking of both the 'civilization of language' and the 'language of civilization' (Whitehead, 1968: 36).
9. The notion of *doux commerce* is a central myth of the development of bourgeois society (see especially Hirschman, 1977), succinctly ridiculed by Karl Marx (1962: 780). Stengers explicitly critiques the thinkers of civilized commerce (Pignarre and Stengers, 2011: 117f.) and attempts to transform the notion of *doux commerce* by insisting that the situations which enable commerce have to be re-established continually by finding a 'middle ground for testing' (Stengers, 2002: 237) which does render differences visible.
10. Apart from his discussion of God – an actual entity, but not an occasion – these terms are usually treated synonymously.
11. Whitehead scholars may forgive us this truncation undertaken in the name of 'selection', disregarding the question of valuation in the present context. Properly speaking, selection only applies to eternal objects – the settled world is found by the actual entity as a datum, that is, a limited 'perspective of the "settled" world' (Whitehead, 1978: 150).
12. This claim is supported by Didier Debaise's reading of *Process and Reality*, which convincingly argues that 'an entity is nothing other than an "inheritance"' (Debaise, 2017: 92).
13. In our translation we have aimed at making explicit the two sides of χάρις, using the terms favor and gratitude as supposed by Edgar Cardew Marchant in his commentary (Thucydides, 1891: 176). Suggesting to understand ὡστε in the sense of 'on the condition that', we propose to read the sentence as expressing the requisites for the reliability of the debtor.
14. Debaise hits the nail on the head when he describes Whitehead's concept of 'satisfaction', the meaning of the 'settled' world, as 'being "settled", as one might say of a debt or an obligation' (Debaise, 2017: 78).

## References

- Bloch, Ernst (1991) *Heritage of Our Times*, trans. Plaice, N., and Plaice, S. Berkeley: University of California Press.
- Breuvart, Jean-Marie (1994) Y a-t-il une philosophie de l'histoire dans aventures d'idées? In: Stengers, Isabelle (ed.) *L'effet Whitehead*. Paris: Vrin.
- Castoriadis, Cornelius (2011) *Thucydide, la force et le droit. Ce qui fait la Grèce, 3. Séminaires 1984–1985*. Paris: Éditions du Seuil.
- Colaïaco, James A. (2001) *Socrates Against Athens: Philosophy on Trial*. New York: Routledge.
- Conway, Philip R. (2020) The folds of coexistence: Towards a diplomatic political ontology, between difference and contradiction. *Theory, Culture & Society* 37(3): 23–47.
- Debaise, Didier (2017) *Speculative Empiricism: Revisiting Whitehead*, trans. Weber, T. Edinburgh: Edinburgh University Press.
- Durant, Will (1939) *The Story of Civilization: Part II. The Life of Greece*. New York: Simon & Schuster.
- Elias, Norbert (2000) *The Civilizing Process: Sociogenetic and Psychogenetic Investigations*, trans. Jephcott, E. Oxford: Wiley-Blackwell.
- Ellul, Jacques (1975) *L'Apocalypse: Architecture en mouvement*. Paris: Desclée.
- Emmet, Dorothy (1948) A.N. Whitehead: The last phase. *Mind* 57 (227): 265–274.
- Gomme, Arnold Wycombe (1956) *A Historical Commentary on Thucydides: The Ten Years' War*. Oxford: Clarendon.
- Halewood, Michael (2014) The order of nature and the creation of societies. In: Gaskill, Nicholas, and Nocek, A.J. (eds) *The Lure of Whitehead*. Minneapolis: University of Minnesota Press.

- Harrasser, Karin (2016) Vom Kontingenten Kosmos zur Kosmopolitik. Erkenntnishandeln bei Isabell Stengers. In: Rössler, Reto, Sparenberg, Tim, and Weber, Philipp (eds) *Kosmos & Kontingenz. Eine Gegengeschichte*. Paderborn: Wilhelm Fink Verlag.
- Hayek, Friedrich, A. (1960) *The Constitution of Liberty*. Chicago: University of Chicago Press.
- Herz, Martin (1958) *Sacrum Commercium: Eine Begriffsgeschichtliche Studie zur Theologie der Römischen Liturgiesprache*. München: Zink.
- Hirschman, Albert O. (1977) *The Passions and the Interests: Political Arguments for Capitalism Before Its Triumph*. Princeton: Princeton University Press.
- Jaeger, C. Stephen (1985) *The Origins of Courtliness: Civilizing Trends and the Formation of Courty Ideals, 939–1210: The Middle Ages*. Philadelphia: University of Pennsylvania Press.
- Johnson, Allison Hartz (1962) *Whitehead's Philosophy of Civilization*. New York: Dover Publications.
- Kant, Immanuel (1824) Idea of a universal history on a cosmo-political plan. *The London Magazine*, pp. 385–393.
- Kant, Immanuel (1853) *Elements metaphysiques de La Doctrine Du Droit (Premiere Partie de La Metaphysique des Moeurs) suivis d'un essai philosophique sur la paix perpetuelle et d'aortes petits ecrits relatifs au droit naturel*, trans. Barni, J. Paris: A. Durand.
- Kant, Immanuel (1914) Die Metaphysik der Sitten. In: *Kant's Gesammelte Schriften. Hrsg. v. d. Königlich Preußischen Akademie der Wissenschaften, Vol. 6*. Berlin: Georg Reimer, pp. 203–493.
- Kant, Immanuel (1923) Zum ewigen Frieden. Ein philosophischer Entwurf. In: *Kant's Gesammelte Schriften. Hrsg. v. d. Königlich Preußischen Akademie der Wissenschaften, Vol. 8*. Berlin: Walter de Gruyter & Co., pp. 341–386.
- Kant, Immanuel (1924) Logik. In: *Kant's Gesammelte Schriften. Hrsg. v. d. Königlich Preußischen Akademie der Wissenschaften, Vol. 16*. Berlin: Walter de Gruyter & Co.
- Kant, Immanuel (1996) *Practical Philosophy*, trans. Gregor, M.J. Cambridge: Cambridge University Press.
- Kant, Immanuel (1998) *Critique of Pure Reason*, trans. and eds. Guyer, P. and Wood, A.W. Cambridge: Cambridge University Press.
- Kersting, Wolfgang (2009) '. . . Das einzig taugliche Princip ein beharrliches Ganzes unter wieder sinnlichen Köpfen möglich zu machen. . .': Kants Gemeinschaftsphilosophie vom commercium der Substanzen bis zum ethischen Staat. *Logos: Anales des Seminario de Metafísica* 42. Universidad Complutense de Madrid: 73–88.
- Kraus, Elizabeth M. (1998) *The Metaphysics of Experience: A Companion to Whitehead's Process and Reality*. New York: Fordham University Press.
- Lango, John W. (2007) Whitehead's derivative notion of societies: *Process Studies* 36(1): 89–107.
- Loroux, Nicole (1986) *The Invention of Athens: The Funeral Oration in the Classical City*, trans. Sheridan, A. Cambridge, MA: Harvard University Press.
- Marincola, John (2011) Speeches in classical historiography. In: Marincola, John (ed.) *A Companion to Greek and Roman Historiography*. Malden, MA: Wiley-Blackwell.
- Marx, Karl (1962) *Das Kapital. Kritik der politischen Ökonomie. Erster Band. MEW 23*. Berlin: Dietz Verlag.
- Mazlish, Bruce (2004) *Civilization and Its Contents*. Stanford: Stanford University Press.
- Morris-Suzuki, Tessa (1993) Rewriting history: Civilization theory in contemporary Japan. *positions: east asia cultures critique* 1(2): 526–549.
- Orléan, André (2014) *The Empire of Value: A New Foundation for Economics*, trans. DeBevoise, M.B. Cambridge, MA: MIT Press.
- Pignarre, Philippe and Stengers, Isabelle (2011) *Capitalist Sorcery: Breaking the Spell*, trans. Goffey, A. Basingstoke: Palgrave Macmillan.

- Price, Lucien (1954) *Dialogues of Alfred North Whitehead*. Boston: Little, Brown and Co.
- Robinson, Cedric J. (2000) *Black Marxism: The Making of the Black Radical Tradition*. Chapel Hill: University of North Carolina Press.
- Rohmer, Stascha (2010) The self-evidence of civilization. In: Faber, Roland, Henning, Brian, and Combs, Clinton (eds) *Beyond Metaphysics?: Explorations in Alfred North Whitehead's Late Thought*. Leiden: Brill.
- Sehgal, Melanie (2014) A situated metaphysics: Things, history, and pragmatic speculation in A.N. Whitehead. In: Faber, Rol, and Goffey, Andrew (eds) *The Allure of Things: Process and Object in Contemporary Philosophy*. New York: Bloomsbury.
- Spinoza, Baruch de (1925) *Tractatus de intellectus emendatione*. In: Gebhardt, Carl (ed.) *Opera, Vol. 2*. Heidelberg: Carl Winter.
- Stengers, Isabelle (ed.) (1994) *L'effet Whitehead*. Paris: Vrin.
- Stengers, Isabelle (1997) *La guerre des sciences. Cosmopolitiques I*. Paris: La Découverte.
- Stengers, Isabelle (2002) Beyond conversation: The risks of peace. In: Keller, Catherine, and Daniell, Anne (eds) *Process and Difference: Between Cosmological and Poststructuralist Postmodernisms*. Albany: State University of New York Press.
- Stengers, Isabelle (2005) The cosmopolitical proposal. In: Latour, Bruno, and Weibel, Peter (eds) *Making Things Public: Atmospheres of Democracy*. Cambridge, MA: MIT Press.
- Stengers, Isabelle (2010) *Cosmopolitics I*, trans. Bononno, R. Minneapolis: University of Minnesota Press.
- Stengers, Isabelle (2011a) *Cosmopolitics II*, trans. Bononno, R. Minneapolis: University of Minnesota Press.
- Stengers, Isabelle (2011b) The care of the possible: Isabelle Stengers interviewed by Erik Bordeleau. *Scapegoat: Landscape, Architecture, Political Economy* 1: 12–17.
- Stengers, Isabelle (2011c) *Thinking with Whitehead: A Free and Wild Creation of Concepts*, trans. Chase, M. Cambridge, MA: Harvard University Press.
- Stengers, Isabelle (2014) Speculative philosophy and the art of dramatization. In: Faber, Rol, and Goffey, Andrew (eds) *The Allure of Things: Process and Object in Contemporary Philosophy*. New York: Bloomsbury.
- Stengers, Isabelle (2017) *Civiliser la modernité?: Whitehead et les ruminations du sens commun*. Paris: Les presses du réel.
- Stengers, Isabelle (2018a) *Another Science Is Possible: A Manifesto for Slow Science*, trans. Muecke, S. Cambridge: Polity.
- Stengers, Isabelle (2018b) The challenge of ontological politics. In: De la Cadena, Marisol, and Blaser, Mario (eds) *A World of Many Worlds*. Durham: Duke University Press.
- Stengers, Isabelle (2020) *Réactiver le sens commun: Lecture de Whitehead en temps de débâcle*. Paris: Éditions La Découverte.
- Thucydides (1891) *Book II*, ed. Marchant, E.C. London: Macmillan & Co.
- Thucydides (1902) *Historiae*, ed. Jones, H.S. Oxford: Oxford University Press.
- Thucydides (1998) *The Peloponnesian War*, trans. Lattimore, S. Indianapolis: Hackett Pub. Co.
- Toscano, Alberto (2008) The culture of abstraction. *Theory, Culture & Society* 25(4): 57–75.
- Watson, Matthew C. (2014) Derrida, Stengers, Latour, and subalternist cosmopolitics. *Theory, Culture & Society* 31(1): 75–98.
- Whitehead, Alfred North (1929) *Science and the Modern World*. Cambridge: Cambridge University Press.
- Whitehead, Alfred North (1939) *Adventure of Ideas*. Cambridge: Cambridge University Press.
- Whitehead, Alfred North (1948) Education and self-education: An address to boys in England. In: Whitehead, Alfred North, *Essays in Science and Philosophy*. London: Rider & Co.
- Whitehead, Alfred North (1968) *Modes of Thought*. New York: The Free Press.

Whitehead, Alfred North (1978) *Process and Reality: An Essay in Cosmology*. New York: Free Press.

Zeller, Eduard (1877) *Philosophy of the Greeks: Socrates and the Socratic Schools*, trans. Reichel, O.J. London: Longmans, Green and Co.

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