

# Michel Serres or the turbulence of interpretation

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“L'espace est sémaphore” (Serres, 1987b: 152)

## Summary

Michel Serres' conception of the rapports between science and literature is exerting a decisive influence on French philosophy and literary criticism. Serres, by drawing on Merleau-Ponty's phenomenology, and through his attentive reading of Gilles Deleuze and Jacques Derrida, addresses the question that French modern thought has left fallow: is there a viewpoint that, from within the precinct of epistemology, allows for an investigation of literature and aesthetics without reducing the latter to the function of a simple mirror-image? Is there a way of entering into literature and language which leads back to scientific hypotheses? Is there a passage between scientific constructions and literary discourse? In other words is there a true interference between “truth” and “fiction”? This presentation of an author whose works are still largely unknown to the Anglophone theorists of literature in South Africa aims at clarifying some points of Michel Serres' approach and at proposing an entrance into what may be called a Lucretian poetics.

## Opsomming

Michel Serres se opvatting oor die verbande tussen wetenskap en letterkunde oefen op die Franse filosofie en literêre kritiek 'n beslissende invloed uit. Deels as die erfgenaam van Merleau-Ponty se fenomenologie, deels as die oplettende leser van Gilles Deleuze en Jacques Derrida, rig Michel Serres hom op die vraag wat deur die moderne Franse denkrigting verwaarloos is: bestaan daar 'n sienswyse wat binne die veld van die epistemologie 'n ondersoek van letterkunde en estetiese toelaat sonder om laasgenoemde te verlaag tot die funksie van 'n eenvoudige spieëlbeeld? Bestaan daar 'n manier om toe te tree tot taal en letterkunde wat terugvoer tot wetenskaplike hipoteses? Is daar 'n deurgang tussen wetenskaplike konstruksies en literêre redevoering? Met ander woorde bestaan daar 'n ware inmenging tussen “waarheid” en “fiksie”? Hierdie voorstelling van 'n skrywer wie se werke nog grotendeels onbekend is onder Engelssprekende letterkundige teoretici is gemik op die verheldering van sommige punte van Michel Serres se benadering en om toegang te verleen tot wat Lucretius se poëtika genoem mag word.

Michel Serres is an enigmatic commentator on science. This is obvious when one reads just a couple of lines from any of his eighteen books. If one bears in mind that, in classical rhetoric, the *aenigma* epitomizes the metaphorical method for reaching a defiant style and propounding forceful thoughts, in modern terms *significance* – and I beg forgiveness for this bold translation –, it then becomes abundantly clear that Michel Serres' epistemology is couched in metaphor, allegory and enigma. The titles of his books speak for themselves; they are a true prosopopeia of his *écriture*: *Feux et signaux de brume*. *Zola* (in translation: “Lights and Foghorns”) (Serres, 1975), *Le Parasite* (“The Parasite”) (Serres, 1980b), *Statues* (Serres, 1987a) and the five volumes of his *Hermès* (Serres, 1969, 1972, 1974a, 1977a, 1980a). What is enigmatic is that Serres has developed for the past twenty years a metaphorical way of talking about science, literature, painting and the human sciences. I say metaphorical since I do not pass any judgement on the veracity of his epistemology. That question is only relevant to historians of the sciences.<sup>1</sup>

My question comes from another region. How can Serres' enigmatic means of dealing with knowledge be of some help in the understanding of things literary? His attempts must be appraised in the light of the intense effort which marked the sixties and, to a lesser extent, the seventies, to produce scientific models in literary theory and semiotics, and the subsequent attempt at establishing deconstruction as a philosophy of writing – in other words after twenty years of a pendulous movement which embodies in Habermas' words a massive advance of “the conservatism” of modernity.<sup>2</sup> In brief how can *Hermès*, the enigmatic *psychopompos* that also stands at the crossroads of any errand – including that of any interpreter –, lead the way out of the meanders of structuralism and post-structuralism? How can an enigma clear the way?<sup>3</sup>

At first sight, Michel Serres does not seem to be essentially attracted by literature: he tackles it along the way, as he unravels the works of Lucretius, Descartes, Leibniz, Laplace, Carnot and Jacob, to quote but a few. Yet the collation of his literary vagaries reveals an impressive range of “criticism”: Rabelais, La Fontaine, Corneille, Molière, Diderot, Michelet, Barbey d'Aurevilly, Maupassant. This itinerary is solidly framed by two votive stones: *Jouvences. Sur Jules Verne* (Serres, 1974b) and *Feux et signaux de brume. Zola* (Serres, 1975). Moreover, looking at painting, he produces a book on Carpaccio (Serres, 1987b) and analyses of De La Tour, Poussin, Vermeer and Turner (Serres, 1974: 189–242). All this would be enough to establish Serres as a prominent literary and art critic if. . . And, in this *if* lies the crux of his enigmatic approach. Serres seems to illustrate his scientific history with literary and pictorial devices, like a Renaissance rhetorician seeks help from a store house of variegated *exempla* and commonplaces. The five volumes of his *Hermès*, pitched at a demanding level for those who have not mastered epistemology and, for instance, the history of mathematics, consist of a magnificent and arresting display of knowledge in which figures of rhetoric proliferate. One is often reminded of Giordano Bruno, insofar as Serres assumes that the reader will follow him from Plato to the RNA (Serres, 1972: 105), from the Arctic Ocean to Diderot's *Encyclopédie*. Claude Lévi-Strauss' “musical” method is also called to mind.

Nevertheless – and, dismembered into “never the less” this could be Serres' motto – it is possible to apply his own method to this incessant passage from science to science *via* literature since with Serres knowledge always pertains to translation, transference and communication. In fact the five *Hermès* warrant such ironical treatment: Michel Serres envisions literature as a voyage, an odyssey, a passage. He is holding no discourse on literature nor is he interested in the “literarity” of literature. What catches his attention lies in what Roland Barthes calls the *mathesis*, science carried by literary language like Ulysses by his ship. Or, to quote from his latest work, *Statues*: “Should you draw or write, imagine that you are aboard the Ark, a box as full as the Trojan Horse or a rocket aimed at the Moon, accompanied by the old patriarch who invented the wine and collected species which, after the Flood, revived on watery islands. . . The flood, the rising of waters or the transgression represent the greatest social violence, a war that glazes the planet and

covers it with a smooth desert, virgin sheet anticipating any drawing, unwritten white page, before the flood subsides in peace and forgiveness. Write with serenity or goodness, the world starts anew. . . . As the page grows richer it crumbles and disappears so that one believes, for a short while, that one is writing or drawing in the sand with a finger, like God must have done it in the morning of the first day; a divine and brief temptation since the author then penetrates the soil in his turn to seek or augment the treasure and transmit the old tradition which is nearly exhausted, by proving the spirit of the place from the earth to the page. . . . The signature comes from beyond the grave” (Serres, 1987a: 75, my translation).

This cryptic formulation is a commentary on the position of science with regard to other signifying activities, which Serres propounds in *Feux et Signaux de Brume*. Zola (Serres, 1975: 372–375). As Nature or Culture are immersed in a diluvian state that may be called chaos, dissemination or simply violence, the scientific spirit represents an elevation above “the flood”. Descartes’ hyperbolic doubt in the *Méditations*, Comte’s “loi des trois états” (Serres, 1974: 175), Rousseau’s *Contrat Social* and Carnot’s *Réflexions sur la puissance motrice du feu*. . . . embody equivalent strategies that aim at placing scientific knowledge on an island and at making it insular with a view to secure a principle of measurement:” The flood is neither a rational hypothesis nor an archaic phenomenon, it is the measurable and metric system of inequality itself. . . . The interval is finite” (Serres, 1975: 373, my translation).

This formulation is typical of the carefully timed steps Serres takes to prove an epistemological reasoning to a reflection on creation. It reveals carefully ordained series of steps. They are instrumental in fashioning an interpretation of his apprehension of literature. I suggest that we follow them and see where they lead us.

First step: an elementary knowledge. In *Hermès V. Le Passage du nord-ouest* Serres studies Euclid’s *Elements* (Serres, 1980a: 165 ff). He notices that Euclidian geometry starts not only with a statement on the point, the line and the surface – twenty-three definitions – but primarily with a reference to the “semeion”, the sign. From this point of departure Serres enlarges on an analysis of geometrical terminology, which sets aside any abstract implications to dwell on the semantic dynamics of the definitions. Serres investigates their connotations, partly answering the unnerving question of denotation and connotation in artificial languages, when he encapsulates his “literary analysis” in these words: “The Euclidian *episteme* is a syntactic system and a system for semantics” (Serres, 1980a: 172, my translation). Serres means that an “episteme” is an equilibrium and that European science conveys a quest for fixity. In its wake, literary texts such as the *Odyssey* elicit the awakening of signification, as the inaugural “semeion” of Euclid’s *Elements* predicts. Now, what is literary? The net-work of semantic relations exposed by Serres in the *Elements* or the warp and the weft in Penelope’s tapestry and Ulysses’ errand? Where is “scientificity”? Serres implies that both words have no meaning. He defines his position in a book on Lucretius (*La naissance de la physique dans le texte de Lucrèce*): “The world and the things of the world only exist because of the *clinamen*; depending on it for their existence, their

beginning and their end. So it is for words, texts, always declined and always derived in language. All in all their formation is but a particular case of the general rule of transformation" (Serres, 1977b: 115, my translation). In other words a passage links exact and human sciences, similar to the North-west Passage between the two oceans in the Canadian Arctic. So called "scientific discourse" and so called "literary discourse" form an archipelago through which knowledge tranships – yet differently.

This difference resides in a second step: communication. In *Hermès IV. La Distribution*, before embarking on his description of a novel by Barbey d'Aureville, *Le Chevalier des Touches* (Serres, 1977a: 213–255), Serres broaches a topic that reads like a structuralist parody: *Discours et Parcours*, which may be roughly translated as "Discourse and Course" (Serres, 1977a: 197–210). Under the pretext of rehearsing his analysis of *Le Chevalier des Touches*, he raises the question of a potential interpretative structure of Zola's *Rougon-Macquart* novels: with ironical command of the text he proposes a labyrinth-like structure, organized according to the "jeu de l'oie" ("snakes and ladders") rules, on which is superimposed an odd play on the two meanings of the French word "tare" in French ("defect" and "tare"). This ingenious explanation, which could be acknowledged by criticism and theory as a brilliant rendering of Zola's discourse and help identify the "literarity" apposite to the *Rougon-Macquart*, is dismissed by Serres. He is not tracing a discourse, he is coming to grips with a hypothesis. And, as he puts it ironically: "I do not know yet whether this hypothesis is of a general nature. I should read everything all over again" (Serres, 1977a: 207). His hypothesis is summed up concisely: OEdipus' and Ulysses' errands are not the discourse of a course, but the course of a discourse (Serres, 1977a: 206). Places and spaces are constantly exchanging positions, combining themselves, swapping the interiority with the exteriority. In other words they manifest an *ars combinatoria* in which Theseus, OEdipus and Ulysses merely play the rôle of operators: "They place the Greek letter X on fractures" (Serres, 1977a: 206, my translation). Their function is to allow for the communication of open and closed systems, for the creation of a "koine", and no more. This "no more" reflects Serres' dismissal of the human sciences' technology: "Disciplines as diverse as the history of religions, ethnology, linguistics or interpretation of texts made themselves subservient to strategies which were not usually compatible with their object: mathematical sets, the study of elements, the use of simple and complex procedures, a combinatory algebra, the construction of models, the demonstration of invariants by the variation of models. Six fundamental gestures" (Serres, 1977a: 275–276, my translation). In this accurate description of the state of structuralism in 1977 and, to a large extent, of deconstruction, Serres indicates "the fruits over-abundantly borne by the sophisticated exploitation of the textual world" (Serres, 1977a: 280, my translation). The analogical spirit that presides over the six gestures of analysis in the humanities casts aside the condition for communication: "parasite" or interference. Communication, as understood by Serres, is the procedure by which anyone can plug into a channel, interfere with messages and deviate the flow of signification or pleasure for one's own purpose and pleasure, thus

combining alternatively open and closed systems and acknowledging the presence of an invariant, Myth or the Imaginary (Serres, 1980b).

As a matter of fact Serres proposes a working hypothesis concerning the Myth (Serres, 1977a: 197–210). It is possible to dismember his hypothesis as follows: firstly, culture consists in establishing passages between disconnected points and in formulating this very move, i.e. in pronouncing “inter-dicts”; secondly, errands or “parcours” such as Ulysses’ or OEdipus’ are essentially discourses of these interdicts: discourse is the cursus, the passage, the disentanglement of chaotic spaces; thirdly, myths institute this cata-strophic formation of what Serres calls “le raccordement général”, the universal accordance, a combinatory algebra; finally, literature often actualizes passages before science transforms them into reality. This is the reason why Serres discards his explanation of the *Rougon-Marquart* cycle in terms of a labyrinth to expose the more fundamental discourse: “*About movement*: this will be a matter of scandal, yet it is an advancement of science. The literary *red-shift* (in English in the original text) is practised before science discovers that the whole universe turns red (. . .) Movement traverses the spectrum towards the red. The universe is the history of redness.” The relevance of this analogy remains a problematic one as long as “the rapport between things and signs (. . .) between signals exchanged by things and signs exchanged by men, in the fog of noise” is not elucidated (Serres, 1977a: 255, my translation).<sup>4</sup>

Communication is therefore silhouetted against a foil of deception: “To say and to pretend that everything is language is a parasitic theft” (Serres, 1977a: 281, my translation). In other words, to the closure of language originally alleged by Saussure in his *Cours* (Saussure, 1974b: 177), Serres retorts with the acknowledgement of noise within communication: in French “noise” means “noise” as well as “confrontation”. Communication is the embodiment of parasitic life and the absolute belief in language a surrender to the foregone conclusion that language organizes representations: “Hence the experimental method of magical transmutation: everything is in the wand and the abracadabra” (Serres, 1969: 215, my translation). Signs barely emerge from the chaos of parasitic interference to produce meaning and return to the noisy background that constitutes the world (Serres, 1985).

From this point Serres moves on to explain the nature of this emergence. He qualifies it in terms of the manipulation of a reservoir (Serres, 1977a). Drawing on thermodynamics and the question of energy, Serres delineates a method by which we can approach the intriguing question of chaos and of its transformation into signs: the usage of signs in language and their analysis indicates that, at some stage, a *clinamen* in Lucretian terminology, or a sign that haphazardly establishes some sudden convention about this usage, takes place. This declension puts stop to the stochastic existence of signs and introduces a code. For the literary and social interpreter, playing the rôle of Lucretius interpreting the creation in terms of an arrested free fall of elements, the challenge lies in understanding how this reservoir of signs had been opened up and transformed into a machine. In the first instance, Serres warns against the most common interpretative practice which consists of opposing couples and listing distinctive features and contrasting paradigms

and, in the second instance, he warns us against being oblivious of the reservoir from which the messages emerge. In other words once we believe we have isolated the *clinamen*, we forget about the stochastic fall of signs. Meaning is scarce. As Serres metaphorizes it: "A structure is a closed and coded cloud, a reservoir is a system of axioms" (Serres, 1977a: 69, my translation). We circumscribe a document in a cloud and we assign its formation to an axiomatic. In so doing we ignore the principle common to information, life and creation: entropy. Static is the condition of any message, energy, that is representation, experiences a loss and difference ends in repetition. We treat culture or literature or history as a "black box" that records signs according to codes – an image that is recurrent in Serres' works until it is luxuriously deployed in *Statues* (Serres, 1987a). We must pay attention to what the Ancients and Rabelais, in his *Quart Livre*, call the "tohu-bohu", the medley of language from which we extract that which contradicts entropy, goes against repetition and differs from the undifferentiated mass: sociologists, politologists and literary analysts have in common the same object, turbulence (the crowd, violence, signs) and the same problem (how does a flux become a rhythm, how does hazard create necessity?) (Serres, 1977a: 232).

This assumption is based upon Serres' indictment of constructivist and biological models, in *Genèse* (Serres, 1982: 199–204). On the one hand Babel represents the traditional attempt at producing constructivist systems and theories of systems in order to achieve a scientific blue print. The constructivist model is a promising one, yet it never achieves totalization and integration. On the other hand, the biological model (as its emblem Serres uses La Fontaine's fable of *The Frog that Wanted to Be as Big as an Ox*) introduces monstrosity, "a teratology of unclassified animals" (Serres, 1982: 202, my translation). By taking this double failure into account it seems probable that if "*l'inachèvement* used to intervene at the end of the construction. . . (it) is now the general condition, synthesis and unity being asymptotically rejected to unreachable limits" (Serres, 1982: 203, my translation). If *l'inachèvement* is neither a residue nor a failure, but a state of being, literary analysis should relinquish a major fantasy, integration, and narrow down its methodology to an unveiling of the relationship between signs and noise. Or as Serres puts it in his article *Le Tigre et le Pou*: "The organic machine (man) makes signs out of parasites ("parasite" and "static") that is words out of noise" (Serres, 1978: 739, my translation).

As a matter of fact, in *La Distribution*, Serres lists ten questions from which "the reader may extract axioms to analyse signifying systems: 1. Where is the reservoir? 2. What is in the reservoir? 3. Is the reservoir finite? 4. What is the reservoir? It is given or can we build it? Qualify it. 5. Define the difference. 6. Explain the terms of the difference. 7. Draw the circulation and schematize it. 8. Where does the circulation come from, where does it go to, through what does it go? 9. Define what is circulating. 10. Does the whole circulation go back to the reservoir? Is it a cycle or does it create a residue?" (Serres, 1977a: 62, my translation).

Thanks to this ironical treatment, Serres gives away the pattern of his

analyses of Rabelais, Verne and Zola while taking a fourth step: “traduction”. In the positivist mood Serres has chosen to impersonate since he is dealing, at that stage, with thermodynamics, a “translation” consists indeed of transferring modes of operation regardless of the field of application: scientific, sociological, historical or aesthetic. Yet this apparent disregard for the “scientificity” or the “literarity” of each *ars inveniendi*, to quote Leibniz (*Le système de Leibniz et ses modèles mathématiques*: Serres, 1968) summons a deep understanding of “modernity”. Serres draws up an inventory (the *ars inventoriendi* precedes the *ars inveniendi*). He suggests that there are four view points on the “course” of science: the Greek site where science is a point of departure, the Kantian site where science is a point of arrival, the *Aufklärung* site where science is a receding point and finally the modern site where science is “pointless”. This is my rephrasing of Serres’ conception of the rapport philosophy entertains with science (Serres, 1974a: 153). About modernity Serres lays bare the “traduction” procedure of textual analysis: “From Marx, Nietzsche and Freud to contemporary writers reading techniques aim at the palimpsest: **active writing is behind activated writing** (my emphasis) (. . .) This procedure is “retro-actionary” insofar as one places oneself behind all factual knowledge, slips behind every one and everything, and fashions, in the tradition of unassailable philosophical discourses, a discourse behind which none other can slip itself” (Serres, 1974a: 153–154, my translation). Reference is the issue. When a document, and Serres now uses the term “énonciation”, is treated as a series of suspended references playing on the whole gamut of linguistic material; when we suspend a sentence in order to read another and infer from a paradigm or a cluster of phonemes the absence of another paradigm or another possible phonemic arrangement that might help us make sense of the ambiguous presence of the text; when we suspend the text to our interpretation, we believe in the power of the reference. Referential criticism plagues textual analysis since it creates “literarity”, fosters literature and, by implication, seems to render its knowledge autonomous, that is a closed and stable system. Communication wishes away thermodynamics (Serres, 1976: 265 ff).

In other words a triple *décalage* has been and is at work between science, philosophy and aesthetics: “an absolute exteriority, outside the encyclopedia; a transdisciplinary or relative exteriority; finally a total substitution” (Serres, 1974a: 155, my translation). They constitute the rapport between knowledge and aesthetics. In fact modern culture, being founded upon information, “philosophies, sciences, praxis and politics” ought to be “retro-active”: “Circulation eliminates negativity” (Serres, 1975a: 161–162, my translation). Either literature and painting expand themselves outside the body of interpretations proposed by science, or they cross-reference it or they substitute themselves to the former. These three operations are neither choices nor intentions, they are three translations or three passages beneficial to aesthetic interpretation since they challenge the nagging prejudice of fixity. In other words literature does not repeat or reiterate science in its own style. One ought to think of their rapport in terms of an inter(re)ference (the topic of *L’Interférence*, (Serres, 1972) within which “exact or rigorous sciences do not

consist in being the reference (of literature)” (Serres, 1975a: 188, my translation). Nor is the obverse true. In a Lucretian approach everything is constituted *en bloc* where sciences and aesthetics and politics are simply circumstantial to one another: they stand on the periphery and not around a centre of gravity, they “circumstand”.

Finally, this brings Serres to suggest five possible attitudes towards inter(re)ference for a modern interpreter (Serres, 1974b: 221–237). Firstly, the doxographer who receives, collates and ultimately produces circular references. Secondly, the commentator who stands mid-way between emission and reception and injects redundancy (when Verne invents a rocket by redundancy of the submarine). Thirdly, the critic who intercepts the message, sifts it by using operators, translates it, determines the emitters and re-emits it in a theological gesture. Fourthly, the interpreter who performs identical operations and adds to them a multiplication of receivers : such is ultimately the foundation of power. Fifthly, the applicator who supplements the translating operations with the awareness that an explanation is but a hallucination : the belief in the possibility of explaining a text is grounded in the illusion of implication and in the coupling of explication/implication. Instead of hallucinating meaning in a text one should look for a law of application transferable from a set to another, regardless of the whole structure. Meaning is neither implicated nor explicated, it is “circumstantial”.

One now understands why, in Serres’ conception, modernity bears the mark of death : literature and philosophy have yielded to the lure of information, the theory that commands the fourth attitude, and they have relinquished to politics and science the centering of the world.

## Notes

1. See on this debate: Kuhn, Thomas S. 1977. *The essential tension*. Chicago: Chicago University Press. Newton-Smith, W.H. 1979. *The Rationality of science*. London: Routledge and Kegan Paul. Popper, Karl. 1968. *The Logic of scientific discovery*. London: Hutchinson.
2. See Habermas, Jürgen. 1984. *Lectures on the discourse of modernity*. Cambridge: MIT Press.
3. A useful introduction to Michel Serres’ philosophy is to be found in the Introduction and Postface to the anthology edited by Harari, Josué V. and Bell, David F. 1983. *Hermès*. Baltimore and London: The Johns Hopkins University Press. Also the special issue of 1979. *Critique* 35 (380): 1–125, with a bibliography updated to December 1978.
4. “When the big Palomar telescope was put into service in 1923, an amazing discovery was made by the American astronomer Edwin Hubble (1889–1953): the colour of distant galaxies was shifted toward the red! In fact Hubble observed that the greater the distance, the greater the shift was. This phenomenon, called **red shift**, demonstrates that distances between galaxies is increasing. In other words, the universe is expanding (. . .) This expansion rate is analogous to “the change in the pitch of sound when source and receiver are in motion relative to each other”, called the **Doppler effect** which Serres has in mind (Emiliani, Cesare. 1988. *The*

*Scientific Companion*. Wiley Science Editions: New York). So doing he links astrophysics to the redness, in ideological or semantic terms, of late nineteenth-century texts.

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