The Parliament of Things and the Anthropocene:
How to Listen to 'Quasi-Objects'

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Abstract: Among the contemporary philosophers using the concept of the Anthropocene, Bruno Latour and Isabelle Stengers are prominent examples. The way they use this concept, however, diverts from the most common understanding of the Anthropocene. In fact, their use of this notion is a continuation of their earlier work around the concept of a 'parliament of things.' Although mainly seen as a sociology or philosophy of science, their work can be read as philosophy of technology as well.

Similar to Latour's claim that science is Janus-headed, technology has two faces. Faced with the Anthropocene, we need to shift from technologies of control to technologies of negotiations, i.e., a parliament of things. What, however, does a

'parliament of things' mean? This paper wants to clarify what is conceptually at stake by framing Latour's work within the philosophy of Michel Serres and Isabelle Stengers. Their philosophy implies a 'postlinguistic turn,' where one can 'let things speak in their own name,' without claiming knowledge of the thing in itself. The distinction between object and subject is abolished to go back to the world of

'quasiobjects' (Serres). Based on the philosophy of science of Latour and Stengers the possibility for a politics of quasiobjects or a 'cosmopolitics' (Stengers) is opened. It is in this framework that their use of the notion of the Anthropocene must be understood and a different view of technology can be conceptualized.

Key words: Anthropocene, parliament of things, Bruno Latour, Michel Serres, Isabelle Stengers

So many other entities are now knocking on the door of our collectives. Is it absurd to want to retool our disciplines to become sensitive again to the noise they make and to try to find a place for them? (Latour 2005b, 262)

1. Introduction

In the last decade, it has become popular to speak of the dawn of a new epoch, the Anthropocene. Introduced in geology in the early 2000s, this new era refers to the moment when human activity started to have a significant or even a dominant influence on the planet (Crutzen 2002). There is still a discussion going on concerning the official recognition of this new label and the precise moment when the Anthropocene has started, ranging from the birth of agriculture, the Industrial Revolution to the first atomic bombs (e.g., Zalasiewicz et al. 2015). More recently philosophers have started to mobilize this concept in their reflections on nature and technology as well (e.g., Morton 2014; Stiegler 2015).[1] Two clear examples of philosophers who have taken up this notion of the Anthropocene are Bruno Latour (2013; 2014; 2015) and Isabelle Stengers (2011a; 2015). Especially in Latour's work, however, this notion appears as an extension of an approach he has been working on for decades.

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Around twenty-five years ago, Latour was already calling for a new form of democracy, namely "a democracy extended to things themselves" (Latour 1993, 142). In an age of climate change, nuclear disasters, GMO's, aids and economic crises, we cannot limit politics to subjects alone. These problems are neither pure politics, because they involve natural phenomena, nor pure nature, for they only exist due to the mediations of humans. We are thus in need of an "object-oriented democracy" or a *Dingpolitik* (Latour 2005a, 14), which implies a rethinking of the role of science and technology and linking them with their political aspects. For Latour, this requires the creation of a "parliament of things": a place where both humans and nonhumans can be represented adequately (Latour 1993, 144). Latour's and Stengers's use of the notion of the Anthropocene must be seen in the extension of this project, resulting in a very specific understanding of what it in fact implies. As we will see, for them the Anthropocene is not about the dawn of a new world, but rather of a new attitude towards the world, in the line of such a parliament of things.

However, it is hard to grasp what Latour has in mind when introducing this 'parliament of things.' At first sight, it seems to be a problematic notion: incorporating things contradicts the history of philosophy. While philosophers used to see direct knowledge of the objective world as unproblematic, authors since Kant have problematized this idea: our knowledge of the world is always mediated, by the categories of our understanding according to Kant, or by language, anonymous structures or ideology according to more recent authors. How, then, can one make room for things? How can we ever know what things really are or want, when we are buried under representations, social constructions, ideologies or power relations? In opposition to the 'prelinguistic stance' of earlier thinkers, where knowledge of the thing in itself seemed possible, we are children of the linguistic turn: nothing is known without mediation through language.

One way to cope with things is to deny the truth of this linguistic turn. One could return to a prelinguistic position and claim that, at least for the sciences, a direct contact with the world is possible. This is not the option Bruno Latour chooses. The Anthropocene as an epoch demands a different response, for it both shows that the traditional conceptions of science and technology cannot be maintained, and that purely linguistic approaches are unable to conceptualize climate change, since they cannot conceptualize the non-linguistic intrusion of nature in our politics. The science of climatology offers us a picture completely different from that of a science of certainty by direct contact with the facts themselves or a complete technological control. Rather, "the very notion of objectivity has been totally subverted by the presence of humans in the phenomena to be described— and in the politics of tackling them" (Latour 2014, 2).

Although Latour is most of all known for his work on the sciences, I argue that his perspective also offers us a new view of the role of technology in the Anthropocene. In his work, for instance, we can find a criticism of geoengineering, i.e., the idea that the negative consequences of climate change and the Anthropocene can be managed by introducing more controlling technologies. For Latour such claims boil down to, in reaction to the impasse of modernity, we must
"become even more resolutely modern" (Latour 2015, 21). However, his own work consists of a fundamental dismantling of this modern condition. In his analysis of modernity and the Anthropocene, there is therefore a clear vision on technology present. The parliament of things is Latour's alternative to the modern constitution. If it is not an alternative technology itself, then it is at least a new setting to shape the technologies for the Anthropocene.

It is no accident that in his work Latour often refers to Michel Serres's *Le contrat naturel* (Latour 2004b; 2014; 2015). In this book Serres was already trying to cope with the new problem of climate change: how can we deal with an active nature that refuses to play to role of inert matter, in which "the earth is moved" by our actions (Serres 1995, 86)? Latour can be seen as a student of Serres, in the sense that both aim to develop a *postlinguistic stance*: interactions with things are still real and meaningful even if everything is mediated through language. Latour's views on science and technology must thus be seen as a part of a French tradition of thinkers, including Serres and Stengers, that try to go beyond language without neglecting the lessons of the linguistic turn. Their philosophy is a postlinguistic philosophy aimed to let things speak again. Although initially developed for different purposes, they see the Anthropocene and the "intrusion of Gaia" (Stengers 2015, 44; Latour 2015) as the ultimate proof that this postlinguistic correction of our views on nature, science, and technology is necessary.

This article will aim to excavate Latour's different conception of technology by sketching his postlinguistic philosophy, initially developed around the concept of the 'parliament of things' to understand his unique approach to the Anthropocene (Latour 2014; 2015). First, I will elaborate on Michel Serres's philosophy of the quasi-object, which can be considered as the groundwork for this postlinguistic project, since both Latour and Stengers are deeply influenced by his work. Next I consider how their background in the sciences made them look for this new postlinguistic perspective and the different view on technology it implies. Finally, I will reexamine the concept of the parliament of things and the Anthropocene.

2. Serres's Philosophy of Relations

The philosophy of Michel Serres can be described as "a general theory of relations" or "a philosophy of prepositions" (Latour and Serres 1995, 127; Serres 2003). He opposes traditional philosophies that start from the subject or the object. According to Serres, these philosophies neglect the third aspect of every relation: "By that I mean the intermediary, the milieu. . . . What is between, what exists between. The middle term" (Serres 2007, 65). His own main focus is the analysis of relations between things and how these relations come into being. For Serres relations are the foundation of both the subject and the object (Serres 1987, 209).

In his early Hermès series, Serres is mainly concerned with an analysis of communication, but this can be generalized to an analysis of relations. His early work must be situated in the tradition of structuralism, but of a specific kind. It is often forgotten that French structuralism has two varieties: one is the famous linguistic structuralism, inspired by de Saussure, but the other one is a mathematical structuralism, inspired for instance by the Bourbaki group. Serres's work is mainly inspired by the second variety (Serres 2003, 230).[2]

What is the relevant difference between these two strands? Linguistic structuralism is linked to the idea of language, and thus with a speaking subject and with culture. Mathematical structuralism, on the other hand, is broader. As Serres often points out, these structures can be both present in natural phenomena, such as DNA, but also cultural phenomena, such as music. Information is not just emitted by humans, but also by nonhumans (Serres 1972, 101). In this context the concepts of *noise* and *communication* are central in Serres's philosophy: we should understand the world as one big network of communicative relations, communication which is not limited to humans but can also be applied to nonhumans. Or as he states:

There is a constant and continuous dialogue between things which form the historical fabric of events and laws, among whom my intervention is exceptional. . . . The general informational language is the fundamental and continuous relation between objects. Even before their deciphering, the certainty that it exists induces the certainty that the external world exists, in the mode of a communicating network, of which all the networks I know and could constitute are singular, exceptional cases, approximating to imitate the real world. (Serres 1972, 110)[3]

For an analysis of communication, this implies that, instead of analysing it by putting the struggle between messenger and receiver at the centre, one has to focus on the relation between them. This relation is not taken for granted, but has to be permanently constructed and maintained. This is done by the mutual war that messenger and receiver wage against a common enemy: the background noise that must be silenced in order to communicate at all. Or as Serres puts it: "To hold a dialogue is to suppose a third man and to seek to exclude him; a successful communication is the exclusion of the third man" (Serres 1969, 41). To create a relation you always have to invoke or exclude a third instance, the medium, that guarantees this. Think for example about the necessary silence of other people, but also the world outside, to make someone able to read a text.

This excluded third (*le tiers exclu*) is a central figure in the philosophy of Serres. It is not only present in linguistic communication, but in every possible relation. As we shall see, it will also be applicable to technological relations. To understand how relations are being destroyed or distorted on the one hand or amplified and created on the other, you need to focus on this third figure. In later work Serres will respectively use the figures of the 'parasite' and the 'quasiobject.'

2.1. The Logic of the Parasite
For Serres, the parasite is by definition always present because noise is always present. If the starting point is the world as one big relational network, then communication is not the establishment of relations, but the exclusions of the irrelevant ones. Not order but disorder is the starting point: "The rational is a rare island which emerges, from time to time" (Serres 1977, 11). Order and communication, on the other hand, always have to be produced and made from this disorder. This is done, according to Serres, through the act of 'translation': noise and interference are silenced, and incomprehensible clatter is translated into a common language that both messenger and receiver can understand.

This however leads to distortion in two ways. First of all, every creation of order implies a reduction, distortion and translation of this original communicative network. Yet the complexity of the network always exceeds the rational model, which can be applied to it (Serres 1982, 174). In this sense, this implies a form of violence against a reality that is more complex than the models we use to talk about it. Secondly, a perfect exclusion is never possible, because not all parasites can be excluded. Practically, this is impossible because there are simply too many parasites and it is difficult to know which relations are essential and which are redundant. Logically, one ends up in a regression as well, because the act of exclusion is itself the creation of a new relation (and thus an invitation of new parasites).

Parasites are the noise that should be excluded if one wishes to communicate at all, but they can never be excluded completely. They can only be reduced to an acceptable level. In such a case, there will still be parasites but it will be claimed that they do not distort the message *in a*

relevant way. This is however a mere claim, and they might still change the message in a relevant way without us being aware of it. By definition, a parasite will try to stay unnoticed by presenting itself as only transmitting the message without any distortion. Every communication, every technology, and even every relation in general is thus open to this ambiguity.

Although Serres mainly starts from examples about communication, this perspective can easily be applied to technology. For instance, this is the case when Latour uses Serres's ideas to make the distinction between intermediaries and mediators (Latour 2005b, 37–42).[4] While we often think of technical instruments as unproblematic intermediaries, which transport a force without any distortion in a perfectly transparent way, we forget that the smoothness of this translation has to be produced. This is exactly the difficulty of technical interventions concerning climate change. The ideal is changing one thing for the better and keeping the rest stable. However, often unforeseen consequences will pop up. The smoothness of a certain technology is never a given fact, but the product of the mediator's optimisation.

Every intermediary is an imperfectly disciplined mediator. Again, practically, one can assume that there will always be imperfections, noise. Logically, one can point to the paradoxical nature of every relation: "If the relation succeeds, if it is perfect, optimum, and immediate; it disappears as a relation. If it is there, if it exists, that means that it failed. It is only mediation. Relation is nonrelation. And that is what the parasite is. . . . The best relation would be no relation. By definition it does not exist; if it exists, it is not observable" (Serres 2007, 79).

Although this might sound very abstract, it can be illustrated by Latour's study on Pasteur in which he often refers to Serres (Latour 1984). The book's starting point is the relationship between people and their daily routines. These relations, however, can be disturbed by the noise of diseases, which parasitizes on human interactions, but often destroy them as well. Subsequently, physicians such as Louis Pasteur will present themselves as a way to 'smooth communication,' namely by eliminating the germs through vaccination and pasteurization so that people can get back to their daily affairs. Although presented as such, this will not result in interactions free from any interference, but only in the exchange of one parasite (the germs) for another (the doctors). The doctors will introduce new distortions in human interactions, such as rules of hygiene or visits to the hospital. These are also alterations of the daily affairs, although not recognized as harmful.

The creation of order is thus never neutral, but always presupposes certain parasitic power relationships and norms that produce them (Serres 1977, 12). In this sense, the replacement of one parasite for another does not necessarily imply better communication or a more stable technology, but can serve the surviving parasite itself. If it can convince the messenger and the receiver that it is the optimal medium, it will survive. Inspired by this, Serres has a great distrust of order, representation, language, and consciousness, for they all are potentially driven by such parasitic power relations. They mutilate the original noise of the world for their own survival, not for the greater good. Science is often reduced to a mere tool for hiding parasites beneath promises of smoother communication. "Power wants order, knowledge offers it" (Serres 1977, 12). Serres himself wants to get back to the things themselves: to give room to their multiplicity and their noise. The task of the philosopher is to protect this multiplicity, this inherent potential of all things (Serres 2007, 46). This means that a philosopher should be the voice of this forgotten disorder beneath all constructed order.

Serres has the ambition to go beyond language and culture to the things themselves, because language is merely an imposed order on the multiplicity of things. "Can we step outside our

language?" (Serres 2008, 89). Serres wants to restore the speech of things. However, it is not the case that things are silent, despite having the potential to speak. Things do always already speak, they always emit noise and thus potential information. This is the starting point of Serres's philosophy.

Here the excluded third is seen as a positive figure, i.e., noise that always breaks through our cages of language: "the third person provides a foundation for the whole of the external real, for objectivity in its totality, unique and universal, outside any first- or second-person subject" (Serres 1997, 48). However, this noise of the world is not recognized. This is the real issue for Serres: somehow everything always speaks, but we ignore this fact. As we will see, this is also the case in the Anthropocene: we silenced nature and forced it to play a passive role without ever realising the violence our relations inflicted on the world. Serres attempts to go back to this moment of noise, before things are being silenced, by introducing the concept of the 'quasi-object.'

2.2. The Omnipresence of the Quasi-Object

For Serres, a quasi-object is something that predates the subject-object distinction. It is neither an active subject nor a passive object, but instead the ground for both of them. It creates a network around itself that makes agency and structure possible. The most famous example he gives is that of the ball within a game. The ball is not a passive object, but the whole game moves around it, and even creates the collective:

Let us consider the one who holds [the ball]. If he makes it move around him, he is awkward, a bad player. The ball isn't there for the body; the exact contrary is true: the body is the object of the ball; the subject moves around this sun. Skill with the ball is recognized in the player who follows the ball and serves it instead of making it follow him and using it. . . . Playing is nothing else but making oneself the attribute of the ball as a substance. The laws are written for it, defined relative to it, and we bend to these laws. Skill with the ball supposes a Ptolemaic revolution of which few theoreticians are capable, since they are accustomed to being subjects in a Copernican world where objects are slaves. (Serres 2007, 226)

This quasi-object must not necessarily be an 'object,' such as a ball or a piece of money (Serres 1982, 148–49), but can also be a quasi-subject: a leader, a king, a celebrity (Serres 1987, 181–82). However, and this is crucial, the quasi-object is nothing without its relations to the things around it, its conditions of possibility. Its existence depends on the things around itself, it is itself nothing more than a node of these relations. In this sense, it is an object of which the relations to other things and persons cannot be forgotten; or a subject of which the necessity of the things around it to make him or her speak, move, or think is recognized. "A ball is not an ordinary object, for it is what it is only if a subject holds it. Over there, on the ground, it is nothing; it is stupid" (Serres 2007, 225). The ball is nothing without the players. The king is naked without its clothes.

These quasi-objects are the ground for the collective of subjects and objects, for our relationships. In fact, reality consists mainly of quasi-objects, rather than orderly subjects and objects, which are the exception.[5] Serres's ambition is to give them a rightful place in the political scene. As we will see, the Anthropocene holds the promise to give them proper political representation. But, to get to the politics of quasi-objects, to a parliament of things, we first need to understand (a) what kind of technological relations are possible with quasi-objects and

(b) why our modern approach ignored quasi-objects in the first place. For this, Latour's and Stengers's philosophy of science is crucial.

3. Technology as Negotiation Latour's early work considers the sociology and anthropology of science: he studies the production of scientific facts within a laboratory (Latour and Woolgar 1986; Latour 1987b). This will form the basis for his analysis of modernity and the Anthropocene.

In his early work, Latour finds a general distinction between *ready-made science* and *science in the making*. Science will present itself to the outside world as if it was a pure rational representation of an independent nature. During the construction of facts, however, science is a messy and hybrid activity, which involves numerous humans and non-humans working together (Latour and Woolgar 1986, 64). Echoing Serres, in later work he will describe this duality as the *translation* and the *purification* of quasi-objects (Latour 1993, 11).[6] According to Latour, the reason why modern science is so successful is not an a priori scientific method, but depends on its abilities (a) to recruit and connect a high number of relevant allies, both humans and non-humans, who will affirm the theory and (b) to make this whole construction and recruitment process invisible as if one was merely describing a passive nature (Latour 1987b, 106; 1993, 108).

Although again mainly concerned with science, the role of technology is crucial here because for Latour science often, if not always, boils down to technoscience.[7] However, in this modern view of science, technology is approached in a very specific way. For instance, in (b) the role of technical instruments is reduced to a mere purification of facts that were already present beforehand, waiting to be discovered, while in practice we are faced with numerous quasi-objects. On the other hand, (a) echoes Serres's idea that all relations imply parasites and that mediators have to be translated into intermediaries. The art of science seems to lie in its practices to successfully translate phenomena into scientific facts, without creating any relevant distortions. It will be able to claim that the scientist has not been a parasite, but only 'smoothed the communication' between object and subject, although, in practice, the scientist has distorted the phenomena in some way. For this, technology is crucial, but a specific technology whose role is not recognized from the moment the translation is finished.

3.1. From a Quasi-Object to a Witness

To understand the precise role of technology in this model, the work of Stengers can be very helpful. For her, every scientific claim starts as a *fiction*, i.e., a claim about reality that does not distinguish itself from other claims about that same reality. This is what the linguistic turn implies: every claim is always open to the accusation of being merely a representation. "*Normally*, any phenomenon that we observe can 'be saved' in multiple ways, each way referring to a human author, his projects, his convictions, and his whims" (Stengers 1997, 156). However, the construction of scientific facts implies the abnormal case, which is the creation of a *difference*, a *non-equivalence*. The scientist has to construct a case in which she can claim that she is not speaking in her own name, but in the name of things, in the name of nature. This is being done by introducing technological interventions in the phenomena one is studying. However, the scientist also has to make her own mediation between nature and our understanding as invisible as possible, and thus, as Serres remarked, make the relation itself (and thus all technological interventions) disappear. "What does matter is that [her] colleagues

be constrained to recognize that they cannot turn this title of author into an argument against [her], that they cannot localize the flaw that would allow them to affirm that the one who claims 'to have made nature speak' has in fact spoken in its place" (Stengers 1997, 160).

How does the scientist do this? By constructing the most reliable *witness* possible in the laboratory, a phenomenon that can testify for her theory:

> The singularity of scientific arguments is that they involve *third parties*.
>
> Whether they be human or nonhuman is not essential: What is essential is that it is *with respect to them* that scientists have discussions and that, if they can only intervene in the discussion as represented by a scientist, the arguments of the scientists themselves only have influence if they act as representatives for the third party. With the notion of third party, it is obviously the 'phenomenon studied' that makes an appearance, but in the guise of a *problem*. For scientists, it is actually a matter of constituting phenomena as *actors* in the discussion, that is, not only of letting them speak, but of letting them speak in a way that all other scientists recognize as reliable. (Stengers 1997, 85)

The scientist, thus, has "to produce a testimony that cannot be disqualified by being attributed to her own 'subjectivity,' to his biased reading, a testimony that others must accept, a testimony for which he or she will be recognized as a faithful representative and that will not betray him or her to the first colleague who comes along" (Stengers 1997, 88). She has to present herself as the perfect parasite that merely transports reality to our discussions. The scientist transcends the mere linguistic stance by constructing a third party, using technological interventions, who will be recognized as a reliable witness. It vouches for her, that she does not distort reality, but translates its information without transformation. She "has to succeed in making one admit that the reality [s]he has fabricated is capable of supporting a faithful witness, that is to say, that [her] fabrication can claim the title of a simple purification, an elimination of parasites, a practical staging of the categories with which it is legitimate to interrogate the object. The artifact must be recognized as being irreducible to an artifact" (Stengers 2000, 167).

The role of these technical instruments and laboratories is that they constitute this difference, they 'discipline' the quasi-object, the phenomena, to be the best possible witness, which only affirms the theory of the scientist and thus appears as a mere passive but affirming object. The third is excluded, noise becomes information; it will only say one thing and nothing else. This is according to Stengers, the core of the modern experimental practice: "*the invention of the power to confer on things the power of conferring on the experimenter the power to speak in their name*" (Stengers 1997, 165). The core of the scientific practice lies not in a specific form of rationality or sceptical way of thinking, but rather in its technical potential to translate ambiguous noise into reliable witnesses.

3.2. How to Negotiate with Things
However, and this is crucial here, this does not imply that scientists merely impose their will on the phenomena. This is not a submission of objects (Stengers 2013, 189–90). This leads us back to the claim of Serres. He claimed that all representations are problematic, but this might be a step too far. Serres is ambiguous whether all order is violence that should be avoided or that some specific forms of order, namely those in function of specific power relations, are the real problem. Latour and Stengers, for instance, are more open to the more moderate claim that

some constructions are indeed acceptable while others are not, because the submission of things is not the whole story.

The impression of submission is only created after the whole construction process is over. The technology being used by science might give the impression that it enslaved the phenomena, but this is only half of the picture. During the construction of these facts, technology plays a different role, namely that of the order of *negotiation*: one has to listen to the quasi-objects and their relations and try to persuade them to follow your theory, while at the same time you are being persuaded by them. To get to the reliable witnesses, the scientist has to go through a process of carefully and accurately putting her research object into question, and at the same time *being put into question by it*. For Stengers, good science is able to put itself *at risk*, i.e., to give the object in question the power to put the subjectivity of the scientist and her categories into question (Stengers 1997, 126; 2000, 134). Bad science, on the other hand, is defined by Stengers as the mutilation or forgetting of the object by a science. So bad science starts with passive objects, rather than ends with them.[8] But during genuine negotiations the phenomenon can dismiss the scientist's questions as irrelevant. Things can respond and show themselves to disagree with the questions asked, they too can take the lead, similar to the quasi-objects of Serres. If this is recognized, good scientific facts can be constructed.

Stengers herself illustrates this by a discussion between Diderot and D'Alembert: while D'Alembert is a follower of a very rigid form of mechanic materialism inspired by Newton, Diderot presents him with the case of an egg, a complex chemical-biological entity. In this case the materialism of Diderot is described by Stengers as a *demanding* materialism and not a reductionist one:
"What Diderot asks D'Alembert is that he *give* to the egg the *power to challenge* his well-defined categories" (Stengers 2011b, 373). A good scientist will let the egg be a *risk* which can challenge her own ideas of materialism.

Another good example is given by Vinciane Despret (2015), a student of Stengers. At a certain moment behaviourists tried to use the Skinner Box on a different organism than the eternal pigeon, namely the raven. The raven, however, refused to pull the levers and instead destroyed the box. The disappointed behaviourists returned to studying pigeons, but, with this decision, started to do bad science. Instead, they could have seen the reply of the raven as a lesson that the technology and categories they used to study organisms are inadequate and should be changed. Good science would in this case be open to the answer of the raven.

From this perspective, another use of technology comes forward, namely one based on negation. Good science can only occur if the proper technologies are in place. The role of technology here is not to enforce itself on the phenomena and reduce them to passive objects. Rather, technologies are being mobilized to allow the phenomena to articulate themselves as quasi-objects, by being sensitive to its feedback.

The two faces of science thus imply two roles of technology: on the one hand technologies are introduced to create the possibilities to listen to things, to create a feedback loop between the scientist and the quasi-object, both posing their own questions. The power of the sciences, to go beyond the linguistic turn, consists of their ability to incorporate *both humans and non-humans* into their networks. On the other hand there is the purification of the quasi-object once the negotiation is over: it is silenced by being disciplined into a witness with predictable behaviour. Science will present itself as if its rational subjects spoke in the name of a silent nature and technology, as if it had the power to impose one's will onto this nature. This is what

Latour calls our modern condition: quasi-objects are forgotten and reduced to active subjects and passive objects (Latour 1993, 139).

4. What Is a Parliament of Things?

If this purification and translation is the essence of science, and it seems to work, then what is wrong with disciplining quasi-objects into objects? Why do these quasi-objects need to be heard as quasi-objects? As stated above, the problem is not that quasi-objects are being disciplined into objects per se, but rather that this is being done in a problematic way. This is often the ground of a deep misunderstanding of the work of Latour. Yves Gingras, for example, criticizes Latour's perspective because "it is impossible to write or even think without making distinctions" (Gingras 1995, 125). In a similar vein Latour has been criticized for first claiming that all subjects and objects are constructions but then "glibly employ[ing] all such [objects and subjects] without going into ontological *Angst*" (Zammito 2004, 201).

Latour's aim is not to bring us back into an endless limbo of letting quasiobjects speak in their multiplicity, in contrast with Serres's view. In his concept of the 'parliament of things' the stress is too often placed on *things* while ignoring the *parliament*. The goal is not to end up in a world with no objects or subjects, but rather in one where there are only well-constructed objects and subjects, i.e., objects and subjects that are the result of adequate negotiations between all relevant actors involved in the network. For this we need to revaluate our institutions, and therefore we need to construct and adequate *parliament* of things.

It is therefore not a plea for less technology or less reduction, but rather for more technology and more reduction, yet thoughtful use of technology and deliberative reduction. Or as Latour states: "The moderns were not mistaken in seeking objective nonhumans and free societies. They were mistaken only in their certainty that that double production required an absolute distinction between the two terms and the continual repression of the work of mediation" (Latour 1993, 140).[9] Or, since quasi-objects cooperate in networks that support our current collective, the problem is that the *current* composition of our collective is inadequate. According to authors such as Serres and Latour, the main issue is that this purification of quasi-objects is (a) not always successful and (b) has become more problematic in the age of the Anthropocene.

(a) First, it is not always successful because quasi-objects can be adequately transformed into objects within the laboratory settings, but these settings have their limits. Furthermore, as Stengers demonstrates, not all sciences succeed in creating such a legitimate witnesses out of quasi-objects, even if they claim to do so (Stengers 1997, 88). Some sciences, such as biology or political science, would do better 'to follow' their study objects, and recognize them as quasi-objects (Stengers 2000, 144–45). The experimental sciences should be seen as an exceptional event, rather than the rule. By taking the purified object of laboratory physics as the paradigm, one is unable to understand what is going in within more complex fields such as biology or economics. By being aware that we are initially always dealing with quasi-objects, we can recognize, as for instance ethology argues, the blind spots that follow from manipulating birds only in a very onesidedly purified skinner box (see Despret 2015). This can finally allow us to work to an adequate purification of these objects, that take all relations of the quasiobject into account, or even recognize that we are unable to purify certain quasiobjects we are faced with.

(b) Secondly, it has also become more problematic to ignore quasi-objects due to global problems such as the ecological crisis (Serres 1995; Latour 2004b). As Latour states, the class

of quasi-objects "ends up being too numerous to feel that it is faithfully represented either by the order of objects or by the order of subjects" (Latour 1993, 49). Latour describes this event paradoxically as the 'end of nature.' According to him, we always have had an idea of nature, but saw it as something merely passively out there without any agency—a pure collection of means to our ends. Now, however, such an idea has become untenable: "the repressed has returned" (Latour 1993, 77). Nature does seem to respond, react, and reply in many unpredictable but devastating ways to our behaviour. Our collective is inadequate, in the sense that the current proposed purifications of quasiobjects are unable to assign a place to all relations and actions of the objects. The unaccounted actions of the objects therefore build up, until finally they are too immense to ignore and in fact threaten the stability of the rest of the collective. The objects show themselves as quasi-objects again. We enter a 'crisis of objectivity': "Political ecology thus does not reveal itself owing to a crisis of ecological objects, but through a generalized constitutional crisis that bears upon *all objects*" (Latour 2004b, 20).

Latour repeats and radicalises this message in his recent work on the Anthropocene, for instance in his book *Face à Gaïa*. For Latour the term Anthropocene shows what a notion such as 'ecological crisis' did not, namely that it is not a temporary state that will pass by. "[T]hat which would possibly be nothing but a passing crisis is being transformed in a profound alteration of our relation to the world" (Latour 2015, 17). While in earlier work Latour was mainly describing how we have never been modern, he uses the notion of the Anthropocene to define us in an affirmative way. In fact, the Anthropocene means that the insight that we have never been modern and that we are actually dealing with quasi-objects, have become a collective experience: "everything is happening as if we have indeed stopped being modern and this time, on a collective level" (Latour 2015, 99).

The new condition in the Anthropocene implies several things for Latour. As stated at the beginning of this article, the traditional view is that the Anthropocene implies that humanity has become the most significant factor of influence on the planet. Latour's view deviates from this perspective in several ways. For him the Anthropocene does not imply some kind of radical break, a fundamental revolution in earth's history. For Latour, we do not live in another world, but the Anthropcene implies first and foremost the obligation to relate to the old world in a fundamentally different way. In this new view, the traditional players disappear (nature, humanity, science, technology) or rather we realize that they have never existed in the first place.

As Latour already described above, nature has ceased to play the passive role that our modern science and technology forced upon it. Latour and Stengers rather speak of Gaia, a term introduced by James Lovelock in 1969. But Lovelock, according to Latour, is often misunderstood. Gaia does not mean that the earth has become a living organism or that it is a fixed and closed system, but rather that it must be seen as "the name proposed for all the interwoven and unpredictable consequences of the acting powers, each of which pursues its own interest in manipulating its own environment" (Latour 2015, 187). Gaia has no fixed identity nor can serve as a transcendent judge of our conflicts, showing the objectivity behind our subjective claims. Rather she is the third in the sense of which Serres speaks, namely of a parasite or quasi-object constantly intervening and changing our relations. "Gaia is a third party in all our conflicts—especially since the Anthropocene—but she never plays the role of third party *superior* to situations and able to *command* them" (Latour 2015, 307). In the Anthropocene we are faced with Gaia, which is a whole range of actors that are not unified in

a system or organism, but that react in a complex and capricious way to whatever we do. This is not a temporary state, but rather it must be seen as our permanent condition. Or as Stengers states: "no future can be foreseen in which [Gaia] will give back to us the liberty of ignoring her" (Stengers 2015, 47).

The Anthropocene not only implies the end of nature, but also that of humans. The idea that humanity has become the most influential factor in the Anthropocene is thus easily misunderstood, according to Latour. First of all, it is misunderstood on an empirical level because it is misleading to speak about humanity, as if we are now faced with a unified collective. In fact, no such unification exists and not all of humanity is equally responsible for the Anthropocene: native tribes in the Amazonian rainforests are not influencing the planet in the same way as western industries are. "The Anthropos of the Anthropocene? That is Babel *after* the fall of the giant tower" (Latour 2015, 189).

Secondly, the Anthropocene is also misunderstood on a more conceptual level since the opposition does not consist of active humans versus passive nature anymore. The traditional picture of the human is that of the subject, i.e., someone who possesses all the agency and the unbounded capacity to do with the planet what (s)he wants. But being a subject in this age "is not acting autonomously in relation to an objective framework but sharing the power to act with other subjects who also lose their autonomy" (Latour 2015, 84). To influence means not that one has all the power over something, but rather that all those being influenced have part of the agency, namely to react and to respond. The Anthropocene forces us to become full-blown quasi-subjects again, and thus depend on the sensitive networks of Gaia.

Finally, the players of science and technology change also. Science cannot be an ultimate referee anymore, but must recognize its dependence on its own networks. We enter an era, the Anthropocene, where science is never certain, but where uncertainty has become one of its main characteristics.[10] Technology, in a similar vein, cannot see itself as a tool in the hand of the active subject, but must play a quite different role in the negotiation with the quasi-objects, with Gaia, as we will see in the next section.

As already indicated in the introduction, Latour is inspired by the book *Le contrat naturel* by Serres, in which he claimed that our modern social contract is insufficient, because it always excluded things although we necessarily relate to them. Within the Anthropocene, this has become problematic. We are faced with the "*generalized revolts of the means*: no entity—whale, river, climate, earthworm, tree, calf, cow, pig, brood—agrees any longer to be treated 'simply as a means' but insists on being treated 'always also as an end'" (Latour 2004b, 155–56). The Anthropocene is nothing more than a general intrusion of quasi-objects in our current political collective: it demands us to reopen the negotiations with the quasiobjects we relate to, for otherwise the world will change and opt for a new political collective without humans.

We are in need of a peace treaty, or what Serres calls, a natural contract: "a contract of symbiosis, for a symbiont recognizes the host's rights, whereas a parasite—which is what we are now—condemns to death the one he pillages and inhabits, not realizing that in the long run he's condemning himself to death too" (Serres 1995, 38). This means a contract in which quasi-objects are recognized. But how can we achieve this?

4.1. The Counterclaims of Quasi-Objects

As stated above, the often proposed prelinguistic position seems implausible: it would imply that we somehow know what nature wants. This is exactly not the case, and even the problem,

of the Anthropocene. Also, a linguistic position seems to be rather puzzled with the situation, and unable to give a good analysis, since it is never able to get out of the discourse of a 'social construction of nature.' Here we have to take a postlinguistic stance: we should open up a space so things can give feedback to our current collective in order to reopen negotiations and propose reforms for a better political collective. This is possible because the world is always connected with us, since non-humans always emit noise, and thus possible information. Or as Serres states: "In fact, the Earth speaks to us in terms of forces, bonds, and interactions, and that's enough to make a contract" (Serres 1995, 39).

To become more sensitive to the noise of the world we need different technologies. Otherwise the quasi-objects would keep revolting against our current collective, which is exclusively focused on humans. This is what Latour means when he speaks about a 'parliament of things' (Latour 1993, 142; 2004b) and Serres when he calls for a natural contract: to let things re-enter politics by allowing them room to articulate their habits, behaviours, and claims. How is this possible? Well, to get a grasp on how they would be able to articulate their claims, in fact we can learn a lot from the sciences, not *ready-made science*, but *science in the making*. We need to return to the position of the scientist-at-risk, i.e., someone who is aware she is dealing with a quasiobject that can speak, and put her own categories into question. The Anthropocene requires a specific type of technology, namely not the *technologies of control* that geoengineers have in mind, but rather *technologies of negotiation*: technologies which enable us to become more sensitive to the reactions and relations of the quasi-objects. Technology in the Anthropocene is not only about trying to control environmental factors such as rising temperatures, but first and foremost has the goal to detect the way these quasi-objects respond to our actions. We make constant claims about how Gaia will respond to our policies, for instance, by claiming the CO_2 level will decrease by a certain policy. Technologies of negotiation are there to give quasi-objects such as CO_2 room to respond. Following our policy CO_2 will either accept our claim (by decreasing) or will make a *counterclaim* (by doing something else, such as increasing). Of course, the politician or the scientist can make a new claim to cope with this resistance, but the ideal (both in political democracy and in scientific practice) is that *a feedback mechanism* is respected: those who are represented should always be able to make a counterclaim and be heard.

In this manner we must understand the aim of the parliament of things, for which Latour's *Politiques de la nature* (2004b) already attempted to write a first constitution, or what Stengers called *cosmopolitics* (2005; 2010; 2011a): do not define beforehand what things are, but offer them the opportunity to put your own questions and perspectives into doubt. We can define what the objects are only after these proper negotiations, although some may never be well-defined, such as GMO's or climate change. There is no guarantee that it will work, but neither that it will fail. The political aim is mainly not to go too fast: every relevant association has to be taken into account, even if that means that the decision will be as difficult as possible: "We may agree with your arguments, but we have to make sure that you are fully exposed to their consequences." (Stengers 2005, 997) Or as Latour states:

The deliberations of the collective must no longer be suspended or shortcircuited by some definitive knowledge, since nature no longer gives any right that would be contrary to the exercise of public life. The collective does not claim to know, but it has to experiment in such a way that it can learn in the course of the trial. Its entire normative capacity depends henceforth

on the difference that it is going to be able to register between t_0 and $t + 1$ while entrusting its fate to the small transcendence of external realities. (Latour 2004b, 196)

This is precisely the role of technologies in the Anthropocene, namely by making us as sensitive as possible to the differences and changes that occur when we introduce a certain intervention. In this sense, the parliament of things itself can be understood as a technology of the Anthropocene, namely one not aimed to help us to fully control nature, but first and foremost help us to negotiate to remain part of a collective with as many possible quasi-objects taken into account. This is a never ending process, simply because there will always be elements that have not been taken into account yet. Precisely because our collective will always change, we need constant monitoring.

However, the initial interpretation of the parliament of things evoked some criticism by Stengers, which must be taken into account. According to Stengers, the early Latour (1993) tended to be rather optimistic about the fact that all quasiobjects could become part of the parliament of things. The essential underlying assumption of Latour here was that everything can be an object of negotiation, but this implied a form of exclusion, namely of those things that refuse to cooperate.[11] "No one can introduce themselves by establishing conditions—take it or leave it—from which the possibility or impossibility of agreement would follow." (Stengers 2011a, 347) However, the construction of certain elements cannot be the object of negotiation, even in such an open parliament of things. There are things such as gods, values, practices that we do not want to give up because they constitute our fundamental identity. Such claims are definitely not without ground. For instance, without the specific experimental practices of the scientists, they cannot do science; but similar claims can be made about religions or ethical values. In this sense, Stengers proposes a corrected "Cosmopolitical Parliament" (Stengers 2011a, 395) where there is room for these excluded elements, that refuse to take part, but cannot be ignored.

In his later work, this also made Latour revise his initial conception of the parliament of things. Negotiation is never by definition successful, and therefore one has to obtain the model of the diplomat, rather than the expert (see Latour 2004b, 209–17). Diplomacy means that one is fully aware that one is taking risks in the negotiations, that one does not have nature on one's side as *ready-made science* once claimed, nor that negotiations will always succeed. We cannot start from a given world, but we have the political task of "the progressive composition of the common world" (Latour 2004b, 18). "Diplomacy . . . celebrates another, quite artificial, conception of truth—what is true is what succeeds in producing a communication between diverging parties, without anything in common being discovered or advanced" (Stengers 2013, 194).

In a similar vein, this might explain some recent criticisms of Serres's original proposal, found in the work of both Latour and Stengers. For Latour, a natural contract has become impossible "because in a quarter of a century, things have become so urgent and violent that the somewhat pacific project of a contract among parties seems unreachable. War is infinitely more likely than contract" (Latour 2014, 5). Related to that, Stengers talks about the "intrusion of Gaia," which does not ask a response of us, but rather obliges us to find means to protect ourselves from this new condition, this new history, the Anthropocene (Stengers 2015). The necessity of negotiation, presupposed by Serres and the early Latour, is no guarantee anymore. We cannot be certain that we will find a new natural contract.

However, Latour and Stengers tend to make the stronger claim: such a contract has become impossible. Similar to the criticism of the necessity of noise or that of quasi-objects, however, one can state that this claim mixes up two different notions, namely the *certainty of the impossibility* of a contract and the *uncertainty of its possibility*. Their claims seem only to support the second claim and not the first claim. In the Anthropocene a natural contract might still be a possibility, although we cannot even be certain of that.

5. Conclusion

For authors such as Latour, the problems of the Anthropocene require new technologies to deal with it, namely a parliament of things, which is neither a parliament of subjects nor a parliament of objects. Rather it aims to be a parliament of quasiobjects, i.e., a place where both objects and subjects are represented, but together with their relations, their scientists, their uncertainties, etc. The problem was never that nonhumans did not speak, but that they were forced to speak only in one way, namely as mere passive objects. Once again, the conclusion is not that we should just let the original chaos of the world speak, although Serres seems to point in that direction. In the case of technology, the message is not the abandon all technologies since they imply this violence. Instead, the task is to listen to things as things, to create new technologies in which quasi-objects can express themselves in their complexity and multiplicity; to articulate and differentiate their habits and their associations (Latour 2004a). Otherwise, "we shall remain barbarians besieged by inhumans—and before Gaia we shall remain without a voice" (Latour 2013, 288).

Subsequently, we do not need to stop constructing objects, but rather construct them better by consciously involving the quasi-objects in the construction process, by constructing an adequate parliament of things. Nevertheless, as the critique of Stengers shows, there is no guarantee that such a parliament of things will work. But also, and contrary to the recent pessimism of Stengers and Latour, none that it will fail.

Notes

1. Nevertheless, there are also some clear criticisms of the term (e.g., Baskin 2015, Bonneuil and Fressoz 2016).

2. From the 1980s his admiration of structuralism weakens: Serres questions the possibility of such a metanarrative, although he remains faithful to his focus on relations rather than subjects of objects. He opens up his perspective to more mixed, mingled relationships and networks that have no clear boundaries, but are multiplicities
(Serres 1982, 17–18). Serres's style becomes more literary in his later work, and he focuses often on myths, fables or art, trying to let the relations within the text speak for themselves rather than speak in their name based on some kind of metanarrative (see Latour 1987a).

3. Quotations are translated by the author, unless when using existing translations.

4. Latour explicitly acknowledges the link between these concepts and Serres's philosophy of translation, for instance, in his book on Gaia where he states that these concepts are "another way of translating the argument of Serres concerning translation" (Latour 2015, 95n63).

5. The image he also uses is that of the discovery of irrational numbers, for instance in the diagonal of a square with sides of length one. For Greek philosophers, there were only rational numbers, but this diagonal confronted them with a new world:

From this contradiction, the third should have been excluded. But if that were the case, the said diagonal wouldn't exist; . . . From then on, the discovery of real numbers, spurting like a geyser from this absent fault line, insists that all other known numbers, at least in those days, be reduced to limit cases of this new form. . . . Soon one will not find anything but this third, as soon as its exclusion is pronounced. It was nothing, see how it becomes everything-or almost. (Serres 1997, 45)

In the same way, quasi-objects will become the rule, rather the exception once we recognize their existence.

6. Latour uses the notion of quasi-object, although he will occasionally replace it with his own terms. For instance Stengers and Latour speak of 'factishes' in opposition to fetishes (Latour 2010; Stengers 2010, 18–24). Latour also uses the term of 'thing' in contrast with object, pointing at the etymology of the word which referred in languages as diverse as Icelandic, German and Nordic (but also in the Roman notion *res publica*) to an assembly, a political discussion or a gathering (see Latour 2004b, 232–37; 2005a). That is why he speaks of the necessity of a *Dingpolitik* as well as a parliament of *things*. In his more recent work, Latour reaffirms that "we are actually dealing here with quasi-objects, to borrow a term from Michel Serres" (Latour 2013, 288).

7. This is in fact a presupposition on which Latour can be criticized. Stengers, for instance, in her work tries to make a more subtle distinction between technoscience and other forms of science (see Stengers, 2011a).

8. She mainly refers to behavioral psychology or mathematical economics: "The behavioral psychologist does not risk anything in accumulating facts about the rat trapped in its labyrinth, but the facts he or she accumulates do not interests many people, and do not generate any *problem* for them" (Stengers 1997, 88).

9. In his recent project on the modes of existence, he links this with the mode of existence of 'habit' [hab], which he calls "the most important, the most widespread, the most indispensable of the modes of existence, the one that takes up 99 percent of our lives, the one without which we could not exist" (Latour 2013, 264). Habit implies that in our daily practices we veil the translations we make in getting from one point to the other, without really omitting them. This works for the scientific practices as well, "so that one can *first* study the mediations and *then* bracket them because they are aligned thanks to the play of constants maintained from one form to the next" (Latour 2013, 276). For Latour, the problem is not this *veiling* of these translations, but rather the risk of omitting them: forgetting that they exist at all, and becoming unable

(in contrast to habit) in making them explicit once the chain breaks down (when a technology fails, a scientific fact is debunked, etc.).

10. This claim is in fact too strong, as I have argued elsewhere (see Simons 2016). Similar to Serres's confusion, Latour mixes up two possible conclusions: stating that we are *certain that we are uncertain*, which does not follow, the real conclusion is that we are *uncertain that*

we are certain. We can never be certain again that we can reduce particular quasi-objects to objects, although it might work for some cases.

11. This also shows itself in the strange paradox that Latour is a critic of geoengineering, but at the same time, for instance, has published an article in a book that is full of these geoengineering solutions (see Latour 2011). Here Latour refers to the story of Dr. Frankenstein: his mistake was not the creation of the monster, but rather abandoning it and by this making it into a monster. Nothing is by definition a monster, but becomes so if one does not take their consequences into account. However and against Latour, it seems likely that there are cases where monsters cannot be adopted, regardless of our care. One could contrast Latour's story with that of *The Fly* (1986), a movie by David Cronenberg, in which the protagonist mixes his DNA with that of a fly. Slowly, he transforms into a fly, escalating dramatically and resulting in his wife being obliged to shoot him. Obviously, taking care of our monsters might be a good cause, but this does not exclude that some monsters cannot be treated for and optimistic attempts to do so (rather than dismissing the technologies as being too dangerous) can be very problematic. As Timothy Morton states, "making something conscious doesn't mean it's nice. We have always been murdering people. How is deliberate murder more moral?" (Morton 2014, 262–63).

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