ROUVEN ERNST HAGEMEIJER

The Unmasking of the Other

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De ontmaskering van de 'ander'

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Promotoren:

Prof.dr. S.J. Magala

Prof.dr. H.K. Letiche

Overige leden:

Prof.dr. A. Klamer

Dr. S.D. Brown

Dr. A.J.J.A. Maas

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Preface

The writer would like to thank the following people:

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Naturally, there are others. However, what is understood need not be discussed (the interested reader should consult the *Van Halen: Right Here, Right Now* [live] two-disc box set for clues regarding the origin of the aforementioned phrase).

Table of contents

You are here

In our present day and age, it is not uncommon to encounter academics that consider their activities to be a part of the field of 'Critical Management Studies'. Since its introduction by Alvesson and Willmott at the beginning of the 1990s (1992, to be precise), the term has come to denote a particular stream or specialisation within the broader field of management studies / organisation theory and analysis. But what exactly *is* this thing called Critical Management Studies or 'CMS'? In order to provide an answer to this question, I will make use of a text by Fournier and Grey (2000) that is intended to present the reader with a short background of the aforementioned discipline.

Let us first spend some time on the conditions that made possible the emergence of a 'critical' approach to the study of management. Fournier and Grey (2000) identify three main issues:

- The privileging of management (pp. 10 – 11): in Britain, the advent of the 1980s was marked by a move towards the removal of both societal and legal barriers to the absolute power of management over corporations in the private as well as public sector. Interestingly enough, this move was supported / initiated by both the 'New Right' and 'New Labour' alike. In the eyes of the former, management was **the** main instrument to introduce the 'law of the market' to the public sector, which would result in the delivery of public services in terms of efficiency and accountability. For the latter, the privileging of management was to result in technical solutions for political problems. Both the Left and the Right saw management as the sole possessors of the knowledge that was needed to bring about these changes. In the academic world, this transition resulted in an increase of interest in the

activity of 'managing'; it was motivated by the fact that management attained total control of organisations everywhere and therefore became **the** single most important factor in their day-to-day operations.

- The internal crisis of management (pp. 12): the international success of Japanese corporations and the corresponding management techniques from the 1970s onwards lead to a reappraisal of the 'art' of management as it was defined in Western societies. It disrupted the status quo in thinking about organisations; up until that moment, management was seen as an essentially bureaucratic and administrative activity. The success of the Japanese lead to a realisation that management science was by no means the well-established and mature discipline people thought it to be. As such, it was no longer impervious to critique, which provided an opportunity for the development of alternative approaches.

- The assault on the functionalist position in the social sciences (pp. 13): here, we are dealing with a two-fold development. To begin with, the idea that the social sciences should simply copy the methodology and methods of the natural sciences was questioned from the 1950s onward. Social scientists started to ask the question whether such a transplant was actually possible, thus paving the way for alternative approaches. In addition, the assault on the functionalist position was aided by developments in the philosophy of science in (most notably) the 1960s[i]. Here, it was the questioning of the objectivity of the natural sciences themselves that created room for different approaches to the study of social phenomena.

The above seems to depict Critical Management Studies as a predominantly British affair. It certainly is true with respect to the embeddedness of the discipline within the academic community: although there are 'critical' scholars outside the UK, their numbers are small and their resources are limited[ii].

We now know a little more about the 'how' of CMS; therefore, the time has come to turn our attention to the 'what'. What is the aim of a 'critical study of management'? At first, the possibility of actually providing an answer to this question might seem impossible. After all, even a brief survey of the discipline creates the impression that CMS is some sort of intellectual as well as theoretical refugee camp. Here, one finds post-structuralism right next to phenomenology or gender studies; here, Actor Network Theory can be seen to mingle with critical realism. All with respect to the study of management and / or organisation(s), of course[iii].

Notwithstanding this amalgamation of ideas, there is a central theme or concern that can be used to characterise the discipline as a whole. The aim of a critical approach to organisations and management in general is to emancipate those who are being excluded, repressed or neglected in theory as well as in practice (Alvesson and Willmott, 1992)[iv]. It is about *the Other*. Or is it?

I will explain myself. The Other is a concept that has become a topic of interest in broader social inquiry as well[v]. It is meant to encompass that, which is foreign to a particular arrangement of individuals, whereby the latter is usually referred to as the *Same*. The concern for the Other expresses an interest in the identities and subjectivities, which are (and, more importantly, are **not**) available to the people in question. The question of Otherness is closely related to the labour of deconstruction; the latter can broadly be defined as a disproval of the assumed immutability of (social) entities by uncovering their constructed nature[vi]. Deconstruction opens up a space in which it is possible to construct alternatives, thus providing a possibility for the emergence of Otherness.

Signpost

Notwithstanding the fact that the aforementioned goal of CMS indeed expresses a concern with the Other, I intend to demonstrate that it does not actually conceptualise it as such; that is, it does not define the Other *as* Other. Put differently: within the discipline of Critical Management Studies, there exists a discrepancy between what the idea of the Other is meant to refer to and what it *is* actually referring to. Furthermore, there is also a definite ethical dimension to the aforementioned goal in that there is a tacit assumption that the emancipation of the Other is in fact the right thing to do. It is therefore legitimate to ask why this might be the case and, in addition, if it really is the right thing to do.

Destination

The object of this book, then: to provide an analysis as well as an appraisal of the conception of the Other, as it is to be found in the field of Critical Management Studies. To be precise, I will provide an answer to each of the following questions:

1. In what manner is the conception of the Other, as it is employed in the field of Critical Management Studies, constructed?
2. In what manner should one conceive the *actual* Other, i.e. how *is* it to be constructed?
3. What are the consequences of the emancipation of the Other, i.e. the emancipation of the Other *as* Other?

Now, one does not hit the road without any directions as to how to get to one's intended destination. Unless you want to end up in a ditch by the side of the road, of course. Consequentially, I need some sort of itinerary. Here it is:

- *Pandemonium* (I): where to begin with an endeavour like the one I have outlined above? After all, the field of Critical Management Studies comprises a considerable body of academic work. Fortunately enough, every discipline knows at least a few authors that have left a lasting impression on it. Gibson Burrell is undoubtedly one of them: his name is attached to some of the most influential texts in the field of critical Organisation Theory. I will therefore treat his work as being representative of the broader field of Critical Management Studies, i.e. I intend to use his ideas as a point of access to those of (a substantial part of) Critical Management Studies in general. Through an extensive analysis of his book *Pandemonium*, which is to be seen as the textual nexus of his various theoretical endeavours, I will explicate the conception of the Other that provides the basis for his thinking. In addition, I also intend to show why he values the emancipation of the Other.

- *Method* (II), *Multiplicity* (III), *Space – Time* (IV), *Order – Disorder* (V): to try to discuss the work of Michel Serres piecemeal would be an exercise in futility. Although he is not (yet) as widely known as for instance Michel Foucault or Gilles Deleuze, his ideas are arguably more sophisticated than those of any other philosopher (be it dead or alive). In addition, Michel Serres is the leading thinker with respect to the question of the Other / Otherness. As a result, his work provides a wellspring of ideas on which I can draw in order to develop a conception of the Other as Other. Chapter III provides an explication of the nucleus of Serres' thinking by discussing his core concept of 'multiplicity' or '*noise*'. Chapter IV discusses Serres' ideas on what, essentially, can be called the history of human relations and its relationship to the concept

of multiplicity. Chapter V brings the discussion to an end by demonstrating how the transition from a disordered to an ordered multiplicity comes about (the latter is to be equated with the Same). Taken together, these three chapters present a comprehensive investigation of the different dimensions of the Other as Other. However, in chapter I, I start off by discussing the method Michel Serres employs. Seeing that he is one of the very few intellectuals for whom style indeed equals content, a better understanding of the one enables a better understanding of the other as well.

- *Dénouement* (VI): this chapter knots the various theoretical strands of my argument together by comparing Serres' conception of the Other to that of Burrell. In addition, I also address the issue of the supposed desirability of the emancipation of the Other. Although I, like any decent writer, will not divulge any specifics at this point, I can tell you that Burrell's and, consequentially, CMS's conception of the Other turns out to be a mere derivative of the Same, i.e. 'Another'.

I have provided a reason for my wish to explore the concept of the Other; I have provided an exact destination for the intellectual journey I intend to undertake; I have also drawn up an itinerary that shows how I can get there. As such, it is time to hit the road. First stop: Pandemonium.

Notes

[i] The prime example of said development is without any doubt whatsoever the whole Kuhnian-inspired debate between (most notably) Popper, Lakatos, Feyerabend and Kuhn himself.

[ii] The British nature of the whole enterprise is also noted by Fournier and Grey (2000: pp. 14).

[iii] Notwithstanding the fact that the discipline is referred to as Critical *Management* Studies, its focus has widened to include the study of the concept of (the) organisation as well.

[iv] Fournier and Grey (2000) essentially come to the same conclusion. According to them, CMS is 'non-performative' (pp. 17) and practices 'denaturalisation' (pp. 18). The former refers to the fact that critical approaches to organisation and management reject the maximisation of profit and revenues as the only legitimate (business) goal and seek to expose its consequences instead. The latter is meant to point out the fact that critical work does not accept particular organisational / managerial practices as being the only, 'natural' way of doing things and, in addition, seeks to uncover the alternatives.

[v] The idea of the Other or 'Otherness' is not restricted to the realm of the social but is applicable to the realm of the theoretical as well. However, seeing that my concern in this thesis is with management and organisation (of people or persons), I intend to restrict my inquiry to issues of a social nature.

[vi] My definition of 'deconstruction' differs from the way in which it is used by Derrida. Although the term is generally associated with his work, I did not want to exclude other academics that have undertaken similar labours.

Rationale

Why the writings of Gibson Burrell? To begin with, Burrell's name graces the cover of *Sociological Paradigms and Organisational Analysis* (with Morgan, 1979), which is a frequently cited publication that found itself right at the beginning of the whole Kuhnian-inspired debate regarding the foundations of (the field of) Organisation Theory in the 1980's. In addition, his name is attached to two important texts on postmodern philosophical thought and its relation to Organisation Theory (Burrell, 1988 and Cooper and Burrell, 1988)[i], although the use of the term 'postmodern(ism)', with hindsight, clearly can be seen as a rather unfortunate choice. Finally, he is a co-founder as well as an editor of *Organization*, which is (arguably) the most important journal in the field of Critical Management Studies.

So much for the 'who' of my analysis; time to move on to the 'what'. I have chosen to use Burrell's *Pandemonium* (1997) as the focal point of my discussion. Not taking into account the *Paradigms*-book (Burrell and Morgan, 1979), which I **will** address elsewhere, *Pandemonium* can be seen as the nexus of Burrell's various writings since the publication of the former. For instance: his writings on sexuality and organisation (Burrell, 1987 and 1992a) are revisited on pp. 210 => of *Pandemonium*; his ideas regarding linearity and death (Burrell, 1998) appear on pp. 134 =>; the influence of modernism on the university (Burrell, 1993) is discussed on pp. <= 192 and his investigation of the concept of time (Burrell, 1992b) is to be found on pp. <= 52.

Does this mean that we need to take *Pandemonium* as a collection of unrelated writings, a mere regurgitation of the already-said, intended to provide the academic in question with an easy additional publication? No (at least not with regard to the former). Although Burrell himself claims that the book does not provide an integrated argument (1997: pp. 28), there **is** a thread that connects these

topics with each another. As such, the text(s) in question are related to one another.

Point of departure

The aim of *Pandemonium* is to provide a critique of the conceptualisation of the organisation as it is to be found in mainstream Organisation Theory[ii]. To be precise, Burrell's critique is directed at the fact that said conceptualisation is based on the principle of *rationality* (1997: pp. 11), which, according to him, can be seen as a legacy of the Enlightenment (1997: pp. 27 – 28). But why is it that the centrality of the principle of rationality has to been seen as problematic with regard to the study of organisations? Because it gives rise to the following four (major) problems: 1. it employs a *linear* form of organising, 2. it fails to recognise that organisations produce and even thrive on *death*, 3. it ignores *sexuality* and 3. it only makes use of knowledge that is *scientific*. Let us, in order to understand, address these problems one at a time[iii].

Linearity

What exactly does that mean, a linear form of organising? And why does rationality lead to linearity? Here, the idea of the linear organisation is meant to denote the *bureaucracy* (Burrell, 1997: pp. 10). As such, the fact that rationality leads to linearity should not come as a surprise. After all, rationality is achieved through the use of *reason*. Reason is analytical and logical; through its use, one (at least when one is, as is the case here, concerned with organisation and production) determines the necessary steps as well as the way in which these are to be arranged in order to accomplish a certain pre-determined goal. And the bureaucracy, to be

envisioned as a straight vertical line (ibid.), with its clear top-down delineation of tasks and responsibilities, its 'command-and-control' approach, and its reliance upon strict schedules and procedures is ideally suited to ensure that these steps are in fact carried out as intended.

Why is this linearity problematic? Because:

"… they lose all trappings of individuality by having their identity stripped away from them, are treated as numbers…" (Burrell, 1997: pp. 142)

The people 'processed' in and through (a) linear organisation are not treated as people; the organisation takes away their faces and turns them into objects instead. How? Its procedures apply to each and every person, everything is carried out according to a specific schedule. What the organisation's employees can and cannot do is spelled out meticulously and solely dependent upon their position within the organisation; there is no room, no need even to concern themselves with the peculiarities of those sitting at the other side of their desks. The entire process is designed to fit the entire clientele into the organisation's mould instead of vice versa.

The argument of 'objectification', however, also holds for those working **in** the linear organisation, i.e. the 'processors'. They are seen as resources to be used; like cogs in a machine, everyone has his / hers specific tasks and responsibilities. There is no room for initiative: they merely need to do what 'they have been told'[iv]. Here, too, there is no need to 'show one's face' at work.

Death

The argument regarding rationality and death is an extension of the one regarding linearity and rationality. Seeing the nature of the problem, however, it is preferable to discuss it separately. The argument itself revolves around the neglect (in

Organisation Theory) of the production of death on a large scale by the modern organisation.

According to Burrell (1997: 138), it is not often recognised that the modern organisation is dependent on the large-scale production of death for its own continuity. The example he provides is that of McDonalds, which generates its revenues by killing large numbers of animals (such as cows and chickens). Naturally, the same argument applies to the business practices of Burger King and Kentucky Fried Chicken as well. In addition, many practices that are to be found in the bio-industry, such as the use of battery cages, do not actually kill the animals in question but make them suffer substantially instead.

This 'death dealing' is, however, not restricted to animals alone. Man suffers just as much on a regular basis. The obvious references here are the Nazi concentration camps and the Stalinist-ones that were to be found in Russia halfway the 20th century. With regard to the former, Burrell (1997: pp. 143) notes that both scientists and businessmen alike actively and willingly participated in their realisation.

These large-scale killings, which are generally unproblematic for those who have to carry them out, are the result of the combination of the linear organisation with the concept of rationality (Burrell, 1997: pp. 141)[v]. The bureaucracy, when coupled with reason, can kill with ease. We all know how this particular combination is able to process large numbers of units, be it humans or animals. The real question is why these killings are unproblematic. Why are people able to take the lives of so many other living beings without any significant problems? Because such a system creates a climate of moral indifference (Burrell, 1997: pp. 142).

The problem of moral indifference is related to the fact that the linear organisation 'objectifies' its clients (although, here, 'client' has a somewhat sarcastic ring to it). The people who work in such an organisation no longer see their clients as living beings; they are merely units that need to be processed

before the end of the day. In such conditions, there is no possibility of reciprocal interaction with those in front of you, no possibility of developing rapport. You do not experience feelings of pity or guilt; you just want to meet your daily quota.

Why is all of this neglected in Organisation Theory? These organisations are *abattoirs* (Burrell, 1997: pp. 138). Abattoirs, as we all undoubtedly know, are full of *waste*, of garbage. It does not matter whether one is thinking of the refuse that is produced by the processing of animals or of the dead corpses or carcasses of people instead: death is messy, dirty and unpleasant. It is this very waste that is anathema to rationality. Rationality is about efficiency, it is about maximising production, it is about analysis, it is about optimal arrangements, about utilising the available resources to the fullest extent possible, it is concise, it is clean, it abhors waste. How could a field of study that centres upon rationality as well as the reason, by which it is produced, ever pay attention to something like death, the death that can be dispensed so easily through that very same rationality?

Sexuality

Sexuality in the workplace is detrimental to production. Why? Because it is inefficient: the time and energy consumed by intercourse result in a sup-optimal output (Burrell, 1997: pp 219). After all, instead of undertaking activities that benefit the boss, one is undertaking activities that benefit one's own desires. As a result, there exists a need to introduce measures that prohibit sexual practices during working hours as well as put its energies to other uses. The linear form of organising, with its clearly delineated tasks and responsibilities, provides one possible solution to this problem, for it considerably regulates interpersonal contact. Another (related) solution is to make the transition from domestic production to the factory system (Burrell, 1997: pp. 218). Whereas the home environment provides a private place where sexual desires can easily get in the way of work, the concentration of production at a single location makes it possible

to vastly increase the regulation and surveillance of the behaviour of one's own employees.

However, sexuality is by no means excluded from the present-day organisation. Notwithstanding the aforementioned efforts, the problem is still present within many organisations, only this time it is one of a different kind. It is one of domination, the domination of women by men.

Sex is not only about pleasure, it is also about power; the power of men over women, to be precise (Burrell, 1997: pp. 212). Why is that? For Burrell, it is all about the *penetrative* act (1997: pp. 211)[vi]. During intercourse between man and woman, it is the former who performs the sexual act by penetrating (perhaps even invading?) his female partner. He is the active party: *he* takes *her*. As such, it is not difficult to understand why the phallus has to be seen as a symbol of power (Burrell, 1997: pp. 212).

One telling example of the relation between the preceding and the modern organisation is the fact that they increasingly represent their female employees as sexual objects in their advertisements (Burrell, 1997: pp. 230). In addition, these advertisements also contain a number of phallic shapes, which are related to the organisation in question (ibid.). In doing so, the female figure is clearly positioned in a subservient position vis-à-vis the male organisation. She is 'ready for the taking', so to say.

Another one is the fact that organisations, especially at the higher levels of management, are replete with various forms of sexual harassment (Burrell, 1997: pp. 220). It really should need no further explanation that managers, in doing so, assert their power over their female employees. Through these practices, they (try to) place the women in question in a subordinate position vis-à-vis themselves. Such behaviour should be seen as both a testament to and of their power within the organisation.

So how does this relate to mainstream Organisation Theory? Its focus on rationality does not concern itself with issues of sexuality for the latter is not

rational at all, as we have seen. It, quite simply, falls outside the scope of its attention. Yes, there may very well be some attention for the practices of harassment as mentioned above but they will, in all likelihood, be seen as caused by questionable morals on the part of management. As such, Organisation Theory completely fails to recognise that the degradation of the feminine within organisations is of a much more fundamental nature.

Scientific knowledge

What, then, might be the problem with science? To begin with, scientific thought is based on *logic* (Burrell, 1997: pp. 95); logic, here, should be understood as *reason*. Scientific though or knowledge, therefore, is 'in cahoots' with rationality: the latter can be seen as the goal of the former. In addition, scientific knowledge can also be put to use within organisations to further rationalise them. Naturally, this goes for both the design of the production process and the utilisation of the human 'resource'. A good example of the former is the discipline called 'operations research'. Two prime examples of the way in which knowledge can be used to 'objectify' employees are F. W. Taylor's time-and-motion studies, who is also mentioned by Burrell with respect to this topic (1997: pp. 136), and Elton Mayo's Hawthorne experiments. It is interesting to note that the latter is one of the very first examples of what is nowadays called 'Human Resource Management' (has there ever been a more telling name?)[vii].

In doing so, the scientific process, according to Burrell (1997, pp. 96), can be characterised in the following way: "… science deals only with externals, such as symptoms and appearances and their causes…" That is to say, science is not interested in determining the 'why' of the phenomena it studies but solely focuses on the 'how'. To be able to determine the latter, it ignores the relationships that exist between phenomena (Burrell, 1997: pp. 95), which is to say that it isolates them from one another in order to study them separately instead. As such, it only

takes into account interpersonal relationships and circumstances that directly relate to the work performed (just think of the lighting experiments conducted during the Hawthorne studies), thus ignoring other kinds of relationships.

We now know what is problematic about the mainstream-conceptualisation of the organisation; we do not know, however, why it is problematic. To find out, we have to follow Burrell into the streets of *Pandemonium*.

Through the gates

'Pandemonium' is the concept that Burrell introduces as an alternative for the conceptualisation of the rational organisation. Yet concept is not quite the right word for it: it is more of an expansive metaphor that, as becomes clear when one is reading the first few pages, designates a city. A medieval one, it should be noted (Burrell, 1997: pp. 33). Yet, it is a kind of city that has, at no point in time, actually existed. As we shall see, Burrell uses this imagined city to represent a number of characteristics that, for *him*, are characteristic of medieval times[viii]. Let us take a closer look.

Pandemonium: although it almost seems like a contradiction, this city is in fact organised in the very same way as a rural community (Burrell, 1997: pp. 84). This reference to life in the countryside implies a group of people with strong interpersonal ties, able to provide both food and shelter for themselves by performing a number of different tasks through their mastery of a number of different skills, who help one another if necessary. Here, one is not 'objectified', not a resource to be exploited, not a cog with narrow responsibilities. No, in the countryside, it is all about *people*; the emphasis is on the person and his or her

abilities. For Burrell, the countryside stands for the appreciation of the person *as* a person; here, one still has a face.

A community in which *death* is a part of daily life. The lack of proper personal hygiene as well as the absence of sewers (one should keep in mind that these *are* the Middle Ages) make for an excellent breeding ground for all sorts of diseases (Burrell, 1997: pp. 36). Most of us will have no trouble to envision streets that are littered with waste, blocked by piles of garbage and rife with the smell of decay. Here, reason can run but it cannot hide from the 'dirty' facts of life.

Pandemonium: in this city, sexuality is not frowned upon but taken for granted instead; in addition, there are no notable efforts made to conceal sexual activity from the eyes of others (Burrell, 1997: pp. 38). Sexuality and sexual pleasure are not repressed and / or denied, they are accepted as being integral parts of one's life; here, sexuality is not a matter of waste or inefficiency. Such an environment prevents one from ignoring or denying sexuality as having a place in (organised) interpersonal relationships. In addition, the practice of witchcraft (not uncommon in medieval times) and its focus on the body provides women with the means of developing their own sexuality (Burrell, 1997: pp. 203). As a result, there is room for both questioning the domination of male sexuality and a redefinition of the structure of the sexual relationship between man and woman.

Pandemonium: here, there is no rational knowledge to be found anywhere. Instead, its inhabitants rely on esoteric forms of knowledge such as Rosicrucianism and cabbalism (Burrell, 1997: pp. 109 and 95, respectively). Esoteric knowledge is holistic in that it takes into account the connections existing between phenomena, be it social or natural ones (Burrell, 1997: pp. 96). In addition, it is "… open only to those judged worthy by their way of life…" (ibid.).

Now, at first sight, it appears that the possession of esoteric knowledge is reserved for a certain elite, the 'happy few'; at least, the quote above seems to suggest as much. True as it might be, the possession of esoteric knowledge is also dependent upon and perhaps even appreciative of the 'person' of the person in

question, i.e. of who one is and what one has done in life. This kind of knowledge does not 'objectify' people, it values their personal qualities instead[ix]. What is more, esotericism is also concerned with the context in which a particular phenomenon is situated; unlike science, it does not separate the two. Here, there **is** an interest in the 'why'. As such, even when someone is at work, there is more that is to be known about this person than his immediate responsibilities on the job. **Not** because doing so will lead to further increases in productivity but because these qualities represent something that is to be valued in its own right instead.

Obviously, one question remains. I have talked about a city, and a rural one at that. How should one call the people who live in this peculiar city? Here, we are not dealing with aristocrats or clergymen. Not with those belonging to the working class either, for that matter. No, the city of Pandemonium and its 'streets' are populated by *peasants* (see, for instance, Burrell, 1997: pp. 57). As, of course, is already implied by the notion of a rural community. It is the peasant to whom all of the preceding applies. Let us leave it at that, at least for the moment. I will return to this figure later on.

Lines and thought

Is that all there is? Yes. Most of the remaining pages provide examples that are meant to further illustrate Burrell's claims. Granted, he also discusses such topics as the relation between the processes of industrialisation across the globe and the peasantry (Burrell, 1997: <= 109); these discussions do not, however, add anything of relevance to his critique of mainstream Organisation Theory.

Still: why? Why exactly are the four problems, as identified by Burrell, problematic to begin with? Why should we prefer the alternatives provided by the

metaphor called 'Pandemonium'? And why, for that matter, does Burrell employ a medieval metaphor to provide us with alternatives?

Intermezzo: before continuing, I want to say a word or two about the structure of Burrell's text. To begin with, he has divided every page (not taking into account the first three introductory chapters) into half. Now, on the top half, the text is presented in the manner with which we are all familiar: it runs downwards from left to right until the bottom of the top half is reached, only to continue on the next page. It does so until it reaches the last page of the book; there, it reverses direction and continues on the lower half of the page, i.e. from the end to the beginning of the book, still running downwards from left to right until it reaches the bottom of the lower half.

What may be the reason for all of this? In his own words (Burrell, 1997: pp. 27):

"Writing is a linear activity in which – in the Western tradition – we begin at the top left of the page and move downwards and rightwards in the text to the conclusion of the argument. This is profoundly limiting for it encourages simple presentations, clarity of exposition, linearity of argument and reliance on logic."[x]

Here, sadly enough, Burrell confounds a *technique* of inscription with the *form(s)*, in which one can communicate one's ideas. Anyone familiar with the work of French author Marcel Proust knows all too well that you can write from 'top left to bottom right' without creatively / intellectually limiting oneself at all[xi]. Furthermore, Burrell's text both begins and ends on page 35. As a result, it assumes the shape of a circle (the circular form returns in the map of the city of Pandemonium, which is to be found at the very beginning of the book). As we all know, a circle is nothing but a **straight line** that comes back upon itself. Ultimately, Burrell's text (or, rather, the argument it presents us with) is still a perfectly linear one[xii].

Again: why does Burrell go back to medieval times? Because the Middle Ages have to be seen as being *pre*-modern (Burrell, 1997: pp. 16), which (in the context of his work) has to be understood as pre-rational. In the countryside of these dark times, one has the possibility of finding alternatives for the rational, linear way of organising human life. Just like Foucault, who (in his books) revisits distant periods in time in order to 'de-naturalise' various concepts (such as madness), Burrell goes back in time to escape from a world so indebted to the Enlightenment that one has difficulties to come up with non-rational alternatives (1997: pp. 5)[xiii]. He goes back to construct an alternative for mainstream Organisation Theory appropriately called 'retro-organisation theory' (Burrell, 1997: pp. 27).

Once more: why *should* we prefer the alternatives that are outlined by the metaphor called 'Pandemonium'? Because Pandemonium is about the *human(e)*. It outlines a number of alternatives, which are all about the appreciation and valuation of people as persons, i.e. of being human. Let us briefly revisit my earlier discussion:

- Pandemonium shows us that people have a face, it shows us that is they are not resources or objects but unique beings of flesh and blood instead;
- Pandemonium reminds us of the fact that death is a part of life in general and is therefore not excluded from organisations, which, in turn, should make possible the recognition that all sorts of organisations show a complete disregard for both human and animal life;
- In Pandemonium, sexuality is a part of daily life as well, which is therefore not excluded from organisations either. Here, the recognition of sexuality as a part of organisational life should make it first of all possible to discuss the denigration of women through male sexuality.

> What is more, the fact that sexuality **is** an integral part of life necessitates that it be given a place within thinking about organisations, in order to do it both justice as well as to avoid any asymmetries between men and women[xiv] *and*
>
> - The knowledge used in Pandemonium is appreciative of a person's *humanity*, which can be seen as a call for the development of knowledge about organisations that does so as well.

Yes, all do indeed revolve around an idea of the existence of a fundamental human quality (I will leave aside the question as to whether the decidedly 'essentialist' connotation that it possesses is still tenable in the face of post-structuralism). Of course, Burrell's argument also implies that one should take it into account in both theory and practice because it would be the *right* thing to do. There definitely is an ethical dimension to the whole discussion[xv].

But what does Pandemonium itself represent, what does it stand for? I am not talking about the specific content it refers to; I am talking about the relationship in which it stands vis-à-vis the rational organisation, vis-à-vis the conceptualisation it is meant to replace. Pandemonium stands for, as I have shown, the repressed, the ignored, the denied, the neglected. To be precise: it stands for that, which is not a part of a particular point of reference. Pandemonium represents *the Other*. In short: *Pandemonium*, as a book, is about the liberation and recognition of the Other, which is supposed to produce more human(e) organisations.

In what manner does the Other relate to its point of reference? In his text, Burrell creates a number of dichotomies. Each of these dichotomies is based upon a particular dimension, such as gender or sexuality; furthermore, its constituting parts are located on opposite sides of the dimension. One of these parts signifies the status quo and serves as a point of reference for the remaining part, which

represents the Other. Burrell calls them mainstream (modernist, RH) Organisation Theory and retro-organisation theory, respectively[xvi].

In this respect, Burrell has definitely not moved away from his academic beginnings. His first major (co-authored) academic feat, the aforementioned *Sociological Paradigms and Organisational Analysis* (with Morgan, 1979), is also based upon such simple dichotomies to identify the paradigms the title refers to. Yes, at first sight, this book seems to be a little more sophisticated due to its reliance on a two-by-two matrix, which is produced by two dimensions (Burrell and Morgan, 1979: pp. 22) called 'subjective – objective' and 'regulation – change', respectively. However, for analytical purposes, it matters little whether one assumes the existence of a transcendental (societal or organisational) reality 'out there' or a socially constructed one instead (i.e. the subjective – objective dimension); in both cases, it is possible to produce knowledge about the 'real', albeit in different ways. The essential question concerns the nature of the realities thus depicted: do or do they not repress certain classes of people (i.e. the regulation – change dimension, see pp. 17)? Although Burrell would probably never admit it, he himself has travelled along an academic straight line ever since 1979.

With that last remark, we have arrived at the end of the present chapter. The time has come to leave the world of Organisation Theory behind us and move on to another one: it is the world of the Greek god *Hermes*.

Notes

[i] These two texts do not, however, figure in the remainder of this chapter because they strive to present an overview of the thought of others instead of those of the author(s) in question.

[ii] It is important to note the following (Burrell, 1997: pp. 13): "As a discipline we have only looked at those who walk and those who stand, not at those who keep their head down." The 'we' refers to Organisation Theory in general, which, here, is to be equated to mainstream Organisation Theory. The quote makes it quite clear that (mainstream) *theory*, in Burrell's opinion, neglects aspects of actual organisational *praxis*. As a result, his arguments will, from time to time, directly relate to this praxis.

[iii] It is not my intention to address the question whether or not Burrell's arguments are in fact correct.

[iv] Burrell's discussion of the use of *panopticism* in (present-day) corporations (1997: pp. <= 234) provides a telling example of how panoptic principles can be used to ensure that employees completely subject themselves to the law of the linear organisation.

[v] At the same time, Burrell acknowledges that rationality and linearity, when combined with one another, do not automatically equal death; one also needs other components, such as (for instance) an ideology of extermination (1997: pp. 141).

[vi] Burrell refers to this as *satyriasis* (1997: pp. 211), after the creature that is to be found in Greek mythology. The satyr is best known for his incredible sexual appetite, which he satisfied by having his way with innocent nymphs.

[vii] Here, scientific knowledge refers to both the natural and social sciences, whereby the Hawthorne experiments naturally belong to the latter. Apart from the fact that Taylor's work is borderline in that it concerns both the organisation's production processes as well as the utilisation of one's employees, one could argue that his work is not really scientific. Leaving aside whether such a claim is correct or not, his work is clearly aimed at 'rationalisation', which justifies the fact that he is mentioned here.

[viii] Why call such an imaginary city 'Pandemonium'? For Burrell, its characteristics are exemplary of the hellish abode of the Devil (1997: pp. 29).

[ix] Obviously, the witchcraft I mentioned in relation to the development of (a) female sexuality is also a form of esoteric knowledge. Its restricted character fits the present discussion quite nicely (after all, the population of witches was / is (?) predominantly female).

[x] Burrell's use of references to non-academic sources and ideas (such as Hell, for instance), can be seen as yet another attempt to avoid stifling his own creativity by relying on only a limited number of sources.

[xi] I am referring to Proust's literary masterpiece *À la recherche du temps perdu*. The book tells the story of a man, who is trying to recover the memories of his past. Although the text is printed in the traditional way, the narrative itself is far from linear. A single encounter with a specific smell or taste is enough to evoke memories of times past, thereby sending the narrative off on a tangent. In this way, different periods of the protagonist's life alternate with one another in a **non**-chronological fashion.

[xii] In addition, Burrell has also chosen to place both the acknowledgements and the bibliography in the middle of the book. Doing something like that, however, only annoys people and does not create 'possibilities' in any form or fashion.

[xiii] Although he does not acknowledge the debt he, in doing so, owes to Foucault.
[xiv] Burrell calls this the 're-eroticisation' of organisations (1997: pp. 236 and 1992a: pp. 78 =>). Naturally, as is often the case with such 'grand' ideas, there is little mention of how one should accomplish such a feat in practice.
[xv] If one compares Burrell's critique of mainstream organisation theory with the alternatives that he attributes to the idea of 'Pandemonium', one could legitimately ask oneself whether the latter does add anything substantial that could not be added by the former alone. Does one really need to revert to medieval times in order to come up with an alternative to mainstream Organisation Theory as it is envisioned here?
[xvi] Speaking of dichotomies: when Burrell (1997: pp. 98-97) calls on us to focus on the peasant instead of the blue-collar worker (the rationale being that the latter is nothing but a more recent generation of the former), there is a definite sense of irony to it. After all, the blue-collar worker, who has been a topic of interest in Critical Management Studies since its very beginnings, should now be put aside in order to focus on another figure. Apparently, Critical Management Scholars are prone to practices of marginalisation as well.

Method

There and back again

Plato. Zola. Brillouin. Pascal. Hugo. Kant. Balzac. Archimedes. Livius. Schrödinger. Bergson. La Fontaine. Dumézil. Beaumarchais. Leibniz. Homeros. Boltzmann. Descartes. Verne. Lucretius. Girard. Carnot. Michelet. Maxwell. The list is by no means exhaustive. These are only some of the sources used by Michel Serres in his philosophical explorations. A mainstay of contemporary French philosophy, he is certainly one of the field's most prolific writers and arguably the most original of them all; seldom has anyone undertaken such diverse intellectual journeys.

Original *and* difficult at the same time. Although Serres' work is widely read in his native country of France (Paulson: 2000), his theoretical movements without a doubt confound the majority of those who have read one of his books; alas, such is the faith of the layperson. Yet, to follow in Serres' tracks is by no means a straightforward exercise for the intellectual either. To begin with, the authors mentioned encompass the natural sciences as well as the humanities. Notwithstanding the fact that it is considered good academic practice to situate one's work in either one of these fields, Serres refuses to stay within the borders as delineated by their respective definitions. He irreverently crosses them time and time again in order to mingle science with literature and philosophy. Serres' transgressions are by no means self-explanatory, however. They raise the following question: how does one move between fields that are seemingly *heterologous*, concerning themselves with nature and culture, respectively? Would such a difference not bar passage from one to the other and vice versa?

Furthermore, the works of these authors stem from different periods in time and, taken together, cover a total of more than two thousand years of human thought. Here, Serres moves across borders as well, in casu temporal ones, juxtaposing texts with one another irrespective of their respective places in history.

As a result, Plato suddenly finds himself in the company of Maxwell and Lucretius becomes a colleague of Schrödinger. Is it actually possible to perform such temporal dislocations? Or do the years by which these texts are separated from one another present Serres with an insurmountable barrier, a barrier that reduces his efforts to an exercise in futility[i]?

In order to provide an answer to these questions, we need to focus our attention on the *method* that is used by Michel Serres in the course of his philosophical investigations[ii]. What method does he use when studying such an eclectic (for some, at least) collection of authors, what method enables him to create his own philosophy on the basis of such an epistemic[iii] variety?

Is it really necessary for me to spend a considerable amount of time and effort on the question of method? After all, most academics that make use of the ideas of others simply do so without concerning themselves with any such questions. To simply follow in the footsteps of someone else, to build upon another person's ideas certainly constitutes a legitimate academic practice. Admittedly, I could do the same; however, as Brown (2000: pp.1) notes in his discussion of Serres' thinking, the aforementioned movements across the intellectual landscape could very well be construed as "… the very worst kind of postmodern carnival…" Personally, I do not particularly like the carnival; I prefer to go to the more learned places instead.

Heeding Plato

In order to be able to follow Serres' analytical chain of thought, I need to provide an explanation of the way in which he conceives the development of knowledge first. The necessity to do so lies in the fact that his analyses are directly related to

his conception of said development[iv]; to explain the former without first doing the same for the latter would render the discussion largely unintelligible.

A word of caution: although French philosophy has always concerned itself at length with questions of an epistemological nature, Serres' epistemic explorations do not belong to that venerable tradition. I realise that such a claim probably sounds a little confusing at first. However, as the remainder of this chapter will show, his analyses merely serve as means to an entirely different end: through them, Serres wishes to learn more about the world, the one we call our own.

So: how does Serres conceive the development of knowledge? To provide an answer to this question, I need to explain how he conceives 'knowledge' first. After all, an inquiry into the way in which the process unfolds will not uncover anything substantial if one does not have a clear idea of **what** is actually evolving to begin with. For Serres, knowledge can be represented in the form of a *network* ([1968] 1991: pp. 9):

"… it [consists of, RH] a number of points… that are interrelated through a number of bifurcations. Every point represents a thesis or a univocally definable element belonging to a well-defined empirical set. Every path represents a connection or relation between two or more theses or… two or more elements belonging to the empirical situation in question." (*my* translation)

Why a network? It is an elegant solution that can easily be applied to a variety of topics. This particular definition distinguishes two interrelated ways in which it can be utilised: one can apply it either to abstractions or actual historical phenomena, i.e. to the realm of the conceptual or to that of the empirical (Serres, [1968] 1991: pp. 23). In the case of the latter, one obtains a representation or graph that depicts the process by which historical entities or events have been produced.

The former makes it possible to consider knowledge *in general* in terms of a collection of interconnected nodes[v].

Still, this conception of the network leaves us with two questions:

1. What is the nature of these nodes, i.e. what is it that acts as a node *and*
2. Where in the network is the knowledge to be found?

Notwithstanding Serres' assertion that each and every one of these points or nodes represents a thesis, the latter does **not** provide us with the answer we are looking for. Why? A thesis or proposition is a theoretical composite: it is composed of a number of other elements. A thesis is not elementary.

What, then, might this elementary element be? Later on, Serres, in his discussion of the various views on the development of knowledge, tacitly introduces a refinement of his conception of the network by using the idea of the 'concept' as the appropriate unit of analysis ([1968] 1991: pp. 103 – 151). Serres' choice is not an entirely unexpected one: the central position that is occupied by the idea of the concept in the epistemic endeavour in general becomes apparent as soon as one is willing to spend some time on examining any one discipline. There are concepts to be found everywhere. My own text is awash with them as well: I talk of nodes, phenomena, graphs, methods and so on and so forth.

We now have a number of concepts that are connected to one another by a number of well-defined relations[vi]. How does this conception of the network present us with knowledge? That is, where does the knowledge reside within this representation? Exactly there, **in** the network itself; knowledge consists in the network, it is to be found in its interstices, it is embodied within its precise configuration. These concepts and their interconnections describe a process or state of things; they tell us something about the world, the one that we call our own. Let me therefore, at least for the moment, define a body of knowledge[vii] as a

network of interrelated concepts. Such a definition leaves enough room for any amendments that might become necessary during the course of the discussion.

In any case, the development of a particular body of knowledge becomes a matter of the development of the corresponding network[viii]. The traditional conception of said development can be characterised as *connected* (Serres, [1968] 1991: pp. 127 =>). Here, development is conceived in terms of the expansion and the refinement of the network. Over time, new concepts are added to the net without disrupting its initial configuration; as such, new knowledge both relates to and builds upon the knowledge that is already present without affecting the latter's status **as** knowledge. Furthermore, this process is accompanied by a continuous refinement of the concepts in question that does not affect their respective positions.

Why call such a process 'connected'? The term refers to the idea of *perfect* communication. For Serres, to qualify the development of knowledge as 'connected' is to say that there is no loss of information (i.e. concepts) as the process progresses (Serres, [1968] 1991: pp. 127). What does that exactly entail, no loss of information? It first of all refers to the fact that information *accumulates* over time: once a concept is introduced into the network, it remains there in its original position. At no point in time is it removed. In addition, it also means that the information in question at no point in time experiences any deformation; its content remains *as is*. This, in terms of the present discussion, corresponds to the fact that concepts within the network retain their original positions. After all, it is the position of the concept that determines its signification.

The development of knowledge, however, should not be characterised as connected but as *non-connected* instead (Serres, [1968] 1991: pp. 127 and 134=>)[ix]. The traditional view is therefore incorrect. What does that mean, 'non-connected'? To be able to understand, we first have to envision a series of successive networks for which time can be seen to run from left to right. Here, the

development of knowledge has to be seen as the transformation of one network into another. How?

Let us consider two configurations designated A and B whereby A can be said to temporally precede B. The transformation of A into B entails the reconfiguration of the former into the latter through the application of a *filter*^{x}: some concepts are filtered out and discarded, others are preserved but connected to one another in different ways or to different concepts instead. In addition, a number of new, previously unseen concepts are added to the remaining ones, which results in the emergence of a new configuration.

Does this process know periods of (relative) stability or are these configurations subject to continuous change? A legitimate question. Let me propose the following answer: whenever one wishes to create a representation of a network, i.e. of its nodes and interconnections, the result will generally be a two-dimensional figure. It is almost inherent to the way in which the concept of the network is defined and certainly is applicable to the one provided by Serres. Initially, the absence of a third dimension seems to suggest that there is no stratification to its nodes, i.e. that the network lacks a hierarchy.

Quite the opposite is true, however. As I mentioned earlier on, every concept in the network occupies a specific position that is determined by the relations in which it is engaged. Depending on the definitions of these relations, it will find itself either at the centre of the network or at its periphery. The concepts at the centre can be said to form the network's basic configuration and embody its *truth*, at least when considering epistemic networks[xi]. The hierarchy of the network can therefore be said to be *immanent* to its configuration.

Now, the transformation of one network into another ends with the emergence of a new *basic* configuration. This does not preclude 'change' at the periphery of the network; not in the sense of the development of new concepts as in the case of the traditional view but in the sense of the extension of the existing ones instead. Here, extension pertains to the propagation of these concepts across

the field of study in which the network is situated. It therefore is a question of *reproduction* instead of *development*.

Intermezzo: the idea of a basic configuration seems to be reminiscent of Lakatos' argument regarding the core programme with respect to the development of scientific knowledge (1970). Fortunately, this is **not** the case. The two most important differences between Serres and Lakatos are:

1. Whereas, for Lakatos, the development of knowledge is driven by the *intentional* activity of the scientist, Serres' conception possesses a force that drives the development from *within* (explained below);
2. Lakatos' core programme represents a *value judgement* on the part of the scientific community regarding the principles that are deemed worthy of preservation. Serres' configuration, on the other hand, is the product of the aforementioned endogenous force, i.e. it represents the state of affairs at a certain point in time.

Although I insisted that I would not discuss the factors that actually drive the development of knowledge, a little clarification does seem to be in order. After all, the whole process appears to lack a point of origin: there is mention of 'insertion' and 'filtering' without any indication as to who or what performs these operations. What exactly is happening here?

Throughout *Hermes I* ([1968] 1991), Serres ascribes a sort of 'Eigenbewegung' to the development of knowledge, a specific dynamic that is inherent to the process itself and drives it from within[xii]. The presence of such a dynamic makes it impossible for any scientist or scholar to manipulate the process in question at will. Ultimately, It marks a rejection of the primacy of the Cartesian *cogito* or consciousness and heralds the demise of the transcendental subject as the 'mover' of intellectual history. Here, it should be noted that Serres is by no means the only philosopher who has noticed the existence of such a force. Others, most

notably his compatriot Michel Foucault, have done so as well. It is one of the main characteristics of the 'post-structuralist' movement in (French) philosophy.

The link between Serres and 'post-structuralism' also provides me with the opportunity to address an important misconception regarding the way in which post-structuralists conceive the development of knowledge. To say that the development of knowledge can be characterised as non-connected is to say that the process is discontinuous. The discontinuity is caused by a disruption of the process of communication through the disappearance and re-positioning of the concepts in question. It has, in various guises, been noted by other post-structuralist philosophers as well, such as (again) Foucault.

Whenever the issue of discontinuity is commented upon or discussed by other philosophers or, alternatively, those working in the field of social theory, it is often referred to by way of the term 'relativism'. It implies a sort of 'anything goes'; it also suggests a total and radical disconnection with the 'intellectual' past, a total and utter disregard for the ideas of others. It does not fit the idea of non-connectivity, however. In the non-connected view on the development of knowledge, the 'past' is not discarded wholesale: it is re-activated and reinvented in different guises time and time again. How? To understand, we need to revisit the 'concept' (Serres, [1968] 1991: pp. 110-111):

"It [the concept, RH] belongs to… different times: *the time of its first appearance*… [and, RH] *the time of its reactivation*… that provides it with a new signification…[xiii]" (*my* translation)

The first one of these temporalities is quite self-explicatory; the latter one encompasses all the different positions occupied by a concept in and through the series of transformations it is a part to and of. As a result, every concept can be seen to embody a manifold of temporalities. For Serres, the development of knowledge essentially amounts to the knotting (and re-knotting) together of these

temporalities (Serres, [1968] 1991: pp. 125); every configuration represents a temporal nexus where new concepts are introduced, old ones re-appear and existing ones are repositioned. In the end, the non-connected development of knowledge marks the return of *Penelope*.

In Greek mythology, Penelope[xiv] is the wife of Odysseus; in addition, she is the queen of Ithaca. While she awaits the return of her husband from the legendary Trojan War, she keeps herself busy by weaving a burial shroud for her father-in-law. In fact, the shroud is a ruse to keep a number of royal suitors, who want to marry her in order to claim the kingdom of Ithaca for themselves, at bay. Penelope tells them that she will choose a new husband after she finishes the shroud. In order to postpone this moment indefinitely, she secretly undoes part of her work under the cover of the darkness of the night.

Why is the aforementioned so important? The relation between the development of knowledge and the figure of Penelope is an actual and quite literal one, as we have seen; it is not merely a metaphor that the writer employs to give his work a certain literary pretence. Nor is it the only relation that connects the world of Antiquity to our own world: other examples are Hermes[xv], Mars and Venus. In a very specific sense, we are still Greeks.

There remains one final issue that is in need of attention, one that concerns both the use of and movements between the natural sciences, philosophy and literature. To envision the development of knowledge belonging to the first two in terms of non-connectivity clearly makes sense. It would be quite a stretch to do so in the case of *literary* writings. Still, the topics that are addressed by them do change over time as well, as can be inferred from the discussion of the Northwest-Passage that follows. As a result, it should be possible to apply the idea of a ‘filter’ to works of literature as well.

Encyclopaedia

To pass from the natural sciences to the humanities and to pass from the humanities to the natural sciences. Is it possible[xvi]? Do they not concern themselves with the heterologous domains commonly referred to as nature and culture? The answer to this question is to be found with (what Serres calls) the *Northwest-Passage*.

The Northwest-Passage is a term that Serres uses to denote the connection between the Pacific and Atlantic Oceans north of Canada ([1980] 1994: pp. 15). This connection is not a straightforward one but resembles a labyrinth instead: it consists of a collection of passages, both inter-related and shifting (just think of gigantic arctic formations and you will know what he means), whereby some of them enable one to cross the divide whilst others lead to a dead end.

The Northwest-Passage is also a model for the connections existing between the natural sciences and the humanities (Serres, [1980a] 1994). Yes, there do exist connections. They are, however, not connections in the literal sense; these are not actual paths across which exchanges between these domains take place. Rather, they denote the (abstract) analytical paths one has to follow in order to discover the correspondences that exist between them. The existence of the Northwest-Passage points out a very important fact: there apparently are certain phenomena that are of interest to both the natural sciences and the humanities. Ultimately, the existence of these correspondences blurs the division nature – culture.

Why does the philosopher cross from one domain to the other? Serres wishes to perform a *synchronous* analysis in order to identify the 'concepts' that underlie the knowledge belonging to both the natural sciences **and** the humanities. However, these are not concepts in the usual sense in that they slightly differ from the ones I discussed earlier on. To explain the reason for this discrepancy, I need to explain how Serres actually performs his analysis first. The answer revolves

around the concept of *structure*. Let us turn to *Hermes IV* (Serres, [1977a] 1993), page 94:

"It [structure, RH] denotes a set of elements whose number and nature are left unspecified, a set for which one or more operations, one or more relations with specific characteristics are defined." (*my* translation)

This particular conception of structure is taken from the field of mathematics. It therefore markedly differs from the one that is usually employed in (cultural) analyses, most notably where the *social* sciences are concerned. There, the concept of structure is essentially of a biological nature[xvii]. In biology, the concept of structure pertains to an entity or, more accurately, an *organism* whose constituent parts are functionally differentiated from, related to one another. In (for instance) sociology, the use of terms such as 'pathology' and 'function' by Durkheim, who is generally considered to be one of its founding fathers, is very telling and clearly points in the direction of biology as a source of inspiration.

Let us return to the concept of structure as it is used by Serres. A closer look reveals something marvellous: it is completely de-contextualised, a pure abstraction without any relation to a specific practice or concrete experience, i.e. a frame of reference to situate it whatsoever. A signifier without a signified. Conceivably, it could be applied to anything; as it is, it is applied to nothing[xviii]. Now, let me follow the structural path in the other direction: what does one obtain by determining the number of elements and their nature as well as the nature of these operations? A model (Serres, [1968] 1991: pp. 94).

This particular definition of a model bears a striking resemblance to the definition of the network I introduced earlier on. Indeed, just as in the case of the network, a model can be seen to describe a certain state or process. As such, it provides us with knowledge about an object or phenomenon as well. Still, there apparently exists one important difference between them: unlike the network, the

model does not seem to be constructed out of any concepts. Its elements (or nodes) are evidently not conceived in terms of concepts but can, depending on the way one chooses to define them, represent anything instead.

Fortunately, the difference only exists at first sight. Here, it is important to remember that concepts are not empty but represent a particular object or phenomenon. A good example is provided by the parasite (Serres, [1980b] 1987). Although the parasite[xix] can be of a biological, cultural or informational origin, its structural properties take the following form (Serres, [1980b], 1987: pp. 85):

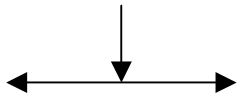

Figure 1.

The horizontal, double-headed arrow represents a stable relationship between two points or stations; the vertical, single-headed arrow is a disruption of said equilibrium.

Ultimately, Serres' conception of the model is yet another refinement of his initial definition of the network. It is also the one that enables him to compare the natural sciences with the humanities.

The re(de)fined concept of the network provides him with the means to dissect knowledge into two distinct dimensions. The first one is based on his mathematical conception of structure and can be designated as relational or structural. The second dimension provides the structure with a specific 'substance' or content that relates it to a specific object or phenomenon and, thus, situates it within a particular field of study. As a result, it is always specific to the field in question. Any attempt to compare knowledge from both fields with one another by

making use of the latter dimension would therefore amount to an exercise in futility.

One **can**, however, if one considers the structural dimension. The first step is to bracket off anything that is of any 'substance' whatsoever. One strictly limits one's attention to the structural properties of the knowledge under consideration; to do so, it is necessary to consider the operations or relations that are implied by said knowledge. The next step is to determine whether any parts of these structures are *isomorphic*, i.e. equivalent to one another. If so, such an isomorphism can be considered a *structural entity* in its own right; it also constitutes a 'concept' that is belongs to the natural sciences as well as the humanities. A concept that is literally devoid of any substance, it should be noted. It can (and must), however, be subjected to closer scrutiny. Why? Precisely because it is not confined to either the realm of nature or that of culture but belongs to both of them instead. As such, it presents us with an essential characteristic of the world we call our own[xx]. Here, we have the goal and purpose of Serres' synchronous analyses.

Let us, for a moment, return to the Northwest-Passage. These pathways are by no means straightforward. They can, to more or less remain in the nautical realm, be cumbersome, take quite some time, necessitate a detour or two and even prove to be dead ends, thereby forcing someone to backtrack and start over again. Why is that? Not because the comparison of these two fields poses any insurmountable problems. The answer is actually quite simple and is related to the development of knowledge.

The development of knowledge has a certain 'Eigenbewegung' to it, a dynamic of its own. However, there is no reason why this dynamic needs to be the same for every single body of knowledge; it will most likely depend on the initial conditions of its emergence. As a result, different bodies of knowledge will develop in different ways[xxi]. Therefore, one can never know where to look for any correspondences between the natural sciences and the humanities in advance. No, these fields are definitely not heterologous but they are not *homologous* either.

Perhaps it is better to consider each of them in terms of an arborescence, which from time to time intersect with one another[xxii].

Intermezzo: up until now, I have solely focussed on the connections between the natural sciences and the humanities, ignoring the issue of the connections between the sciences *themselves*. The mere fact that they concern themselves with the same realm does not mean that they share the same internal dynamic. Put differently: different sciences have different internal dynamics as well.

Here, one needs to remember that all objects and phenomena of concern to the natural sciences are to be found exactly there, in nature. One may very well balk at such a comment at first. Nonetheless, it does create a real possibility for the intersection of these sciences. Let us, for instance, consider physics, biology and chemistry. They all concern themselves with *energy*. Put somewhat crudely, for physics, it is a matter of conversion of different kinds of energy into one another; for chemistry, it is a matter of the energy released / produced during chemical reactions; for biology, it is a matter of the energy that is needed by organisms to sustain themselves. These connections can be seen as (to stay in the nautical realm) a Panama Canal: straightforward and clearly delineated.

Here, the interesting thing is that, for the natural sciences, these abstract passages can become *actual* ones for communication. One prime example is the spread of the laws of thermodynamics from physics to biology and chemistry (Serres, [1974] 1992: 53-96). Since these laws pertain to the work that can be performed by the energy under consideration (put crudely, although only somewhat), their movement to and subsequent application in biology and chemistry seems almost self-evident.

Back to the topic at hand: there is still an issue with respect to Serres' synchronous analyses that needs to be addressed. The mere use of a structural approach or method is **not** enough. One problem still remains; it needs to be overcome in order to be able to identify and define these concepts. To be precise:

the structural method alone is not enough because it only relates to the question as to **how** to compare the natural sciences with the humanities. It does not tell us **what** one needs to compare with one another. At first, the obvious answer seems to be knowledge from both fields. Unfortunately, things are not that simple:

"… We lack… a criterion with which we would be able to optimise the number of layers that are both necessary and sufficient to discover as well as to define the totality [of knowledge, RH] as such. As long as we are without said criterion our analysis remains dependent on a randomly determined number, it remains relative and therefore fixed within [the knowledge in question, RH]." (Serres, [1968] 1991: pp. 286; *my* translation)

Here, Serres refers to a problem with which he and, for that matter, any philosopher who wants to undertake a historically situated inquiry, is confronted. To be precise, the problem is one of *perspective*.

In order to be able to undertake any kind of analysis, one needs to define the object of analysis first, both literally and figuratively. The definition of the latter is fairly straightforward: here, the aim is to produce knowledge *about* the knowledge belonging to a particular historical period. The definition of the former, however, presents the philosopher with quite a daunting task: whether he intends to focus his efforts on any single field or, as in the case of Serres, on both the sciences and the humanities, he will need to analyse an extremely large amount of knowledge. To paraphrase Foucault: although the knowledge in question can be exhaustively enumerated **in principle**, it is impossible to do so **in practice**.

Serres realises this as well, as can be inferred from the fact that he talks about "… to maximise the number of layers…" Here, he is trying to come up with a solution that will enable him to successfully conduct his intended inquiry without having to perform the nigh impossible task of going through all of the corresponding texts, which is basically a Sisyphossian labour of sorts. Still, why is

it impossible to simply select a number of layers[xxiii] without having such a criterion at one's disposal in the first place?

By selecting a number of layers at random, the philosopher limits himself to a part of his object of choice. In doing so, he situates his analysis within these layers; he situates his analysis in a point *within* his object. Consequently, the results obtained from them provide a specific perspective with which to view the object as a whole; they are projected onto the totality on knowledge. Relative and fixed, as Serres says. And herein lies the problem.

In order to be able to successfully study a particular object, the philosopher needs to situate his analysis in a point that is *external* to it, i.e. to consider **all** layers. In doing so, he avoids the very real possibility of mistaking a particular perspective for the object as a whole. However, the only way to do so is to become Sisyphos oneself. It is a choice between a projection that may or may not be valid on the one hand and the impossibility of traversing all layers on the other.

It is also the reason why Serres is searching for a criterion that will enable him to make an optimal selection of layers that are "…necessary and sufficient…" Such a criterion would provide him with the guarantee that the layers he **did not** select merely reproduce the ones he **did** select. In addition, it would keep the number of layers as small as possible. Is such a search actually feasible? On what could such a criterion be based? Might, in the end, the structural method be useless? No. One needs to circumvent the issue and devise a ruse instead. What is an encyclopaedia? The answer to this question provides Serres with a way out.

Again: what is an encyclopaedia? The term is mentioned again and again in the *Hermes*-series of books; Serres does not, however, provide us with a clear definition. Still, it is possible to distinguish two (related) conceptions of the term in his writings. The first one is concerned with the Encyclopaedia with a capital *e*.

Serres, in *Hermes IV* ([1977a] 1993: pp. 135), discusses an 'encyclopaedia' as well as the knowledge that it encompasses. However, it is clear

that he is not referring to an encyclopaedia in the common sense, i.e. a book of reference; if he was, one would expect him to make mention of a specific title or series. To avoid any misunderstanding whatsoever: he does not. What might this 'encyclopaedia' be, then?

In my view, this particular use of the encyclopaedia should be understood as a reference to the totality of knowledge present within both the natural sciences and the humanities in a particular period in time. Such an explanation definitely is in accordance with his use of the term in *Hermes I* ([1968] 1991: pp. 269-290). As a result, the encyclopaedia covers the whole of the epistemic space of both fields. One should not think of it as a simple repository, a mere enumeration of the totality of knowledge, though. This encyclopaedia also delineates the different bodies of knowledge, relates them to a particular discipline as well as the corresponding realm; it also positions them vis-à-vis one another. To go through the encyclopaedia is to go through the whole of knowledge as it is to be found in that particular period. Therefore, I will subsequently refer to it as *Encyclopaedia*.

Where is the Encyclopaedia to be found? The definition I have provided establishes a relation between the Encyclopaedia and actual (existing) knowledge; subsequently, the question becomes *where* this knowledge might be located. Now, Serres ([1977a] 1993: pp. 135) states that knowledge *in general* only exists with respect to and through (a) *praxis*. What does that mean? To begin with, it concerns **all** knowledge regardless of the field in which it is situated. Furthermore, the use of the idea of 'praxis' points out that knowledge is inextricably related to a form of activity. However, one should see this as a reference to (intellectual) activity in the broad sense in order to include theoretical as well as experimental work. Is it possible to identify anything that remains invariant across this totality of activity? Yes. All these activities are performed through or preserved by *the written word*.

Again: where is the Encyclopaedia to be found? It exists in and between the totality of the aforementioned writings as well as in the interrelations that are to be found between them; to go through these writings is to go through the

Encyclopaedia itself. The Encyclopaedia is therefore not of much help when trying to solve our problem. After all, it is virtually impossible to analyse such an extensive collection of writings. Do we have any alternatives left? Yes. Let us turn to the encyclopaedia instead.

An encyclopaedia in the common sense is a book, an object we are all familiar with; the most famous one is probably the *Encyclopédie* by d'Alembert and Diderot, published in the 18th century. However, it is important to keep in mind that a text need not to be structured in the same (classical) way as the *Encyclopédie* in order to qualify *as* an encyclopaedia. As Serres shows with respect to the work of Verne ([1968] 1991: pp. 291-299), any text containing knowledge about one or more objects of study qualifies as one. Seeing that the customary definition of the term 'encyclopaedia' does not include this particular kind of text, I will redefine it in the following way: an actual text covering a part or the whole of the Encyclopaedia in terms of both content and organisation.

The readers who are familiar with the work of Serres will undoubtedly agree with me that he uses encyclopaedic texts extensively; besides Verne, other prime examples are the works of Leibniz and Lucretius' *De Rerum Natura*. The latter, amongst others, describes a physics and an ethics from Greek Antiquity around the time of Epicurus (Serres, [1977b] 2000). So **why** does Serres use this particular kind of text? The answer at last provides us with a solution for our problem, another ingenious one at that.

What is an encyclopaedia? An *intermediary object*. Intermediaries allow those who make use of them to perform a significant larger amount of *work* than they would have been able to perform on their own (Serres, [1980b] 1987: pp. 94-101). The intermediary does so by being positioned between a person and the object of his labour, allowing the former to *extend* himself by means of the intermediary's capacities and capabilities. The same goes for the encyclopaedia[xxiv], which mediates between the philosopher and the Encyclopaedia.

Method

As I noted earlier on, the study of the Encyclopaedia would require vast amounts of time, making the whole enterprise practically impossible. By using encyclopaedic texts, Serres is able to reduce the time it takes to study (parts of) the Encyclopaedia to, relatively speaking, almost *zero*. As a result, we do not need a criterion for the selection of layers after all and the name of Hermes fits Serres as well[xxv].

Translation

The groundwork that I have done in the preceding section allows me to speed up the remainder of the discussion. It is time to move on to the next analysis. In the master's own words ([1974] 1992: pp. 30):

"The god Ra or generic activator has become a yellow dwarf that is close to its own nova. There have been displacements but there also remain stable elements." (*my* translation)

Does everything change? I have shown that knowledge develops in a discontinuous fashion through a process of transformation and reconfiguration. Still, Serres seems to think that some things remain invariant over time; unfortunately, his 'solar' example does not specify their exact nature. In order to obtain an answer, we need to turn our attention elsewhere; we need to turn our attention to the concept of *form*.

What is (a) form? It refers to a set of elements, unspecified in both nature and number, in which a number of well-defined operations is performed (Serres, [1974] 1992: pp. 21)[xxvi]. This particular definition of 'form' is very similar to the one of 'structure' I discussed elsewhere; to be honest, a form is nothing more than a specific structure. As a result, it enables me to make a useful distinction. Up until this point, I have used the term structure to refer to a tool that can be used to

analyse knowledge as well as a specific structural entity. To avoid any confusion, I will reserve the term 'structure' for the former and use the term 'form' with respect to the former from here on.

Why is it necessary to make such a distinction? Whereas knowledge in general can be dissected into two dimensions (a structural and a 'substantive' one), all actual knowledge consists of both a specific form and substance. The latter provides a definition for the number and nature of the elements as well as the nature of the operations; Serres refers to it as the form's *content* [xxvii] ([1974] 1992: pp. 51):

"At the most general level one encounters the theme of invariance as a multiplicity of variations. Just as if there could be said to exist two histories and two sciences: trans-historical stability of pure forms on the one hand, a complex displacement of contents on the other…" (*my* translation)

Again: what remains invariant? A particular form. It is not limited to any object, science or realm. Depending on the historical period in question, it might pertain to fluid mechanics or, alternatively, the possibility of free will for mankind independent of God's design for all of creation. Serres refers to these invariant forms as *translations*.

In mathematics, a translation refers to a spatial transformation; it denotes the constant offset of every point of the space in question. A translation does not create any spatial distortions. In terms of the present discussion: the process of translation displaces a form from one body of knowledge to another. It is **not** affected by any epistemic discontinuities that might be present.

To identify these translations[xxviii], it is again necessary to make use of the concept of structure. This time, it is a matter of performing a diachronic instead of a synchronous analysis. Seeing that these two analyses do not significantly differ from one another, there is no need for me to discuss the whole process in detail[xxix].

I want to point out, though, that the analytical path one needs to take in order to identify these translations can be quite complicated for reasons similar to those I provided with respect to the Northwest-Passage.

Return

The last analysis I want to discuss differs to some extent from the previous two. It is, in general, the one philosophers perform the most. At the same time, it is also an analysis they hardly care to elaborate upon (provided they choose to explain their method at all). What exactly am I talking about?

It is quite common for philosophers to make use of the writings of those, who belong to a period that has come and gone; they do so in order to develop their own philosophies. Plato, for instance, has returned countless times since antiquity. How is such a return possible? By no means a trivial question when one takes into account the discontinuous nature of the development of knowledge. The whole issue becomes even more complicated due to the fact that every body of knowledge can be seen to embody a particular *truth*. As a result, the reconfiguration or development of knowledge essentially amounts to the substitution of one truth by another, i.e. what once *was* no longer *is*.

Perhaps I should not ask how one can make use of the writings that belong to a distant past but wonder whether or when it is possible to make legitimate use of them instead. Fortunately enough, in his analysis of Lucretius' *De Rerum Natura* ([1977b] 2000), Serres has left a trail of intellectual breadcrumbs for his readers. I will attempt to follow it; with some luck, it will lead me to the answer I am looking for. The trail starts on page 78:

"Lucretius is among us, he speaks the same language as we do, his feet on the same earth."

According to Serres, Lucretius lived in a world that was no different from ours. But why? His was one that came into existence through the conjunctions arising, by chance, between elements belonging to large, chaotic populations; a world in which existence can be seen as a perpetual struggle against entropy; a world of open systems and fluid mechanics (Serres, [1977b] 2000: for instance pp. 30, pp. 68 and pp. 125). For Serres, a world exactly like the one that we are used to call our own.

Now, to proclaim someone our contemporary clearly goes beyond the presence of any isomorphic forms in his work; they are a necessity, for sure, but they are not enough. Forms can stay invariant through time whilst accommodating a variety of contents. So it has to be a matter of both form and content. "If that is indeed the case, then surely your mister Serres must have made a mistake." I can almost hear someone utter an objection along these lines. Why?

For Lucretius, the world and all that is to be found in it is the product of the conjunction / combination of 'atoms'. It does not matter whether one is considering the living or the inanimate: everything that one encounters there is, in essence, an aggregate. One could call such a conception hopelessly naïve or childish when compared to the state of things in contemporary science. To do so, however, would be entirely beside the point; Serres' point, that is. It does in no way change the fact that Lucretius presents us with a model that explains the genesis of a world of which the essential characteristics are those I mentioned above. The difference I pointed out is a secondary one, cosmetic or aesthetic I am tempted to say. What I mean to say is: irrelevant.

Why is it of such importance that someone can be considered our 'contemporary'? If he indeed is, his writings may very well provide us with a solution to some of the problems of our own day and age (which probably were problems in his own well). When looking back, there is always the possibility that one might encounter valuable insights. At any rate, the time has come to leave

these questions of method behind and move on to those of content. However, you may not like what awaits you…

Notes

[i] Needless to say that Serres complicates matters even further by employing sources from different periods that, in addition, belong to different fields.
[ii] Here, philosophy serves a dual function: it provides the questions addressed by Serres as well as a body of knowledge to address them with. A dual function that, one might add, is quite a common one.
[iii] Not in the sense of Foucault but in its regular one instead.
[iv] I will not address the *why* of the development but intend to concentrate on the *how* instead; the latter is enough for present purposes.
[v] It should be noted that it has become quite normal to do so in *our* time.
[vi] As Serres ([1968] 1991: pp. 9) notes, these relations can be defined in very broad terms, for instance as analogies, deductions or reactions.
[vii] For present purposes, a body of knowledge is to be seen as the totality of knowledge belonging to a particular discipline or field of study at a specific point in time.
[viii] As said, the 'empirical' use of the concept of the network enables one to investigate historical developments or phenomena (Serres, [1968] 1991: pp. 23). It can therefore be 'turned back' upon its conceptual use in order to examine the development of the latter.
[ix] It should be noted that Serres employs a second distinction to characterise these processes: d*irect* and *recursive*, respectively. Seeing that they are in not related to the analyses he performs, I have chosen to omit them from the discussion.
[x] I have borrowed the idea of a filter from Serres; he makes use of it as well, although with respect to the aforementioned issue of recursivity.
[xi] The fact that every epistemic network embodies a truth is mentioned by Serres ([1968] 1991: pp. 104). He also adds that this truth has no significance outside the network to which it belongs.
[xii] See, for instance, page 132.
[xiii] Here, I have chosen to employ 'signification' instead of 'meaning', which would normally be the term to translate the one used in the original text. Why? The use of 'meaning' would suggest that the definition of the concept is provided by the human subject, which is inappropriate in the context of the text, at least as far as the English language is concerned. It should be read as pertaining to the position of a concept within a particular body of knowledge instead.
[xiv] Serres explicitly refers to Penelope on pp. 9 of *Hermes I* ([1968] 1991).
[xv] We will encounter Hermes elsewhere in this chapter.
[xvi] For the moment, I am only considering *synchronous* movements.
[xvii] On a related note: Foucault ([1970] 1994) even goes as far as to claim that all social sciences are merely combinations of concepts taken from biology with those taken from economics and / or philology.
[xviii] As a result, the concept of structure also represents one of the essential characteristics of mathematics as a whole.
[xix] The concept of the parasite is discussed in chapter four in more detail.
[xx] I will use the term *concept* to denote these structural entities as well. To use a different term would, in my opinion, make the discussion seem somewhat artificial. Needless to say, I intend to make sure that you, the reader, will be able to tell the difference.

[xxi] It also provides the explanation for the shifting nature of the passages; as knowledge develops, old ones are bound to disappear and new ones will appear. Their shifting is of no consequence to a synchronous analysis, however.
[xxii] As a result, Antonello's assertion that Serres' journey across the intellectual landscape is to be seen as a labour of integration (2000: pp. 168) is incorrect.
[xxiii] The term 'layer' refers to a single body of knowledge.
[xxiv] To be precise, the encyclopaedia makes us of intermediaries as well in order to mediate between the philosopher and the Encyclopaedia, in casu the ones that have produced its text.
[xxv] Hermes, in Greek mythology, is both a god and the messenger of the gods. In addition, he is also the patron saint of thieves, which has earned him the nickname of 'trickster' god.
[xxvi] When discussing the concept of 'form', Serres makes use of the linguistic perspective and talks about sentences and the relations between their constituting elements (i.e. grammar). This is not to say that the relation to the concept of structure and, thus, knowledge is one of analogy. Rather, it recognises the fact that grammar is a matter of structure as well.
[xxvii] At first, one might be tempted to think that the characteristics of the relations between the elements should be seen as content instead of form. This is not so, however. Form is a concept belonging to the field of geometry, which studies spaces (or forms) in order to provide an exact definition of them. To talk of geometry is to invoke images of forms such as the square, rectangle, circle etc. However, these forms are not definitions of their respective spaces but represent the spaces to be defined instead; this is accomplished by coming up with definitions of the form that relates one of its parts to another, such as, for instance, defining the surface area of a circle in terms of its radius. Now, this is exactly what one is doing when defining the form of a structure through the characteristics of the relations in question.
[xxviii] Although trans-historical, a specific form is nonetheless always situated within a specific body of knowledge belonging to a particular period through the content it is combined with at that time.
[xxix] Here, too, one looks for structures (i.e. forms) that are isomorphic.

Omen

A sign of things to come:

"The atmosphere we breathe and hatred, the hate in which we bathe… that syrupy hate." (Serres, [1982] 1995: pp. 6)

Heeding the *noise*

To find the turtle at the bottom of the pile. Is it possible, does he exist? Or are we left with an infinite regression, a never-ending column of tortoises smiling all the way down? In a way, philosophers are not that different from zoologists; however, it is their misfortune that the sea creature they are chasing is a metaphysical one…

Not any more. One only has to open one's ears. Metaphysics is a question of *noise*. In the words of Serres ([1982] 1995: pp. 13):

"So [*noise*, RH] is not a matter of phenomenology… it is part of the in-itself, part of the for-itself…"

In a remarkable twist of fate, metaphysics suddenly becomes accessible by way of our senses. It is a matter of *noise*. *Noise*, you see, is that from which all of reality springs forth (Serres, [1982] 1995: pp. 15); it is the ground of all of existence, biological, physical, social etc. To exist is to free oneself from the *noise*. *Luctor et emergo*.

Why do I speak of *noise*, why do I employ Italics when talking about it? Should it not be noise instead? No. *Noise* is not a matter of sound alone. In order to fully grasp this concept one has to set sail:

Multiplicity

"… *noise* crosses the seas. Across the Channel or the Saint Laurence seaway, behold how the *noise* divides itself. In Old French it used to mean: noise, uproar and wrangling; English borrowed the sound from us; we keep only the fury." (Serres, [1982] 1995: pp. 12)

The in-itself is not only noisy; there is a sense of danger, of violence inherent to it as well[i]. How and why? I will return to this question later on. Let us, for the moment, remain with the auditory aspect. How to conceive of this noise, how does it sound? Serres, at different times and in various places, calls it *tohu-bohu*, a French word signifying (a) brouhaha. However, this still is a somewhat benign way of describing it.

I realise that the aforementioned has probably left some readers with a certain sense of bewilderment; in any case, the text is more akin to a summary than an explanation. Let it serve as a starting point instead. The aim and purpose of this chapter: to undertake an investigation of the *noise.*

What is the multiple?

Whence comes the *noise*? It comes from a *multiplicity*, a multiple. An answer, but an empty one at that. The object that is of interest to us changes, the question remains the same. Do not worry: we will get there yet.

I begin anew. The *noise* comes from a multiplicity. The multiple is that which produces the sound and violence. Multiplicity, as such, is the wellspring from which the real in all its guises comes into existence; it is originary. I said as much already in my discussion of the *noise*. Does the concept of multiplicity add anything we do not know? Yes. As Serres puts it ([1982] 1995: pp.18):

"The work is made of forms, the masterwork is a formless fount of forms… The masterwork never stops rustling and calling. Everything can be found in this matrix… one could call it chaotic…"

The masterwork that is mentioned by Serres is to be found in *The Unknown Masterpiece* by Balzac. The work of art in question, called the 'Belle Noiseuse' or querulous beauty, is a painting by an old man named Frenhofer, a fictitious acquaintance of the 16th – 17th century painters Porbus and Poussin. The prefix 'master' is not meant to denote the quality of the painting, however; it is meant to indicate that it should be seen as a source or stock instead (pp. 21). As its name already suggests, the painting in question is in fact a multiplicity[ii].

Again, a source. What does Serres want to convey to us by saying that 'everything can be found in this matrix'? He is not referring to the real, obviously; after all, it is the real that emerges from the multiple. The answer is quite astounding: this matrix both contains and generates the totality of *possible* realities (Serres, [1982] 1995: pp.21). It would not be far from the truth to consider it an arena in which would-be realities strive for or towards existence. The real we know and inhabit is only one out of many. How is such a thing possible? To answer the questions at hand it is necessary to conduct a thorough investigation of the concept of multiplicity *an sich*.

What does that mean, the multiple an sich? As I said, multiplicity is the source of the real. In general. Reality, however, is multi-dimensional: social, biological and so on and so forth. Although some would like to convince us otherwise, these dimensions are by no means reducible to any single one of them. It would therefore be more appropriate to speak of multiple multiplicities. In order to be able to better grasp the concept of the multiple it is necessary to determine the *structural* properties that are invariant across this set and, subsequently, examine these further. An sich, i.e. an abstracted multiple, a shape without a content.

Multiplicity

Idle hope. You see, the path towards the multiple is blocked. I will explain. The painting is called *The Unknown Masterpiece* for a good reason. According to Serres, it is impossible to ever truly know the masterwork; we only have access to the work, the reality that emerges from the *noise* (pp. 18). But why? And, for that matter, what exactly can be said to be evading our intellectual grasp? After all, we seem to know, for example, that it is chaotic. Yet more questions, no answers and only quicksand to support my theorising.

"The multiple as such. Here's a set undefined by elements or boundaries. Locally, it is not individuated; globally, it is not summed up… It is not an aggregate; it is not discrete. It's a bit viscous perhaps, a lake… I've no notion of its point, very little idea of its bearings. I have only the feeblest conception of its internal interactions…" (Serres, [1982] 1995: pp. 4-5)

Things become a little clearer. It is possible to have some notion, an outline of multiplicity but a sketchy one at that: a set, a collection of elements[iii] spread out like a puddle of water. Apparently, there is no real cohesion, no unity to be found in the multiple: not summed up, not individuated, not discrete nor aggregated, the image of the lake. This also suggests that the relations between the elements present are far from straightforward. Somehow, through their interactions, these elements produce the *noise*, the sound and the violence. We should not be surprised: after all, the *noise* is of the world, we are not separated from the real in its nascent state. It is very well possible to examine multiplicity to some extent.

Still, we know very little. Why is multiplicity pure possibility, whence comes the violence and racket? These questions, the important ones, remain unanswered. A joke without a punch-line. Why is that? Because of the brouhaha. Try and observe a multiple from a distance[iv]; the sound is manageable, the violence far away. Yet, this yields only the contours of our intended object of study. We have to venture closer. But, if we do so, the *noise* increases to the point

that it almost drowns out our sensory apparatus, not only hearing but sight, touch etc. as well. If this seems a little odd to you, just step into the wind, like Serres says ([1982] 1995: pp. 63) and you will understand. Be sure to make it the wind of a tempest, though.

In an ironic twist of fate, our epistemic endeavours are limited to the real in all its manifestations; its origin is beyond our reach, across the horizon. The phenomenon we are interested in, the *noise*, bars us from investigating it at the same time. The journey is over before it has even begun. **No**. As I said before, the old man is a trickster. The god Hermes comes to our aid again.

Throughout the book, Serres makes use of concepts that are isomorphic to the multiple, concepts we know quite a bit about: scientific ones like flux or heat, for instance ([1982] 1995: pp. 63 and 102, respectively). As such, he is able to circumvent the *noise*, to enter into the multiple without endangering himself. In doing so, he presents us with a curious and intriguing insight: the present-day natural sciences apparently employ concepts that are isomorphic to our ontological condition. Yes, science sometimes really is fundamental and the journey can commence after all; there **is** solid ground to tread on[v].

Black and white

Before I can continue with my investigation, I need to pay attention to two other issues first. To begin with, the preceding discussion refers to the multiple as *chaotic*. I will leave it for now; the explanation for the chaotic nature of the multiple is to be found with the *noise* as well. As for the absence of unity within the multiple: it, too, is addressed elsewhere.

Onwards. The first question to be answered is *how* the possible can be said to reside in or, perhaps, between the elements that, taken together, comprise the

multiple. To do so, we need to make our way to the aquatic again. Only this time, we need to go to the sea.

"There is the complex and noisy possible, there is the blank virtual. There is chaos by superabundance of presence, there is chaos by blank absence." (Serres, [1982] 1995: pp. 29-30)

The road to the sea is rarely straightforward, more often it twists and turns across the countryside. Here, Serres seems to complicate matters by introducing another kind of multiplicity. We already know the former one: it is the *Belle Noiseuse*, the 'superabundance of presence'. I will subsequently, following Serres, call this multiplicity *black*. What about the other one, the *blank*? Is there another wellspring to be found from which the real emerges? How can something blank be chaotic? Do not be fooled: these multiples belong to different levels.

What does that actually mean, *blank*? To be blank is to be without distinction. Serres also calls this *white* or *naked*. A blank surface bears no marks whatsoever, it displays no signs or symbols (Serres, [1982] 1995: pp 34). There is nothing to be found but this absence of determination; it belongs to no thing and no one. To be blank is to be undetermined. Again: how can this undetermined lead to chaos, how can it give birth to anything at all?

In order to understand, we need to go back to the origin of the concept of the white multiple. Would you be surprised to learn that it is mathematical? To get there, we need to play a game of cards (Serres, [1980b] 1987: pp. 243):

"This white object has – just like the blank domino – no value of its own, so that it may take on all values… its special characteristic, its distinction, as they say… [is to, RH] time and time again take on some specificity from a certain set." (*my* translation)

Serres calls this kind of object a *joker*, just like the one to be found in a game of cards. It makes its first appearance in relation to and as part of his analysis of the biblical stories of Tamar and Joseph[vi]. A joker has no value of its own but obtains one by being played in relation to a number of other cards instead. It is a relational element; it is defined or determined in relation to other elements. As such, it is not a particular revolutionary concept. We are all since long familiar with it: as Serres himself indicates, it is nothing else than the unknown quantity in mathematics, *x* ([1980b] 1987: pp. 248). X does not have a value of its own; it obtains one through the relations that exist between itself and a number of other elements, all of which are in turn defined by a particular function.

The white is the sum of all colours (Serres, [1982] 1995: pp. 63). White is not a colour in itself, it stands for all existing colours instead, it covers their entire spectrum; we all know that. To say that the white is the sum of all colours is basically the same as saying that it encompasses all values belonging to a particular set. We are now able to grasp to notion of the white multiple. Being white is not the same as being empty. The white denotes the fact that there is no transcendental essence to such an element. One can write on its surface over and over again; the joker can be played time and time again in combination with any set of cards. Its value always depends on a number of specific relations, is always situated. The concept of the white multiple therefore debunks the stream of thought that is commonly referred to by the term 'structuralism'. We have seen enough. Time to move on. Onwards to the sea.

Why the sea? Is it a multiple, a source of existence, of life? Yes; Serres does not, however, see it as one because of the more apparent reasons that probably come to mind. We all know the stories that life on earth originated in the primordial seas. It is certainly true that Serres has considered the sea in this respect in his discussion of the work of Michelet ([1977a] 1993), calling it the 'pre-biotic, primordial soup' (pp. 163).

Here, however, the prime reference is the *Theogonia*[vii] by Hesiodos, in casu the birth of the goddess Aphrodite, which is time and time again evoked by Serres in *Genesis* ([1982] 1995). Aphrodite is born from the sea, she emerges almost instantaneously from the foaming, tempestuous waters (Hesiodos, 20002: verses 189-195). Foaming and tempestuous: noisy and dangerous, a black multiple, due to the agitation of the waves. Whenever the sea raises such an uproar, its waters become *grey*.

It is also more than likely that the *Theogonia* has sown the first seeds for the concept of the blank, the white multiple. The first gods form a sequence: Chaos, Gaia, Tartaros and Eros (Hesiodos, 2002: verses 116-120). Chaos, just like old *master* Frenhofer who stands at the beginning of another sequence, that of the three painters (Serres, [1982] 1995: pp. 11)[viii], comes first; he is at the beginning, perhaps he even is *the* beginning, the origin. Hesiodos does not explicitly say so but the lineage he describes certainly implies it. Why does he not? In old Greek, chaos signifies a chasm, a void, that is, *nothing*. Perhaps he was afraid to be branded a fool; after all, has anyone ever witnessed how something was born from nothing[ix]?

Still, whence comes the *noise*? We are almost there; I can almost see the sea. Does the *noise* solely belong to the black multiple?

"The sea is gray, the sea is the two chaos together… Gray is not a medium, between black and white. White is gray in its totality, black is gray too in its number." (Serres, [1982] 1995: pp. 63)

The grey does not exist on its own, located halfway on a scale that connects the white to the black. It belongs to the both of them; there is *noise* in the white as well. The totality of values encompassed by the white apparently is an even match for the number of elements constituting the black. Yes and no: the *noise* of the white literally is the same as the *noise* of the black. Why? Because the sea is white

as well. It has **no** memory (Serres, [1982] 1995: pp. 31). To be without a memory means that one does not retain any sign, symbol or engraving, in short: any determination. Yes, the sea indeed has no memory, the sea is blank. It should be obvious: waves do not remain, ripples disappear and any perturbation vanishes. The surface of the sea, in the end, becomes smooth once more. Only to give rise to new disturbances.

The sea integrates the two multiples, it establishes a relation between the black and the white, positions them vis-à-vis another. As I said, the *noise* is due to the agitation of the waves, their crashing and smashing into one another, tossing around anything and anyone they encounter, rising up from and also disappearing into the sea, making room for new ones, now here and then there. Large waves, small waves. A pandemonium coming from and returning to a blank multiple. The white gives rise to the myriads that produce the *noise*. The undetermined gives rise to the possible and the *noise*, that is, the elements in the black multiple are jokers, they are *blank*.

We still do not know how these elements take on their values and why such a totality produces both sound and fury, though; we do not yet know the process. The sea does not divulge all of its secrets. But that is not a problem: there is more than one way to travel to Rome. As a matter of fact, I have almost everything I need to provide the answer that I am looking for.

First, however, I need to revisit both the white and the black. For Serres, the white or blank, i.e. the joker is (a) virtual. What does that mean? Virtual: as if it where so. To say that something is virtual is to say that it can attain a certain property or definition, which it does not possess (at present). This idea of the virtual is in accordance with the nature of the joker. Although the blank element can take on any value, it does not have one of its own. To take on a value, it needs to be connected to other elements. To be precise: every value is dependent on a specific number of relationships.

The story is a little different where the black multiple is concerned. It is a set, a collection of elements. However, it is by no means an ordinary set, for it contains the possible, the totality of possible realities[x]. Where does the possible reside within this set? It is to be found in or, to be precise, between the manifold of possible combinations of its elements. Why? Every combination or configuration of these elements positions them vis-à-vis one another in a specific way, thereby providing each element with a particular value. The possible encompasses the totality of these configurations. The possible is combinatorial.

With regard to the *noise*, it is important to note that Serres describes it as capacious ([1982] 1995: pp. 22). What does he want to convey to us by this particular choice of words? Capacious: (to be) comprehensive. Serres' comment is related to the *noise* being the repository of the possible. To describe it as capacious means that there are no possibilities, which are excluded from the black multiple. It seems that we already knew as much. However, it does direct our attention towards a very important fact: if the noise is to be truly comprehensive, then every possible combination needs to have a chance to actually occur. As a result, every element needs to be able to take on all possible values as well.

The journey continues. The road to Rome is traversed by foot. You see, the black multiple is an *ichnography* (Serres, [1982] 1995: pp. 19)[xi]. What exactly is an ichnography? A groundplan, a blueprint. A blueprint provides an explanation of the constitution of a particular object of interest. However, it is a plan without any form, shape or recognisable representation, as we already know; it delineates nothing. But wait, there is more: an ichnography is also a graph drawn by feet. Do not laugh, it is important, for it points toward an answer to the following question: whence comes the ichnography?

To come up with an answer, it is necessary to turn to mythology, to the myth of Hercules as described by Livius in *Ab Urbe Condita* and analysed by Serres ([1983] 1991)[xii]. The ichnography in question is produced by oxen that are grazing on the banks of the river Albula (pp. 22). There is no discernible direction

to these tracks whatsoever; the oxen's movements are entirely arbitrary and solely depend on those tussocks they happen to notice first. They literally meander about. It is impossible to discern any pattern whatsoever in the ichnography. The proper name for this type of movement is *Brownian*, a term used at times by Serres as well. The concept of Brownian motion describes the random movement of particles, which are immersed in a fluid medium. An ichnography, in general, is nothing but this very movement, this mass or series of movements without a directional. Therefore the *possible* is nothing but this very movement either. From here on, I will call such a random movement, i.e. a movement without a directional a *displacement*.

The sea has shown us that the black multiple is filled with white elements; the ichnography, in turn, tells us the way in which these elements, taken together, produce the possible and the actual, i.e. the real. How do the white elements obtain their values? These elements are relational; they obtain their values through the relations that exist between them and other elements. In turn, the analysis of the ichnography tells us that these relations are not given[xiii]; they are produced.

To understand this process, it is crucial to remember that, in the multiple, every possible combination between its elements has a chance of occurring. Put differently, there are no stable relations to be found between any of these elements, there is no pattern to be discerned between them. The existence of such a stability would exclude a number of possible combinations from occurring again, which would amount to the transition of the possible towards the real. The relations in question therefore change continuously and at random at that; there are no immediate iterations[xiv]. The same, consequently, goes for the values taken on by any single element: their sequence does not display any pattern either. Yes, both locally and globally, the multiple is truly chaotic; indeterminate, as well.

How to denote such a transition from one value to another? It is nothing but a displacement, a move from one position to another; we already knew as much, the ichnography showed us already. Through the fluctuating relationships

that provide the connections between these elements, they are displaced vis-à-vis one another again and again or, rather, seeing that these elements are relational, it is more accurate to say that their continuous fluctuating is due to the presence of relations of displacement between them.

For those, who find it somewhat difficult to follow my argument: if one, for every single element in question, would trace out the totality of the movements of which it has been a part, the 'path' thus obtained would depict a pure Brownian motion, i.e. an ichnography. The same would occur if one would superimpose these movements on each other; there would be no pattern to it whatsoever.

So much for the production of the possible; how does reality get produced? By the emergence of a pattern, of number of stable relationships between the elements, which provides each and every one of them with a single value. To say that there exists a stable relationship between any two elements means that the relationship is reproduced; the presence of a pattern is nothing else but a recurring movement between the elements in question, a movement with a directional. Let us call such a movement repetitive, a *repetition*[xv].

An important insight that follows from the replacement of relationships of displacement by those of repetition is that the transition from the possible to the real relegates the former to the realm of the *virtual*. As the number of repetitions increases, more and more elements are provided with fixed values. As a result, the number of possible realities decreases. Yes, there is something called virtual reality after all.

Whence comes the *noise*? This is the question that I posed at the beginning of this chapter. Is it possible to provide an answer to it at this point? Yes. The answer, however, will undoubtedly surprise and perhaps even disturb you.

Of 'non'-sense

How can we describe this fluctuating collage of values that is the multiple? Let me take the two movements called repetition and displacement as my point of departure, in order to provide an answer to the question at hand,

In the case of a repetitive movement, there are two invariant points of reference between which the movement is repeated. Now, (such) a stable relation between two points or elements provides the latter with stable values; it provides each of these points with (an) *identity*. Repetition constitutes the principle of identity. That it does, however, is not particularly surprising: the etymology of the word 'identity' already suggests as much. Identity: it can be traced back to the Latin 'identits', which, in turn, can be traced to the Latin 'identidem'. Identidem: repeatedly, over and over again. Repetition produces identity; it perpetuates the same, over and over again.

In the case of (a) displacement, there are no two invariant points of reference. To be precise: the points of reference for a displacement continuously change. One can only compare a specific displacement to the preceding one and even then only in the sense that there is no comparison to be made due to the fact that there is no directional to a displacement in the first place. When there is displacement there are no stable values to be found, only (as I said) a fluctuation of values. Consequently, all the elements in question lack (an) identity. Displacement produces a 'lack of identity', i.e. it knows no identity. Instead, it produces possibilities or alternatives; it produces the non-identical. Generally, it is referred to as *the Other*; it is also known as *difference*. Consequently, displacement constitutes the principle of difference[xvi].

To come across a body of thought that revolves around the concept of difference is not particularly remarkable. Difference as an ontological condition, albeit in various guises, is probably **the** main tenet of a substantial body of thought

in contemporary social theory and (French) philosophy. The fact that difference is not a given but needs to be produced and, in particular, that the Other is *dangerous* **is** remarkable.

The multiple is both noisy and dangerous. I will discuss the reason for this noisiness first; the violence, the danger can wait. Tohu-bohu or brouhaha; one can also call it a cacophony. The words chosen by Serres to describe (the noise of) the *noise* clearly have something in common. Why these and not others? Because 'noise' signifies nothing (Serres, [1982] 1995: pp. 56), there is no *sense* to it. In order to understand, we have to return to the ichnography once more.

Ichnography: the graph of Brownian movement, the movement without a directional. Without a *sense* of direction. Here, we have to go back; we have to cross the Channel again, this time in the opposite direction. In French, there are two significations to the word *sens*: it refers to meaning as well as to movement, sense as in sense of *direction*, to be precise. Serres knows this all too well and equates one with the other ([1983] 1991: pp. 12). He relates movement to meaning: signification necessitates a stable movement, a directional. As a result, there literally is no sense to be made of the ichnography, i.e. the multiple. That this is indeed the case is quite easy to see: how could anyone ever hope to discern anything at all in this perpetual collage of differences? The black multiple is the very absence of sense, it produces nothing but 'non'-sense or no-*sens*. Consequently, to signify is to come into existence.

What is the purpose of this whole discussion of movement and signification? Yes, there is no sense to the *noise*; but how does all of this relate to noise? Is noise audible? Yes. What exactly is noise? Sound, that much is certain; however, it is also a concept that belongs to the field of communication theory, which is a topic of interest to Serres as well ([1980b] 1987).

The concept of noise, in a nutshell, denotes a disruption or disturbance of the process of communication between two or more parties. It distorts all messages that are being transmitted from one party to the other thereby making them

completely unintelligible. It literally produces *no sense*. Serres calls it a *parasite*; it is not alone, however. There are anthropological and biological parasites as well (Serres, [1980b] 1987). Like their auditory counterpart, they disrupt stable relationships between different parties by causing interference. The parasite or noise is therefore a general phenomenon that is not limited to these three particular fields. At the same time, the parasite is also a localised phenomenon because it always to be found between specific parties.

Now, the total absence of sense in the ichnography is nothing but the presence of this phenomenon on a global scale[xvii]. Once local, it has spread out its wings and moved on to bigger things, in a manner of speaking. As a result, the noise that is to be found in the multiple did not originally start out as an auditory one; the corresponding chaos, however, can nonetheless be heard all the same, regardless of the nature of the multiplicity in question.

End of days: prologue

At last: why is the multiple, this perpetual collage of differences, dangerous? Elsewhere, I have also made use of the terms 'fury' and 'violence' to describe it. Here, however, I intend to limit myself to 'dangerous' only. Why? I am presently investigating the multiple *an sich*, i.e. an abstracted one. The use of fury and violence evokes certain ideas or images that are more or less associated with a certain realm, such as the *social* for instance. I do not mean to suggest that the use of these notions is limited to a particular domain. However, in order to avoid any confusion, I will refrain from using them.

The task before me is quite a daunting one. Why is that? I am concerning myself with an abstracted multiplicity, which means that I have to avoid employing ideas or concepts that solely belong to their own discipline or field. I

am aware of the fact that I, earlier on, mentioned Serres' use of concepts that are isomorphic to the multiple. Serres, however, always avoids stretching the argument too far. Likewise, I intend to do the same.

What does a multiple do? It performs work; it produces (Serres, [1982] 1995: pp. 101). It creates. Possibilities or possible realities, to be precise. At first sight, it appears that we already knew as much. However, to say that the multiple performs work gives rise to the question as to how it is able to do so? No. I need to pose another question first: who or what performs work, who or what produces? A *motor* or *engine*.

What we need, then, is a schematic or blueprint that explains the workings of an engine. Here it is (Serres, [1977a] 1993):

- A *motion* or movement that performs work, i.e. produces (pp. 44);
- A *differential* that makes possible said movement (pp. 63) *and*
- A *reservoir* that provides the necessary differential (ibid.).

According to the aforementioned blueprint, an engine produces by generating a movement that results from a differential, which is to be found in a reservoir[xviii]. Now, At first sight, this description of the engine appears quite similar to that of the multiple. Do not forget: looks can be deceiving. Let us take a closer look at the multiple in order to determine the way in which it is able to perform work.

The multiple is a perpetual collage of differences produced by a mass of displacements. It is also a set of blank elements or jokers, of relational elements. Taking the exposition of the inner workings of the multiple I provided earlier on as a starting point whilst keeping the aforementioned in mind, it is possible to compose the following sequence: the change in the value of an element, which itself is the result of a displacement, in turn displaces the elements to which it is related, thereby changing their values and so on and so forth[xix]. Movement –

difference – movement etc. Here, we have a differential that produces a motion, which subsequently produces another differential[xx]. Two components of the engine are definitely present; what about the third?

The multiple is not an engine; it is a proto-engine. Not only in the sense of the primordial, the originary engine but also in the sense of being of a rather crude design. It does not have a separate reservoir but acts as its own one instead. The multiple draws on itself in order to produce itself over and over again[xxi]. Could the multiple be the one machine to accomplish the impossible, i.e. perpetual motion?

No. The proto-engine is unstable. The differential on which the proto-engine operates is not stable; it fluctuates like crazy. There is no cohesion, no unity to the multiple whatsoever. Cohesion requires the presence of stable interactions or repetitions, which are (as we know) completely absent from the multiple. The fact that these elements are relational does not change that. To use a figure of speech: they go their own way. The proto-engine is unstable and perpetuates its own instability through its own productive process. The proto-engine is therefore always in danger of falling apart. It can and ultimately will, if left to its own devices. Such a breakdown would amount to the cessation of all movement. Death.

The notion of death as the cessation of all movement is also in accordance with the presented conceptions of the real and the possible. After all, if the real is defined in terms of repetition and the possible is defined in terms of displacements, it follows that death is to be defined in terms of the absence of all movement. Yes, it is death or, rather, Death; and rightly so at that. The concept of the multiple embodies at once the Alpha and Omega of existence. Yes, the multiple is the source from which existence springs forth; however, it also contains the seeds of its own negation. If left to its own devices, the multiple will ultimately destroy itself. It is a model that encompasses Serres' entire philosophy in a nutshell.

It should be noted that the content of the process I just described depends on the actual multiple under consideration. The factors of importance will vary from one multiple to another. The outcome of the process remains invariant across the entire 'multiplicity of multiplicities', however: the perpetual presence of displacement always ends with Death. Has any writer ever devised a plot as diabolical as this one?

I set out to explain the *noise* of the abstracted multiple; I have done so. The time has come to explain how the problem of the *noise* translates to the (realm of the) *social*, i.e. to the field of human relations. Such an explanation requires me to provide an answer to the following two questions: how is the multiplicity produced, the multiplicity that is to be called our own and why will it, if left to its own devices, destroy itself?

End of days I

The problem of the *noise* is essentially one of *place*:

"To take a place or to give up a place, that is the whole question. There are those who take places, there are those who give them up. Those who take places take places always and everywhere, and those who give up places always do so." (Serres, [1982] 1995: pp. 74)

The taking or ceding of place, to be precise. At first sight, one either *takes* or *gives up* a place, i.e. we are apparently confronted with two different operations. A closer look, however, reveals that they do not differ from one another. I will show you. In a moment. If one wishes to discuss the taking and ceding of place, one

needs to know what is actually taken or ceded. First, I need to focus my attention on the concept of place.

What does Serres refer to when he talks about place? A place: a location or *position*. In order to understand, it is important to remember that we, here, are interested in the social. Therefore, place should be understood as a reference to what we commonly call (an) *identity*. Seeing that I have already made use of identity in a different sense earlier on in the discussion, I will use position instead of identity in order to avoid confusion. In any case, there do not exist any *unoccupied* places (Serres, [1982] 1995: pp. 74). That is to say, place is not a *transcendental* given existing independent of us. It is to be actively produced instead; it is *immanent*.

How should one conceive of the ceding of place? It is obvious that it entails the cession of a particular position. But how is it done, in what way does one give up one's position? To give up a place is to step aside (Serres, [1982] 1995: pp. 77). An answer, but one that immediately gives rise to another question: what might it be, this 'stepping aside'? Such a step is neither deliberate nor programmed, it knows no route (Serres, [1982] 1995: pp. 79). The step aside is (what I have elsewhere called) a displacement, it is nothing more or less than a movement without a directional. At first sight, this displacement called stepping aside appears to differ from the so-called taking of place; after all, the latter seems to imply an operation or movement *with* a directional. It does not, however.

First the obvious: when one takes a place, one also leaves behind or gives up a place. Therefore, what is important is the way in which one does so. With regard to the taking of place, it is the place itself that matters; the way in which it is to be occupied is only of secondary importance (Serres, [1982] 1995: pp. 53). Put differently, any place will do. We have encountered this before: it is no different from the oxen that produce the ichnography. Here, too, it is all about those tussocks that happen to be noticed first, only this time it is not about tussocks but positions instead. Here, too, we are confronted with a movement

without a directional. That is to say, the taking of place entails stepping aside as well. The ones that step aside are to be called *white* (Serres, [1982] 1995: pp. 47). As we have seen, all step aside; *all* are white. What is going on here?

Why does someone step aside? To evade the noise (Serres, [1982] 1995: pp. 79). Noise in the sense of *interference*, the very same parasite I introduced earlier on. It, in the form of either battle or racket, is produced by those wanting to take (a) place (Serres, [1982] 1995: pp. 53). It comes between a person and his place, it expels the former so that the latter may be taken by someone else, i.e. the noise-maker. However, it should be noted that, although Serres mentions battle or violence as one manner of causing interference, it is by no means necessary to **actually** engage in it in order to expel someone from his place. Its mere threat should be enough to provide all the interference one needs. Or, rather, its threat is already present when one makes a racket; after all, as we have seen, sound and fury go hand in hand.

Why does someone step aside? Serres has already (implicitly) provided us with the answer. One wants to evade the noise; one is looking for a *quiet* place[xxii]. This should not come as a particularly big surprise: after all, stepping aside does not take place in a vacuum, which is to say that one needs *somewhere* to step aside *to*. Time for a re-examination of this operation called 'stepping aside'. When someone steps aside, one either finds or creates a new place to occupy (Serres, [1982] 1995: pp. 77). A quiet one, naturally. However, there are no unoccupied places. As a consequence, whenever someone manages to find a quiet place and subsequently seeks to occupy it, he will have to expel someone as well. How? By making noise. The step aside takes places as well; to be precise, it can amount to the taking of a place as well, provided one does not create a place instead.

When does one step aside by finding (= taking) a place and when does one step aside by creating one instead? It *depends*. To begin with, everyone is looking for a quiet place, a place that is temporarily not assailed by others. The moment a particular person is expelled from his own place, he will look for another place to

occupy, whereby any place will do. As long as it is quiet, that is. However, if there are no quiet places to be found around him, i.e. if all the places around him are already being assailed by others, he will have to *create* one instead[xxiii]. As such, it depends.

Ultimately, it does not matter whether one takes or creates a quiet place. The result will always be the same: in both cases, the new-found peace-and-quiet attracts others, leading to another expulsion etc. In the end, everyone causes interference for everyone. It is easy to see that this results in, reproduces the abstracted multiplicity I discussed earlier on. Still, what is happening here?

It is **not** a matter of *Being*. After all, Being necessitates the occupation of a single place, it requires stability. 'To be' or 'to exist': to persist, to endure. Nothing more and nothing less. No, it is definitely not that. It is a matter of *Becoming* instead[xxiv]. Not in the sense of the development towards a particular state or endpoint, though; I mean Becoming in the sense of becoming something or someone *else*. Becoming is a process that rejects the present, the 'here-and-now' in favour of the future, the 'there-and-then'. It aims for the horizon. Repetition and displacement; Being and Becoming.

It is the *Hell of Becoming*. One is trapped in a process that never stops, a process that leaves one with *nothing*. Or, rather, leaves one as *nobody*, which is basically the same thing. Here, no one exists, no one has an existence, everyone is left standing with empty hands, time and time again. This nothingness is the reason why everyone is looking for a quiet place: to have a quiet place, i.e. a place to call one's own is to exist, to have an existence. Yes, any place will do, any existence will do… Ironically, this hell is perpetuated, is produced by the very search for a quiet place. Be aware: this is neither a contradiction nor a circular argument. Let us, in order to understand, take a closer look at what exactly Serres is trying to tell us about ourselves.

We human are not autonomous; we are not free to choose a place, we are not free to choose our own place to live. In order for anyone to be able to occupy a

single place, i.e. in order for anyone to be able to *be*, it is necessary that (the) others refrain from taking his place and stay in their own ones instead, which, in turn, necessitates that they are left alone by (the) others as well. However, this is exactly what is absent from the whole process: the search for a quiet place completely ignores all the others in and through the very fact that one takes their places.

Ultimately, it is impossible to find a quiet place, to escape the Hell of Becoming. Why? Could one not, in a concerted effort, try to refrain from taking each other's places? Yes, one could. However, as soon as one succeeds in creating a couple of quiet places, as soon as one succeeds in bringing some of the local noise to an end, this very quiet will, invariably, attract others that wish to make it their own, thereby negating it in the process. It is this impossibility of escaping the noise that produces the violence through and by which the multiple will destroy itself. It is the result of the realisation that the only way to find a quiet place, the only way to exist, is to silence this noise. Who makes noise? Everyone. Who, then, to silence? All (that is, everyone else). The syrupy hate, mentioned in the quote at the beginning of this chapter, is the product of the despair that someone experiences when he is not able to find a quiet place. From this point on, it will not be long before the violence of all against all (Serres, [1982] 1995: pp. 83) becomes a reality. Yes, if left to its own devices, this multiple will cease to 'not-be'. The end of history.

Notes

[i] I want to emphasise that neither one is reducible to the other, although they **are** related; the quote makes this quite clear.
[ii] For those who do not know this fairly short story by Balzac, the painting in question consists of a myriad of colours, a jumbled Frankensteinian collage in which nothing, no shape, form or representation is to be discerned whatsoever.
[iii] To say that a set is undefined by its elements does not mean that there are **no** elements but that these elements are not sufficient to define the essential characteristics of the set instead.
[iv] Here, I am referring to an actual instead of an abstract one.
[v] I want to point out that Serres does not privilege the natural sciences in his investigation of the multiple; he makes use of the humanities as well.
[vi] The story of Joseph is one of expulsion. His brothers, who were jealous of the preferential treatment that Joseph received from their father, one day trapped their despised brother at the bottom of a pit and subsequently sold him to travelling merchants who, in turn, sold him into slavery. Eventually, Joseph ended up at the court of the Egyptian pharaoh, where he ascended to a position of considerable power. The story of Joseph is paralleled by that of Tamar, who got married to and subsequently banished by each and every one of his brothers.
[vii] Theogonia: birth of the gods. Birth of the world as well.
[viii] The complete sequence is as follows: Frenhofer – Porbus – Poussin. Frenhofer has completely mastered the fine art of painting; it no longer holds any secrets for him. Porbus is a well-known painter in his own right but still has a thing or two to learn, whereas Poussin stands at the beginning of his artistic career. The old man is indeed a source, a source of knowledge on which the latter two can draw to further the development of their own skills.
[ix] Although nothingness is not exactly the same as whiteness or blankness, there obviously is a clear connection between these notions.
[x] The nature of the possible depends of the definition of the set that constitutes the multiple under consideration.
[xi] Serres therefore calls it 'the divine floor plan' ([1982] 1995: pp. 21).
[xii] The myth tells how Hercules, after having defeated the monster Geryon, sets up camp near the banks of the river Albula in order to get some well-deserved rest. While he is sleeping, the oxen he took from Geryon graze on the banks of the river until they are stolen by a shepherd by the name of Cacus. Upon awaking from his slumber, the Greek hero notices that 'his' oxen are missing and sets out to find them. After a while, he comes across a cave; it is the one where Geryon has hidden the oxen. He ventures into the cave in order to retrieve the oxen and kills Geryon in the process.
[xiii] If this were the case, every joker would have a single and unchanging value. As a result, there would only be one possible reality, i.e. a single and invariant one.
[xiv] It does not mean that any relation will only occur once. Relations can re-occur; the exact moment of their re-occurrence remains unpredictable, however.
[xv] Although the basic mechanism for the emergence of the real from the black multiple (as it is introduced here) is accurate, the process itself is a little less straightforward. I will discuss it later on.

[xvi] Displacement and repetition: the two (dare I say it?) *prime* movements.
[xvii] The way in which a local noise can become global is addressed in chapter four.
[xviii] Although most people are inclined to think of a reservoir in terms of a receptacle, it is more than that: a reservoir is a *source* of energy (Serres, [1977a] 1993: pp. 70). Here, one just needs to think of the aquatic storage reservoirs that are used to generate electricity in order to see that this is indeed so.
[xix] Alternatively, the displacement can also lead to the establishment of a relationship with a previously unconnected element, which will lead to further displacements as well.
[xx] A differential is solely defined as the presence of two or more elements that are unequal to one another, as can be inferred from Serres' writings ([1977a] 1993: pp. 56).
[xxi] At first, I wanted to say that the multiple reproduces itself. However, reproduction is repetitive and does not create anything new; it merely repeats the same over and over again. The multiple creates, even when it is re-creating itself. A somewhat paradoxical situation perhaps.
[xxii] The search for a quiet place is in accordance with Serres' own thinking; see page 77 ([1982] 1995).
[xxiii] Yes, all are truly white in that everyone can occupy all positions.
[xxiv] On page 48, Serres ([1982] 1995) refers to a process that he calls 'Being'. At first sight, this process seems to refer to what *I* have called Becoming. However, Serres' remark that "Being is blank" is meant to point out the fact that there is no *essence* to our existence, just as there is no essence to the joker. Page 47 (ibid.) supports this explanation by stating that "Man has no instinct, man is not determined".

L'Histoire d'histoire

With respect to the concept of *history*, it is possible to distinguish three different senses that are generally attributed to it. History can be seen to refer to either *that, which no longer is*, *the totality of events belonging to the past in general* or *a particular sequence of occurrences that has led to / brought about a specific event*[i]. In addition, there also exists a field of inquiry that not only claims to concern itself with 'history' but prefers to use the term to refer to itself as well.

Although all three senses are clearly related, whenever someone wishes to subject history to closer scrutiny, he or she is usually interested in the last one. I, for one, definitely am. To be precise, I am interested in the relationship that exists between history and the multiple. Seeing that the multiple is the wellspring of the real, how does the latter (multiplicity) produce the former (history)? How does history emerge from or, perhaps, come about in the multiple? To answer the question, I need to turn to another concept, that of *time*[ii]. Why? Or, rather, why is it necessary to explicitly address the relationship between these two concepts? Is it not a rather obvious one in that the passage of time can be seen as the very thing that produces history? No. Things are not that simple.

Time: it is often said to be 'relative'. An idea that, with respect to the realm of the social, usually results in or amounts to some sort of subject-ive, phenomenological concoction[iii]. Does this mean that there is nothing sensible to be said about 'social' time at all? A rhetorical question, of course; otherwise, I would not be spending any 'time' (no pun intended) on the subject. Where to start the investigation, how to approach the matter at hand? By picking up a dictionary of the French language.

The final frontier

Temps. It is the French word for 'time'. It also, however, refers to sun, snow, fog, rain, in short, the *weather*. Similar to the *noise* of the previous chapter, Serres plays off these two senses of 'temps' ([1982] 1995: pp. 101):

"Thus, the weather, meteoric time, qualified as fair of foul, is in precession over the time that elapses, passes… or flies."

'Elapse', 'pass' or 'fly': these are all qualifications that we use to describe the way in which we usually experience time. They designate what can be seen as time in the 'usual' sense. The latter is, however, dependent upon another kind of temporality, one that belongs to the heavens, i.e. to storms, winds, snow or clouds; to *multiplicities* (pp. 102)[iv].

Why is said relationship important? Because the temporality belonging to the multiple is one that can be considered quite peculiar, notwithstanding the fact that Serres calls it 'basic' time (pp. 100). But let us consider the aforementioned 'mundane' temporality first. What exactly *is* time in the 'usual' sense? To be honest, my particular choice of words here is somewhat unfortunate, for it implies that there is only one kind of time. This is not the case; there are more temporalities, although they are all dependent upon multiplicity (pp. 97). I will address them elsewhere. Does this mean that there is nothing that these different temporalities share or have in common with one another? No. The idea of temporality in general is associated with a 'journey' from one instance to another. It is certainly implied by the qualifications I mentioned above. As we will see, there is one characteristic that all temporalities have in common with one another: they all refer to or encompass a particular sequence, a succession of occurrences that leads to a particular outcome.

However, the situation is somewhat different where the temporality of the multiple is concerned. Here, we need to remember that the multiple fluctuates incessantly. It does not contain any stabilities or stable values whatsoever. Although it is saturated with activity, one could say that nothing actually happens in the multiple. Nothing except the perpetual production of possibilities. As such, multiplicity knows no time. To talk about basic time is talk about the prerequisite of temporality. The multiple, the *noise* is nothing less than the temporal matrix.

Where might one find time, then? The time of history, that is. Before I can provide an answer to this question, I need to discuss another concept first, one that is usually bracketed together with time. I am referring to *space*. Let me turn, yet again, to the good book *Genesis* (Serres, [1982] 1995), page 116:

"Space is what we call a relatively homogeneous, isotropic multiplicity, subject to some law or definition."

Space is a concept we usually take for granted in the sense that we consider it a given. This holds true whether the space under consideration is natural / physical or, as is the case here, social. However, as Serres argues, space is a particular kind of multiplicity, it is the product of movement: it is produced. But how? What do the terms he uses, i.e. homogeneous and isotropic, refer to?

It is a matter of redundancy, of *repetition* within a multiple (pp. 117). Taking into consideration the nature of multiplicity, Serres' use of the term 'repetition' should be understood as pertaining to a repetitive movement, i.e. a movement with a directional. To say that a multiple is relatively homogeneous and isotropic is to say that, when one considers it in terms of both repetitions and displacements, the former are more prevalent throughout it. When *all* displacements have been eliminated from the multiple, the space that remains can be called 'Euclidean' (ibid.)[v]. The consequence of said elimination is that, in Euclidean space, there is no *noise* to be found whatsoever.

At last, I have all I need to provide an answer to the question regarding the relationship between the multiple and history. Let me, in order to explain, repeat the definition of history I provided earlier on. History is about (the coming about of) events, it is about the transition from or transformation of one state (in)to another. As such, it is not to be found in the multiple: the latter is always in a perpetual state of flux, nothing in there is ever definitive. Perhaps it is to be found in a space, then? No. In (Euclidean) space, there are only repetitions to be found or, rather, it is repetitive, that is, re-productive. Euclidean space is a perpetuation of a particular state.

Does this mean that I have exhausted all possibilities? All except one. One has to look *in-between*; in-between space and the multiple, that is. Consider a series that, just like the one discussed by Serres ([1982] 1995: pp. 116-117), begins with (a) pure multiplicity and ends with (a) Euclidean space. As one moves from space to multiplicity, as one moves from the right to the left of the series, repetitions give way to displacements, which is to say that the real retreats in favour of the possible. Space dissolves and *noise* reappears. Or, when moving from the left to the right, the possible recedes to make way for the real and the *noise* disappears.

To be able to talk about history is to be able to discern the process in and through which transformation comes about. History is as much a definitive course of action as it is a discernible course of action. Or, rather, in order for a course of action to be definitive it needs to be discernible as well (although the latter is not enough). As such, history requires the presence of repetition(s). It also, however, requires displacement(s); otherwise, there would be no possibility for change. History, its production, is to be found between these two extremes.

End of days II

Now, although important, there is more than history alone. Its time is only one temporality; there are other ones to be found. Serres discusses them extensively in *Hermes V* [1980a] 1994). I will spend some time on these temporalities as well.

The first of these temporalities is called 'reversible' by Serres ([1980a] 1994: pp. 97). Reversible should, however, not be understood in the sense of the undoing of a certain outcome or state of things but in the sense of Newtonian time instead. For Serres, Newtonian time is the time of a closed cycle (ibid.). It does not matter whether this cycle is passed through from beginning to end or from end to beginning: the state of things remains unchanged. To put it in the terms I used earlier on: reversible time should be conceived as a sequence, a succession of occurrences that has come back upon itself. In doing so, it has created a circle. As a consequence, this sequence or succession of occurrences is repeated over and over again. In essence, reversible time is the time of the identical; it is the time of Euclidean space. It is also the time of our daily lives…

The remaining (two) temporalities can be characterised as *thermodynamic* (Serres, [1980a] 1994: pp. 100-101) or, more appropriately, *entropic*. But what exactly is this thing called entropy? By no means a trivial question. Let us turn to the field of physics where the concept made its first appearance. How is it defined? Entropy: a measure of the amount of useful energy present within a particular system. Or: entropy: the amount of free energy available in a system to perform work. Or, alternatively: entropy: a measure that is used to determine the degree of order that is present within a system.

Notwithstanding the fact that these three definitions of the concept of entropy differ from one another to some extent, they all are related to the second law of thermodynamics, which concerns itself with closed systems. As a consequence, they all convey the same message: total entropy equals *death*,

literally. Nothing can and will ever again emerge from such a system. More accurately, its consequence is that there no longer is a system in the first place.

It should be obvious that the phenomenon, to which the concept of entropy refers, is by no means limited to the realm of nature. One does not even need to discuss whether notions as energy and work do or do not belong to the realm of the cultural (social). Entropy, ultimately, is about death. The same can be said of Serres' two thermodynamic temporalities. He does, however, make an important distinction. The first one ([1980a] 1994: pp. 100) is the time of a single organism, of a single individual. It delineates the path that every life, without exception, takes. It is the time of the decay of our physical being, the irreversible trajectory that, ultimately, comes to an end when we die. Sooner or later, our bodies expire and we cease to exist; whether said expiration is caused by some disease or the result of natural wear and tear makes little difference. It is this very trajectory that Nobel laureate Schrödinger (1967) saw as the defining characteristic of *life* in general.

Although significant, it is not a particularly shocking temporality. We all, already from an early age on, know that we will die, although it is quite common and, perhaps even necessary, to sometimes delude ourselves into thinking that we will not. The second temporality is quite shocking, however. It is the time of the social (pp. 101). The time of *Man* instead of man. It delineates a path quite similar to the one discussed above, albeit with one crucial difference. Here, the end of the path is marked by the destruction, the complete annihilation of the social itself. *Death* with a capital d, that is. It is the temporality that belongs to the multiple[vi].

Time: it is often called a dimension, which is meant to express the fact that it is a given. However, as the content of the present chapter has shown us, it is **not**; time is actively produced instead. Or, as is sometimes the case, re-produced. Time is first and foremost (a) movement[vii]. In addition, I have also shown that time's arrow knows more than one direction. Sometimes there even is no arrow at all.

Notes

[i] 'Event', here, has to be understood as the transition from or transformation of one state (in)to another.
[ii] It should be noted that the conception of time, which is introduced here, differs from the way in which I have used the term in the preceding chapters.
[iii] The work of Adam (1990) provides a collection of these unfortunate misconceptions.
[iv] By now, most readers have probably noticed that Serres excludes the **social** sciences from his intellectual journeys. What are his reasons for doing so? And why, for that matter, have I waited until this point to address the question? To answer the latter one first: I had to wait for the weather to change first. Serres' use of concepts such as the sea and the storm-cloud teaches us an important lesson: multiplicity, i.e. the *noise* is of or, rather in the world. In nature. As Serres points out (1997: pp. 16), the social sciences have chosen to isolate themselves from nature as well as the natural sciences because they believe that their object of inquiry is of a entirely different nature (no pun intended). As such, the social sciences are blind to or, rather, deaf to the *noise*; they completely ignore the wellspring. They cannot teach us anything.
[v] In Euclidean space, all elements occupy a fixed, i.e. stable place. They do **not** occupy the same place; such a thing would be impossible.
[vi] At this point, a word of clarification might be in order. A couple of pages ago, I said that multiplicity knows no time; which is still true. However, if perpetuated, multiplicity will invariably bring about entropic time, i.e. the time of Death. Multiplicity knows no time; no time but the one of entropy if left to its own devices.
[vii] Assad (1999) sees 'time' as the central theme of Serres' work. As such, she has not only failed to recognise the fact that time is produced but also missed the crucial difference that exists between basic time and the other temporalities.

As if

How to avoid or put an end to the violence of all against all before it is too late? And, in addition, how does the transition from order to disorder take place, the transition from (Euclidean) space to (basic) time, i.e. from repetition to displacement? And vice versa, naturally. These are the questions that will be addressed in this chapter. In the process, we will encounter Lucretius again.

As always:

"The structural system and Georges Dumézil's comparative method lead to classification. They help identify… the invariability of three classes… sovereignty[i], struggle, and production. Jupiter, Mars, and Quirinus, under different names… remain the gods of these peoples…" (Serres, [1982] 1995: pp. 81)

How do these three classes and their invariance relate to the problem of the violence of all against all? Here, it is necessary to understand that each class is associated with a particular object, a *quasi-object* (Serres, [1982] 1995: pp. 88). As such, we are in need of an explanation of the concept of the quasi-object. Where to start the investigation? Would you be surprised if I told you we need to go out and watch a game of soccer?

Consider a ball; the one to be found in a game of soccer, for instance (Serres, [1980b] 1987: pp. 346 =>)[ii]. See how it moves across the field or, rather, how it moves the players across the field. The way in which the two opposing teams are configured depends entirely on its movements; their configurations change as the ball moves across the pitch. Yes, the entire game is geared towards it, even the rules revolve around this ball (Serres, [1980b] 1987: pp. 347). Revolve, a good choice of words: this ball is the sun around which the players revolve (pp. 346).

This ball, which (just in case you were wondering) is indeed a quasi-object (Serres, [1980b] 1987: pp. 347), reverses the traditional subject – object division. Not so much in the sense of the subject as (a) human and the object as (a) non-human, although it is applicable here as well; more in the sense of the subject as the one who performs a certain operation and the object as that, upon which the operation is performed[iii]. To be precise: here, the human subject becomes the human object and has no choice but to submit itself to the (movements of the) ball. Just see how they run.

Interesting? Yes. Important? No, not here. With respect to the violence of all against all, Serres is not interested in the quasi-object as a quasi-subject but in the quasi-object as a *bond* between men instead ([1982] 1995: pp. 88)[iv]. But what does that exactly entail, a bond between men? Why is it important? Bond: connection or relationship, an in-between that links one person to another. A *stable* relationship, it should be noted. It is what I have called, referred to as *repetition(s)*. Such a connection makes for or provides stable places; in doing so, it cancels out any interference.

We already know the three classes in question; let us take a closer look at the associated objects. With respect to religion, it is a matter of the *sacred object* (Serres, [1982] 1995: pp. 88); with respect to war, it is one of the *weapon* (ibid.); with respect to exchange or trade, it is one of *money* (Serres, [1982] 1995: pp. 89). How is it that these three objects can function as, create a bond between those comprising the multiple, the very multiple that is running rampant? How do they stop the violence of all against all, how do they prevent or bring a halt to the time of entropy? Let us take a closer look. In Serres' words ([1982] 1995: pp. 89):

"Here then are the lineaments of our bonds: the crowd prostrate before the monstrances limns a star – the one-all schema."

The term 'monstrances' refers to both the sacred object and the weapon (Serres, [1982] 1995: pp. 88). It is easy to see how these monstrances, the moment they are made visible, stop those that comprise the multiple dead in their tracks. Who would dare to ignore the sign of the divine? Who would dare to ignore the sign of one's very own god or gods? And likewise for the gleam of the unsheathed sword: who would be foolish enough to ignore its presence, thereby running the risk of being mercilessly cut to pieces?[v]

What about money? At first, the schema produced by the other two quasi-objects seems to be counter-intuitive where money is concerned. Remember: first looks can be deceiving. Initially, money produced the one-all schema as well, in that it was a matter of paying tribute to the heroes of war or the payment of taxes to the state (Serres, [1982] 1995: pp. 89). Hero or state: both are clearly related to the class of the weapon. Initially, this quasi-object started out as a mere derivative of the weapon, the only difference being that it did not form the centre of the star but had to be brought there instead.

We now know the *how*, we do not yet know the *why*. Why is it that these quasi-objects succeed in stopping the violence? Because a quasi-object is *white* (Serres, [1980b] 1987: pp. 353). We already know what that means: blank, undetermined. This, too, might seem counter-intuitive. Take, for example, the sword: does it not present us with a clear signification? If this were indeed the case, its presence would not accomplish anything. As Serres explains ([1982] 1995: pp. 29):

"Symbol was what the Greeks called a broken, jagged, uneven, fragment of terra cotta, which fitted precisely only the other fragment of the same break… Rub out the crenellations… of the symbol… [and] the symbol adapts to an increasing number of fragments… If it is determined, it excludes much… the symbol fits no one…"

Here, Serres uses the term 'symbol' in two different senses: it not only refers to the fragment but also to the symbol as *sign*. With respect to the latter, he shows that the symbol, in order to be able to signify something to everyone, has to posses no signification of itself whatsoever; otherwise, the sign is of no use. Its lack of determination is what makes the sign, the symbol, the quasi-object *omnispecific*. To induce fear, it is absolutely imperative that the sword is blank.

Above, I said that each class is associated with a quasi-object. It would have undoubtedly been more correct to say that these classes have developed around these objects instead. After all, classes do not just fall like manna from the sky. It is their very development that has led to the institutionalisation, the ever-increasing regulation of these three quasi-objects. One only has to think of institutions such as the church, the bank or the army (and its derivatives, such as the police) to become aware of the extent to which these objects impinge on our day-to-day lives.

What do classes do? They produce *dams* in order to regulate (a) flow (Serres, [1982] 1995: pp. 94). That is, they restrict movement in certain directions and channel it in others, they create pathways or circuits to move across or along. They provide movement(s) with a *directional*, through which they create order and stability. The development of these classes marks the transition from the one-all schema to that of a (much) more sophisticated graph, which is merely a more effective means of cancelling out *noise*. It also sheds some light on the workings of money as a quasi-object: the circulation (instead of accumulation) of money cannot be anything but he result of this process. A circulation that is possible due to the fact that money, as a general equivalent, can be substituted or exchanged for anything or anyone (Serres, [1980b) 1987: pp. 353). Yes, money **can** buy you anything and anyone you want. It is quite easy to see how the exchangeability of money is able to create stable patterns of interaction between people, patterns that keep the *noise* at bay…

End of days III

The problem at hand is, however, not yet solved. Unfortunately, these quasi-objects are not always able to stop the violence of all against all (Serres, [1982] 1995: pp. 91). Why? The answer to this question should not be particularly surprising. It is their very ability to bring order to the multiple that can lead to their failure to do so. As we know, multiplicity is produced by the search for a quiet place; the violence of all against all is the result of the fact that it is impossible to find such a place. Now, he who holds a quasi-object is able to bring the violence to a halt; he is able to, at last, find or create that quiet place. Therefore, the possibility always exists that someone will (try to) seize it the very moment it is made manifest. There is nothing to stop (the) others from doing the same, with the result that the violence will simply continue[vi].

There *is* another solution to the problem. I will show you:

"… at the center of the vortex, lies the object of hate, the subject of proscription. Multiplicity shoves its *noise* onto the one. It crystallizes the *noise*." (Serres, [1982] 1995: pp. 60)

What we have here bears a strong resemblance to the star schema, the one-all schema of which the quasi-object provides the centre. Only this time, the 'one' Serres refers to is a person instead of an object. Let us examine this figure more closely to see what we might learn from him.

The person at the centre becomes the focal point of the *noise*; the racket, the violence of all against all is directed at him and him alone. The violence of all against all, the violence resulting from the impossibility of finding a quiet place, accompanied by the syrupy hate. The one at the centre becomes the 'object of hate' because this syrupy hate is now directed towards him instead. No longer is

everyone attempting to kill everyone; they all want to kill this lone figure instead. In short, he has become a directional for the multitude. How is this possible?

In a minute. First, I have to point out a small but important distinction. A vortex is **not** the same as a star. A star schema, that is. In the case of the vortex, the movement revolves around the centre, it is not directed towards the centre, as it would be in the case of the one-all figure. Not *yet*, at least. This circular movement is the multitude that swarms around their victim-to-be; perhaps it is better to call it an encircling movement, the crowd preparing themselves for the kill. The star schema is not actualised until the one at the centre is actually victimised. Then, and only then, order is produced.

The one at the centre is a quasi-object as well. How else would he be able to polarise everyone towards himself? How else would it be possible that he becomes the object of everyone's hate, a hate that, at first, is directed towards those causing interference, that is, towards all? Yes, the one at the centre is, has to be *blank*.

In addition, he also *is*, which is to say that he exist, has an existence. Before the crowd rushes in, before he is mercilessly put to death, whilst they circle around him, he is left alone, albeit momentarily. No interference, a place of his own. A quiet place at last. Produced by the masses swarming around him, due to his impending victimisation[vii]. Could it be that the victim dies in bliss for, literally in the end, having come into existence?

The one at the centre is not only a victim: he is a *scapegoat*. Why? Because the hate that arises from the noise-as-interference, which is to say: the blame for the impossibility of finding a quiet place, is shoved onto him and him alone. Furthermore, he is only one of many possible scapegoats. Again: why? The victim, i.e. the scapegoat is a quasi-object; he is blank, he is *white*. This blankness of the quasi-object is no different from the whiteness of the *joker*; it is exactly the *same*. Now, the multiple is composed of white elements; all are white. As a result, all can become the scapegoat.

How, then, is the vortex formed? How is the syrupy hate shoved onto the one? Serres ([1982] 1995: pp. 72):

"It is a chain of contingency, the recruiting takes place through tangency, by local pulls and by degrees… A fragile [chain]… easily cut, fragments easily replaced, a chain almost always broken…"

Serres sees this process as the formation of a chain, the emergence of connections between the links, i.e. elements present[viii]. A chain produced in and through *movement(s)*, that much we already know. Let us subject the chain to closer scrutiny.

To begin with: in order to connect, movements need to make contact with one another; the way in which they connect depends on the way in which they make contact. That is what tangency refers to. Now, taking into account that these movements go in all directions, precisely due to the fact that they have **no** directional, different movements will connect with one another in different ways each time the chain reforms after it has fallen apart[ix]. Furthermore, contacts do not always lead to connections; that is to say, the angles at which movements come into contact with one another need not be compatible at that particular instant. It should also be noted that these movement do not stand in a particular order to one another; therefore, different (combinations of) movements can replace or connect to other fragments as well.

Here, we have a chain or process, which is non-deterministic. And non-linear, for that matter. A chain, in and through which movements combine and, piecemeal, go from being displacements to being repetitions. A chain that can break at *any* stage of its formation ([1982] 1995: pp. 71). Right up until the vortex itself. Why is this a matter of importance? Because the vortex finds itself at a point of transition, a crucial one at that.

The vortex is located in-between order and disorder[x]. No longer pure multiplicity due to its movement around a centre; not yet fully ordered either, precisely because of this very movement, a movement not yet completely oriented towards the figure in the middle. If the vortex collapses, the multiple finds itself back on the path towards Death. If, on the other hand, the vortex reconfigures itself into the star schema, there is order, thereby bringing the violence of all against all to a halt. There is a chance that the scapegoat-to-be will live to see another day.

Intermezzo: it is interesting to note that the way, in which order is produced by means of a scapegoat, directly contradicts the second law of thermodynamics. A brief reminder: the second law of thermodynamics states that the degree of entropy within a closed system can never decrease without having recourse to an outside. Put differently: the degree of entropy within a closed system either remains constant or increases.

However: the object of hate is also the object of exclusion (Serres, [1980b] 1987: pp. 180). This object of hate is none other than the recipient of the *noise* of the multiple, it is the scapegoat. He, the scapegoat, is excluded from, no longer belongs to the multiple. It is easy to see why this is the case: the multitude comes together around the scapegoat, it is their collective hate, the hate shoved onto the scapegoat, that links them to one another. The scapegoat, the object of hate is, rather, becomes the bond, the tie that binds them. As such, it precludes him from being bound to them[xi].

The scapegoat is white, all are white, all can become a scapegoat, I have said so already. The scapegoat is excluded, presents us with an *outside*; an outside produced from **within** the multiple. The multiple is able to bring a halt to the violence of all against all, is able to stop entropic time, to decrease its (degree of) entropy all by itself. Self-organisation. Why is this a matter of importance? It shows us that one should never blindly import insights from the natural sciences to the social ones…

Back to the matter at hand. The scapegoat is not a perfect solution to the problem of the violence of all against all either. The necessary act of killing the scapegoat, the act that brings about the star schema, at the same time destroys this bond. How long will it take for the violence to reappear? No, a single scapegoat is not enough. No number is, in all likelihood.

Lucretius revisited

My point of departure:

"So there is flow; we will call this a laminar flow. This means that however small may be the lamina cut from the flow, the movement of each is strictly parallel to the movement of the others." (Serres, [1977b] 2000: pp. 5).

The flow mentioned by Serres is to be found in Lucretius' *De Rerum Natura*. It is the flow of atoms that moves through empty space, the primordial flow from which all things emerge through the conjunction of these atoms (Serres, [1977b] 2000: pp. 34). It is also a stable flow, i.e. one that is at equilibrium. In this flow, there is no contact between the atoms whatsoever (pp. 27); they will forever continue this parallel movement. As such, it is also the flow of (what I have called) Death, the maximal entropy from which nothing can ever emerge again[xii]. It is the final equilibrium[xiii]. Do these two conceptions of the laminar flow contradict one another or not?

The answer is provided by the *clinamen*. It is the smallest possible deviation (of one of the atoms) from the parallel trajectory (Serres, [1977b] 2000: pp. 4); it is a definitive deviation from *equilibrium*. It is through this very deviation that existence becomes possible: the first atom that deviates will collide

with other atoms, thereby knocking them out of their trajectories as well, which leads to more collisions and so on and so forth. Existence, in the world of Lucretius, must therefore be seen as a temporary deviation from equilibrium (pp. 92); temporary because the entities that are formed through this deviation will eventually fall apart again at their moment of death.

Deviation or *inclination*; the latter is used throughout *The Birth of Physics* ([1977b] 2000) by Serres when referring to or discussing the clinamen. It is not surprising in that inclination, just like the clinamen (pp. 11), refers to an *angle*. The concept of the clinamen can help us to understand how, for *us*, the transition from order to disorder, i.e. to multiplicity comes about. In terms of a previous discussion, the clinamen signifies the first (decisive) displacement, it marks the beginning of the ichnography; from here on, repetition(s) will give way to displacement(s)[xiv].

How is the clinamen produced? The answer to this question is not that difficult. We have seen that there are no permanent solutions that prevent or end the violence of all against all. At one point, one or more stable relationships will break down and the noise-as-interference will reappear, with the result that the search for a quiet place will start all over again. As Serres ([1982] 1995: pp. 58) notes, this noise spreads like wildfire. After the first displacement, that is. But when? And where, where in the ordered graph, for that matter? Both the *where* and *when* are indefinite (Serres, [1977b] 2000: pp. 6). It is simply not possible to say so with certainty. One can try to foresee or predict both the corresponding moment and location; there is no guarantee whatsoever that the prediction will come true, that the foresight will prove to be correct. There are no certainties with respect to the clinamen, just like with the formation of the chain earlier on.

No, Lucretius is not our contemporary. Although I said so in a previous chapter, it is not true after all. As I have shown, the clinamen is the first step on the path towards existence. For us, it is the first step on the path towards multiplicity,

noise, ultimately, *Death*. Lucretius lived in a world that was different from our own. Some would, perhaps, call it a better one…

Notes

[i] Sovereignty should be taken to refer to *divine* sovereignty, that is, to *religion*, as page 85 (Serres, [1982] 1995) shows.

[ii] Serres does not actually refer to a specific ball game; he only discusses a ball and its relation to the players in questions. Being a European from the continent, I have chosen the game I am most familiar with. An Englishman, on the other hand, would probably think of rugby first.

[iii] It should be noted that, as I will show later on, there also exist *human* quasi-objects.

[iv] Although the 'quasi-object-as-bond' is also addressed in Serres ([1980b] 1987: pp. 346 =>), he dismisses the ball as being a 'ludic mime' of such a bond (Serres, [1982] 1995: pp. 87), preferring to investigate the matter by analysing proper quasi-objects instead.

[v] As Serres ([1982] 1995: pp. 89) puts it: "Fear will freeze all the raying connections into a star…"

[vi] Serres ([1982] 1995: pp. 90) points out that the quasi-objects are also objects to be desired, which supports my explanation.

[vii] Serres calls the centre of the vortex literally 'the eye of the storm' (Serres, [1982] 1995: pp. 60). He, too, has noticed this one quiet place.

[viii] The use of the concept of the chain is a reference to the famous chain that was formulated by Descartes, as can be inferred from Serres' discussion on page 71, where he refers to a chain and its weakest link.

[ix] Why does it break time and time again? Because the movements can go off at a tangent. After all, all are white, all are possible scapegoats.

[x] Serres ([1982] 1995: pp. 109) calls *turbulence* an intermediary state located between order and disorder. Although there does exist a relationship between turbulence and the vortex, the former, as discussed by Serres on page 109, refers to a 'collage' of order and disorder. As such, the present discussion regarding the vortex as an in-between differs from Serres' discussion of turbulence as an intermediary state.

[xi] To be honest, the scapegoat is both *in*-and *excluded*. Seeing that the concept of in- / exclusion (Serres, [1980b] 1987: pp 41 =>, for instance) does not affect the present argument and does not add anything to it either, I have decided to exclude it from the present discussion.

[xii] On page 146, Serres ([1977b] 2000) makes the following remark: "The monotony of the uniform field [the laminar flow, RH] might be called white noise." That is to say, white noise is the sound of, signifies *Death*.

[xiii] It should be noted that Lucretius' conception of Death comes very close to our own. Elsewhere, I defined Death as the cessation of all movement. Now, as Serres notes ([1977b] 2000: pp. 146): "… when there is just one uniform movement, in one direction, it is not perceptible."

[xiv] Serres ([1982] 1995: pp. 69) explicitly mentions inclination as the onset of multiplicity.

Dénouement

Prelude

Why *is* it that we talk about organisations as systems instead of songs? The question, which is a rhetorical one, is posed by Gergen at the beginning of his text on Organisation Theory in the postmodern era (1992: pp. 207). It can be inferred from the remainder of the text that his particular choice of words has to be understood as an attempt to change the discourse in the field of (mainstream) Organisation Theory. It is **not** my intention to provide a comprehensive analysis of Gergen's ideas; I do, however, want to spend some intellectual time and space on examining the particular organisational metaphor that he refers to at the very beginning of his argument.

At first, it might seem a little peculiar to focus one's attention on a single metaphor; after all, does one not have a myriad of metaphors at one's disposal that can be used with respect to the study of organisations?[i] However, when one takes into account the fact that the discourse of and in the field of Organsation Theory is dominated by concepts such as rationality, efficiency and performativity, the idea of conceiving an organisation in terms of music seems a particularly enticing one, for the latter is typically associated with a sense of joy, excitement or wonder and, most importantly, the presence of *harmony* between the composition's constituent scores or parts. Whereas the discourse advocating rationality, efficiency and the like presents us with an essentially instrumental view of organisations, the suggested analogy between the organisation and music can be seen to infuse the former with much more *humane* qualities.

As it should happen, music is also a topic of interest to Serres; he is particularly interested in the relationship between music and the noise-as-interference. Here, the argument revolves around the presupposition that music presents us with the most perfect instance of harmony ([1980b] 1987: pp. 200). Musical harmony is to be seen as a state of concordance, which offers us access to

a sublime experience, a moment of profound bliss. It is produced by the attunement of the various scores to one another, which necessitates the exclusion of any form of dissonance from their interrelations; it entails the exclusion of noise, the noise-as-interference, that is.

It follows from the above-mentioned that any analogy between organisation and music goes beyond the arbitrary; the fact that there exists a relationship between music and noise provides a direct link between the former and social multiplicity, thereby making it possible to translate the corresponding ideas of harmony and concordance. Such a state of concordance should be understood as an agreement between the people that, taken together, comprise the multiple. Put differently, it presents us with a situation in which the noise-as-interference is cancelled out through a collective agreement between the subjects in question. It presents us with an impossibility. Utopia.

As I have explained elsewhere, the global (as well as the local) noise is produced by the search for a quiet place; this search is to be conceived as a successive series of displacements or steps aside. The concerted effort needed to cancel out the noise is beyond the power of those involved. Hence the importance of the three quasi-objects: their appearance brings order to, imposes order upon the multiple. Yes, social concordance is an impossibility. Except in the negative sense.

The multitude is able to organise itself from time to time; in order to do so, it creates its own outside, a focal point for the syrupy hate resulting from the impossibility of finding a quiet place. Only in those moments in which the multitude piles itself onto the one at the centre, only when the star-schema is finalised will one ever encounter an example of social harmony… Social concordance, in short, always takes the form of a labour of negation.

Dénouement

The face of the Other

Notwithstanding the existence of a relationship between music and noise, the above-mentioned does not seem to be directly related to the problematic of the Other. However, it does possess one particular characteristic that it has in common with the latter, one that (as I will argue below) is exemplary for the field of Critical Management Studies as a whole. The use of this particular kind of metaphor exhibits optimism with respect to the possibility of redesigning companies in such a way that they offer their employees a more benign working environment. The example of the musical metaphor presents an image of organising that is the product of a bottom-up process involving all of the employees in question. It suggests the creation of a working environment, which is more or less attuned to the (personal) needs of these employees, thus going beyond a pure instrumental approach.

The same kind of optimism (perhaps it would be more appropriate to call it idealism) can be found in the work of Burrell and is directly related to his conception of the Other. The time has therefore come to subject the latter to closer scrutiny. Earlier on, I described the specific construct he presents us with as a dichotomy whose parts are located on or along a particular dimension. More specifically, they occupy opposing positions on the dimension in question. However, such a description is quite crude and certainly leaves a number of questions unanswered. As such, I need to avail myself of a different approach with which to analyse Burrell's conception of Otherness.

Instead of referring to a dimension, it is more appropriate to consider it as a formless (abstract) substance, an undifferentiated material of a particular nature. Like clay, it can be moulded into different shapes or forms, whereby each shape represents an actual manifestation or permutation of said substance. Furthermore, each form can be said to encompass a number of qualities that are specific to it[ii]. It

addition, the specific nature of the material pre-figures the number of possible shapes. As for the parts that, taken together, comprise the dichotomy I mentioned above: they are concrete examples of such shapes.

We already know that one part of the dichotomy (the dominant one) provides us with (an example of) 'the Same' and that the second one provides us with 'the Other'. But how are these dichotomies produced, how does one move from one pole to the other (no pun intended) one? On the basis of what kind of logic do these dichotomies operate? It is my assertion that it is a *logic of complementarity*. It does not matter whether one is considering a dichotomy such as the 'Male' vs. the 'Female' or one constructed around the 'objective' and the 'subjective' (as discussed in the 'Pandemonium' chapter on pages 20 and 21, respectively) instead; in both cases, one part can be said to encompass that, which the other one lacks. To create this particular kind of dichotomy, the logic of complementarity produces a form by composing the contrary of the 'given' or dominant one. It essentially actualises a form that is *already present in its absence*; the possibility of the formation of the contrary is implied or foreshadowed by that, which the dominant form is not. By defining the qualities it does possess, the latter simultaneously (and implicitly) points towards those it does not possess. As such, they serve as the point of departure for the delineation of the shape of its contrary. This 'absent' presence is made possible by the fact that both parts of the dichotomy are moulded from or brought forth by the same substance. As a consequence, a logic of complementarity does not entail a process of transformation or transubstantiation but one of re-formation and re-substantiation instead.

How does the above relate to the question of organisation and the Other? That is, how would an organisational arrangement be affected by the incorporation of the Other, the Other outlined in the preceding argument? Seeing that I have previously related organisation and organising to the creation and maintenance of a particular arrangement of elements vis-à-vis another, the notion of substance

may not be suited to address the topic at hand. Fortunately, it is possible to draw an analogy by redefining it as a *coding principle*.

The organisation of a set of elements can be understood as a process of coding, whereby different codes arrange these elements in different ways and therefore produce different structures. A code provides a set of rules that delineates the operations these elements can (and cannot) perform as well as the interaction that are (and are not) permitted; in doing so, it assigns positions to every element and establishes well-defined relationships between them. Just as the substance pre-figures the range of possible shapes, a coding principle pre-determines the number of codes available; it a priori limits the sets of rules that can be applied to the elements in question.

With respect to the issue of the Same and the Other and its relation to organisation, both can be said to represent different sets of rules. As such, the emancipation of the Same within an organisation amounts to a process of de- and re-coding[iii]. A process that begins with the dissolution of a specific arrangement and subsequently re-codes and, thus, recombines the elements in question. It is essentially a process of re-shaping an organisation; only this time, it concerns itself with a set instead of a substance. How to conceive of this new shape, how does it relate to the previous one?

We already know that the Same and the Other, as used by Burrell, are complementary to one another. The new arrangement therefore possesses all the qualities or properties that its predecessor did not. Same and Other exchange places in that the former is now excluded in favour of the latter. The process of re-shaping is in effect one of inversion: it creates a mirror-image, a negative of the initial arrangement. It is again a matter of re-substantiation instead of transubstantiation.

Is it possible to relate the preceding argument back to the work of Serres? Yes. In a nutshell, Burrell's conception is completely devoid of noise; the noise-as-interference, that is. There is no noise present between the Same and the Other,

no caesarean that could or would prevent them from communicating with each other. Both are well-defined, abstractions that are by no means foreign to one another: although they do differ, they are by no means different. Since they are both moulded from the same substance, any dissimilarity is only a relative one. In the end, Burrell merely presents us with permutations of, variations on a particular substance. They are both, quite simply, manifestations of the Same. His Other is just **an** other or 'Another'.

To put it succinctly: there is no genuine Otherness to be found in the writings of Burrell. Despite his efforts to the contrary, he remains stuck in the valley of the Same. The Other *as* Other, i.e. true *multiplicity*, is entirely foreign to his rural community. Why? It is due to the fact that he conceives it in terms of a stable property or characteristic juxtaposed with a second one. Serres, however, teaches us that Otherness lacks any such stability and only exists in a process of random movement[iv].

I have to admit that I already suspected as much beforehand. Why? At the beginning of *Pandemonium*, Burrell makes the following comment with respect to the 'two-track' structure of his text (1997: pp. 33):

"This does not mean that you should start at the end of sentences on the right-hand side of pages and 'begin' there. Reading '.cte dne eht' is not appropriate. Even devils would not be that malicious."

I readily admit that nonsense is not yet the same as *no-'sens'*. Nonetheless, even the slightest glimpse of a shade of true multiplicity is enough to send him running in the opposite direction. It should not be particularly surprising that any person who does so is unable to come to grips with the Other.

Of course, up until now, I have only addressed one side of Burrell's coin. Not only is he unable to conceptualise the Other, he also believes that it is humane to (try and)[v] liberate the Other in practice, i.e. in the actual world of organisations.

Dénouement

A brief reminder regarding the relationship that exists between multiplicity and entropic time should be enough to his put an end to any such hopes. The moment order begins to give way to disorder, to multiplicity, one has to be prepared for the very real possibility of violence. The possibility of the 'possible', so to speak, is not without its dangers.

Sidebar: an initial reading of the writings of a number of other (influential) writers shows that Burrell is by no means the only one to commit this two-fold mistake, which provides additional support for the validity to the claim I made in the first chapter. One prime example is Alvesson and Deetz (1992). In their text on the potential contributions of Critical Theory to a critical approach to management studies, they, too, employ a number of these dichotomies. For instance: the existence of an objective, 'given' social reality vs. a subjective and socially constructed one (pp. 11) and open vs. closed discursive organisational spaces. In addition, the explicitly mention that their goal is to emancipate the autonomous individual, to set him free from repressive organisational practices so as to realise his full potential (pp. 10).

Another example is Hassard (1993), who contrasts modern with postmodern theory in order to distil a number of elements, which are to be used in the development of a postmodern approach to organisational analysis. Here, too, we are presented with a number of dichotomies. For instance, whereas modern theory sees theoretical language as describing an immutable reality that exists independent of the observer, postmodern theory sees theoretical language as being self-referential (pp. 12). Another important distinction revolves around the conception of agency: whereas modern theory sees agency as originating in the autonomous and self-aware subject, postmodern theory sees it as dependent upon the intersection of different (social) strata within the subject (pp. 15).

Even Hetherington and Munro, whose work (admittedly) is more concerned with general social theory than the field of Critical Management Studies, consider these 'variations of the Same' as exemplars of Otherness. They

regard the great taxonomies, as analysed by Foucault in his *The Order of Things*, as systematic overviews of 'ideas of difference' (1997: pp. 27), whereby the latter is meant to refer to categorisations of the Other(s). However, a taxonomy is merely a collection of entities, a collection that is ordered along a number of dimensions. As such, it is a perfect example of an epistemological *Euclidean* space. After all, the latter is a multiple subject to a particular definition[vi]. Put differently: the elements and their respective positions are all based upon the definition in question, which thus can be seen to provide a common measure for them all. It should be noted that this argument remains valid regardless of the number of elements in question and is not limited to a simple dichotomy.

Apparently, it is extremely difficult to conceptualise the Other *as* Other, i.e. to come up with a conceptualisation of multiplicity. Why is that? According to Brown (2002: pp. 13), who, in order to provide an answer, draws on the work of both Jay and Crary concerning the centrality of the visual in contemporary conceptual analysis, vision's need for recognisable forms and the multiple's total lack of the latter are to blame. Here, however, Brown forgets to take into account the *noise* of the multiple. As such, he only comes up with part of the answer. Regardless of the fact that we do rely heavily on the visual for analysis, it does not preclude one from sensing the *noise*. Although the *noise* can assail **all** the senses, it is first and foremost of an auditory nature and our sense of hearing, as Serres points out ([1982] 1995: pp. 60), is 'always on', i.e. continuous.

What might the answer be, then?[vii] It is not so much about distinction as it is about *signification*. After all, the *noise* signifies nothing. We are not used to thinking about ab-'sense', particularly not about one that, at the same time, is full of **all** possibilities. For a species that is so desperate to discover the 'meaning of life', all of the above may very well be a little too much to comprehend.

Dénouement

Beyond good and evil

Every kind of judgement, be it legal or ethical, is dependent upon or takes place within a corresponding system (Serres, [1977a] 1993: pp. 68). Naturally, it is the system in question that makes it possible to pass judgement in the first place. We all know this by now, yet it is of great importance, since it bears a direct relation to the single most important consequence of Serres' thinking.

Latour (1987) refers to the work of Serres as being devoid of critique, of criticism. Such an assertion immediately arouses one's curiosity and demands an answer. I will provide you with one; better yet, with three. First with the one given by the master himself, then the one given by Latour and, finally, my own.

Critique: it is the work of the negative (Serres, [1982] 1995: pp. 99). Critique is parasitic for it directs itself at the work of others. It scolds them for their failure to recognise the 'truth' with respect to the matter at hand and subsequently proceeds to provide the only correct answer(s), i.e. the only real 'truth'. And, in doing so, becomes the focus of the critique of the one who was initially criticised. Ad infinitum. Critique, as a result, is a variation on the Same as well[viii]. In addition, Serres sees it as the duty of the philosopher to produce possibilities (Serres, [1982] 1995: pp. 23). To produce is, as we know all too well, to step aside. As such, Serres has chosen not to criticise his peers; he has chosen to step aside as well.

Latour's answer is exactly the same as Serres' (see Latour, 1987: pp. 91 regarding the nature of critique and pp. 96 regarding the production of possibilities). It is too bad that he needs the whole of fifteen pages to explicate the motivation of someone who already did so himself five years earlier. It should be noted that copying someone's work is parasitic as well…

The time has come to provide my own answer to the question regarding the absence of critique in Serres' work[ix]. I already pointed out the fact that any

judgement, which includes critique, takes places within the confines of a particular system; it belongs to the ordered, the organised. Passing judgement takes place on the basis of a binary logic: one is either right or wrong, good or evil and so on and so forth. It is impossible for such a logic to cope with multiplicity: in the case of the *noise*, it is not a matter of either / or but one of and / and, all and nothing at the same time, folded into itself. Critique is incompatible with multiplicity; it is powerless when confronted with disorder, with chaos, with *noise*. When one is confronted with *noise*, notions such as good and evil, right and wrong or guilty and innocent are of no use whatsoever[x].

Multiplicity: here, the possible and the actual have the possibility of trading places. Here, one can find true change. However, the possible always finds itself in the vicinity of Death. Eventually, the multiplicity **will** destroy itself. At times, one can see a lone figure standing in its middle; he is all that stands between the multiple and Death. We all know him: he is called 'Scapegoat'.

We are all too eager to condemn the practice of scapegoating. However, as Serres shows us, the real question is whether one can actually do so in the end. An important question, for it brings us to a place in history where Carnot meets Girard. It is also the most important reason for Serres' refusal / reluctance to criticise other philosophers: his concerns lie elsewhere[xi].

Notes

[i] See, for instance, Morgan (1986).
[ii] A comprehensive discussion of the concept of form is to be found in the 'Method' chapter.
[iii] It should be noted that I am still referring to Burrell's conception of the Other, which calls for a replacement of the Same by the Other.
[iv] My argument regarding 'form / substance' resembles Cooper's (1989: pp. 488 - 492) discussion of Derrida's *différance* to a certain extent, particularly with respect to the issue of the re-substantiation of one form into another and the 'present absence'. Our arguments differ to the extent that Cooper does not refer to a substance but a 'force of sameness' instead. Although it is beyond the scope of this text, it does seem legitimate to ask whether Derrida (Cooper's Derrida, it should be noted) remains deaf to the actual Other.
[v] I will leave aside the fact that it is not possible to plan for multiplicity.
[vi] Said definition is not exogenous to the (ordered) multiple but produced in and through the movements between its elements.
[vii] It is not because the of the multiple's inaccessibility. After all, if Serres, as I discussed elsewhere, has managed to successfully avoid such an epistemological obstacle, others should be able to do so as well. Not in great numbers, perhaps, but still…
[viii] Another good reason for the absence of the Other in a discipline called 'Critical Management Studies', especially if the academics in question have chosen their moniker themselves.
[ix] To be honest, he does engage in critique from time to time, especially where phenomenology and Hegel are concerned; yet, he always tries to get it out of the way as quickly as possible, thereby staying true to his intentions.
[x] The fact that Assad (2000) refers to the 'problem of evil' with respect to the *noise* is yet another example of her inability to come to an understanding of the fundamental aspects of Serres' thinking. To designate a specific act or form of behaviour as 'evil' is to judge it on the basis of a particular code or system of ethics. It has no significance whatsoever outside said system.
[xi] In *Der Parasit* ([1980b] 1987), Serres states that we are in need of a *multivalent logic*, which is meant to refer to a logic capable of coping with multiple (concurrent) possibilities. Although such a statement clearly lends some support to my assertions regarding his refusal to engage in traditional forms of criticism, it does not say anything about the feasibility of actually developing a multivalent logic.

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Samenvatting - Introductie

Sinds het eind van de jaren ’70 van de twintigste eeuw heeft zich binnen de organisatiekunde een belangrijke ontwikkeling voorgedaan: naar aanleiding van de discussies rondom het werk van Thomas Kuhn aangaande de beoefening van wetenschap binnen de kaders van een zogenaamd ‘paradigma’, is men zich ook binnen de organisatiekunde bewust geworden van het bestaan binnen deze discpline van verschillende theoretische stromingen welke niet met elkaar verenigbaar zijn. Meer specifiek betreft het een bewustwording van de grondslagen van het zogenaamde *functionele* paradigma en de bijbehorende aannames aangaande de aard van de organisatie alsmede de rol van de werknemer hierin.

In reactie op en als tegenwicht tegen deze dominantie heeft zich een sub-discipline ontwikkeld welke het beste kan worden gekarakteriseerd als ‘Critical Management Studies’. Hoewel er reeds een aantal kritieken van de dominantie van het functionalisme binnen de organisatiekunde voorhanden waren, hebben deze pas met de paradigma-discussie de mogelijkheid gekregen om zich eenduidig te profileren. Hoewel er ook binnen dit veld sprake is van een pluriformiteit aan uitgangspunten, streven de Critical Management ‘Studies’ hetzelfde ideaal na: de emancipatie van de Ander.

Het functionele denken reduceert de werknemers van de organisatie tot een productiefactor, welke geoptimaliseerd dient te worden teneinde de organisationele doelstellingen te realiseren. Het heeft geen oog voor de Ander, dat wil zeggen voor de intrinsieke waarde van de werknemer als **mens** en miskent het recht van de laatstgemoemde op een werkomgeving, waarbinnen men ook als zodanig dient en kan worden behandeld. Binnen de Critical Management Studies ziet men deze reductie als een probleem, dat men langs verschillende theoretische wegen op probeert te lossen.

Het voorgaande roept twee vragen op: in de eerste plaats kan men zich afvragen op welke wijze de Ander binnen de Critical Management Studies wordt geconceptualiseerd; als zodanig betreft het hier een definitie-kwestie. In de tweede plaats is het mogelijk het emancipatoire ideaal van de Critical Management Studies ter discussie te stellen: verdient het inderdaad de aanbeveling om de Ander binnen de (hedendaagse) organisatie te emanciperen? Deze twee vragen vormen het uitgangspunt van dit proefschrift. De discussie zelf is gestructureerd langs de volgende lijnen:

Pandemonium

Teneinde tot een definitie van de Ander te komen introduceert dit hoofdstuk het werk van Gibson Burrell. Burrell's denken bekleedt een belangrijke positie binnen de Critical Management Studies: middels zijn boek (geschreven met Gareth Morgan) over de relatie tussen organisatie-onderzoek en de verschillende paradigma's in de sociale wetenschappen alsmede zijn artikelen over de bijdrage van het zogenaamde 'postmodernisme' aan het denken over organisaties, heeft hij een grote invloed gehad op de ontwikkeling van het veld sinds 1980.

Het startpunt van de discussie wordt gevormd door Burrell's *Pandemonium*, dat kan worden gezien als een coherente verhandeling aangaande zijn denken over de Ander in relatie tot de contemporaire organisatie. Aan de hand van de thema's **sexualiteit**, **lineariteit**, **dood** en **kennis** laat Burrell zien hoe (volgens hem) de traditionele organisatie-theorie de werknemer reduceert tot een object, dat is ontdaan van zijn fundamentele menselijke kwaliteiten. Vervolgens formuleert hij een alternatieve conceptualisatie, gebaseerd op de pre-moderne middeleeuwen, welke de mens respecteert **als** mens.

Burrell's conceptie van de ander kan worden gezien als zijnde gebaseerd op een aantal dichotomieën: elk van deze is geformuleerd aan de hand van een bepaalde dimensie (zoals geslacht), welke twee verschillende polen omvat. Hierbij

behoort een pool tot de traditionele organisatiekunde en is de ander(e) gepositioneerd ten opzichte van de eerstgenoemde, waarbij de Ander steeds staat voor datgene, dat wordt genegeerd, gemarginaliseerd of ontkend.

Method t/m Order - Disorder

Deze vier hoofdstukken introduceren de nucleus van het denken van de Franse post-structuralistische filosoof Michel Serres, wiens werk zich steeds in de nabijheid van zowel de natuur- als geesteswetenschappen situeert teneinde de onderliggende isomorfismen te indentificeren. Aan de hand hiervan formuleert Serres een filosofie bestaande uit verschillende strata, die elk het concept van multipliciteit als uitgangspunt nemen. Achtereenvolgens bespreek ik de relatie tussen multipliciteit en socialiteit, geschiedenis en orde – chaos. Alvorens dit te doen is Serres' methode het onderwerp van de discussie om zodoende inzicht in zijn vele intellectuele reizen te verschaffen.

Multipliciteit is te karakteriseren als *noise*, geweld, interferentie, parasitair, entropisch, als motor van verandering, een zoektocht naar (onmogelijke) stilte, als een proces, het ontbreken van distinctie, mogelijkheid, virtueel en ichnografisch. De zoektocht naar multipliciteit leidt ons ondermeer langs de zee, het oude Rome, Ithaca, de Griekse goden en de thermodynamica.

Dénouement

In dit hoofdstuk komt het denken van Burrell in aanraking met het denken van Serres. Laatstgenoemde laat ons zien hoe Burrell's Ander eigenlijk een **a**nder is, een variatie van de onderliggende dimensie. Deze 'Ander', welke terug te vinden is in alle theoretische hoeken van de Critical Management Studies, draagt bij aan een voortdurende reproductie van de status quo en leidt niet tot de gewenste emancipatie.

Daarnaast is de beoogde emancipatie problematisch: de waarachtige Ander, Serres' multipliciteit, is niet maakbaar en gevaarlijk. De verschijning van de Ander leidt tot geweld, het Hobbesiaanse conflict van iedereen tegen iedereen, dat maar één eindpunt kent: maximale entropie, de Dood. Deze Ander leidt tot vragen aangaande de mogelijkheid van een ethisch oordeel aangaande de opoffering van de zondebok.

Curriculum Vitae

Rouven Ernst Hagemeijer was born on the 7th of January, 1977 in ‘s-Gravenhage. He studied Business Administration at the Faculteit Bedrijfskunde / Rotterdam School of Management from 1995 until 2000, where he graduated in Change Management.

Since 2000, he has been working as a PhD-candidate at the aforementioned Rotterdam School of Management. His PhD-thesis is concerned with a critique of the concept of difference, which can be seen to underlie the field of Critical Management Studies. In 2004, he served as guest editor for a special issue of the *Journal of Organizational Change Management* on the topic of the role of the non-human object in social processes of organising.

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