

‘Strategic Management in (a) Crisis?’ Uncertainty, Imprecision and the Incomplete as Axioms in Building Appropriate Theory

Abstract

This Paper argues that a key task in understanding crisis situations lies in how their general manifestations penetrate into and affect individual enterprises. One transmission mechanism for moving crisis around is studied here: uncertainty based on incomplete propositions (enthymemes). The challenges posed by incompletely specified commerce are traced, using Latourian tools of relational materiality. Conventional approaches to enterprise planning born of strategic management theory may be a barrier to dealing with the incomplete, but their overthrowing is likely to evoke considerable conflict. The Paper concludes with some practical lines for organising a new approach to managing with enthymemes.

Keywords: enthymeme; crisis; relational materiality, strategic management.

Introduction

This Paper examines crisis and its effects on the institutions of the market economy. It has long been recognised that there are different kinds of crisis. There are, for example, crises of accumulation (Mandel, 1980) driven by changes in underlying profit rates. Baran and Sweezy (1966) discussed realisation crises which they attributed to structurally insufficient demand. There are then crises of legitimation (Poulantzas, 1974), in which government makes macroeconomic problems its own, but at a high cost to itself and society. The boundaries separating the different forms of crisis are permeable, so that one kind of crisis often leads to another. A liquidity crisis in the banking sector in 2008 transmuted (for the construction sector, for example) into a realisation crisis, in which real property could not be cleared at any reasonable price. These long-established theories have their limits, however. They do not, notably, specify exactly how these general crisis conditions are communicated to individual productive organisations, nor how their proliferation across organisations might disrupt existing relationships. It would be reasonable to assume that no singular mechanism is responsible for this process of crisis-proliferation. This Paper focuses on one mechanism among these: uncertainty. It explores how that uncertainty is often presented to productive enterprises as an incomplete proposition. It proceeds to appraise how that incompleteness is

most likely to disrupt only specific forms of organising, based on a specific interpretation of rational planning. This argument means that some ways of organising – and indeed, some enterprise structures - may be more vulnerable to the disruption that uncertainty brings compared to others. The other benefit that being specific about crisis transmission brings is its capacity to illuminate the possible responses available to enterprises. Many producers will, for example, adopt make-and-mend approaches, based on life extension and deferred capital expenditures. Others will re-assess defeasibility of their contractual relations and annul or postpone where they can. It is claimed here that these strategic responses embrace both people and things and thus go considerably beyond the inflated emphasis on communication in existing research in the field of corporate crisis management (for example, Benoit, 1995; Hearit, 1996). These contentions are discussed in later sections of the Paper.

New theory is required to make progress on these lines, however. The focus of the current argument is on the enterprise (not ‘firm’: a far more inclusive approach to ownership is required) and the networks of people-and-things that compose it as an institutional and less than wholly stable form of organising. Such considerations bring the relational materiality associated with Bruno Latour (1992, 1987) and Michel Callon (1998, 1986) to mind. Originally developed within the field of Science and Technology Studies, this body of thinking has been incorporated – to differing degrees of success - across the conventional academic disciplines of a Business School. Woolgar et al (2009) chart its ingress into subjects like marketing, finance, organisation studies and economics. Notably absent from their account is the field of strategic management. Yet, efforts have been made here too, visible in the research of authors like Carter et al (2010), with its specific reading of performativity in strategy; Clegg et al’s (2011) critical interrogation of the relations between strategy, institution and power; Denis et al’s (2007) speculations on strategising using innovative paradigms (including relational materiality); and Spender’s (1996) influential attempt to incorporate aspects to Latour’s work into a renewed knowledge-based theory of the firm. With its wide citation, it is doubtless Spender’s work that has thus far achieved greatest circulation. His arguments are based on a critique of positivist theories of knowledge and rejection of rationalist-empiricist arguments associated with traditional strategic management. These arguments have been narrowed and tamed in onward recitation. For example, his embrace of a multiply organising and heterogeneous concept of the firm has been scaled back to a singular (Nonaka et al, 2000) and primarily ‘social’ (anthropocentric) community (Nahapiet and Ghoshal, 1998). An inherently unstable network of knowledge-producing

actors generates questions over institutional membership (see also Orlikowski, 2002) that subsequent research on social networks incorrectly re-stabilises (Inkpen and Tsang, 2005). Strategy-as-process, thought by Spender to be an unceasing dynamic of imaginative leadership, is reduced to a recursive management of (again, primarily social) relations (Jarzabkowski, 2004). These various attempts to pull Spender's interpretation of relational materiality and his wider critique of rational-empiricist epistemologies back into a mainstream from which he was then seeking some distance echo wider concerns about de-radicalisation (Woolgar, 2004), but also about purpose. Spender's determination was to bring the research of Latour and Callon, with their early interest in actor-networks, to the attention of a strategic management audience. The current ambition is to extend relational materiality into a new, topical field (how to read crises) and to assess what its various analytical devices have to say to managers in enterprises facing these crisis situations.

The extension proposed here is based on a specific transmission mechanism, one that builds on incomplete propositions embedded in commerce. Latour (2005) hints at this link, when he discusses the relation between the incomplete nature of a proof about something and the status of that thing as an object of concern or controversy. His purpose is to press the continuing inconclusiveness of proofs about significant things and the need to found argumentation on this incompleteness: not to shy away from controversies or the apparently inexplicable, but to find appropriate tools that recognise the ubiquity of perplexity and dissent. Specifically, Latour's target for criticism is the inadequacy offered by premature completion. He uses the specialist term, enthymeme (n. 12), to capture this inherent inconclusiveness and he does so (unusually for Latour) in a conventional way. The concept of the enthymeme is central to the argument put here and it is more fully defined below. A term with Aristotelian origins, it has been traditionally confined to the study of rhetoric, or persuasive intervention. In contemporary research on enthymemes (Gilbert, 1991; Walton, 2008), the concept is extended to logic, in a move that registers pragmatics equally with semantics. Enthymemes are traditionally conceived as incomplete statements. The complete statement or syllogism is customarily assumed to be composed of three parts: a major proposition; a minor proposition; and a conclusion derived (by rhetoric, classically, more recently, by logic) from the propositional premises. In an enthymeme, one or more of these principal parts is missing. What is left is an open point, a more or less inferred proposition as to how the enthymeme may be translated into the complete statement, or syllogism. It is plausible to argue that the persuasive force of these enthymemes changes over the course of a

Business Cycle. In a speculative period, enthymemes attract (or enrol, in Latour's terms) people and things, as a given 'investment opportunity' mobilises entry into a market. Both suppliers and buyers are strongly affected by moral hazard as this speculative boom unfurls. It is contended here that enthymemes embody this hazard, in specific propositional forms. Thus, many of the esoteric financial products offered by secondary banks in the recent period of intense financial speculation were often exceedingly complex and combined real property with monetary equivalents in 'swaps' of increasing opacity. Markets are always structurally incomplete, but never more so than during their speculative crescendos. This quality of incompleteness is innate in the design of contracts (for example Turner, 2004). A message space (formally, a locutory or speech act) defines whether a deal may be struck and incipient market relations realised (Bernheim and Whinston, 1998). Messaging implies communication. It is a central tenet of relational materiality that communication (irritation) may be prompted by many seemingly heterogeneous things (people, certainly, but equally, information systems, contracts, symbolic objects and executive emoluments or externalities arising from the extraction of primary goods). The languages of commerce transcend human tongues.

This widespread quality to irritation equally implies that enthymemes may take different forms. It is already acknowledged that they can be rhetorical or logical in nature. As they are used here, it is argued that enthymemes may also take material form. This occurs through the displacement of the linguistic into material propositions – but with a displacement that maintains various forms of incompleteness throughout. This displacement becomes endemic in crisis situations like those of the present. A practical example makes this point. The half-completed husks of over 400 speculative housing estates in the Irish Republic embody this idea of the material enthymeme and exemplify often frenetic displacement processes. Indeed, a moment's reflection on what happened to these still-born estates indicates some of the strengths of Latourian-inspired readings (Latour, 1992). The failed estates – especially those where the developers have effectively vanished (the 'developer abandoned developments' in AGUHD, nd.) can be read as cases of the unravelling of what once appeared to be enduring social and technical relations. The property relations (developers of real property, involved construction firms) became intertwined with planning consents and intermediary and final contracts and then with materials listings and with the materials themselves. Ultimately, however, these networked property-material relations were unable to complete the construction job and realise values. The rapid unravelling that followed was heralded by the

unexpected death of some firms (who were thus, in Latour's terms, forcibly dis-enrolled from the development network). With their withdrawal, the property relations were destroyed and a petrified shell was left behind. This residual shell is visibly a material enthymeme, purged of its heterogeneity and purified as a singularly tangible artefact. This episode suggests that successful value creation depends on the constant movement between the nominally separate realms of natural, artefactual and human that Law (1987) describes as heterogeneous engineering (see also, Suchman, 2000). Crisis happens when the movement unexpectedly ceases and processes of value destruction take hold. Destruction is, however, an equally heterogeneous process, as both people and wheels fall off a proverbial wagon. The lonely hour of the last instance (a naked object) does not endure and immediate re-mixing of people-and-things recommences. This begs the question: on what terms might the work on these estates be taken up again and completed? Some sketchy answers may again be approximated from those Irish housing estates and the State's developing responses to them (DEHLG., 2010). At a most basic level and without further human intervention, natural systems almost instantaneously start to colonise the abandoned edifices. The progression of natural systems that follow (in the first instance, mould growth and infestation) is a form of network-building (Suchman, 2000). The logic of this argument is that entropic work continues without end, even in the absence of human labour. The housing estates also suggest anthropic responses (AGUHD, nd.). Where public safety is a matter of concern, Site Action Plans propose immediate human-instigated steps to secure estates. There are then the suggestively named Site Resolution Plans (SRPs). These look to construct new networks from residuals fragments of the old. They are designed to permit site development to be completed, but they embrace a new, again heterogeneous networking form to achieve this. In this endeavour, only some of the original protagonists may be enrolled. Completion is the theme in SRPs, but the involved people may be different and two new things (a subsidy and a new completion plan) have been introduced. A changed network of people and things is thus evolving, under the direction of an additional agent (a redesigned State). The State is the enunciator of this new order and its actions are based on a reading of the implicatures or cues that are to be found in many enthymemes (Azuelos-Atias, 2010). This is, as later sections of this Paper outline, but one way of dealing with the puzzle posed to enterprises by enthymemes and by the crisis trading conditions with which they are associated.

It is not hard to find other, commercially significant cases of enthymemes at work. Incomplete (enthymematic) contracts are the general rule and the search for

comprehensiveness, illusory. These contracts are generally logical in structure (benefitting from specialist procurement support advice), but they are complex. This is partly because the relationships they describe are usually heterogeneous, fusing people and things liberally. Invitations to tender combine offers of project or service responsibilities, as the major logical proposition, with the temporary vesting of assets or facilities - the minor, material proposition. The invitation then calls for would-be contractors to project an imaginary performance on the basis of the major and minor propositions. They supply the logical conclusion, claiming (in resource-based terms) competences and proclaiming capacities. The contractor thus seeks to complete the enthymeme through its response. These conclusions are of course deliberately omitted from the enthymematic tender documents, thus constituting the focus for object construction. They are a deliberate contractual ellipsis, which tenderers are invited to fill.

A relational perspective also sheds light on the nature of the minor proposition. Here, the contractor sets out the asset condition and mode of asset utilisation through technical norms, quality standards, performance targets and so on. Relative to other aspects of the enthymeme, the assets appear to be tightly technically inscribed (Joerges and Czarniawska, 1998). It would then appear, in engineering terms, to be few open points through which contingencies might force things to unravel. Of course, this completeness in the minor proposition may be more apparent than real, since quality-shading is a recurring temptation. It is all too likely that post-contractual disputes might readily re-open the condition of the asset base to examination. In Latourian terms, it is a poorly sealed black-box that, in its unexpected opening, generates a new object of concern. Such considerations imply that enthymemes are potentially as unstable as the contractual settlements that may issue from them.

These general observations on the heterogeneity of enthymemes and their potential significance in crisis situations invite further questions:

- How do enthymemes force their way into, or otherwise infiltrate the planning systems of an enterprise?
- How does enthymematic action alter or destabilise the extant enterprise planning infrastructure?

- What tactical responses are available to the enterprise in dealing with the threateningly implicit aspects to enthymemes?

These questions frame the arguments to follow

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The Enterprise and the Enthymeme

At times of crisis, the need for a planned response to an increasingly severe and testing array of incomplete propositions put by (reified) markets (Callon, 1998) assumes pressing significance. Yet, it is a widely noted paradox of strategic management that ‘it is most needed where it is least likely to work’ (Bryson, 1995, p. 8) – in precisely these crisis situations. The thesis of the inappropriateness of strategic management in a crisis has been widely reiterated (for example, Halal, 1984; Idenburg, 1993). There is some dissension regarding the stronger proposition that one specific approach to strategic management may make enterprise survival in enthymematic crises *more* unlikely, but it is one made here. The approach that is so potentially troubling resembles early interpretations of corporate planning and has the following main qualities:

- An underlying philosophy that is rational-empiricist in nature.
- The widespread use of deductive reasoning, manifest in an emphasis on linear causality, problem factorisation and hierarchical decomposition.
- An emphasis on institutional organisation, formal hierarchical structure, functional alignment and concentration of expertise.
- The separation of strategic planning from other (corporate) functions and its vesting in identified individuals and teams.
- The organisation of planning into discrete stages running from commencement to a discrete end.
- An interpretation (and fetishism) of the corporate plan, which seeks to be panoptical in ambition, such that only that which it recognises is validated as useful work. All else is ‘off the balance-sheet’.
- A definition of the planning horizon as convergent with the amortisation period of key (and separated) assets. This requires the separation of these assets as factors of production (in the form of technology or knowledge assets).

Some of these propositions are ontological (separation of asset bases) while others are epistemological (how planners come to know and master the world in progressive stages). In fusing them, the underlying philosophical ambition of the model is clearly wide-ranging. However much the list runs the risk of stereotyping a very complex field, it does converge on the basic curricular structure of many MBA programmes. As such, its categorical assertions influence the subsequent practical orientation of increasing numbers of the ‘senior’ organisers in enterprises. In a sense, inculcating these contentions through successive generations of MBA graduates builds institutions with precisely the qualities inferred in the model; the self-referentiality of weak performativity (Santos and Rodriguez, 2009). In theoretical terms, it owes far more to the thinking of Ansoff (1965) and the planning school than Henry Mintzberg (Mintzberg and Waters, 1985), with his principles of emergence. Even here, though, it does not in any sense capture the richness of their work (in Ansoff’s examination of the surprising, potentially disruptive effects of classes of technology, for example).. It nonetheless serves current purposes as a foil, enabling one to project the likely consequences of enthymematic disruption at a planned enterprise level. For brevity, this model shall henceforth be termed the Comprehensive Rational Planning (CRP) model. Assuming the initial ascendancy of CRP., how do the increasingly trenchant demands of enthymemes in crisis situations force their way within the institutional boundary? There are two key moves in this internalisation process identified below, then an ensuing period in which the enterprise may begin a proper engagement with the enthymemes.

Internalisation of Crisis I – Fragmentation within the Enterprise

It has been noted that the very incompleteness of enthymemes poses a puzzle to those who need to read them. Viewed cognitively, this process of reading may be construed as a sense-making process (Weick, 1995). In relational materiality, however, the matter is far more than cognitive, requiring a practical response. Some actors within the enterprise will respond to the specific cybernetic and practical puzzle of the enthymeme. Others will ignore, or fail to recognise the puzzle, seeking to remain in happier times. A trial of strength ensues between those two groups and their respective networks. To be specific, those who shy away from enthymematic puzzles are likely to be those who are already wedded to a doctrine (an integral part of the CRP) of planned completeness. For them, the structural incompleteness of the enthymeme will simply not be recognised. As the trial of strength escalates, the

enthymematic disruption within the enterprise also broadens. This is, it is contended, one of the modalities through which crisis may become generalised across enterprises. In this process of generalising, two identities deserve special mention, occupying as they do vanguard positions in the controversy front between proponents of the incomplete and proponents of the complete. These two identities are those of the planner and of the boundary agent. Neither is stable (relational materiality posits only weak essences and eschews fixed identities), but neither are the entities on which they work – a point returned to below. For each of these identities, the following comments may be made:

- Boundary agents can be both human and non-human. They are defined as actors who successfully translate enthymematic ambiguity into terms that resonate with other actors within the enterprise (Bijker, 1997). It is supposed here that these boundary agents are attracted (and activated) by specific enthymemes, in a self-selecting process of mutual appellation. Boundary agents can also appear from any part of an enterprise and any functional background, sharing few (but nonetheless important) qualities. They act as voluntary passage points.
- Dedicated planners, acting (depending on institutional design) at either the corporate centre or in decentralised units, defend and operationalise the strategic plan. As with the boundary agent and indeed, all network actors in relational materiality, planners can take non-human, as well as human form. The planning network is made up of an assemblage of people and things. It will enjoy executive and other advocates, together with the plan itself and the planning machinery (decision rules, the performance management machine, the planning management, alignment and implementation systems).

In an enterprise facing crisis, the planning network will find itself assailed not by incomplete messages bringing grave news of crisis, but by boundary agents' increasingly strident demands for change. These considerations imply that the internalisation of crisis is likely to produce an escalating planning war. This conflict is one in which the dedicated planning staff continue to defend the tenets of the established enterprise plan, in a move that is symptomatic of their increasing operative closure to the environment. As many of the planners' technical estimates start to diverge from realised values, the persuasiveness of their performances falls

(Throgmorton, 1996) and actors reconsider their allegiances: CRP becomes itself a control problem within the enterprise (Streatfield, 2001). In a further micropolitical turn, it is likely that boundary agents, acting as crisis enunciators, will also use the enthymemes as a bridge to advance their own (situated) development within the enterprise. In this context and in an extension to Winnicott's (1971; also Carr and Downs, 2004) original psychoanalytical usage, the enthymeme is internalised by those advocating a new planning order as a transitional object. It is fashioned in a new form – translated - and projected as a weapon in a developing anti-programme to CRP. The enthymeme is worked upon and changed, in ways that are further discussed below. In terms of unfinished Irish housing estates, Site Resolution Plans are not the only option.

Internalisation of Crisis II – the Use of Special Weapons

Relational materiality is a part of a wider (multi-disciplinary) resurgence of interest in objects in organising contemporary action (Svabo, 2009). This object orientation alerts one to the special material entities that become active in these planning wars. It is likely that some special classes of objects will be enlisted, as the conflict widens across the enterprise. Many of these objects reside in a deep background infrastructure, only stepping forwards reluctantly, as the settled relations that have hitherto defined their actions come under scrutiny. In Latourian terms, they have hitherto formed a part of blackboxed assemblies of entities. These assemblies look like unities in themselves, but their challenging causes them to re-open unexpectedly and their contents are forced into the open, where they must seek new allies if they are to survive this breakdown. Both sides in the planning war for the future of the crisis-bound enterprise have access to some special objects.

The planners have privileged ownership of the Plan itself. This entity, now suitably capitalised, seeks a reified, commanding status. Its pursuit of this end is aided in part through its strong relations with its technical allies: the trappings of durability apparently rooted in a multi-year planning horizon; and its constant onward referral through complex decision rules and in the detailed codes and procedures that support these. The planners can use these special relations to combat the unauthorised activities of those mavericks that refuse to accept its privileged position. The object-oriented literature also underscores the fact that the object (the Plan) can profoundly affect its human users, too. The consequences of this reflexive determination will be more fully assessed below. In this vein, however, it is the Plan and its

technical network of associates that also elects its defenders (the planning functionaries), patrolling unwarranted variances and constructing an obligatory passage point (Callon, 1986). The passage point becomes the only legitimate channel through which outsiders are routinely directed whenever they seek to access planning resources. It is undoubtedly true that this planning network can, in more benign, less enthymematic conditions, inspire co-operation and indeed, alignment in service of the CRP. This is the interpretation of enterprise history favoured in the literature on strategic management (for example, Labovitz and Rosansky, 1997). It is equally likely – especially in times of crisis and the rise of planning wars – that this nexus of people and things can come to impede the new set of requirements ushered in with the generalising enthymeme. What was once a visionary boundary object (Briers and Chua, 2001), bringing different people together around a common, future-oriented cause, increasingly functions itself as a cause for conflict. This underscores the situational evanescence of many boundary objects, as they are understood in relational materiality.

If the planners and the Plan have each other, what do the boundary agents have by way of special weapons to respond to the Plan's obligations and constellation of forces? They clearly operate in service of an anti-program that sees the increasing number and severity of enthymemes as a profound threat to the enterprise. Their practical action will involve constructing oppositional networks. To this end, they will operate in a twilight world of surreptitious organising and be deemed by the planning network to be mavericks, with the often ethically dubious attributes that entails. As the innovation research indicates, one aspect to mavericity involves efforts to procure 'bootleg' resources from unauthorised sources (Shane, 1995), or otherwise to mobilise slack resources in pursuit of their cause.

It is these slack resources that constitute the boundary agents' most significant offensive weapon. The importance of this notion of mobilising slack is widely registered in varying literatures. Spender (1996) discusses redundancy and underutilised resources in his examination of actor-networks and the knowledge-based theory of the firm. This notion of slack, latency and dormancy would be highly problematical in relational materiality. Latour's fundamental ontological assumptions see the definition of all things in terms of the effects of their actions on others within networks. There are no essential qualities that lie beyond relational activity: objects hold nothing in reserve (Harman, 2009). It follows that objects that fail to exercise their relational qualities disappear from the relational world. This is unsatisfactory, theoretically and means, practically, that redundant or slack resources are

doomed to degrade through non-use or otherwise to become incoherent. This is a complex matter whose fuller consideration lies beyond the scope of the present Paper. Suffice it to say that there are designs for ‘netting’ networks (shielding them from undue scrutiny and permitting dormancy) that explicitly register these relational concerns (Hansen and Mouritsen, 1999). A key part of the preparation of slack resources for their reawakening is the calculated reworking of network connections through trials, contingency exercises and simulations. These are designed to ephorise connections, remind slack resources of their relational purposes and rouse them from their netted state. The clandestine organisation of these exercises will be vital to the mobilisation that boundary agents may mount.

A hint of the likely content of the resources at stake is set out in the extensive research into boundary objects (Carlile, 2002; Gal et al, 2004; Levina and Vaast, 2005). They include:

- Repositories of the processes and results of previous encounters with enthymemes.
- Common incomplete problem-solving resources – logic resources, special diagnostic tools, client relationship management experiences and other exploratory techniques for working within enthymematic situations, as detailed below.
- Models of organising to tackle enthymemes (for example, managing projects in temporary organising).

Of course, it remains unclear which party will ultimately win the civil war over the CRP and go on to take the lead part in succeeding crisis situations. Yet, until a paradigm that is comfortable with the structural incompleteness posed by commercial enthymemes triumphs, the enterprise will remain powerfully under-equipped to deal with them. There is then the very nature of the enthymemes themselves and the kinds of problems they pose. It is to this question of their (‘correct’) treatment that focus now turns.

Internalisation of Crisis III – The Tactical Enthymematic Challenge

Why are enthymemes so difficult to manage? An example serves to illustrate the practical difficulties they pose. The example concerns the complexities recently presented in western markets by financial instruments. One of the main lines of criticism of secondary financial institutions’ design of these instruments (including, for example, collateralised debt

obligations) in the late-2000s was that they were so complex and attenuated that few who handled them and passed them on in altered form wholly understood them. This generated ensuing concerns regarding accountability. This dilemma was made worse by the manner in which these instruments combined real property and financial claims. They were thus profoundly heterogeneous. In a long process of assembly, however, they were successively re-securitised in such a way that both their origins in an ever-receding real economy and their ever more complex trajectory through the world could not be discerned by many of those enrolled in their increasingly erratic course. These instruments were therefore described by a senior investment banker in 2011 as 'Frankenstein financial products' (cited in Clark, 2011). What is a Frankenstein product but one that has sufficient force as to be able to turn on its maker? The unintelligibility of Frankenstein products is therefore deeply affective. In this regard, they share some of the qualities of a quasi-object, because they change their form as they pass between the various networks that compose the enterprise. Their power lies in the fact that they also and simultaneously alter actors' relations and their (largely) enacted selves. (Carr and Downes, 2004). The investment bankers who dealt in these products were overwhelmingly schooled in rationalism. They therefore pined for intelligibility from their work problems. Their bafflement in the face of Frankenstein products – and the fact that they had no choice but to live with this affect – was fundamentally unsettling. Through a series of personal, engorging displacements, their bafflement found its climax form in bottles of champagne and furious partying. The innate uncertainty of enthymemes may be expected to produce similar effects on a much wider group of rationalist professionals.

The unintelligibility of these esoteric financial products is clearly correlated with complexity and from complexity, to the length and opacity of an object's chain of construction. It is also complicit with a 'performance that cannot be reliably predicted' (US Senate Permanent Subcommittee on Investigations, 2011) and then to major problems of accountability. This issue of length-of-chain or concatenation is thus significant. Unfortunately, theorists are divided on the merits of differing approaches to concatenation. Latour notes the increased load (a benefit) that comes with long chains. Arguments for inimitability favour the deliberate creation of ambiguity surrounding chains. Proponents of process engineering advocate short chains with minimised hand-ons and other fault points. The choice is not simply about design, but extends to practice, since increasing concatenation usually invites countervailing simplification moves. These take the form of the modularising and blackboxing of elements and their passing on to others in sub-contracted form. This was one of the notable outcomes

to the processes of re-securitisation in banking discussed above. As the US Senate Permanent Subcommittee on Investigations noted, '(t)he more complex and opaque the structured finance instruments became, the more reliant investors were on high credit ratings for the instruments to be marketable' (2011, p. 30). These calculations of risk were themselves, of course, the translations of credit rating agencies that were meant to be authoritative in nature. This status then became questionable and the rating agencies have therefore become implicated in the general deterioration in financial trading conditions. In theoretical terms, what were once treated as adequately complete statements of creditworthiness (that is, blackboxed entities) have become provisional and suspect, as have the authors of those products. Stability and completeness have given ground to the generalising uncertainty associated with incompleteness. The solution proposed by the US State to this interconnected problem of complexity, intelligibility, performance and accountability (a tax-based solution) works by adding a new concatenation to an existing chain. It does not mandate the selection of the least number of linkages in an inferential or material chain, but rather, permits long chains on sufferance of a tax cost premium. If increasing complexity wins out, it is in itself likely to limit the applicability of conventional forms of inductive and deductive reasoning (Boutilier and Beche, 1995). Complexity implies new forms of problem-solving, like abductive reasoning, triggered by surprises (novel observations set against an established background theory).

The complexity of financial instruments meant that even their producers did not understand them. Their functioning was nowhere fully articulated. It remained implicit, based on nuanced ellipsis. With these qualities, there were strong elements of the enthymeme surrounding them. Both the structure and plausible responses to enthymemes have been widely studied (Azuelos-Atias, 2010; Gilbert, 1991; Marsh, 2006), but there are methodological limits to much of that research that restrict its applicability in a commercial setting. The customary abstraction in current approaches to enthymemes is to conceive of them as working between a dyad of two agents (sender/receiver). There are exceptions. Walton (2008) explicitly registers three-party processes of enthymematic clarification, including the planner, but not ruling out wider arbitration mechanisms. Enterprise transactions are, of course, typically multilateral, notwithstanding the continuing effects of functionalist organising. That is to say, each enterprise is composed of numerous internal and boundary-spanning networks. An enthymeme may issue from one part of one enterprise and be received by another part of a second enterprise, disputed within networks in the first,

contested within the second. Translating the work of numerous enthymeme researchers into networked situations is at points extremely difficult (the question of intentionality is linked with agency and denigrated in favour of collective interests in Latour, 1999). The effort is made, however and a number of key factors and some insights into associated processes are set out in Table 1.

Table 1 – Factors in Enthymeme Management

Factor	Process Detail
1. Intentionality & provenance	Did enunciator mean to omit parts of syllogism? Did enthymeme represent all networks within enunciating institution equally, or is there dissent across networks? Did contextual implicatures impede enthymematic communication or did they cause it?
2. Travel efficacy	Did transporting move enthymeme faithfully? Did transporter & enthymeme interact?
3. Post-enunciation engagement	How tightly drawn are rule-based processes to open/close clarification mechanisms (statements of procurement ethics, remit of arbitrators)? How strongly affiliated is the enunciator with the enthymeme (assess commitment set through successive engagement).
4. Enthymeme diagnosis	Where is the implicature? <ul style="list-style-type: none"> • Implicated premise (straightened resources/demand limitation in scope of work. • Implicated conclusion (respondents need to pay obeisance to rhetoric of cost savings). What is the effect of background theory & common knowledge? <ul style="list-style-type: none"> • Knowledge beyond reasonable doubt (Latour's matters of fact) • Performative propositions on how key objects (markets, organising methods) should perform. What loading effects can be attributed to expertise?

There is considerable richness in existing enthymematic research. It needs to be insisted again, however, that the implicature-driven cues are located in physical objects as much as the logical semantics or discursive acts of humans. To return by way of illustration to the incomplete housing estates in the Irish Republic, material diagnostic cues might include:

- How tightly drawn is projected type of use (residential/communal space; residential tenements) within the physical structure of the incomplete structure to date?
- How tightly drawn is use in combinations of property and construction (pre-sold units at advanced stages of construction; detail of planning consents)?
- How tightly drawn is use in the expectations and actions to date of community networks in surrounding existing streets and neighbourhoods)?

Some of the factors identified in Table 1 might be competently handled in the logic of CRP (tests of intentionality, for example). Most of them require, however, a practical capacity to engage with the world of the incomplete: a willingness to use expeditionary processes and abductive reasoning, for example. It is, moreover, what might happen next after the diagnostic processes have been completed, that is likely to prove testing to reasoning based on completeness. The nub of the problem is that the personal values (Brugidou, 2003) of the rationalist demand that completing the implicature becomes obligatory. Completion may need avoiding, but it is the central task set by enthymeme researchers. This is because the process of translating implicatures into explicatures – constructing a syllogism - is a sociotechnical, not logical process. Tactics are required that would locate the implicature, but refrain from completing the syllogism. using analytical or semantic logic.

Discussion

Do the enigmatic problems presented by the enthymeme permit only ‘irrational mechanisms, wishful thinking, ignorance and conformism’ (Idenburg, 1993)? This questioning is put in defence of a conception of comprehensive planning, but it applies with equal force to the enterprise navigating an enthymematic world. There are already credible responses to the faltering hegemony of rationalist-empiricist thinking within strategic management. These emphasise the need for flexibility in the active management of ambiguity (Engau and Hoffman, 2011) and the benefits of ambiguity for realising strategies (Bernheim and Whinston, 1998). They fail to address the (conflictual) processes through which enterprises might migrate from a rationalist-empiricist regime, based on CRP., to a network based on a fuller understanding of incompleteness. This is, it is contended here, a perspective that relational materiality is well disposed to explore, with its technical examination of network trials of strength. The philosophical consequences of that move – and the price of not making

it – are radical, however. Yanow (2009) talks of the dispositional aspects to transitions like these. What he terms certainty acts are strongly associated with CRP and its strongly aligned action. Goal-seeking activities pursued by the deliberative agent (Johnston and Brennan, 1996) promote unambiguous reasoning, resulting in patterns of action that are performed with machine-like precision and great surety. Such a decision system exudes confidence. From the perspective of the institutional organisation (here, the enterprise), certainty acts are directed through an authority based on strong claims to rationalism. Much of this is jeopardised as the ‘completeness paradigm’ on which it is based is threatened (Jones et al, 2004). Anchored conceptions of identity, stability and optimality are increasingly qualified in the adoption of incomplete propositions. A weakening in (categorical) thought (ibid.) may follow.

It is this epistemological emphasis on the complete that is challenged by generalised commercial enthymemes. The response to that incompleteness challenges conventional forms of reasoning. It recognises the importance of surprises in an ongoing process of adaptation to a radically changed world. To this end, abduction returns from the philosophical wilderness to check the monopoly of inductive and deductive reasoning. Heuristics for exploring the enthymeme shun the search for the singular, correct response in favour of analyses that ‘move the argument forward’ (Gilbert, 1991). This open and exploratory tone resonates with the emphasis on continuous translational work that lies at the heart of relational materiality. The exploratory demeanour equally destabilises clear (functional) role definition. Such a move provides a further challenge to the assigned and constitutional roles that ground much strategic management research (for instance, Floyd and Lane, 2000). These challenges do not observe disciplinary boundaries, restricting themselves tidily to strategising. They disorganise both the enterprise institution (inducing increasingly wide-ranging conflict) and the choices underpinning strategic action. They are in this double sense profoundly destabilising to conventional senses of organisation.

Are, finally, any of these changes truly strategic in nature? Particular approaches to solving individually incomplete problems are surely more of a tactical endeavour: they can feel like the practicalities of a problem orientation, for example. Contrary to this, however, the effects of a move from a completeness paradigm to one capable of dealing with generalising uncertainty does have strategic implications. It does affect, or infect, a broadening spectrum of the organising networks and formally designated units across the enterprise. While the supply chain organisation has not been dealt with in the preceding analysis, there is no reason

to think that many of the same drivers to change will not apply there too. In this sense, incompleteness has broad-ranging effects that reshape the whole-organisation. It is equally the case that the current fiscal and liquidity crises in Europe is likely to be addressed only to be welcomed by other, potentially equally severe crises stretching long into the future. The result: the emergence of permanent crisis. Taking these two factors together, the longer and wider – that is, strategic - view is in prospect.

Conclusion

Conclusions to a Paper whose most basic themes are incompleteness, uncertainty and ellipsis cannot be anything but provisional: categorical assertions of fact must be one of the first victims of the incomplete. This crisis is structural and enduring, however, taking heterogeneous forms and displacing between them with alacrity. As such, it demands a strategic response from enterprises. Yet, conventional interpretations of strategy as comprehensive and rational fail to provide this response. Indeed, many of its contentions may make matters worse, with their deeply ingrained emphasis on completeness. A new paradigm, (left deliberately anonymous here) would embrace enthymemes within a broader framework provided by the deliberate fragility of relational materiality.

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