Pragmatogony: The Impact of Things on Humans

Prof C.S. de BeerDepartment of Information Science, University of Pretoria

Abstract

In both scientific work and in philosophy our concern is that subjects are directed towards objects, studying them, having control over them, getting to know them, and having them in their power. Michel Serres taught us that it is extremely necessary to reverse this direction. According to him we should describe the emergence of the object: how does the object come to the human, how does it shape humans and direct their lives? This process is called pragmatogony, a combination of two Greek words, namely pragma (thing, matter) and gonos (the created). The primacy of the object, or of things, are dealt with in terms of an archaeology of things. From this archaeology of things emerges the anthropology of science. This notion refers to the anthropological actions of science which clearly indicates that the sciences, however pure they claim to be, can never be separated from human involvements and that they are actively involved in this. This poses an argument in favour of the irreplaceable importance and relevance of the humanities not only for humans but also for the sciences and scientific work in general. The links and connections between humans, things, the sciences and the world constitute a generative power for invention that takes us forward in difficult times. The celebration of things and the creative power of the arts with respect to things illustrate the importance of a pragmatogonic stance for the survival and regeneration of the relevance of the humanities in any society and in all societal institutions.

In scientific work, our preferred methodological concern generally is that subjects are directed towards objects, studying them, controlling them, giving shape to them, getting to know them and even possessing them and having power over them. However, Michel Serres, the French philosopher and historian of science, teaches us that it is extremely necessary to work towards the reversal of this direction. Although the familiar approach is that subjects study objects, Serres wants to find out what impact and what

shaping power objects or things have on subjects. He writes: "We want to describe the emergence of the object, not only of tools or beautiful statues, but of things in general, ontologically speaking. How does the object come to what is human?" (Serres 1987: 162)

Pragmatogony

According to Latour (1993: 84) "Serres, in his so-unmodern work [referring to *Statues* (1987)], recounts a pragmatogony, that is as fabulous as Hesiod's old cosmogony, or Hegel's". Etymologically speaking pragmatogony comes from the combination of the Greek words pragma (a thing, matter) and gonos (that which is begotten, the created), that is things plus creation, emphasising the creative power of things. This brings us to the core issue emphasised by Michel Serres, namely how things or objects come to the subject, giving shape to the subject, playing a role in what subjects will become and how they interrelate. The implications of these views for our general understanding of the scientific method, and what can be achieved by it, are vast and there are drastic changes.

The term "pragmatogony", as used by Michel Serres, describes this situation whereby the human subject is no longer the sole creator and controller of things and objects, but where the creative impact of the object or thing in shaping the subject to what it is, becomes central. Modern philosophy, as well as science, understands objects as resulting from a process in which a potential is realised, or a virtual possibility actualised, due to the activity of subjects. Serres reverses this process by emphasizing the activities of objects/things working in on subjects, in the sense of reconfiguring and reconstituting the subject. Or, to put it in the words of Isabelle Stengers (2000: 134): "[T]he relation between the 'social experiences' of scientists and the "types of cognitive structures" their procedure privileges ... preserves the distinction between subject and object, but modifies its meaning: it is recognized not as a right, but as a vector of risk, an operator of "decentering". It does not attribute to the subject the right to know an object, but to the object the power ... to put the subject to the test."

This view is most probably, although not intentionally, a forerunner of the new image of the human being as described in terms of or referred to as "the posthuman" with special emphasis on the impact of information and communication technologies on human beings with the implication of the drastic revision of our understanding of the human subject. (See Hayles 1999, 2005, Lecourt, 2003, Poster 2001, and others).

Information and communication technologies constitute an excellent example or manifestation of this creative event of pragmatogony. These new technologies are objects/things like none before them. With phenomena like computerised hypertext or a networked real-time community we are confronted by objects/things whose structure is so indefinite that they must be characterised as virtual and not actual. Mark Poster (2001: 27) writes: "These objects, through their interfaces, open to the human subject in such a manner that the subject is immersed within them and reconstituted as an element of the object ... Object and subject combine and reshape each other in new paradigms of existence, into the realm of the virtual".

It is understandable that Latour (1991: 189) considers modern humanists as reductionist since the classical way of viewing subjects and objects are highly reductionist and that he emphasises the fact that "when human actions are redistributed amongst all the delegates it loses its reduced form, but it gains another form that should be called irreducible". And further on: "Human nature is the totality of its delegates, its representatives, its figures, and its messengers", in other words, the totality of everything that may have an impact on it

The implications of these developments for our understanding of the human being are immense, and therefore need thorough exploration. They most certainly do not only spell out dramatically new dimensions for the humanities (to be understood in terms of the posthuman) but open up new avenues for their incalculable relevance in contemporary "computerized, globalized, and mechanized societies and individuals".

The theme of the revision and reconfiguration of the image of the human person and human subjectivity is of great relevance to Felix Guattari (1995). He involves the humanities in a very direct sense in this initiative with global proportions and implications for the well-being of the human race. He writes: "Among the fogs and miasmas which obscure our *fin de millénaire*, the question of subjectivity is now returning as a leitmotiv. It is not a natural given any more than air or water. How do we produce it, capture it, enrich it, and permanently reinvent it in a way that renders it compatible with Universes of mutant value? How do we work for its liberation, that is, for its resingularisation? Psychoanalysis, institutional analysis, film, literature, poetry, innovative pedagogies, town planning and architecture – all the disciplines will have to combine their creativity to ward off the ordeals of barbarism, the mental implosion and chaosmic spasms looming on the horizon, and transform them into riches and unforeseen pleasures, the promises of which, for all that, are too tangible." (Guattari 1995: 135).

A reflection on the archaeology of things, which is of primary importance in the discussion of pragmatogony, will certainly deepen our understanding of pragmatogony.

The archaeology of things

From the above discussion it is clear that objects and things must be

understood as of primary importance in human scientific, social and cultural endeavours. The "archaeology of things" needs to be explored. Serres (1987: 216) is explicit: "Authentic archives sleep in the earth and not in libraries." According to him philosophy has two options in this regard: "It either refuses to quit the library ... or it quits books and digs the earth with its own hands" (Op. cit.).

Latour (1993: 82-85) explores this argument further by explaining in more detail his views in terms of an "archaeology of things". Let us start with the etymology of these words with reference to the work of Michel Serres. "The word 'cause' designates the root or origin of the word 'thing': causa, cosa, chose, or Ding ... The tribunal stages, the very identity of cause and thing, of word and object, or the passage of one to the other by substitution. A thing emerges here." (Serres 1987: 294). He emphasises that all European languages, north and south alike, express the same idea. "The word 'thing', whatever its form, has as its root or origin the word 'cause', taken from the realm of law, politics, or criticism generally speaking. As if objects or things themselves existed only according to the debates of an assembly or after a decision issued by a jury. Language wants the world to stem from language alone. At least this is what it says..." (Serres 1987: 111).

In order to grasp the deep and central significance of the humanities for human culture, as well as science culture, it is important to investigate the place and role of things, a kind of "archaeology of things", or even its link – and this link is of vital importance – to an anthropology of science in this regard. There are two sides to the story: the subject side (where subjects construct objects) and the object side (how objects construct subjects). "We possess hundreds of myths describing the way subjects (or the collective, or intersubjectivity, or epistemes) construct the object. Yet we have nothing that recounts the other aspect of the story, namely how objects construct subjects. The witnesses to this other aspect are constituted not by texts or languages but by silent, brute remainders, things, such as pumps, stones, statues" (Latour 1993: 82). Serres loads epistemology with silent things.

But even before this, Michel Foucault (1971: 51), in his classic *Order of Discourse*, also spoke of "things whispering a meaning which language can do no other than reveal". And before him, the Dutch phenomenologist, JH van den Berg (1966: 32) emphasised the way objects or things communicate with the subject, and since it is true "that things move us, or, at least, touch us" why should we keep quiet about it? This was reiterated by Pierre Lévy (1997) in a publication "The cosmos thinks in us" that appeared in a book titled *The new utensils of thought*. (See Lévy 1997: 93, 262). Lévy (1997: 93) refers to the philosophy of Avicenna and writes: "Avicenna's theory of knowledge was inseparable from his cosmology: the world came into being through a process of perception or contemplation and,

consequently, all the celestial hierarchies are implicated in the least act of knowledge. This idea is aptly reflected today in reciprocal involvement of the world and thought (the cosmos thinks in us and our world is saturated with collective thought)"

Mark Poster (1990: 136) also seems to be relevant in this regard. According to him "individuals are constituted through their place in the circuit of information flows". In order to illustrate how humans are constituted by machines he uses the following quotation form Deleuze and Guattari (1987: 458): "The relation between human and machine is based on internal mutual communication, and no longer on usage or action ... with automation comes ... a new form of enslavement ... one is enslaved by TV as a human machine in so far as the television viewers are no longer consumers or users, nor even subjects who supposedly "make" it, but intrinsic component pieces..." Guattari (1995: 16) speaks of "the diversity of components [including things and objects] of subjectivation that pass through me" and that constitute my identity.

From this archaeology of things emerges the anthropology of science. The anthropological actions of the sciences, to which this anthropology referred, will be of the utmost importance in this paragraph.

The anthropology of science

Michel Serres (1987) is explicit: There is a history of science; there is a philosophy of science; but, there is an anthropology of science as well. "There exists a history of sciences, or of these techniques, certainly, and even several, but more profoundly, there exists an anthropology of it. The humanities teach this anthropology, without knowing it: when they speak of statues they clarify the ones of our museums or of our cemeteries, but also and especially torpedos and missiles." (pp.19-20). We should never forget the social relevance of missiles and torpedos. And again: "There is an anthropology of the sciences. She accompanies them – silent, unheard of. She constitutes their legend: how one must read them." (p.273),

Michel Serres is not alone in this approach. Bruno Latour (1990, 1993) supported him strongly. As a matter of fact, he elaborated extensively on some of these insights of Serres in his development of what he calls "an anthropology of science". This anthropology emerges from the archaeology of things. In an interview Latour had with Serres (Serres/Latour 1995: 139-143) the following key issues in an anthropology of science have been highlighted: "Do you think", Serres asks, "science would advance, inventively, without the intense heat of the spirit or of life?" The emphasis on spirit is remarkable. "A car travels through space, which is an aspect of nature; it participates in a competition of egos on behalf of its owner, which

is an *aspect of culture*, admittedly. When you put together these two vehicles (that really are one, of course), they allow us in our leisure time to assuage our *unslakable thirst* for human sacrifice to the gods, whom we think we have forgotten. *Our god is* the machine, *the technical object, which stresses our mastery* of our surroundings, which regulates certain group relations or certain vicious psychological relations, *but which suddenly plummets*, like a lead weight, *into the depths of a formidable anthropology*. ... You see how we pass *without a break* **from** science ... **to** technology, and **from** there **to** sociology, then **to** the history of religion, which ... comes close to the fiery core". (My emphasis).

Yes, our sciences are cultural formations and intensely heated spiritual endeavours. Our tools (eg. The Challenger) are simultaneously objects of this world and objects of society. Every technology transforms our rapport with things and at the same time our relations among ourselves. All our instruments and all our theories show both aspects. In Serres' writings, for examples his book Rome, and his Origins of Geometry, there is a whole mythology of science's anthropological actions – purifying, washing – that plunges the sciences into that very past they claim to have left behind forever. In his book on Lucretius he indicates for example how "the word atom belongs to the same family as temple" and establishes a firm link between vacuum (vide) and catharsis (Serres 1977: 165). Rationality, physics, religious narratives and spirituality are not far removed from one another. Similar examples can be collected from the writings in the area of computer technology. "When this is ignored the social sciences remain without a world, the space par excellence of human meaning, and the natural sciences become inhuman, without humanity" (Serres/Latour 1995: 142). An anthropology of science that emerges from "an archaeology of the thing" (Latour 1993: 82-85) offers new perspectives to the humanities in terms of the centrality of their position in intellectual, cultural and everyday activities and surroundings.

Networks or the atlas of knowledges

It is important to note that Serres relates his emphasis on things (stones) to religion (Islam and Christianity), but also to science, in order to deliberately highlight the links, and by doing that he brings the humanities right into the centre of the knowledge and science picture. Literally, all knowledges are linked in some way or another. He writes: "All Islam dreams of travelling to Mecca where, in the Kaaba, the Black Stone is preserved. Modern science was born in the Renaissance from the study of fallen bodies; stones fall to the ground. Why did Jesus establish the Christian Church on a man called Peter? I am deliberately mixing religion with science in these examples of

inauguration." (Serres 1987: 213). In a much later publication he goes even further by relating things to angels (Serres 1995) in a publication dealing with contemporary technical developments and the implications thereof.

In this regard he also takes the sciences, social and natural, to task for the absence of real humanisation activities in their work. The social sciences and humanities do not deal with or mention "world"; world understood as the human home or habitat par excellence. The natural sciences, on the other hand, show no real concern for humanity (Serres 1995: 139-143, esp 142). This lack of concern may be interpreted as an indication that these sciences neglect the special human focus that belongs naturally to science as human endeavour in all its manifestations. All sciences are in the last analysis human sciences. In this regard Prigogine and Stengers (1988: 65) emphasise the necessity of introducing into physics a "narrative element".

In one of his first publications Michel Serres (1968), a great advocate for the humanities, emphasised the notion of tabularity over against linearity. He describes them in the following summarised way: While dialectical reasoning is linear and characterised by unity and simplicity, the tabular model is characterised by plurality and complexity. The tabular model is somehow superior to the linear model: a reasoning with several entries and multiple connections is richer and more supple than a mere chaining in a line of reasons, whatever would be the resort of this chaining: deduction, determination, opposition, etc. There is a pluralisation and a generalisation of the dialectical sequence by means of a passage from the line to the space in making of the straight line a broken line (See Serres 1968:11-20). This would eventually develop in the idea of networks and after being picked up by some French (Callon and Latour) and British sociologists (Law, Collins, etc) it became "the actor-network theory" - action or activity in the milieu or context of networks. Implied in the idea of networks are, of course, the notion of collectivity articulated by Latour (2005) in terms of "reassembling the social", which Serres also relates to the idea of the thing. With this view we arrive at the centre of science and technics.

Much later, the idea of "the atlas of knowledges" (Serres 1994) emerged so that we can frankly state that what is encountered here has to do with networks of knowledges with the emphasis on the links between all forms of knowledge. Serres draws our attention to the fact that a new world is emerging and transformations are taking place. This new world is a world of networks, knowledge networks, computer networks, cybernetworks – a virtual world. The question needs to be posed: How is knowledge transformed and how is this to be learned? In other words, the networks include all possible knowledges, that include, of course, all sciences and connections between them as well, and with emphasis on the fact that their interrelatedness makes them indispensable to one another and make them recreating one another,

interfering with one another. The sciences need philosophy and philosophers cannot philosophise without the sciences and the humanities provide the bond between these interlinked activities. The humanities provide interpretation, critique, relatedness, matters of morality, logic of diverse kinds, imagination and phantasm and the capacity of reverie. All of these are issues that do not find a firm place in the sciences of whatever nature. Even science fiction, we have to realise, is a matter of humanities and creation and not a scientific or technical matter. And let us never forget that we are immersed in these networks that constantly shape our lives and transform the image we have of ourselves into a new image, the image of the posthuman (Cf Hayles 1999 and Lecourt 2003 in this respect).

An argument for the pertinence of the humanities

These four interrelated themes, discussed up till now in this article, about how things constitute humans, are of fundamental importance, since they determine the road for the humanities into the future: pragmatogony, archaeology of things, anthropology of science, collectivity and networks. They constitute a massive argument for the pertinence and decisive role that the humanities can and should play in the contemporary dispensation of interdisciplinary and transdisciplinary work.

In a fascinating publication Michel Serres (1995) describes, in a slightly paraphrased form, the current state of human affairs and human societies world wide in the following way:

Our sciences and technics provide a multitude of ways to communicate, too many universal (world) networks, a city without boundaries, unstoppable displacements that designs the map of a new universe and inducing planetary problems, brought to us without end by thousands of messages. But this universal messagerie is simultaneously accompanied by undecidable injustices, growing misery, hunger and war, a revolting inequality. Do we not notice everywhere around us a new legend of the angels with exchangers and announcers, networks and passages, downfalls and demons, powers and dominations, a quest for misery...?

If the above is a realistic and fairly accurate description, the question is: Who will be in the best position to address this misery with its many faces? It can hardly be any other group of human endeavours than the humanities in all their manifestations. They are historically, but also in terms of their focus, the only group that can really address these issues that emerge from our contemporary intellectual, cultural and technical landscape. For this reason we find it a fatal mistake in the contemporary world, that they are effectively, and often with animosity and great cynicism, sidelined in all sectors of society to secure thereby, according to Serres, the

unavoidable downfall of yet another civilization.

The option of the humanities remain open and should be kept open, especially by themselves. They offer the intellectual activities that lead us into and should encourage the poetic celebration of things as well as the appreciation of art works as a formidable demonstration of the shaping power of things.

A poetic celebration of things

Many things and their impact have been explored and discussed by many. The symbolism of the flame of the candle was magnificently presented by Gaston Bachelard (1980), the French philosopher of science, in a very poetic fashion. Equally important, and related to this, is his earlier book on the psychoanalysis of fire (1964). His emphasis on reverie, the special human quality of imagination, and its connection with things should be carefully explored in this context. This includes his works on earth, water, air, space and their interconnectedness with reverie (dreamery) that are equally important in this context. He writes: "The dreamer tears a splinter of wood from the ceiling, he picks a leaf from the top of the tree, he takes an egg from the nest of the crow. To these precise facts are united well-connected reasonings, well-chosen arguments to be given to those who do not know how to fly. On waking, alas, the proofs are no longer in his hands; the good reasons are no longer in his mind." (Bachelard 1982: 19)

In his book Water and dreams: an essay on the imagination of matter (1983) he deals with material imagination and spoken imagination. The relationship between the two are worked out along the lines of the following stimulating themes: the earth and how it is linked to reverie, the aggressive character of tools, rocks, petrifying reverie, crystals and crystalline dreams, the rose and the pearl. In this regard, compare the poem on "the profound rose", or, "the unending rose", in the poetry of Borges (Borges 1979). The rose changes the poetic imagination of the poet in a profound way. He writes: "The steady, tidal fullness of your fragrance rises up to my old, declining face. ... I am blind and I know nothing, but I see there are more ways to go; and everything is an infinity of things. You, you are music, rivers, firmaments, palaces and angels, O endless rose, intimate, without limit ..." (Borges 1979: 185). The myth of Sisyphus by Albert Camus is another example of the immense impact of things on humans and how humans relate to things. "When the images of the earth cling too tightly to memory, when the call of happiness becomes too insistent, it happens that melancholy rises in man's heart: this is the rock's victory, this is the rock itself. ... His rock is his thing. ... Each atom of that stone, each mineral flake of that high-filled mountain, in itself forms a world. The struggle itself towards the heights is enough to fill a man's heart. One must imagine Sisyphus happy." (Camus 1971: 98-99). Only humans can contemplate and reflect on this impact of things on their lives.

The following remark by Guattari (1995: 21) may be totally appropriate in this respect: "Poetry today might have more to teach us than economic science, the human sciences and psychoanalysis combined."

Works of art and the power of things to shape: some concrete manifestations

And then there is the overwhelming demonstration of pragmatogony in the impressive art exhibition with the theme "Poetics of matter" of Tàpies in 2001 in The National Library of France. This exhibition is extremely relevant in this regard and illustrates in a special way the extreme relevance of what Serres would call pragmatogony. "Artistic forms [in their thinglike nature] are precisely the indispensable channels to actualisation of the spiritual foundations of tradition" (Tapies 2001: 18). And he continues: "The profound contemplation, far from being elitist, enlightens precisely our value ladder for resolving the real problems and injustices of everyday life." (p19). He furthermore emphasises: "Although we sometimes have the impression that they are shut away in clouds of praise by sclerosed institutions, we rediscover the manifestations of the depths of human spirituality and what give meaning to them among the simplest, the most terrestrial, the most human things." (p19) The revealing power of things are available to those who know how to read. Fremon (p126) adds: "The Great Book of the world is open; Tàpies [with his art works] makes of it something for us to read."

These insights deserve to be explored carefully and thoroughly for those who care about the interests of the humanities! What can be closer to the heart of human beings than art and works of art, especially when they are related to and focused on naked materiality, as is so often the case. Can a work of art ever be "matter-less"?

It may be useful to look at how gemstones are used in The Bible book of Revelation. This offers a special emphasis on the place and role of things even in the gateways of the new Jerusalem, a kind of eschatological imagination, since the history of religion is a matter of course, and unavoidably so, drawn into the picture. The function and symbolic value of gemstones in so many ancient cultures are highly significant in a very human and humane sense. Should it be taken seriously or not?

Conclusion

Some concrete manifestations of the transformative power of things with

regard to humans can be illustrated by the following two examples that will certainly confirm the significance of pragmatogony:

Viewing a flowering rose: unlocking the sublime.

One morning, a friend was standing with his back to another friend. He was gazing through the window at the unexpected blossoming of a newly planted rose with exceptional colours. After some minutes, he turned around to his friend, who asked him: "What on earth happened to you?". "Why?" he asked, surprisingly, but also slightly embarrassed. "Your facial expression tells a remarkable story", comes the answer. "It is as if you have been touched deeply and affected by something that turns your face into a sublime, contented glittering that seems to be of another world." A total transformation, not only of the physical appearance, but also of the inner life of the person has been detected that finds an avenue of disclosure in his facial expression. "That rose," was his brief answer, "look at it. It looks sublime; it looks as if it belongs not in this but in another world."

Looking at a Monet: water lilies unlock paradise.

One day in Monet's house in Paris it happened to me. I visited the house on a Sunday morning in a very hungry perceptive mood, the mood described by Tàpies as "a thirst for the absolute". In the sous-sol (underground) hall there was an exhibition of Monet's water lily paintings. I went down the steps and was soon overwhelmed by the most colourful, serene display of paintings of water lilies. After a long time of silent and peaceful contemplation, absorbing the beauty of what colour, ink and paintbrush could offer, I decided, fully satisfied, to leave. On approaching the steps a woman stood halfway down the steps with her back turned to me watching a huge water lily masterpiece hanging between the upper and lower floors. I intuitively decided to wait for her to finish. It would have been very improper, almost rude, to disturb her in her moments of absorbing contemplation, I thought at the time. She most probably wanted to listen attentively to this "thing", speaking to her, giving itself to her unreservedly, disclosing to her a glimpse of the absolute that would quench this thirst of hers for the absolute. Eventually, when she decided to turn around towards the lower domain of even more such "things" awaiting her, pregnant with their own revelatory powers, I was completely overwhelmed. This person's face emanated an expression of total bliss and immaculate beauty, as if, so I imagined it for she had spent some substantial moments of unhindered concentration right in the heart of what one could call paradise. Things, beautiful things, transform humans into blissful, equally beautiful beings.

In our "sclerosed", "thanatocratic" institutions we have lost this capacity to marvel, to experience the sublime, to be radically transformed into new beings by the things around us. The humanities, and only the humanities, properly pursued, may be able to help us in a distinctive way in an endeavour of this nature, the endeavour of imaginative and total transformation in a world filled with destructiveness, boredom and misery.

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