Agency versus identity: actor-network theory meets public relations

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Abstract

This article offers an introduction to a theoretical approach which has recently begun to be used by organisational theorists to explain the distribution and exercise of power between organisations and entities within particular spheres, or "networks". This approach, which has been labelled "actor-network theory", argues that focusing on questions of "identity", particularly questions of self-identity, depends upon accepting and reproducing a "modern" set of presuppositions. These modern presuppositions are concerned primarily with the creation of stable boundaries and hierarchies, between subject and object, and between self and other. Actor-network theory proposes that the notion of "agency" offers an alternative "amodern" perspective from which to explore how entities, or actors, influence other actors through the process of translation. Concludes that actor-network theory, as a meta-theoretical position and as a methodological approach offers an alternative to existing public relations theory which cannot easily be ignored.

Introduction

Marcia Prior-Miller (1989) has suggested that four major social scientific perspectives constitute the framework for most contemporary organisational theory and research. She notes that these are symbolic interactionism, exchange theories, conflict theories, and structural-functional theories. Prior-Miller works from the premise that public relations is an inherently organisational form of communication, "[b]y definition and by historical precedent, the focus of the field is on the relations that an organisation has with its publics, whether those publics be internal, external, or both" (p. 67). She goes on to suggest that existing public relations theory is either already built upon or can benefit from engagement with these perspectives.

Recent analyses of current directions within public relations theory tend to bear out this assumption. For instance Toth (1992) contrasts the "systems" perspective with the "rhetorical/critical" perspective. She notes that the "systems" approach (e.g. Grunig and Hunt, 1984) regards activities such as public relations and corporate communications as having the primary role of contributing to the smooth functioning of the relationships between an organisation and its publics and ultimately to society as a whole, which tends to locate the Grunig "systems" approach within what Prior-Miller refers to as the "structural-functional" perspective. Theorists adopting the rhetorical/critical approach (e.g. Cheney and Dionisopoulos, 1989; Miller, 1989) argue that all communication – including public relations – is humankind's primary symbolic resource for exerting control over the environment, and this would locate these approaches within the perspective referred to, by Prior-Miller, as "conflict theory". It could be argued, however, that they have more in common than what divides them. All of these approaches share similar foundational presuppositions, so that, for instance, they take for granted the existence of individual subjects and organisational entities with distinct boundaries.

Referring to their book *Public Relations Theory* (1989) Botan and Hazleton (Eds) proclaim that "[t]he book seeks to identify and explain the theoretic roots appropriate to the study of public relations as a social science" (p. 3). It is probably fair to say that most theoretical accounts and studies of

public relations practice have regarded the social sciences as the most appropriate framework within which to examine this area of activity. Within organisational theory there have, however, recently been calls for a re-examination of the presuppositions which inform this framework. Hardy and Clegg (1996), for instance, suggest "[p]erhaps it is time for both functionalists and critical theorists to pause. Maybe the practical, ethically situated and socially contexted uses of power need thinking through?" (p. 636). This re-examination has in fact been going on for some time in various guises, one being the so-called postmodern perspective, and attention has been drawn to the fact that the social sciences, like much contemporary Western thinking, exist within what has been labelled the "modern episteme"[1]. However, this episteme (set of axioms) has not gone uncontested and the second half of this paper will consider an alternative which has been described as "amodern" (Latour, 1993, p. 47). However, the presuppositions which constitute the "modern way of thinking" are so deeply entrenched in Western thinking that there is a tendency to take them for granted. The next section, therefore, will endeavour to highlight and contextualise the key assumptions which characterise the modern episteme.

"Modernity", "identity", and the separation of humans and non-humans

Histories of Western philosophy invariably locate the beginning of "modern" philosophy, and indeed the beginning of a modern way of thinking about the world and the human beings relationship to it, with the work of René Descartes. His aim in his two key philosophical texts – *Discourse on Method* (1639) and *Meditations on the First Philosophy* (1641) – is to lay the foundation for a "scientific" investigation of the physical universe, and in these works he sets out a series of arguments which attempt to pre-empt the sceptic's claim that certainty about anything, including the existence and nature of the physical universe, is impossible. One historically important outcome of the set of arguments in the *Discourse* and the *Meditations* was the positing of a world consisting of two different sorts of entity. There is the external world, given to me by a God, on whom I can rely, and which I can scientifically investigate. But there is also

a *me*, observing the external world. Descartes found he could doubt everything but the fact that he must be thinking he was doubting – *Cogito ergo sum*[2] – and this, said Descartes, means that I must irreducibly *be* thought. I can conceive of myself as existing without a body, but I cannot conceive of myself as existing without conscious awareness therefore the material which is my body is not part of the quintessential me. This presumption leads ultimately to a view of the world as split between subjects, which are pure thought, and objects, which are pure extension and results in the bifurcation of "nature" between mind and matter, observer and observed, subject and object. This "Cartesian dualism", it has been argued, has become built into the whole "Western" way of looking at the world, particularly its science[3].

The same histories of philosophy tend also to place Kant's "Copernican revolution" at the centre of the development of modern thought. Kant held the view that our mind shapes the way in which we perceive reality, so that we cannot actually perceive anything except through the concepts of space and time and causation which our mind brings to it. Kant argues that because all our perceptions and experiences come to us through our sensory and mental apparatus, they all come to us in forms which are sense-dependent and mind-dependent. Anything which falls outside those limits is simply not knowable by us. Among his conclusions are that any experienced world, perceived by experiencing subjects, must appear to be ordered in the dimensions of space and time, but that space and time have no reality independently of this ordering of appearances, and, therefore, no reality independently of experience. The same is true of the notion of cause, events in such a world must appear to be causally interrelated, but it makes no sense to speak of causal connections existing independently of experience. In the *Critique of Pure Reason* (1933) Kant states that objects must be thought of in order to be known. Objects cannot be thought except through the categories of thought, thus objects cannot be known except through the categories. According to Kant, human thought has an irresistible impulse to unify and give systematic arrangement to all human experiences and cognitions. The "unity of apperception", which Kant also calls the "I think", is the ultimate condition of all experience and experience is always experience *for a*

subject. The ego of the "I think" is a logical requirement of all experience which Kant describes as simply "a bare consciousness which accompanies all concepts, ...a transcendental subject of thoughts" (Kant, 1933, p. 404). "Known" objects are objects subjected to the a priori categories of the human understanding. In other words, we know things as we are. This is Kant's "Copernican revolution" in philosophy: just as Copernicus had created a revolution in astronomy, claiming that the earth goes round the sun rather than the sun round the earth, so Kant created a revolution in philosophy, arguing that what we see and think depends upon the nature of our minds rather than the "objective reality" of which we think we have knowledge. As Warnock (1964) notes, Kant:

> Insists upon a vital distinction between the world as it is *in itself* and as it *appears to us*. What exists, exists: its nature simply is what it is; with that, we ourselves can have nothing to do. It is, however, equally certain that what exists *appears* to human beings in a particular way, and is by them classified, interpreted, categorised and described in a particular manner. ...Thus, though our faculties and capacities make no difference at all to the nature of what exists in itself, they do partly determine the general *form* that it has; for whatever the world may be in itself, it appears to us in the way that it does because we are what we are. It is, then with the world as appearance that Kant is concerned; it is objects as *phenomena* that must "conform to our knowledge" (p. 300).

Kant regarded the objective datum, the "world out there", as a "pure diverse", a random inflow of scattered impressions lacking all internal structure and intelligibility, and capable only of being a source of determinate knowledge. Kant focused his attention on the universalising and "informing" structures of the knowing subject and in the process of doing so he depreciated the objective datum. Thus, in the Kantian "reconstruction" of knowledge, the value and function attributed to the objective datum is so reduced that the weight of reconstruction must be borne almost exclusively by the activity of the knowing subject. The epistemological principles posited by Kant are the principles of a critical idealism which lead ultimately to a philosophy of subjectivism, and which always involves, as a foundational assumption, the concept of a boundary or division between subject and object and between the phenomenal and the noumenal[4].

This "modern" approach, evident in Descartes, and emphasised by Kant, privileges the subject and results in a position which regards cognition as an activity which posits, produces, or constructs its object, rather than a submission to and an assimilating and affirming of the "real". "Modernism" is thus synonymous with the creation and stabilisation of boundaries and with a preoccupation with the notions of identity, in that, a radical separation of the world into the "human", the "natural" and the "technical", leads ultimately to questions as to the essential nature, or identity, of each.

It could be argued that the modern episteme has produced a lot of "good" and useful things – for example, in art and science and medicine and so on – and in general for many humans, in Western industrialised society, it has resulted in a better and more comfortable life (Wise, 1997). Why then should anyone wish to seek an alternative? Well, it could equally be argued that, although the modern episteme is associated with many good things, it has some side-effects which, to say the least, are problematic. So, for instance, dividing the world up into self and other and creating strict boundaries between subject and object, has historically been to the detriment and even the harm or destruction of the other or the object. These "others" have tended to be overrun and exploited as mere resources whether they are humans, "natural objects", or other entities. The anthropocentric worldview fostered by "modernity" places humans centre stage and tends to marginalise and exclude non-human entities, or at best treat them as mere props on the set of a human drama. As noted above, the modern episteme has dominated Western thinking, but its assumptions have, of course, not gone uncontested. Most recent critiques of "modernity" have emerged from the so-called postmodern perspective, however, the next section will discuss a perspective which labels itself "amodern"[5].

Alternatives to the modern episteme: the actor-network approach

Actor-network theory (ANT) proposes a theoretical shift in emphasis away from the centrality and primacy of the human subject. Instead ANT regards the human subject as simply another actor in a network. This theoretical shift has profound ontological and

epistemological repercussions. In the modern episteme it is taken as axiomatic that "reality" depends upon the collective subjectivities of a human community (its ontological axiom) and that what we regard as "knowledge" is constructed by a human community (its epistemological axiom). It is exactly these presuppositions central to Western sociology, and indeed to most post-Kantian thinking, which are questioned by actor-network theory.

A key feature of the actor-network approach is its resistance to the modern reification of boundaries which prevent us from seeing the ways in which the "social", the "technical" and the "natural" are intermingled in a *seamless web*. This position is admittedly counterintuitive – for instance, we refer both to machines and operators – but for Latour (1993) these distinctions are not to be taken for granted; rather they should be seen as an achievement of the modern episteme – he calls it the "modern constitution" (p. 13). A useful analogy to explain this notion of the seamless web is a cake mixture. In a cake several different ingredients are mixed together – e.g. butter, flour, milk, eggs and chocolate – until they become an homogenous entity. It is possible to take a slice of cake and "observe" the impact of one ingredient but it seems absurd to arbitrarily ignore the effect, or interconnectedness, of all the ingredients. Latour (1993) notes that this predisposition to classify, order, and in particular dichotomise, is a key characteristic of the "modern critical stance" which creates "two entirely distinct ontological zones: that of human beings on the one hand; that of non-humans on the other" (p. 10) and establishes "a partition between a natural world that has always been there, a society with predictable and stable interests and stakes, and a discourse that is independent of both reference and society" (p. 11) [6].

So how might we redescribe the world from an actor-network standpoint? Michael (1996) has pointed out that there are three key theoretical premises which must be adhered to in order to produce an actor-network account: *generalised agnosticism* which requires an analytic impartiality as to whatever actors are involved; *generalised symmetry* which involves the use of an abstract and neutral vocabulary to understand the conflicting viewpoints of actors (i.e. the human and the non-human are analysed with the same conceptual and terminological framework); and *free association*

which demands the repudiation of a priori distinctions between the social and the natural and the technological.

The approach emphasises the interconnectedness of the heterogeneous elements that make up a network and this interconnectedness is elucidated in the process of *translation*. This process has been described as pivotal in any analysis of how the different elements in an actor-network interact (Callon, 1986). Callon and Latour (1981) state:

> By translation we understand all the negotiations, intrigues, calculations, acts of persuasion and violence thanks to which an actor or force takes or causes to be conferred on itself authority to speak or act on behalf of another actor or force. "Our interests are the same", "do what I want", "you cannot succeed without going through me" (p. 40).

Translation thus rests on the idea that actors within networks will try to redefine the meaning of other actors, "speak" on their behalf, and *enrol* (manipulate or force) the other actors into positions with them. When an actor's strategy is successful and it has organised other actors for its own benefit it can be said to have translated them.

The actor-network perspective stresses both the *contingency* of networks, that is, they are not determined, permanent, or universal, and what is referred to as their *emergent* qualities. What this means is that networks are rarely stable for long and are continually bringing in new elements and changing the relationships between actors. By focusing on emergent qualities one avoids the requirement to impose a theoretical framework upon the network. The aim is to expose the work which is being done in order to generate associations, to enrol and translate, rather than appeal to some overarching, general analytical construct that will do all the necessary explaining (e.g. class, pathology, interests) which are rooted in "taken-for-granted" assumptions of the modern episteme and which can themselves be "unravelled" in an actor-network redescription (Michael, 1996, p. 56). Rather the explanations should be local, contingent, practical and reflect the character of the specific work under study. Such local explanations can only emerge in the description, or narration, of the networks.

The actor-network approach assumes that no actor is passive, all have some degree of agency, but all of them vary in the extent to which they influence or resist the influence of

other entities (Callon, 1993). Not only are humans and non-humans to be seen within the same (conceptual and terminological) framework, but micro-actors (individuals, computers, etc.) and macro-actors (institutions, corporations, governmental organisations, etc.) are to be seen in this way as well. As Callon and Latour (1981) put it:

> The difference between [micro- and macro-actors] is brought about by power relations and the constructions of networks that will *elude analysis* if we assume *a priori* that macro-actors are bigger than micro-actors…[A]ll actors are isomorphic…[which] does not mean that all actors have the *same* size but that *a priori* there is no way to decide the size since it is the consequence of a long struggle (p. 280).

Wise (1997) points out, in regard to epistemological positioning, any focus on social actors is not based on notions of "identity" but of "agency". This is because what matters to the analysis is not the self-consciousness or "natural state" of the actor but, rather, its relations with others actors. Latour (1993) refers to one actor's relationship with another as alternatively the process of delegation or "the pass" (as in passing a football, or handing on the baton). Thus, the closing of a door is delegated to an automatic groom (Latour, 1988) or the actions of yeast are passed to scientists studying them, who then speak for the yeast as its delegates (Latour, 1994). According to Wise (1997, p. 33) this notion of agency means that macro-actors cannot be known to be more powerful than micro-actors a priori, so, for instance, IBM (as a macro-actor) cannot act on its own but only through its delegates (be they human representatives or its computers, etc.). The actor-network theorist thus focuses on an actor not because it is human, or because of its size, but because it has the most significant role in a particular network.

Actor-network theory and public relations

To date there has been little comment on actor-network theory from public relations theorists although several writers from an organisational studies perspective have engaged with the approach. Writing on the subject of metaphor and organisation Inns and Jones (1996) suggest that, what they refer to as, the "actor-network metaphor" has the potential to radically alter our perspective on organisations in many ways, particularly, of course, in giving equal importance to human and non-human elements in organisations. They suggest that in theorising organisations multiple interpretations are an asset rather than a problem and that the deliberate use of such metaphors in organisational research "offers a way out of the cage of thought and language constructed by the dominance of a few paradigms within the subject" (p. 118). Inns and Jones thus agree with Gergen (1992) who stresses the need to challenge the "taken-for-granted" in organisational life and with Foucault who emphasised the importance of trying to make "the familiar strange" thereby achieving a new perspective. They point out that the notion of organisations as actor-networks challenges the traditionally accepted belief that organisations are fixed in one place as if an invisible boundary surrounded them. Rather "[i]t changes our conception of an organisation to incorporate all of the elements 'inside' and 'outside' which constitute the organisation's activity, and to see the taken-for-granted boundaries established between 'inside' and 'outside' as an act of representation" (p. 118).

Similarly Gagliardi (1996) suggests that Latour is right to point out that non-human entities "are the missing masses who knock insistently at the doors of sociology…[and]… [t]o neglect to analyse them and observe only human action is like limiting one's gaze to half of the court during a tennis match: the observed movements seem to have no meaning" (p. 568). He notes that in contemporary organisations non-human entities perform tasks that were previously performed by human beings, not only that, "they condition human beings, they interact with them and are conditioned by them, in a chain of delegation and transfers … which have conscious human beings at one extreme, efficient and tenacious machines at the other, and the power of signals and symbols halfway between" (p. 568). Such interaction means, for instance, that computers as "non-humans" have now become such an intrinsic part of organisational life that any "failure" on the part of computers to play their allocated "role" will be no less catastrophic to an organisation than a human failing[7].

Latour and Callon's concept of translation, so central to actor-network accounts, has been used in organisational theory to redescribe the consultancy process. Clark and

Salaman (1996) note that to be successful and survive in the management consultancy industry, consultants – and, it could be argued, public relations practitioners – must convince clients of their expertise, knowledge and indispensability. To achieve this they must appear authoritative, must behave confidently and must be in command of something which clients seek and value or which clients can be persuaded to seek and value. Clark and Salaman suggest that it is "the *apparent* possession by consultants of something that client managers value which leads them to bestow high status upon consultants. Therefore, consultants' authority *vis-à-vis* clients depends on mastering techniques which convey the *impression* that they possess authority and expertise in areas which clients value" (p. 175). It is suggested that they do this by encouraging clients to make their judgements about the value and quality of their service on the basis of "generic *symbols of expertise*" which they provide, such as qualifications, quality of data, client base, demeanour, style, confidence, and so on.

Clark and Salaman argue that consultancy success is achieved through "knowledge" which is produced and displayed through what Callon and Latour have described as a process of translation. As noted above for Callon translation is achieved through "problematisation" (Callon, 1986). So, according to Clark and Salaman (1996), in regard to management consultancy, "one actor (i.e. a management consultant) convinces another actor (i.e. a client) that their interests coincide – 'I want what you want' – by redefining the 'problem' in terms of a solution owned or within the orbit of the former" (p. 176). Thus, organisations demanding expert assistance from knowledge-intensive organisations, such as management consultancies, cannot rely upon assessing formal, rational bodies of knowledge and expertise. Rather the "value" attributed to a consultant and consequently his or her ability to enrol and translate, is dependent upon the belief that they are able to offer something valuable to their clients.

As I noted above, there is little evidence of any reference to the actor-network approach in public relations theory. However, it might be useful to attempt, to redescribe, from an actor-network perspective, a network which those writing within the modern episteme would portray as a public relations struggle between social actors. Examples of public relations struggles between oil companies and environmentalists have been utilised to illustrate certain points by those theorising public relations (Cheney, 1992; L'Etang, 1996). These descriptions discuss humans actors but tend to ignore the non-human. From an actor-network perspective the relevant actors within the network includes: the sea; the "public"; the oil company; the hazardous waste; and the environmentalists. In actor-network accounts it will be assumed that the sea, or the hazardous waste, are important actors possessing agency and sometimes managing to place themselves at the centre of the network.

Conclusion

Present public relations theory exists within the modern episteme and reflects the ontological and epistemological assumptions of modernity. This means that those theorising public relations tend to take for granted an anthropocentrism which privileges the human and the social in a dualism which marginalises the non-human and the non-social. ANT challenges this dichotomy in the sense that it questions its hierarchical nature and argues that a kind of heuristic flattening (Star, 1991) offers a more coherent way of describing or narrating a complex world filled with "quasi-objects" – constructed from human and non-human elements. The approach is beginning to be used in organisational theory by those theorists who question the "taken-for-granted" "modern" presuppositions of the current paradigms in the area. By exposing and disputing modern assumption it may open up the way to new perspectives in organisational theory and it may do the same in public relations theory. However, it has not been the purpose of this article to argue that public relations should be viewed though the lens of actor-network theory or that the modern episteme should be replaced by the amodern episteme. Rather the above discussion has endeavoured merely to point to some features of this perspective which the author believes may be worthy of consideration by public relations theorists. As has been noted, as a meta-theoretical perspective the actor-network approach resists and disputes a whole set of presuppositions which inform most organisational and public relations theories. It is also clear that the approach has a significant impact *vis-à-vis* methodology. So, for instance, other actors which have previously been ignored must be included in any

descriptions or explanations of organisational scenarios and public relations struggles.

Notes

1 I have borrowed this term from Wise, 1997, p. xiv.

2 Walsh 1985 p. 224, has suggested that the Cartesian formula *Je pense, donc je suis* or its Latin equivalent *Cogito ergo sum* would be rendered more accurately in English by the words "I am aware, hence (of course) I exist". In the very act of doubting I am aware of myself as doubting and I am assured with certainty of my existence as a conscious being being conscious of my act. That is, I intuit the objective and necessary connection between my being and my being aware. Furthermore he notes that Descartes did not develop this insight along the lines that "being conscious" is necessarily a consciousness of being or of beings (of one kind or another). Had he done so, his philosophy would have developed into a philosophy of being (and pre-empted Heidegger by four centuries). Instead Descartes developed his insight in a rationalist and idealist direction through focusing his interest merely on the clarity and distinctness and certainty of his foundational idea.

3 For a useful summary see Magee, 1987, p. 86. It is worth noting that Descartes' view contradicted both Aristotle and Aquinas, in other words, classical and medieval authority, who held that the knower has to be understood as an essentially embodied creature, and not just pure spirit. It is Descartes who is generally credited with the construction of the "rational" subject. See Couse Venn, 1984, p. 135 who notes "So it is with Descartes that the theme of reason and a Subject-of-Reason most clearly emerges, [and] the form of the argument in the *Meditations* (1641) and in the propositions developed in the *Discourse* (1639) together co-ordinate the key concepts of the modern philosophical logos in their clearest critical form".

4 On this point see Walsh, 1985, p. 322-23. For a more extended discussion of Kant see Allison, 1983.

5 See Latour (1993), pp. 46-48, for a discussion of distinctions between the modern and the postmodern perspectives.

6 Latour (1993) does point out that while the modern episteme is characterised by purification and strict boundaries between human and non-human entities modernity itself is characterised by the proliferation of nature/culture hybrids.

7 A good example of this is the so-called "Millennium Bug" which according to some predictions could prove to be disastrous for organisational life.

References

Allison, H.E. (1983), *Kant's Transcendental Idealism*, Yale University Press, New Haven, CT.

Botan, C.H. and Hazleton, V. (1989) (Eds), *Public Relations Theory*, Lawrence Erlbaum Associates, Hillsdale, NJ.

Callon, M. (1986), "The sociology of an actor-network: the case of the electric vehicle", in Callon, M., Law, J. and Rip, A. (Eds), *Mapping the Dynamics of Science and Technology*, Macmillan, London, pp. 19-34.

Callon, M. (1993), "Social ordering" (lecture), University of Illinois, 7 May, Urbana-Champaign, IL.

Callon, M. and Latour, B. (1981), "Unscrewing the big Leviathan", in Knorr-Cetina, K.D. and Mulkay, M. (Eds), *Advances in Social Theory and Methodology*, Routledge and Kegan Paul, London, pp. 275-303.

Cheney, G. (1992), "The corporate person (re)presents itself", in Toth, E.L. and Heath, R.L. (Eds), *Rhetorical and Critical Approaches to Public Relations*, Vol. 3 No. 15, Lawrence Erlbaum Associates, Hillsdale, NJ, pp. 165-83.

Cheney, G. and Dionisopoulos, G.N. (1989), "Public relations? No, relations with publics: a rhetorical-organisational approach to contemporary corporate communications", in Botan, C.H. and Hazelton, V. (Eds), *Public Relations Theory*, Lawrence Erlbaum Associates, Hillsdale, NJ, pp. 135-58.

Clark, T. and Salaman, G. (1996), "Telling tales: management consultancy as the art of story telling", in Grant, D. and Oswick, C. (Eds), *Metaphor and Organisations*, Sage, London, pp. 166-84.

Gagliardi, P. (1996), "Exploring the aesthetic side of organisational life", in Clegg, S.R., Hardy, C. and Nord, W.R. (Eds), *Handbook of Organisation Studies*, Sage, London, pp. 565-80.

Gergen, K.J. (1992), "Organization theory in the postmodern era", in Reed, M. and Hughes, M. (Eds), *Rethinking Organization: New Directions in Organization Theory and Analysis*, Sage, London, pp. 207-26.

Grunig, J.E. and Hunt, T. (1984), *Managing Public Relations*, Holt, Rhinehart and Winston, New York, NY.

Hardy, C. and Clegg, S.R. (1996), "Some dare call it power", in Clegg, S.R., Hardy, C. and Nord, W.R. (Eds), *Handbook of Organisation Studies*, Sage, London, pp. 622-41.

Inns, D.E. and Jones, P.J. (1996), "Metaphor in organisation theory: following in the footsteps of the poet?", in Grant, D. and Oswick, C. (Eds), *Metaphor and Organisations*, Sage, London, pp. 110-26.

Kant, I. (1933), *Critique of Pure Reason*, (trans. N. K. Smith), 2nd ed., London.

Latour, B. (1988), "Mixing humans and nonhumans together: the sociology of a door-closer", *Social Problems*, Vol. 35 No. 3, pp. 298-310.

Latour, B. (1993), *We Have Never Been Modern*, Harvester Wheatsheaf, Brighton.

Latour, B. (1994), "Will modernization continue? Reflections on science and democracy" (lecture), University of Illinois, 11 October, Urbana-Champaign, IL.

L'Etang, J. (1996), "Public relations as rhetoric", in L'Etang, J. and Pieczka, M. (Eds), *Critical Perspectives in Public Relations*, Thomson Business Press, London, pp. 106-23.

Magee, B. (1987), *The Great Philosophers: An Introduction to Western Philosophy*, Oxford University Press, Oxford.

Michael, M. (1996), *Constructing Idenitities*, Sage, London.

Miller, G.R. (1989), "Persuasion and public relations: two 'Ps' in a pod", in Botan, C.H. and Hazleton, V. (Eds), *Public Relations Theory*, Lawrence Erlbaum Associates, Hillsdale, NJ, pp. 45-66.

Prior-Miller, M. (1989), "Four major social scientific theories and their value to the public relations researcher", in Botan, C.H. and Hazleton, V. (Eds), *Public Relations Theory*, Lawrence Erlbaum Associates, Hillsdale, NJ, pp. 67-81.

Star, S.L. (1991), "Power, technology, and the phenomenology of conventions: on being allergic to onions", in Law, J. (Ed.), *A Sociology of Monsters? Power, Technology, and the Modern World*, Blackwell, Oxford, pp. 27-57.

Toth, E.L. (1992), "The case for pluralistic studies of public relation: rhetorical, critical, and systems perspectives", in Toth, E.L. and Heath, R.L. (Eds), *Rhetorical and Critical Approaches to Public Relations*, Lawrence Erlbaum Associates, Hillsdale, NJ, pp. 3-15.

Walsh, M.J. (1985), *A History of Philosophy*, Geoffrey Chapman, London.

Warnock, G.J. (1964), "Kant", in O'Connor, D.J. (Ed.), *A Critical History of Western Philosophy*, Free Press, New York, NY.

Wise, J.M. (1997), *Navigating Technology and Social Space*, Sage, London.

Further reading

Bowden, G. (1995), "Coming of age in STS: some methodological musings", in Jasanoff, S. *et al.* (Eds), *Handbook of Science and Technology Studies*, Sage, London, pp. 64-79.

Couse, V. (1984), "The subject of psychology", in Henriques *et al.* (Eds), *Changing the Subject*, Methuen, London.

Crawford, H. (1993), "An interview with Bruno Latour", *Configurations*, Vol. 1 No. 2, pp. 247-68.

de Vries, G. (1995), "Should we send Collins and Latour to Dayon, Ohio?", *European Society for the Study of Science and Technology*, Vol. 14 No. 4.

Latour, B. (1987), *Science in Action*, Open University Press, Milton Keynes.

Law, J. (1992), "Notes on the theory of the actor-network: ordering, strategy and heterogeneity", *Systems Practice*, Vol. 5, pp. 379-93.

Reed, M. (1996), "Organisational theorizing: a historically contested terrain", in Clegg, S.R., Hardy, C. and Nord, W.R. (Eds), *Handbook of Organisation Studies*, Sage, London, pp. 31-56.