Ambiguity and polysemy as rhetorical resources in knowledge disputes: The struggle over the interpretation of Kuhn in organisation studies

In organisation studies (OS), the literature is not short of attempts to delineate the contours and internal boundaries of the field. Some debates revolve around whether or not authors should use Thomas Kuhn’s (1962/1996) concepts to do so, and whether or not they are being faithful to the original ideas. I propose in this paper that examining some usages of the notion of paradigm can not only inform future conceptualisations, but shed light on the politics of attempts to delineate and police the field.

The question “how is the idea of paradigm used in OS, and to what purposes?” is addressed in four steps. First, I discuss the diversity of representational practices. Representations of the field differ in at least two respects: the dimensions underpinning the paradigms that are delineated, and the relationship those paradigms have with Kuhn’s. I then consider the reception of Kuhn’s notion of paradigm in OS and in the social sciences in general, showing the lack of consistency in how the notion is appropriated—something enabled by its ambiguity and polysemy. Third, I discuss the role of ambiguity in scientific disputes, and propose that ambiguity is a useful rhetorical resource in a wider struggle for intellectual dominance of the field. The thesis developed is that the definition of ‘paradigm’, rather than being merely an object of philosophical discussion, is an important site of contestation. The consequence of such a view is that the relationship between paradigms can be seen as not much other than the reification of the definition that is used. I illustrate this idea in the fourth part with a reading of Donaldson (1995) and McKinley and Mone (1998).

To look specifically at the ‘paradigm debate’ in OS is not to ignore that similar debates are also happening in neighbouring fields. Whilst I am interested in the case of OS because it is the field I belong to, the relative longevity of the debate means that a lot of material is available to the analyst, and that positions are generally well articulated and documented.

The diversity of representational practices

The delineation of OS proposed by Burrell and Morgan (1979) is so widely established that one can hardly think of the idea of paradigms without thinking of their 2x2 matrix, which articulates the interplay of assumptions about the nature of social science with assumptions

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1 For example, for an account of debates in marketing theory and consumer research, see Tadajewski (2014). In accounting research, see Lukka (2010).
about the nature of society (Figure 1). Whilst earlier classification (e.g. Clegg & Dunkerley, 1977; Silverman, 1970) used simple binary oppositions, subsequent ones often adopted the 2x2 matrix format – something described by Deetz (1996) as “spatially and visually convenient” (198). Examples include Astley and Van de Ven’s (1983) ‘four views of organisations and management’, a matrix articulating the interplay between levels of analysis and orientation toward agency; Rao and Pasmore’s (1989) ‘knowledge-interest nexus’, and Deetz’s (1996) ‘contrasting dimensions from the metatheory of representational practices’. Other authors abandoned the 2x2 format and either kept the notion of paradigm (e.g. Hassard & Cox, 2013) or abandoned it altogether (Reed, 1999 proposed six analytical narratives)

(PLEASE INSERT FIGURE 1 NEAR HERE)

This brief overview suffices to illustrate that existing schemes are diverse and underpinned by widely different principles. One could also design entirely new classifications inspired by alternative dimensions. For example, Connell and Nord (1996) argue that in general, interpretations of knowledge disputes focus too much on epistemological and ontological assumptions, and insufficiently on differences in interests and values. Parker (2000) similarly suggests that discussions around epistemology and ontology marginalise questions of value and ethics. Classifications can emphasise differences at the expense of similarities, but they can also do the opposite (Bailey & Eastman, 1994).

It is useful to draw a parallel with what happened in sociology, where Eckberg and Hill (1979), after looking at numerous delineations of sociology found that, “There are almost as many views of the paradigmatic status of sociology as there are sociologists attempting such analyses” (925). This is because, they say, authors confuse notions of ‘paradigm’ and ‘perspective’:

When used by sociologists, the term [paradigm] comes most often to mean no more than a general theoretical perspective, or even, as we shall see, a collection of elements from several more or less distinct perspectives. As such, the paradigm spoken of by sociologists are nebulous, shifting entities, indicating whatever one wishes them to indicate, and are limited only by the theorist’s imagination. (929)

Eckberg and Hill (1979) suggested that sociologists found Kuhn’s ideas appealing because it furthered the legitimacy of the discipline by presenting it as a science similar to any natural science. Using ‘paradigms’ while really meaning ‘perspectives’ enabled sociologists to claim legitimacy without having to take seriously the implications of Kuhn’s argument. By generating paradigms arbitrarily, “[theorists] miss both the cognitive and the structural aspects of the paradigm concept” (932).
Let us therefore ask these questions: how did OS scholars relate to Kuhn’s work? And how did this compare to elsewhere in the social sciences?

The reception of Kuhn in organisation studies and in the social sciences

Commentators have often debated whether or not Burrell and Morgan’s (1979) notion of paradigm is aligned with Kuhn’s. For example, Donaldson (1985) said that it fundamentally misinterprets Kuhn, exaggerating the extent to which Kuhn’s framework is a phenomenological one. Kuhn, with his stress on the cumulative process of study, theory construction and empirical testing is much more aligned with conventional philosophies of science than is assumed. For Donaldson, this is not a reformulation of the philosophy of science but an enrichment of the conventional accounts offered by authors like Popper (1945) or Toulmin (1962). Burrell and Morgan also exaggerated the extent to which paradigms are mutually exclusive (Donaldson stresses that for Kuhn, communication between paradigms is possible through processes of translation, persuasion and conversion). Finally, Donaldson rejected Burrell and Morgan’s notion of paradigm incommensurability, claiming that it is assumed rather than demonstrated. This assumption hides and protects a contentious premise – that different views about ontology and epistemology prevent the adjudication of competing knowledge-claims. In Donaldson’s view, Burrell and Morgan have used Kuhn’s concepts as symbolic resources to produce statements that cannot be challenged. Tit for tat, Jackson and Carter (1991) responded that Donaldson is wrong to infer equivalence between Kuhn’s notion of paradigms and Burrell and Morgan’s, and that, “apart from the use of the word paradigm and the fact that both texts are concerned with the production of knowledge, the two theories are markedly different” (114). Indeed, Burrell and Morgan did dissociate the two notions of paradigms explicitly (1979: 35-36n1) and did refer to different theoretical influences (1979: 37n4).

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Whether common usages of the notion of paradigm have anything to do with Kuhn’s ideas is a question that is also meaningful in the wider context of the social sciences, where a common view is that the work of Kuhn has been generally misused (Fuller, 2003). Kuhn was careful to avoid making broad claims that would encompass the social sciences, and whenever discussing anything specific to the social sciences, he leaned on the side of caution. Wondering whether an increasing number of the social sciences specialities could ever find a paradigm
that would support the ‘normal, puzzle-solving research’ found in the natural sciences, Kuhn (1991/2000) said: “About the answer to that question, I am totally uncertain” (222).

A comprehensive account of the reception of Kuhn shows that instances of alleged misappropriation of Kuhn’s works abound. Maasen and Weingart (2000) conducted a content analysis of a large body of citations of Kuhn, showing not only the enormous variation of contexts in which Kuhn’s work has been appropriated, but also the variations in the interpretation of his work. From a survey of texts citing Structure over the period ranging from 1974 to 1997, they observed several patterns of citations. Here I underline five of them relevant to this analysis.

1) **There is no limit to the domains of application of Kuhn’s ideas.** Kuhn’s Structure is cited in various contexts, many of which are remote from Kuhn original focus: nursing, education, wine expertise, theology, etc. Maasen and Weingart conclude: “whatever limitations of the applicability Kuhn himself had in mind does not in any way prevent others from ignoring them” (78-79). They add: “Kuhn’s conceptual framework is not only applied to an immense array of thematic contexts far beyond anything ever imagined of intended by its author, but also in contradiction to and in defiance of his original definitions” (88).

2) **Most of the references to Kuhn are affirmative and non-critical.** Kuhn’s ideas are taken for granted without necessarily any discussion or examination. Kuhn is cited simply as an authority in order to justify a given position. Critical references appear sometimes, but they are rare and confined to very specialized discussions.

3) **Kuhn is used to legitimise antithetical positions.** Readings of Structure are used to legitimise two diametrically different positions. Some authors use Kuhn to promote the overthrowing of the orthodoxy of their field. This ‘radical’ interpretation of Kuhn depicts science as being made of distinct competing paradigms, and enable authors to advocate a pluralistic view of science that legitimises the existence of heterodox perspectives. Other authors rely on Kuhn to legitimise the scientific status of their field by identifying the presence of a paradigm, which is taken as a sign of scientificity. This ‘orthodox’ reading of Kuhn enables authors to argue that new theories should be integrated theoretically to the orthodox body of works in order to restore paradigm unity. Maasen and Weingart note that in general, the ‘radical’ interpretation of Kuhn tends to rely more on a metaphorical borrowing of Kuhn’s notion, and there seems to be a greater distance between the realm of application of Kuhn’s work and the domain the concepts are applied to. The ‘orthodox’ interpretation tends to rely on a more direct and literal reading.
4) Over time, references become increasingly summarily. Superficial and uncritical uses of Kuhn are frequent, but over time, Kuhn’s concepts become common currency. The concept of paradigm takes a life of its own, with authors using it without any mention of Kuhn.

5) Kuhn’s attempt to redefine the concept fails. Kuhn’s attempt to substitute the concept of ‘paradigm’ by the alternative ‘disciplinary matrix’ is largely ignored by most readers.

Kuhn himself recognised that what may explain the popularity of the concepts featured in Structure is precisely their interpretive flexibility and their capacity to be filled with different meanings. Maasen and Weingart (2000: 78) report that Kuhn said “I have sometimes found it hard to believe that all parties to the discussion had been engaged with the same volume”. But what or who is to blame for this? It is tempting to blame Kuhn himself. He has been described by Fuller (2002) as an author whose discourse can be so obscure that, “[it] makes virtually any interpretation look reasonable” (135). We could also argue after Masterman (1970) that if Kuhn uses the term ‘paradigm’ in no less than 21 different ways, then it is no surprise if the reader does not know exactly which meaning to affix to the term. Although most references to Kuhn’s works are to Structure, one thing that can add to the difficulty of being ‘faithful to the scriptures’ is the fact that over time, Kuhn changed some of his views in an important way. Arguably, we could also blame Kuhn’s readers for their ‘lazy’ or ‘dishonest’ interpretations, but still, ‘misreadings’ do not happen randomly. They are relatively predictable and thus seem entirely motivated. For example, in OS, the reading Donaldson (1995) makes of Kuhn’s work unsurprisingly supports the view that his own brand of contingency theory should become the paradigm for the field (see also: Donaldson, 1999).

Between blaming Kuhn and blaming his readers lies a more nuanced explanation. Maasen and Weingart suggest that concept transfers are generally metaphorical, and that distortions are likely to happen during that process. If the idea of paradigm is a metaphor, then it entails many meanings, variously emphasised according to circumstances. New meanings are also allowed to emerge, although constrained by older meanings and by the limited number of potential meanings any term carries. The interaction of a metaphor within a given discourse, Maasen and Weingart say, “[does] not produce non-referential ‘chaos’ but rather […] introduce[s] new semantics and new pragmatics, new knowledge and new world views, even” (34). In the interaction between the discourse and the metaphor, some meanings get affixed while some are

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2 Stankey (1993) distinguishes at least three phases in Kuhn’s works, each implying a different conceptualisation of the notion of incommensurability.
ruled away. They add, “Typically, a discourse ‘makes sense’ of a metaphor by incorporating it into its discourse specific vocabulary and/or methods, thereby eventually turning the metaphor into a familiar concept” (36). Metaphors are thus the site where the production of discourse is controlled and organised. Changes in a term like ‘paradigm’ reveal more than changes in the lexicon, and semantic ambiguity can be seen not as a failing, but as a rhetorical resource in knowledge disputes.

Ambiguity as a rhetorical resource in knowledge disputes

A priori, concepts being ambiguous is a bad thing, and commentators have deplored the ill-defined character of some of the concepts used by organisation scholars (Van Hees & Verweel, 2006), rendering impossible the design of refutable claims (Donaldson, 1992; McKinley & Mone, 1998; Sandelands & Drazin, 1989), or making difficult the production of cumulative knowledge (Osigweh, 1989). This treatment of ambiguity is underpinned by the classic ‘conduit’ metaphor of communication (Putnam, Phillips, & Chapman, 1999): communication as a conduit in which a message is transmitted, and encounters various obstacles that need to be removed. Whilst useful for analysing breakdowns in communication, this embeds a view of ambiguity that obscures its sometimes intentional character. As Putnam et al. (1999) suggest, “Ambiguity and misunderstanding of messages are not necessarily breakdowns in communication (...) Rather they result from message modification and the need to balance relational and political goals” (131). In the study of scientific rhetoric, authors inspired by the works of Kenneth Burke tend to understand ambiguity, not as an obstacle to overcome, but as a strategic rhetorical resource (e.g. Ceccarelli, 2001). Burke (1945/1969: xviii-xix) paid much attention to the ambiguity inherent to language, but simply identifying ambiguity for the sake of it is not necessarily a very useful exercise, as a certain level of ambiguity is inevitably present with the use of any symbol (including scientific concepts). For Burke, the task of the analyst is not “to ‘dispose of’ any ambiguity by merely disclosing the fact that it is an ambiguity”, but instead, “to study and clarify the resources of ambiguity” (xix). This means identifying what is achieved through the (mis)uses of symbols and the mobilisation of ambiguity. He says, “it is in the areas of ambiguity that transformations take place; in fact, without such areas, transformation would be impossible” (xix).

Similarly, the position taken here is that ‘paradigm’ is not a neutral term, but one that can carry different meanings, and that can be used for different purposes in a struggle for intellectual dominance. In that sense, the definition of ‘paradigm’ (and its companion notion,
‘incommensurability’) can be seen as a site where intellectual struggles take place – struggles for the definition of what counts as legitimate knowledge, and what does not. What follows from this view is that the relationship between paradigms is not much else than the reification of the definition that is used. Let us illustrate this key idea with a reading of two texts.

**The usefulness of an arbitrary definition: Two illustrations**

The key idea of this paper is illustrated through a reading of two texts: *American Anti-Management Theories of Organization: A Critique of Paradigm Proliferation*, a book by Lex Donaldson (1995); and ‘The Re-construction of Organization Studies: Wrestling with Incommensurability’, an article by William McKinley and Mark Mone (1998). The first text was chosen because it represents a critical case. Over the years, Donaldson has been part of numerous discussions on paradigms and metatheoretical issues, and he has systematically advocated a literal and ‘orthodox’ reading of Kuhn. That he departs from such literal reading shows how easy it is for authors to invest new meanings into already well-used concepts. The second text is interesting because McKinley and Mone are preoccupied by the fact that concepts are often ambiguous, and they see this ambiguity as a problem – a source of incommensurability that renders difficult the adjudication of competing claims. The solution they propose – the creation of a dictionary – ultimately shows in an absurd manner the extent to which their project is an impossible one. The proposed dictionary is of only use to deal with the most narrow kind of incommensurability they have arbitrarily chosen to focus on.

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Donaldson’s (1995) book is an ambitious one, aiming to find a replacement to what he sees as ‘flawed paradigms’ for the study of organisational structures. He deplores that in the last decades, there has been an outbreak of new paradigms attacking the position of structural contingency theory. He says: “Each of the newer paradigms explicitly or implicitly repudiates structural contingency theory” (2), and he thinks that when subjected to scrutiny, those paradigms reveal themselves as flawed. This situation exemplifies the problems associated with the allegedly excessive fragmentation of the field – a situation he wants to remedy by proposing a unifying paradigm. Let us examine what he proposes by looking specifically at the meaning his usage of the Kuhnian notions paradigm, incommensurability, and normal vs. revolutionary science.

1) **Paradigms.** At the beginning of the book, Donaldson identifies four theories that function as distinct paradigms: population-ecology theory, resource dependence theory, institutional
theory and organisational economics. Anticipating the criticism that the four approaches may not really be distinct paradigms, Donaldson adds, “[they] are paradigms in the Kuhnian sense that they are mutually antithetic theory statements and languages, which tend to make them incommensurable with each other. Each paradigm has its own set of adherents, that is, there are distinct paradigm communities” (4). However, the link between Kuhn’s notion and Donaldson’s soon become more distant. Donaldson asserts that, “In US organization theory there are many new paradigms and newer ones are introduced frequently. Since around 1967 at least fifteen new paradigms have been launched” (7) [emphasis added]. He also says, “On average a new paradigm is offered every second year” (8). The closest Donaldson comes to defining the nature of a paradigm is when he explains how structural contingency theory can be seen as one:

Structural contingency theory constituted a research paradigm in that there was a core theory (…) and a style of empirical research which featured comparisons of structures and contingencies across organizations. Within the broad paradigm there was scope for development in the contingencies identified, the structural aspects to which they were related, the performance outcomes examined, and refinements in concept and method. (13)

We recognise here implicit references to Kuhn’s idea of puzzle-solving, the main task that concerned organisation researchers working within the framework of structural contingency theory.

2) Incommensurability. Donaldson identifies numerous reasons the four theories mentioned above as incommensurable paradigms. For a start, authors from one theory/paradigm (Donaldson alternates regularly his choice of term) do not refer much to authors from another theory/paradigm. And none of those theories/paradigms offer an extended statement of how it relates to the others. What Donaldson seems to say here is that although there is no reason to think that theory adjudication is impossible, researchers make it difficult by not engaging with each other. Is there anything more that can make the case for incommensurability? Yes: “Each [theory] has a somewhat distinct language which would not aid ready inter-theoretical discourse and would pose the problem of which language would be used in any new integration” (20). Also, “each of the newer theories differs from the others in core theoretical propositions, assumptions about organizations, language and methodologies. Each of the theories conforms rather closely to the definition of a theoretical paradigm advanced by Kuhn (1970)” (21).

3) Normal vs. revolutionary science. This is perhaps where the task of conciliating Kuhn’s view and Donaldson’s is at its most difficult. Donaldson suggests that the newer paradigms all represent forms of revolutionary science:
In none of the three newer theories is there much attempt to accommodate previous structural contingency theory or to present the newer theory as complementing the older theory by adding to prior work so that a more complete explanation of structure is obtained. The approach is not the eclectic or synthesizing or integrative one of building upon an earlier model and showing how the new model explains more variance in organizational structure or in other dependent variables. (…) Hence each of the three newer organizational theories potentially constitutes a paradigm revolution. (17)

Trying to clarify how this represents a Kuhnian revolution, Donaldson adds:

Thus the paradigm-revolutionary nature of the newer organizational theories means that there is a disjunction or break in the way the field thinks about organizations. This poses problems of integration and cumulation. At the theoretical level there is no scheme which unifies old and new (that is functional and political) and makes the field coherent by offering a picture of how all of these variables and processes go together. Nor would it be easy to somehow construct such a unified theory as the base-assumptions are antagonistic, (…) This is the price of paradigm revolution in any science, (…). Paradigm revolution becomes a major impediment to serious integration of thought—unless some paradigm completely triumphs over the other, that is, the paradigm revolution is successful. (17-18)

Overall, Donaldson’s text shows how a reasonable argument can be developed upon questionable premises that rely on the ambiguity and polysemy of the key concepts used. Donaldson uses Kuhn’s language and evokes various links between his version of the concepts and Kuhn’s, but he also seems aware of the metaphorical nature of the transferred concepts, keeping a safe distance from them: theories can be seen as paradigms, and those paradigms can be seen as incommensurable.

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McKinley and Mone (1998) initiated a controversy when they suggested that the ambiguity of the concepts used by organisation researchers is a major obstacle to advances in knowledge, and is one major reason for persistent incommensurability between theoretical perspectives. In line with what they are arguing, they are careful to confine their claim to a specific form of incommensurability – what is generally labelled ‘semantic incommensurability’ (Harris, 2005) – between a set of North-American theories. They do not claim to be tackling the broader question of paradigm incommensurability.

McKinley and Mone argue there are many theories that are in contradiction, and that if two incompatible claims can be made, it is because they carry enough ambiguity to be impossible to refute. Ambiguity, they say, “makes it difficult to conduct conclusive empirical tests and to compare incommensurable schools of thought”. In sum, “[it] renders theory non-falsifiable” (175). This ambiguity, they suggest, “makes conclusive empirical assessment of any theoretical school equivalent to punching a marshmallow” (176). What sparked controversy here was the solution proposed: “the democratic creation of a construct dictionary (…) [that] would include definitions of key organization studies terms, and would also provide suggestions for
operationalizing those constructs so as to create valid measures of them” (176-177). In their view, the main advantage of such a dictionary would be that “[it] would provide a theory-neutral observation language that could help reduce the incommensurability between organization studies school of thought” (180). This is because “Measures based on construct definitions in the dictionary would draw on a field-wide consensus, so results derived by using those measures would have broader legitimacy than results based on the particularistic construct definitions and measures typical of organization studies research projects today” (180).

Leaving aside the philosophical issues raised by this position, in the spirit of McKinley and Mone’s suggestion, one could wonder whether debates about paradigms in OS would really be facilitated by establishing a dictionary entry that would affix a permanent and stable meaning to concepts such as ‘paradigm’ and ‘incommensurability’. Let us note this irony: if McKinley and Mone would have had to rely on any of the conceptualisations of incommensurability that are generally used in OS, they would not have been able to express their argument in the first place. This was noted in a response by Booth (1998) who suggested indeed that their argument makes sense only because they use a peculiar and arbitrary definition of incommensurability. Once again, like with the previous text, the argumentation developed is only coherent if we accept in the first place the arbitrary choices made by the author. What McKinley and Mone’s (1998) use of the notion of incommensurability shows is that attempts to legislate over the meanings of concepts, or even merely to reach a temporarily stable shared understanding are likely to encounter major difficulties. This is to be expected given the importance of the meaning of concepts as a site of struggle for the intellectual control and dominance of the field. Ultimately, McKinley and Mone show in an absurd manner that their project is an impossible one.

**Conclusion**

Expunging ambiguity can be virtuous in some cases, but often it is a fantasy that sidesteps the fact that actors have important and legitimate stakes in the definitions they affix to concepts. We do need to acknowledge that concepts are naturally ambiguous, and that this is probably inevitable, and not such a bad thing. Like others who have highlighted the need for interpretive flexibility in the invention of innovative arguments (e.g. Astley & Zammuto, 1992; Sköldberg, 1992), Gergen (1998) responded to McKinley and Mone that expunging ambiguity is unrealistic and undesirable:
Because languages are living and evolving systems, because words carry multiple meanings, even the dictionary police would have trouble in discriminating between who has adhered to, as opposed to violated, the rules of the game. Eventually everyone in the profession who received a ‘ticket’ would seek to get it ‘fixed’ or become outlaws. And the outlaws, I suggest, would profit in the end—because they would have new and exciting things to say. (277-278)

Still, one may retort that ambiguity can really hamper the possibility of meaningful discussions. Here Watson does exactly that when he deplores how authors use the term ‘positivism’:

One almost cries out here for a knocking together of heads and a demand that people in the field sort out just what they want to apply their labels to. Different positions could continue to be adopted, but at least we would know what precisely people were talking about when they debate those positions. (380)

In my view, the problem that Watson is highlighting is not only ambiguity and polysemy, but probably a lack of goodwill. Taking a different example – the contested concept of culture – we can imagine how to even propose that a dictionary could settle its meaning is as intellectually offensive as it is unrealistic. The best one can hope for is a clearer acknowledgement of the polysemic nature of most concepts that are central to our endeavours, and in the case of the paradigm debate in OS, a recognition of the role played by ambiguity in that debate.

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**Figure 1: Four paradigms for the analysis of social theory**

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From Burrell and Morgan (1979)
References

ASTLEY W.G. - VAN DE VEN A.H.

ASTLEY W.G. - ZAMMUTO R.F.

BAILEY J.R. - EASTMAN W.N.

BOOTH C.

BURKE K.

BURRELL G. - MORGAN G.

CECCARELLI L.

CLEGG S. - DUNKERLEY D.

CONNELL A.F. - NORD W.R.

DEETZ S.

DONALDSON L.

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DONALDSON L.

ECKBURG D.L. - HILL L.J.

FULLER S.

FULLER S.

GERGEN M.

HARRIS R.A.

HASSARD J. - COX J.W.

JACKSON N. - CARTER P.

KUHN T.S.

KUHN T.S.

LUKKA K.
MAASSEN S. - WEINGART P.
MASTERMAN M.
MCKINLEY W. - MONE M.A.
OJIGWEH C.A.B.
PARKER M.
POPPER K.R.
PUTNAM L.L.- PHILLIPS N. - CHAPMAN P.
RAO M.V.H. - PASMORE W.A.
REED M.
SANDELANDS L. - DRAZIN R.
SILVERMAN D.
SKÖLDBERG K.
STANKEY H.
TADAJEWSKI M.
TOULMIN S.E.
VAN HEES B. - VERWEEL P., EDS.