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**RHETORICAL ENTHYMEME: THE FORGOTTEN TROPE AND ITS
METHODOLOGICAL IMPORT**

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RHETORICAL ENTHYMEME: THE FORGOTTEN TROPE AND ITS METHODOLOGICAL IMPORT

Abstract

Despite growing interest in rhetorical analysis by management scholars, the study of enthymemes or arguments-in-use, arguably the mainstay of rhetoric, has been scarce. We argue that enthymeme analysis holds promise in enabling researchers to access agents' shared beliefs, in turn shedding light on organizational processes. We draw from two key studies of enthymeme analysis; one interpretivist and one objectivist, to propose a mixed methods approach that combines the situationally-specific, grounded insights of the former, with the confirmation, population validity aspects of the latter.

Keywords

Rhetoric, enthymeme, shared beliefs, cognitive maps, mixed methods

Rhetorical analysis has gained traction in organization theory since the 1990s (Browning & Hartelius, 2018; Sillince & Suddaby, 2008), following the “rhetorical turn” in the humanities in the latter 20th century (Gaonkar, 1993). Organization theory’s attention to rhetoric has been selective however (Zald, 1996). One fundamental aspect of rhetorical analysis, the study of enthymemes or arguments-in-use (Fisher, 1988), has remained scarce in our field. This is surprising given both the central role of enthymemes in rhetoric (Hartelius & Browning, 2008; Hossfeld, 2018), as well as the potential of enthymemes to provide access to agents’ ideational worlds, and illuminate shared beliefs or mental models (Heracleous, 2006).

We have known for quite some time that agents’ cognitions have consequences on their context (Thomas & Thomas, 1970). Individuals’ decisions are shaped by their mental models of the world and pertinent issues (Daft & Weick, 1984; Porac & Thomas, 1990; Walsh, 1995). Agents’ mental models influence what they pay attention to and how they interpret their external environment; this further shapes mental models and subsequent organizational outcomes (Barr, Stimpert & Huff, 1992; Hodgkinson, 1997; Tripsas & Gavetti, 2000; Wright, Paroutis and Blettner, 2013). Scholars have drawn on a range of methodologies and techniques for eliciting managers’ cognitive maps (Huff, 1990; Huff & Jenkins, 2002). Textual data (interviews, stories, discussions, metaphors) are the primary inputs for the majority of these approaches. These are analyzed to derive cognitive maps or repertory grids, that are seen as representations that establish a particular domain, pinpoint the main entities in that domain, and the interrelationships among those entities (Huff & Jenkins, 2002; Hodgkinson, Wright and Paroutis, 2016). Enthymemes, when represented as argument structures (e.g. Heracleous, 2006; Heracleous & Barrett, 2001), by virtue of presenting key conceptual entities in agents’ mental models, and their interrelationships, can be seen as under-studied types of cognitive maps.

We draw from two exemplars of enthymeme analysis, one employing an interpretivist, inductive, theory development approach (Heracleous & Barrett, 2001) and one employing an objectivist, deductive, theory-testing approach (Green, Li & Nohria, 2009). In doing so we propose a mixed methods approach (Creswell, 2009; Creswell et al., 2003; Molina-Azorin, 2016; Paroutis, 2017) that can combine the emergent, inductive insights of interpretivism with the population validity aspects of objectivism. Our approach follows in the tradition of efforts to treat different paradigmatic approaches as potentially complementary rather than presuming irreconcilable conflict between them (Lee, 1991; Pettigrew, 2013), a position supported by a pragmatist orientation to research (Rossman & Wilson, 1985).

We develop and illustrate the steps involved in our approach through an analysis of texts surrounding Nokia's turnaround strategy. We selected Nokia for analysis because of the prominence and strategic centrality of the "burning platform" memo sent by CEO Elop to Nokia employees (Ziegler, 2011). We outline what Creswell (2009; Creswell et al. 2003) refers to as a "sequential exploratory" mixed methods design, and Morse (1991) as a "sequential triangulation" design. We then discuss the potential of rhetorical enthymemes to deliver insights to actors' ideational worlds or shared beliefs.

FROM TRADITIONAL RHETORIC TO SHAPING SHARED BELIEFS

Rhetoric is discourse with intent to persuade, posing instrumental and pragmatic concerns (Gill & Whedbee, 1997). The appropriateness of rhetorical devices and argument types depends on the situational context (Bitzer, 1968; Hossfeld, 2018), since according to Aristotle (1991) rhetoric is "an ability, in each [particular] case, to see the available means of persuasion" (Rhetoric, 1: 2: 1). In terms of classical rhetoric, this persuasive power can be accomplished

through a combination of appeal to *ethos*, or the character of the speaker; to *pathos*, or emotional engagement of the audience; and to *logos*, or logical argument.

These appeals find expression through *enthymemes*, rhetorical arguments in action where one or more premises remain unexpressed (Eemeren et al., 1997). Aristotle did not offer a clear definition of the enthymeme, even though he referred to it as “a syllogism from likelihoods or signs” (Seaton, 1914: 1). Bitzer (1959) suggests that the enthymeme is distinctive from a logical syllogism in that it is characterized by probable rather than universal premises and conclusions, that it is “formally deficient” (p. 408) since one or more premises are not expressed, that its contents are related to human affairs, and finally that it is potent in terms of persuasion because its premises are drawn from the audience.

Similarly, Conley (1984) suggested that the enthymeme is a type of deductive argument employed for purposes of persuasion. It is truncated in that one or more premises are not stated, and the premises that are stated are usually probabilities rather than certainties. The rhetor does not state all premises since in that case the argument would be too verbose and awkward, and assumes that the audience takes for granted the unstated premises. The audience supplies the unstated premises, connected to the audience’s values and attitudes in the process of interpreting the enthymeme. The process of supplying unstated premises contributes to the persuasive power of the enthymeme.

An example of a simple enthymeme is: It’s raining (premise 1). I am leaving the house soon (premise 2). I need an umbrella to protect myself from the rain (premise 3). Therefore, I have to take an umbrella with me when I leave (conclusion). If someone states the conclusion that “I’m leaving and taking an umbrella with me”, the audience will likely supply the unstated premises 1 to 3. Note that there are further unstated premises that one could assume here; for

example that it is raining in this area rather than in another area; that the rain will still be continuing when I leave the house; that I will need to walk in the rain rather than just get in the car in the garage and drive to another garage; that the umbrella will only protect me if it functions well; and more. Mentioning all these premises every time an argument is made, would render communication so awkward and verbose as to be inoperable. Therefore, many premises are unstated and assumed by the audience, drawing from shared knowledge.

Modern rhetorical analysis has however diverged from classical formulations. In the traditional rhetorical situation, as understood in Aristotle's *Rhetoric* (1991) and other classical authors (Conley, 1984), the assumption is that there is a single orator, with a focus on a single text such as a speech, delivered at a certain point in time, to an audience that is assumed to be largely homogeneous in background and interests. Rhetorical analysis in social and organization theory however (e.g. Scott, 2002; Suddaby & Greenwood, 2005), has shifted from this traditional, unitary conception, towards a more pluralist, hermeneutic approach concerned with the effects on rhetoric on the social construction of reality (Berger & Luckmann, 1966; Bitzer, 1968; Sillince & Suddaby, 2008); what has been called "constitutive rhetoric" (Charland, 1987). This hermeneutic mode of rhetorical analysis (Heracleous & Barrett, 2001), aligned with the "rhetorical turn" in the humanities (Gaonkar, 1993) examines bodies of texts arising from groups of actors at different points in time rather than single texts arising from single speakers at a certain point in time; and assumes that stakeholders are heterogeneous with potentially incompatible interests. These bodies of texts are seen as discourses patterned by structural properties such as root metaphors, central themes, or frames, which have socially constructive potential (Heracleous & Hendry, 2000).

Such empirical applications of rhetoric have transcended the classical analytical approach

focused on particular rhetorical devices or other technical elements, seeking rather to understand the nature and effects of broader rhetorical strategies (Sillince & Suddaby, 2008; Symon, 2008) or rhetorical practices (Jarzabkowski & Sillince, 2007). These are identifiable patterns of how particular rhetorical techniques are consistently employed by agents, in pursuit of certain goals, highlighting the intentionality (Li, Green & Hirsch, 2018) and agency (Symon, 2008) of individuals in employing rhetoric. These goals for example could include enhancing the legitimacy of an innovation (Suddaby & Greenwood, 2005), rationalizing particular organizational choices (Bielby & Bielby, 1994), gaining commitment to multiple strategic goals (Jarzabkowski & Sillince, 2007) or challenging the implementation of a new technology that can alter existing power dynamics (Heracleous & Barrett, 2001).

Framing events or issues in a particular way is a key goal of rhetorical strategies. For example, national health insurance was framed as desirable through the persistent use of certain central themes such as “equality”, “guaranteed job”, or “services versus taxes” (Koch, 1998). Decisions of network television programmers were framed as appropriate, legitimate and rational through employment of reputation, imitation and genre rhetorical strategies (Bielby & Bielby, 1994). Chinese government officials employed different rhetorical genres to frame themselves as defendants of the stock market’s legitimacy, as educators of the public and community builders, and as managers focusing on the success of the market in order to manage the contradictions of a stock market operating in a socialist institutional context (Li et al., 2018). Rhetorical studies may also incorporate an explicit concern with issues of power, politics and ideology, aiming to shed light on contentious social arrangements within a critical perspective (Symon, 2008; Zachry, 2009). Beyond management, rhetoric has been influential in related fields including social psychology (Billig, 1996) and sociology (Bielby & Bielby, 1994; Gusfield, 1976).

Therefore the shift from classical rhetorical analysis focusing on particular devices or techniques, to contextualist, interpretive analysis of how rhetoric can shape ways of thinking and acting, enables us to employ such analysis as to explore how rhetors may seek to influence shared beliefs, and how bodies of texts can encompass and offer access to shared beliefs.

Enthymemes as a Means of Accessing Shared Beliefs

The building blocks of rhetorical genres are enthymemes. Despite disagreements as to the precise definition of enthymeme (e.g. Conley, 1984; Seaton, 1914), generally accepted elements are that enthymemes are argumentations-in-use (Gill & Whedbee, 1997) presenting a particular, contextually-relevant, narrative logic rather than formal logic (Bitzer, 1968; Fisher, 1988).

Enthymemes contain both implicit, taken for granted premises as well as explicit propositions, and often culminate in action-oriented conclusions (Feldman & Skoldberg, 2002; Fisher, 1988).

Enthymemes encompass other fundamental elements of rhetoric such as central themes and metaphors (Fisher, 1985; Heracleous, 2006). They invite actors to see things in a certain way, and take “appropriate” actions in accordance with the worldview encompassed in the enthymeme. Enthymemes constitute (and reveal) shared beliefs that when made explicit can deliver insights to researchers about the ideational worlds and patterns of actions of agents in that social domain (Heracleous & Barrett, 2001).

The premises and conclusions that make up enthymemes can employ central themes constructed in a particular way and having specific connotations (Nakayama & Krizek, 1995; Smith, 2005); root metaphors having specific implication complexes, highlighting some aspects of an issue and downplaying others (Ivie, 1987; Osborn, 1967); or speech acts with a specific intent, linked to interests or power considerations, and aiming to legitimize action or inaction

(Campbell, Follender & Shane, 1998).

In addition to a semantic reading (the dictionary, literal meaning of the words used), central themes, metaphors, propositions, and other rhetorical elements can be read in a semiotic way, a between-the-lines reading to explore their connotations (Eco, 1994) and understand their performative intent (Austin, 1962). A semiotic / performative reading allows us to examine such issues as how rhetorical arguments expressed via enthymemes discursively construct their authors (Burke, 1969), their audience (Charland, 1987), their context (Bitzer, 1968) and the focal issues (Scott, 2002); as well as the role power dynamics and interests may play in rhetorical production and interpretation (McKerrow, 1989).

Importantly, identifying enthymemes and in particular their unstated premises, allows us to unearth the implied logic, or shared understandings structuring actors' communications and interpretations about particular issues. Such shared, taken for granted understandings or *endoxa* to use Aristotle's (1991) term, are accepted as truths or axioms over time, as a result of processes of institutionalization or diffusion of meaning (Green, 2004; Green, Li & Nohria, 2009).

By *endoxa*, Aristotle referred to "those opinions accepted by everyone, or by the majority, or by the wise – and among the wise, by all or most of them, or by those who are the most notable and having the highest reputation" (Topics 100b21-22, cited in Reeve, 1995: 40). *Endoxa* therefore are not necessarily true or accepted by everyone, but rather they are plausible propositions, as put by Renon (1998: 96), by virtue of being "opinions that may be esteemed according to criteria of consensus or approval". As Karbowski (2015: 75) also notes, *endoxa* are "reputable, respectable, or noteworthy beliefs". He suggests that Aristotle's treatment of the concept in the Topics is more complex than assumed, since there are different sets of *endoxa* with different standards of *doxa* or acceptability. *Endoxa* are fundamental to Aristotle's dialectic

method, being employed as premises in dialectical syllogisms (Frede, 2012, Renon, 1998) as well as in rhetorical enthymemes (Haskins, 2004). Haskins (2004) notes however that Aristotle's association of *endoxa* with stratified received opinion, does not entirely accord in his broader philosophizing with the "hierarchical partitions between proper objects of enquiry" (p. 7). We employ *endoxa* here as plausible propositions that are not necessarily shared by all, as we elaborate in our illustration.

Enthymemes in Management and Organization Theory

Despite rhetorical studies enjoying a revival in management and organization theory (Browning & Hartelius, 2018; Hartelius & Browning, 2008), and significant engagement with enthymemes in the humanities (e.g. Poster, 1992; Walton, 2001), enthymemes have scarcely been researched or employed as analytical tools in our field. There are notable exceptions however. Green et al. (2009) for example employed enthymemes longitudinally as a methodology for studying processes of institutionalization; and Heracleous and Barrett (2001) employed enthymemes as a way of analyzing the discourses and understanding the actions of various competing stakeholder groups in the context of implementation of a new technology. These studies offer useful illustrations of how enthymemes can grant us access to actors' shared beliefs, which also shape practice - how groups of agents act in accordance with those beliefs - indicating the beliefs' performative effects.

Green et al. (2009) followed an objectivist analytical approach. They identified enthymemes through noting the central themes of Total Quality Management as found in relevant texts, then by coding propositions made by various stakeholders within a body of texts that engaged with this topic, tracking quantitatively the longitudinal levels of reference to the various premises and claims; and imputing levels of institutionalization of TQP practices via the

volume of references to it.

Heracleous and Barrett (2001) employed an interpretivist, inductive analytical process that involved searching for central themes firstly in individual texts and then through inter-textual analysis, analyzing the connections among these themes and their argumentative functions, and then combining these two steps to identify enthymemes that cut across individual texts to bodies of texts, operating at the discursive level.

While these studies offer useful pointers on how enthymemes can be identified, we are still missing methodological advancements that can combine the situationally-specific, emergent insights of a qualitative, interpretivist approach with the confirmatory, validity-oriented elements of an objectivist, quantitative approach.

The de facto separation of interpretivist and objectivist approaches to enthymeme analysis is one that is broadly mirrored across scholarship in management and organization theory. Much research in our field is siloed, with research designs being aligned to specific types of scholarly reasoning (Mantere & Ketokivi, 2013). Theory testing is aligned with deduction using quantitative data (Rumelt, Schendel, & Teece, 1991), whereas theory building based on qualitative data tends to be inductive (Eisenhardt & Graebner, 2007). Interpretive scholarship employs relatively low levels of deductive and higher levels of inductive reasoning at different stages of data analysis; and the moment of generating insights tends to be abductive (Hatch & Yanow, 2003).

In terms of the use of enthymemes as analytical tools, Heracleous and Barrett's (2001) interpretivist research design employed mainly inductive and abductive reasoning. The strength of this approach is the development of situationally-specific emergent insights, but the extent to which such insights can be confirmed or validated more broadly, is open to question.

In contrast, Green et al's. (2009) theory testing, objectivist research design employed mainly deductive reasoning. The strength of this approach is the ability to validate or disprove insights that are deduced from the data analysis or the literature. However, the theory testing is less sensitive to contextual, grounded insights that might arise through an in-depth, hermeneutic approach. A hermeneutic reading for example would explore how themes are framed, what rhetorical techniques are employed by actors, or what are the more sophisticated types of argument structures employed that go beyond basic enthymeme structures.

These types of approaches however are not necessarily incompatible. Rather than capitulating to limiting assumptions of paradigm incommensurability, we can view research methods as means to gain useful insights to particular issues from a pragmatist perspective (Rossman, 1985), rather than as ends in themselves that somehow have to conform to pre-fabricated ontological assumptions. Bringing together elements of different approaches is both possible and desirable and can enhance both grounded insights as well as validity (Jick, 1979; Lee, 1991; Pettigrew, 2013).

Table 1 below portrays an outline of an enthymeme analysis process that draws both from a hermeneutic, interpretivist approach (Heracleous & Barrett, 2001) as well as from a positivist, objectivist approach (Green et al., 2009). The process shifts from an exploratory mode (steps 1 and 2) to validation mode (step 3) to theory testing mode (step 4), and finally to making theoretical inferences and gaining insights (step 5). We then illustrate this process through the legitimization of a turnaround strategy at Nokia.

Insert Table 1 about here

ILLUSTRATION – LEGITIMIZING A TURNAROUND STRATEGY AT NOKIA

Communications by managers to both internal and external audiences are disseminated through such means as memos, presentations, speeches, blogs, tweets and emails. They can relate to a number of pertinent strategic and organizational issues such as mergers and acquisitions, restructuring, failure, strategic change and turnaround. For this illustration we analyze key texts from Nokia's former CEO Stephen Elop about the company's turnaround strategy, and associated media reports, during the period 2011-2013.

We start our analysis with a piece of internal communication by the Nokia CEO to his staff that was swiftly leaked to the media on 8 February 2011. The "burning platform" memo as referred to by the media plays a foundational role in any analysis of Nokia's turnaround strategy, as it was the first explicit, substantive communication of the newly appointed CEO outlining his assessment of conditions in the mobile phone industry, the firm's main competitors, reasons for Nokia's declining performance, and the need for Nokia to take radical action if it was to survive. It swiftly became a well-known piece of CEO communication as it was taken up and reprinted by various media outlets, and described as "destined to become an instant classic in the art of corporate communications" (Ward & Parker, 2011). The memo has been published in full at Wall Street Journal (2011), Guardian (2011) and other media outlets.

We outline our analysis in terms of the approach shown in Table 1 ("steps in analysis" row). Our initial study of Nokia and its industry context, through iterative readings of company texts and media reports, is step 1 (gathering and initial reading of relevant texts on phenomena of interest, in context). We learned about Nokia's declining market share and survival risk, slow innovation and inertia, the intensity of the competitive environment, and competitors' fast encroachment on Nokia's traditional territory of mobile handsets; which provided us with a basic understanding of the context that informed our subsequent steps.

In step 2 (analysis of the connections among central themes and their functions in arguments-in-use), we analyzed the enthymeme structure of the central document in the turnaround process, the “burning platform” memo, as shown in Table 2 below to identify what we refer to as the “primary enthymeme”. By “primary enthymeme” we refer to the principal argument that emerges from or structures the main text under consideration, in our case the burning platform memo.

Through multiple readings we first identified the central themes in this text that were explicitly stated or implied given the textual context. We then identified the connections among these central themes in structures of argumentation following Fisher (1988). In this case for example, two of the central themes are extreme danger and radical action, where radical action is necessitated by extreme danger. As Heracleous and Barrett (2001) note, the enthymeme identification process involves a number of hermeneutic readings of the text that enable the analyst to go back and forth around the hermeneutic circle between a text and its context, and between individual parts of the text and the whole (Kets de Vries & Miller, 1987; Thachankary, 1992).

With respect to notation, P refers to premises, and C to conclusion. P with a numeral, such as P1 and P2 refers to the first and second premises respectively. C1/P1 refers to the first conclusion (C1), that also acts as the first premise (P1) in a subsequent argument that builds on it. P2', P3' and so on refer to the second and third premises of the subsequent argument that builds on the primary premises and conclusion (e.g. P1, P2, C1). C2' refers to the second conclusion that is a specific, action-oriented statement, in this case referring to what Nokia must do to survive. As Table 2 notes, P1, P2 and P3 are generalized assumptions of different types. C1 is a normative conclusion based on prior premises. P2' and P3' pose evidence from the positive

domain about the focal actor, Nokia. We employ the term normative to refer to general statements about appropriate action in particular situations, and the term positive to refer to empirically-informed statements. Following Tinker, Merino and Neimark (1982) we recognize that these types of statements are not as clearly demarcated as the labels imply, and that there are both interconnections and mutual influences between them.

Insert Table 2 about here

The enthymeme portrays Nokia as a firm facing extreme danger, mainly from increasing competition and the inertia fostered by its prior leading market position; and as having to take radical action to survive. The first three parts of the enthymeme structure (P1, P2 and P3) are generalized assumptions about the extreme nature of conditions that firms have to deal with, leading to the normative conclusion that under extreme danger, firms must take radical action (C1=>P1).

Following these generalized assumptions are themes from the positive (empirical) domain related particularly to Nokia, identifying it as an inertial organization that is dealing with extreme conditions. P2' suggests that Nokia's internal competencies had not developed fast enough in recent years to keep up with competitor advances, meaning that the firm now faces extreme risks (P3'). These central themes are connected in a means-end relationship in which transforming Nokia's strategy, organization and regaining its competitive position as a top three mobile phone manufacturer is posed as the key goal. C2', which functions as a key action-oriented conclusion, supports the need to restructure Nokia's organization design.

For step 3 (inter-textual analysis to explore the validity of central themes and the primary enthymeme within the relevant discourse, and the existence of rhetorical strategies), we utilized

four further key texts from Nokia-generated communications, chronologically spread across the period of investigation, where the CEO was outlining Nokia’s strategy. These texts and their significance are summarized in Table 3.

Insert Table 3 about here

We analyzed these texts in light of the more explicit aspects of the primary enthymeme identified in the foundational “burning platform” memo, as shown in Table 4 below. We focused this analysis on the aspects of the enthymeme structure P2’, P3’, and C2’ applying to the positive, empirical domain rather than those offering normative, generalized assumptions, which often remain unstated but underlie what is explicitly said. This analysis enables us to explore the extent to which the central themes identified are inter-textual, and whether they have similar functions and constructions in other key texts. Table 4 displays CEO Elop’s rhetorical strategy for creating legitimacy and urgency for the turnaround strategy that he felt Nokia needed to undertake in order to survive.

Insert Table 4 about here

In step 4 we examined the diffusion and validity of identified central themes using a larger number of texts from a variety of sources. We collected a corpus of media texts about Nokia from 1 January 2011 to 1 June 2013 using the Factiva database. First, we examined articles from six prominent business publications that referenced Nokia: *Financial Times*, *Bloomberg Businessweek*, *Wall Street Journal*, *Economist*, *Forbes* and *Newsweek*, resulting in 1,210 articles. For the purposes of the current illustration, we narrowed down this set by searching for ‘Elop’, to make sure we capture the articles mentioning Nokia’s CEO, which are

also likely to make more than a passing reference to Nokia, as many of the articles in the larger corpus. This narrowed our sample to 172 articles (349 pages, 103,088 words). Using the analysis software NVivo10 we conducted searches based on the central themes anchored in the three elements of the primary enthymeme. The keywords, frequency counts and indicative extracts are provided in Table 5 below.

Insert Table 5 about here

In step 5 (drawing inferences about whether quantitative analysis supports validity of enthymeme patterns, and about shared beliefs enshrined in enthymemes) we find that the analysis of the corpus of media reports is consistent with the central themes identified.

Our analysis has shown that Elop was drawing from shared assumptions (*endoxa*), in particular the implicit premises in the primary enthymeme (Table 2, P1 and C1) in order to build a convincing argument and promote a shared belief for why Nokia needed to take radical steps if it was to survive. The components of this shared belief are outlined by the primary enthymeme propositions (premises and conclusions) and validated by the analysis of both Nokia communications as well as the media corpus of texts.

It is worth mentioning here that consistent with how Aristotle defined *endoxa*, and as we noted above, the premises in Elop's enthymeme were not necessarily accepted by all stakeholders. Many were skeptical of Elop's motives given his prior employment with Microsoft (Orange, 2011), relatively short four-year tenure with Nokia having been parachuted from outside as the first non-Finnish director of the company, and the fact that the burning platform memo was expected to be swiftly leaked, depressing further the share price, when it was communicated to everyone in the company. However, the premises were sufficiently general and

consistent with the tough business conditions that several companies had to face, to render them applicable to Nokia's situation and therefore as inputs for Elop's arguments.

DISCUSSION

Enthymemes as an Analytical Approach

Why propose a research approach based on enthymeme analysis? As the exemplar enthymeme studies we cited indicate, interpretive enthymeme analysis supplemented by quantitative inputs can serve as a way to gain access to agents' shared beliefs, and in so doing connect with broader organizational processes such as organization change or institutionalization. Given that enthymemes are a type of cognitive map, Huff's (1990) five categories of cognitive maps can help us elaborate: (1) maps that assess attention, association and importance of concepts; (2) maps that show dimensions of categories and cognitive taxonomies; (3) maps that show influence, causality and system dynamics; (4) maps that show the structure of argument and conclusion; and (5) maps that specify schemas, frames and perceptual codes. Enthymemes contain aspects of all 5 categories.

The central themes contained in enthymemes, that pervade a particular body of texts, are indicators of what is central to that group, a key aspect of the group's shared beliefs; they indicate attention and importance (category 1). In the Nokia illustration, these themes were the presence of extreme danger and the need for radical action, combined with Nokia's presumed inertial nature. The framing of those themes, formed by the precise labels used and their connotations, can indicate the perceptual dimensions or taxonomies of these themes (category 2). In the Nokia example, extreme danger was metaphorically posed as fire on an oil platform and its associated risks, and substantiated in the positive, empirical domain by reference to the rapid

loss of market share due to the android system, efficient Chinese competitors, and the fast advance of high end competitors such as Apple. Radical action was metaphorically symbolized by the man jumping from the platform into the icy water to survive, and in the positive domain as the need to make radical changes to Nokia's strategy and organization. Nokia's inertial nature was framed in terms of low levels of innovation, collaboration, accountability and leadership (Vuori & Huy, 2016).

The connections among propositions that constitute enthymemes, within the various argument structures, indicate perceived causality (category 3). This is shown in the Nokia illustration through the primary enthymeme, composed by seven propositions that act as generalized assumptions, normative conclusions, evidence in the positive domain, and culminate in action-oriented conclusions; that is, what Nokia must do in order to survive given the aforementioned reasoning. The causality is narratively constructed (Fisher, 1985) in terms of the interrelations among these propositions, which together form a system encompassing both evaluations as well as implications for action.

Enthymemes are a type of argument maps (category 4), but not in terms of formal logic; they are arguments-in-use, dependent on contextually relevant, narrative logic (Fisher, 1985; 1988). The contingent causality within the narrative element is essential to understanding why agents think and act as they do, that is, to understanding their shared beliefs. Finally, enthymemes have a normative dimension, that is often present in the unstated, taken for granted part of the enthymeme (category 5). Because unstated premises are based on *endoxa* or shared beliefs, these unstated, implicit propositions can be seen as deeper-level frames or perceptual codes which underlie what is explicitly discussed. In the Nokia example, P1, P2, P3 and C1 are shared beliefs which serve to legitimize subsequent evaluations and arguments about Nokia's

situation and what it should do. Parts of the *endoxa* may occasionally be stated, but most often they remain implicit since they are commonly understood.

Adopting a Mixed-methods Approach to Enthymemes

We developed our enthymeme analysis approach after scholars who, consistent with a pragmatist tradition, advocate the use of diverse methodological approaches as complementary elements of the same research program, recognizing the synergistic insights that may be gained (Jick, 1979; Lee, 1991; Pettigrew, 2013). Our approach constitutes what Creswell (2009) has referred to as a “sequential exploratory” mixed methods design. Mixed methods research is described as involving the “collection or analysis of both quantitative and/or qualitative data in a single study in which the data are collected concurrently or sequentially, are given a priority, and involve the integration of the data at one or more stages in the process of research” (Creswell et al., 2003: 212). A sequential exploratory design is one where the research begins with the collection and analysis of qualitative data, followed by the introduction of quantitative analysis. Rather than both types of data being collected and analyzed concurrently, they are collected analyzed sequentially. Further, qualitative data is afforded priority in the sequential exploratory approach. Finally, the interaction between the qualitative and quantitative data takes place in the later parts of the analysis and informs the interpretation of the results.

Morse (1991) described such studies as “sequential triangulation”, where qualitative and quantitative analysis follow each other rather than being employed concurrently, and “the theoretical drive is inductive and uses a qualitative foundation” (1991: 121). Morse (1991) suggested a notation where capital letters denote primacy of a qualitative or quantitative approach, an arrow (\rightarrow) denotes a sequential approach, and a plus sign (+) denotes a concurrent approach. Using this notation, our approach can be described as QUAL \rightarrow quan; that is,

qualitative analysis is employed first and has primacy in the design, followed by quantitative analysis to elaborate and validate the insights afforded by qualitative analysis.

Exploring and identifying the enthymemes embedded in various types of texts that frame particular organizational issues, provides a useful means of uncovering shared beliefs and understandings in context. Over and above analytical approaches such as content, thematic or metaphorical analysis, enthymeme analysis provides the opportunity to identify sets of beliefs rather than simply central themes, propositions, or metaphors; and to relate these beliefs to their organizational or strategic contexts. Enthymemes offer a nuanced way for researchers to appreciate actors' ideational worlds and why they act as they do in relation to particular issues or challenges. Such rhetorical elements as central themes, propositions, or metaphors are embedded in enthymemes, not on a stand-alone basis but in terms of having particular functions in the world-views encompassed and projected by enthymemes. A mixed methods approach allows us to enhance our understanding of these issues by combining the situationally specific, grounded insights of the qualitative analysis, with the confirmation, population validity aspects of a quantitative approach.

Limitations and Future Research

One limitation of our research is that we have only employed a particular group of texts in a particular situation in our analysis and therefore we can only make bounded statements about the usefulness of enthymeme analysis in other contexts, other texts, and with different types of data. A second limitation is that we have employed these texts as an illustration of our ideas relating to integrating different approaches to enthymeme analysis rather than as a fully fledged rhetorical analysis. Such a broader analysis could pay attention for example to how Elop's arguments were received, and the multiplicity of voices and counter-arguments that could

be observed in that social setting. A third limitation is that we conducted initial but not sophisticated quantitative analysis in step 4 of our approach, as could potentially be conducted by other researchers who decide to employ this approach. One boundary condition is that textual data is needed as a primary input for this approach rather than for example observational or financial data. These types of data would be useful as contextual information, but would not be able to substitute for textual data. Despite these limitations and boundary conditions, we believe that we offer an approach that is sufficiently specified so that it could be fruitfully employed and developed further by other researchers.

With respect to future research, identification of enthymemes inter-textually and within particular discourses, can not only provide access to prevalent beliefs within a discourse, but also potentially to divergent beliefs across discourses or stakeholder groups, offering insights as to why for example strategic change, technology implementation or other processes involving various stakeholder groups can run into substantial difficulties or fail (e.g. Heracleous & Barrett, 2001; Vuori & Hui, 2016). Offering a novel approach to accessing actors' ideational worlds is a timely focus, as management and organization theory delves more deeply into cognitive, ideational dimensions (Bingham & Eisenhardt, 2011). Understanding actors' own perspectives and shared beliefs is essential to gaining insights to central issues such as institutional change (Suddaby & Greenwood, 2005), institutional adoption (Paroutis & Heracleous, 2013), strategic tools (Wright et al. 2013) or strategic change (Ford & Ford, 1994).

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Table 1: Approaches for the analysis of enthymemes

	Interpretivist approach (Heracleous & Barrett, 2001)	Objectivist approach (Green, Li & Nohria, 2009)	Sequential exploratory mixed methods approach
Central themes	<ul style="list-style-type: none"> • Emerge based on inductive exploration of discourses of various stakeholders in the field 	<ul style="list-style-type: none"> • Inferred a priori, based on nature of issue being researched and on extant theory on this issue 	<ul style="list-style-type: none"> • Emerge based on inductive exploration of stakeholder discourses in the field, informed by extant theory
Links among central themes	<ul style="list-style-type: none"> • Identified based on the narrative logic within which the themes are located, within the discourses being explored 	<ul style="list-style-type: none"> • Hypothesized a priori, based on theoretical logic inherent in issue being researched; and then examined through data 	<ul style="list-style-type: none"> • Identified based on the narrative logic within which the themes are located, within the discourses being explored; informed by extant theory
Argument structures identified	<ul style="list-style-type: none"> • Various sophisticated types of argument structures 	<ul style="list-style-type: none"> • Basic argument form of minor premise, major premise, claim 	<ul style="list-style-type: none"> • Various sophisticated types of argument structures; search for primary enthymemes
Nature of analysis	<ul style="list-style-type: none"> • Iterative reading, contextual, hermeneutic 	<ul style="list-style-type: none"> • Coding, quantitative, deductive analysis 	<ul style="list-style-type: none"> • Iterative reading, hermeneutic; supported by coding, quantitative analysis
Steps in analysis	<ol style="list-style-type: none"> 1. Gathering and initial reading of relevant texts on phenomena of interest, in context 2. Identification of emergent central themes through hermeneutic, iterative analysis 3. Analysis of the inter-connections among central themes and their functions within arguments-in-use 4. Inter-textual analysis to infer validity and significance of central themes and arguments in organizational context 5. Inferences about shared beliefs enshrined in enthymemes, that explain why groups of actors think and act as they do (theory development) 	<ol style="list-style-type: none"> 1. Gathering and initial reading of relevant texts based on research terms deduced from literature and initial interviews 2. Coding analysis of sample of paragraphs that contain particular research themes as deduced from literature review, interviews and research objectives 3. Propositions containing themes allocated to one of a limited number of pre-determined categories (e.g. major/minor premise, claim) 4. Quantitative analysis to examine extent and validity of identified patterns 5. Inferences about whether theoretical propositions are supported based on statistical results 	<ol style="list-style-type: none"> 1. Gathering and initial reading of relevant texts on phenomena of interest, in context 2. Identification of emergent central themes, inter-connections and functions in arguments-in-use in foundational texts; emergence of primary enthymeme 3. Further inter-textual analysis to explore validity of central themes and primary enthymeme within relevant discourses, and the existence of rhetorical strategies and practices 4. Quantitative analysis to examine diffusion and validity of identified central themes 5. Inferences about whether quantitative analysis supports validity of enthymeme patterns, and about shared beliefs enshrined in enthymemes

Table 2: Enthymeme analysis of Nokia’s “burning platform” memo

Enthymeme structure	Narrative elements and quotations from memo	Nature of statement in the memo
P1: Organizations face extreme dangers	<ul style="list-style-type: none"> - Explosion and fire on the oil platform - Smoke and heat consume the platform - Man in danger of dying 	Generalized assumption, employed analogically in narrative about organizations and the conditions they face
P2: Radical action is needed to survive	<ul style="list-style-type: none"> - Man jumps into icy water 	Generalized assumption based on means-ends reasoning
P3: Extreme conditions enable radical change	<ul style="list-style-type: none"> - The extreme danger creates a sense of urgency so that the man changes his behavior 	Generalized assumption about motivating effects of extreme conditions
C1/P1: Under extreme danger, organizations must take radical action	<ul style="list-style-type: none"> - Implicit in storyline through analogical reasoning, prepares audience for, and offers legitimacy to, the action-oriented conclusion 	Normative conclusion based on previous three premises
P2’: Nokia is an inertial organization without clear direction	<p>Direct quotations:</p> <ul style="list-style-type: none"> - We haven't been delivering innovation fast enough - We're not collaborating internally - We have lacked accountability and leadership to align and direct the company through these disruptive times - We had a series of misses 	Evidence from the positive domain regarding Nokia’s internal competencies
P3’: Nokia is facing extreme danger	<p>Direct quotations:</p> <ul style="list-style-type: none"> - In China they produce a phone in as long as it takes us to polish a presentation - Competitors now top of the market - Android came in at the high-end, they are now winning the mid-range - Nokia losing market share in multiple markets and segments 	Evidence from the positive domain regarding Nokia’s competitive context
C2’: Nokia must take radical action to survive	<p>Direct quotations:</p> <ul style="list-style-type: none"> - Nokia must transform its organization - Nokia must rebuild its strategy 	- Action-oriented conclusion

Table 3: Selected key communications by Nokia CEO examined via enthymeme analysis

Title (reference)	Context and Significance	Nature and Date	Length	Source
1. The Burning Platform (D1)	One of the initial key communications of the first outsider CEO, Stephen Elop. Offering rationale underlying the new strategy for the firm.	Memo (speech reprinted in internal Nokia blog, leaked to press) 8 February 2011	1,220 words	http://blogs.wsj.com/tech-europe/2011/02/09/full-text-nokia-ceo-stephen-elops-burning-platform-memo/
2. On mobile technology and Nokia (D2)	A talk at McMaster University where the Nokia CEO provides an insight into recent strategic actions and the decision to partner with Microsoft. Reference to the burning platform memo.	Video 1 April 2011	60 minutes	Nokia News Videos: http://www.youtube.com/watch?v=Oj5XUoiGzwc
3. Live from D9 (D3)	A major technology event. A chance for Nokia CEO to offer more detail and clarify rationale for the new strategy.	Liveblog and Video 1 June 2011	39 minutes (1,571 words of live updates) – 8:16 minutes of video highlights	http://live.theverge.com/Nokia_CEO_Stephen_Elop_live_from_D9/ Video highlights: http://allthingsd.com/20110601/nokia-ceo-stephen-elop-it-s-not-a-battle-of-devices-its-a-war-of-ecosystems-video/
4. AT&T Developer Summit (D4)	A key mobile technology event. A chance for Nokia CEO to offer more detail and clarify rationale for the new strategy.	Video 2 January 2012	6 minutes	http://www.youtube.com/watch?v=ROXwOgbexHk
5. Zoom Reinvented event (D5)	A flagship mobile phone launch. A chance to take stock of the strategic direction and implementation.	Liveblog and Video 11 July 2013	65 minutes (2,685 words of live updates)	http://live.theverge.com/live-nokia-event-july-2013/ Video: http://www.youtube.com/watch?v=p9LuVmJKY8c

Table 4: Inter-textual analysis of primary enthymeme and central themes applying to positive domain

Enthymeme structure	Narrative elements and quotations from memo	Nature of statement in the memo	Indicative quotes from corpus of Nokia communications
<p>P2': Nokia is an inertial organization without clear direction</p>	<p>Direct quotations: - We haven't been delivering innovation fast enough - We're not collaborating internally - We have lacked accountability and leadership to align and direct the company through these disruptive times - We had a series of misses.</p>	<p>- Evidence from the positive domain regarding Nokia's internal competencies</p>	<p>There were clearly some patterns that formed [when I emailed all employees asking what needed to be changed] in terms of the rate of innovation, about attitudes in the company that needed to be changed, all sorts of things that people said you need to make these changes (D2)</p> <p>So I gave this speech, talked about the burning platform and we got so much positive feedback from the employees saying thank you for telling the truth, thank you for setting aside the multiple layers, the polished Powerpoint nonsense and giving us the unvarnished assessment of where things stand (D2)</p> <p>Yesterday's way of doing things in this rapidly changing world was no longer good enough (D2)</p> <p>We used to have a huge market share. When you're big, you tend to get comfortable (D3)</p> <p>When flip phones started getting popular, Nokia had no interest in making flip phones... and we started to slip (D3)</p> <p>Nokia said we're a market leader, and we're playing on a global stage (D3)</p>
<p>P3': Nokia is facing extreme danger</p>	<p>Direct quotations: - In China they produce a phone in as long as it takes us to polish a presentation - Competitors now top of the market - Android came in at the high-end, they are now winning the mid-range - Nokia losing market share in multiple markets and segments</p>	<p>- Evidence from the positive domain regarding Nokia's competitive context</p>	<p>If you add up all of those issues [that Nokia needs to change] in the context of this industry changing rapidly around us towards this ecosystem play, where it is about Android, about Apple, those are the two things to worry about the most, if you add it all up we are standing on something we could call a burning platform (D2)</p> <p>There's incredible competition from Chinese companies (D3)</p> <p>There's clearly fragmentation taking place. That's always been the challenge in the mobile industry (D3)</p> <p>A shift is underway in the mobile industry, from a battle of individual devices to a battle of ecosystems (D4)</p> <p>A fundamental challenge that Nokia faces...and that is we made the bold decision to not try to just</p>

			make another set of phones using a common operating system that so many others have pursued... and with that decision came tremendous responsibility (D5)
C2': Nokia must take radical action to survive	Direct quotations: - Nokia must transform its organization - Nokia must rebuild its strategy	- Action-oriented conclusion	<p>We had to set the tone [with the burning platform memo] because something fundamental had to change (D2)</p> <p>We needed to change our strategy, we needed to consider options that we had never before considered, and by the way, we needed behaviors and attitudes, and ways that we worked that fundamentally changed (D2).</p> <p>With a recognition of the changing industry dynamics we made a bold decision in February (D4)</p> <p>[we took the bold decision] to shift our mobile strategy to fully embrace the Windows phone (D4)</p> <p>[with the Windows phone] we saw the opportunity to differentiate (D4)</p> <p>We're building a third alternative, and it's on us to make sure that companies, reps, and customers understand that third ecosystem. (D5)</p> <p>There is a lot of work required to push through with this third ecosystem...it's hard work for all of us and I know we have tough moments but boy we are pleased they [AT&T] are committed and standing behind us every step of the way as we grow with them (D5)</p>

Table 5: Analysis central themes and related terms in media reports (172 articles)

Primary enthymeme elements	Related keywords	Keyword frequency in 172 articles	Indicative quotes from corpus of media reports
P2': Nokia is an inertial organization without clear direction	Inertia, slow, inaction, lack of strategy, lack direction, lack of change, lack of accountability	47	<p>Nokia has been slow bringing innovations such as touch-screen phones to market. (<i>Wall Street Journal</i>, 12 February 2011)</p> <p>Mr Elop says such changes should improve results. "Part of the reason I have confidence in our ability to change gears," he explains, "is because when you look at the things that slow you down - like length of decision-making, confused missions between teams - those are problems we can solve" (<i>FT</i>, 14 April 2011)</p> <p>At Nokia, the diffusion of decision-making around the company - to a "brand board", for example - led to a lack of accountability (<i>FT</i>, 14 April 2012)</p>
P3': Nokia is facing extreme danger	Threat, risk, challenge, danger, competition	180	<p>Facing down fierce competition will be key for some, such as Nokia's Mr. Elop, who must try to reverse market share declines in smartphones amid major inroads by Apple Inc.'s iPhone and Google Inc.'s Android software (<i>Wall Street Journal</i>, 4 January 2011)</p> <p>The stock has shed one-third of its value over the past six months and more than 80 per cent since its 2007 peak as Nokia's status as the world's biggest mobile phone maker has come under threat (<i>FT</i>, 1 June 2011)</p> <p>UBS pointed out in a recent research note that the market was "littered with examples of companies failing to deal with shortening technology lifecycles" and warned the "risks to Nokia remain stark" (<i>FT</i>, 12 April 2011)</p>
C2': Nokia must take radical action to survive	Change, transform, turnaround, action	172	<p>Mr Elop signalled that a strategy presentation on February 11 would deal with radical options to improve the company's position in smartphones. "In short, the industry changed, and now it's time for Nokia to change faster," he said (<i>FT</i>, 28 January 2011)</p> <p>Nokia Corp. posted a second successive quarterly net loss, but the cellphone giant said it was making progress on its turnaround and touted higher sales of its low-end phones (<i>Wall Street Journal</i>, 21 October 2011)</p> <p>Such a revolution in strategy for Nokia required careful preparation and execution. It was never going to transform its smartphone business fortunes in the space of one year. Mr Elop deserved time. For the moment, he still deserves it (<i>FT</i>, 27 April 2012)</p>