# Narrative Rhetorics in Scenario Work: Sensemaking and Translation

Zhan Li University of Southern California USA

### **Abstract**

With Jerome Bruner and Walter Fisher's work on narrative as a starting point, this article presents a narrative-based approach to theory-building for scenarios—relevant for futures narratives broadly defined—that conceives of them as sensemaking and rhetorical efforts for organizations that seek to catalyze decision and action through futures work. The organizational sensemaking theories of Karl Weick are combined with the rhetorical and narrative perspective of Actor-Network-Theory from which the key concept of 'translation' is drawn. Weick's work emphasizes the disruption of established and routine organizational certainties as occasions for sensemaking—that is, sites and opportunities for new accounts of reality that describe and enable options for action in the face of equivocality. Futures exercises fit well into this conception. Actor-Network Theory is a theory of power and knowledge from science and technology studies, used to unpack how accounts of reality are assembled by actors from networks of organizations, technologies, materials, texts, practices etc. "Translation" refers to how such elements are enrolled by these networks to legitimate ideas, to argue for particular agendas, and to allow and operationalize decisions and actions. The paper develops a framework for thinking about how scenarios can be more effectively used for organizational narrative sensemaking processes.

**Keywords:** Scenarios, Narratives, Sensemaking, Actor-Network Theory, Rhetoric, Translation.

#### Introduction

In this issue's lead article, Vuokko Jarva calls for greater theory-building and practical innovation focused on narrative as a means for filling the gap between futures scenarios and action; she evokes the seminal work of Jerome Bruner (1986, 1991) who proposes that the constitution of social reality be divided between logico-deductive (or "paradigmatic") reasoning and interpretative narrative reasoning. Such a divide mirrors the qualitative/quantitative

tensions in the futures field as well as in organizational sciences. This paper sets out a narrative theory-building direction that reconciles the two sides of the tension by proposing that futures work be understood in the terms of organizational narrative sensemaking as a rhetorical practice.

All organizational strategizing can be considered as a particularly influential form of storytelling (Barry & Elmes, 1997). Narration and organization can be understood as essential components of each other (Czarniawska & Gagligardi, 2003). Scenario planning, in particular, differentiates itself as a strategy tool through being narrative-based—indeed, the very term "scenario" was borrowed from an archaic Hollywood word for screenplay (Kleiner, 2008). Rasmussen (2005) has written of the practical advantages of scenario-building as a narrative vehicle of organizational communication—the futures stories told at the heart of scenario planning are easily created, circulated and understood by individuals and communities, so helping creativity and problem-solving, communicating visions and questions, and reinforcing or challenging ideology. This paper discusses futures scenario work broadly (after Bell, 2003), rather than scenario planning narrowly.

Bridging organizational sciences theory with scenario work through understanding narrative provides intellectual support to the bringing together of strategy, planning, and futures studies (Lindgren & Bandhold, 2009; Roney, 2010). The emphasis is necessarily on theoretical depth rather than breadth here, but further work beyond this paper will be crucial for forging connections with past futures discussion about narrative and sensemaking in the Journal of Futures Studies (see e.g. Aaltonen & Barth, 2005; Wilkinson and Ramirez, 2010; Schultz, Crews & Lum, 2012; Li, 2013) and elsewhere.

To return, then, to Bruner: crucially, he views narrative as a social constructionist mode of knowing—an epistemological and ontological perspective that understands reality as generated through the cognition of many socially interacting minds (Berger & Luckmann, 1967). Particularly when this mode is confronted with, or even aims to create, uncertainty and complexity, it should also be seen as a mode of rhetoric. Rhetoric, that is, not in the sense of persuasive arts but in the broader meaning of "taking a stand", as Bruner puts it (2001, p. 35), over how reality is made sense of. A key target for organizational decision-makers' development and engagement of accounts of reality through narrative is, of course, the question of possible futures. So through the rhetorical perspective, scenarios can be understood as narratives composed to reflect different power configurations and claims that persuade and legitimate on behalf of particular, competing accounts of reality—including the arguments for the credibility and effectiveness of the futures process itself.

Bruner's approach takes us beyond only assessing a futures exercise's narrative qualities in terms of how well the explicitly defined stories¹ engage its participants (through, as Van der Heijden (2004) suggests, being original, memorable, provocative, and compelling). Such assessment might, for instance, revolve around a story's aesthetic allure (Nordfors, 2007); ability to create immersive experiences (Candy, 2010); or effectiveness as a reporting or mnemonic device (Schroeder, 2011). However, this falls short of fully applying Bruner's view of reality if it does not address the narrative epistemology of the broader situated context of futures exercises. Social constructionist and sensemaking views call attention to how the scenario processes themselves are socially constructed, so disrupting the view of scenarios as driven by logico-deductive reasoning (Wright, 2004a, 2004b);

organizations' processes for making sense of reality (and possible futures) are already primarily orchestrated through narrative whether futures scenario methods are used or not. The futurist's goal is to effectively intervene in and become part of an organization's narrative sensemaking processes—a rhetorical endeavor in the power/knowledge combinations that make up its construction of reality.

However, Bruner's view that the narrative-interpretative and the logicodeductive modes are "irreducible to one another" (1986, p. 11) suggests that while narrative is a rhetorical way of making arguable claims about reality, effective logical-deductive reasoning can be entirely separated from rhetoric. The influential communication theorist Walter Fisher's conception (1984, 1987) of a narrative reasoning paradigm is a useful addition here. While generally parallel to Bruner's conception. Fisher's paradigm sees narrative reasoning as also crucial to logicodeductive reasoning (which Fisher calls the "rational world paradigm"); indeed, the first subsumes the second. Moreover, Fisher treats the logico-deductive mode as rhetorical. This is not to suggest that logico-deductive reasoning is reducible to story, but rather that any type of reasoning cannot influence human decision and action without being articulated through the cultural values and historical contexts that is the special domain of narrative reasoning (story being the most pervasive and effective human means for making sense of events). For the futures field, this perspective suggests a theory-building direction that resolves qualitative-quantitative tensions by making narrative fundamental to all types of futures reasoning.

The emphasis on rhetoric resonates with the growing interest of scenarists in defining plausibility criteria for assessing scenario effectiveness (Wilkinson & Ramirez, 2010; Ramirez & Selin, 2013). The social constructionist perspective requires reflexive analysis of how plausibility itself is constructed and contested rhetorically in scenario processes. Such inquiry should be taken with other efforts seeking to enhance scenario processes' legitimacy through addressing methodological confusions, theoretical deficiencies, and questions of efficacy (Bishop, Hines & Collins, 2007; Varum & Melo, 2010; Inayatullah, 2009).

For instance, in summarizing her key conclusions from the 2008 Oxford Futures Forum, Wilkinson (2009) worries about how scenario practices' success is constrained by dissensus among scenarists and their clients on what scenario effectiveness means—she argues that this is irresolvable without greater theoretical development and systematic scholarly research. Wilkinson importantly identifies the seminal work on 'sensemaking' by the organizational theorist and social psychologist Karl Weick (Weick, 1995; Weick, Sutcliffe & Obstfeld, 2005) reflecting one of the key themes of the Oxford forum—as a particularly promising established body of work from outside the futures field that might be used to develop greater depth in scenario theory. This paper agrees that Weickian sensemaking has much to offer theory-building here, and proposes a way of interpreting and applying Weick (who shares with Bruner the social constructionist view of human knowledge being based on social cognition) that directly links it to narrative and avoids the pitfalls of reifying the field's qualitative-quantitative tensions or of overlooking the power of narrative reasoning in sensemaking through overcommittment to logicodeductive reasoning. To approach Weickian sensemaking primarily for improving technical effectiveness measures is to underestimate the importance of its reflexive power as a social constructionist perspective.

To add analytical depth to this Fisherian rhetorical perspective on how scenario

processes can be understood in the context of organizational narrative sensemaking, this paper proposes a framework using the concept of "translation" as used in Actor-Network Theory (ANT) (Latour, 2005). The rhetorical composition of narrative sensemaking can be understood via ANT in terms of the recruiting and aligning of heterogeneous elements and interests (i.e. the 'translation' of networks of allies, warrants, claims, interests that make particular visions and agendas for action, decision-making, legitimation etc. more persuasive, more authentic, *more plausible* etc.). ANT concepts are borrowed selectively however. As Castells (2009) suggests, we can value the explanatory abilities of ANT as a theory of power for showing how rhetorical assemblages underlying accounts of reality are socially constructed, while remaining wary of ANT theory controversies such as its apparent extension of agency beyond humans.

The rest of this paper is organized as follows: first, Weickian sensemaking's epistemological fit with futures is discussed, then connections with ANT's concept of 'translation' are examined, and next, a convergence of sensemaking and translation for scenario theory-building is considered.

# Weickian Sensemaking's Epistemology

Weickian sensemaking is one of the most successful examples of the social constructionist and interpretative turn in the organizational sciences (Sutcliffe, Brown & Putnam, 2006). This turn shifted the focus from understanding organizations as structures which shape action to understanding them as being continuously maintained and altered by socially interpreted interactions (Taylor et al., 2001). Weickian sensemaking proposes that macro processes of organizing be understood through micro processes of social cognition at the individual level that continuously construct (or make sense of) reality through conversation and other kinds of linguistic and textual discourse. A basic proposition is that sense of the activities around us—and our own activity—is made retrospectively—that is to say, we arrive at more-or-less settled accounts of events and environments after we have experienced them (Weick, 1995). This sensemaking is social and discursive, working through language, media and communication. Organizations themselves are understood as social systems for interpreting meaning environments always saturated with uncertainties and ambiguities. These systems receive and collect information about the environment as well as about other organizations and their own conditions, with the purpose of reducing their organization's equivocality in understanding the world. This reduction is conducted through the continuous attempted creation of consensuses about social realities. This creation's processes take form through improvised and routinized interpretation schema, interaction rules and mental models that become embedded in the organization through socialization and technical apparatuses. Sensemaking is articulated through activities that bring order to streams of raw experience, such as noticing, bracketing, and labeling. Importantly, the sensemaking process is not understood as simply interpreting environments or investing them with meaning, but also as reflexively helping to enact environments through coupled action and cognition (Daft & Weick, 1984; Weick, 1995; Weick, Sutcliffe & Obstfeld, 2005).

The main challenge to be overcome that Wilkinson sees in applying Weickian sensemaking to scenario planning theory-building is epistemological—she reads Weick's approach as being defined by the belief that "sense is made ex-post, whereas

scenario practices by definition considers the world ex-ante" (Wilkinson, 2009, p. 110). Weickian sensemaking inherently assumes, it is implied, a retrospective orientation mutually exclusive of the prospective orientation of futures practices. Ramirez & Selin (2013) have noted critical assessments of Weick drawing attention to prospective types of sensemaking, as in the idea of sensegiving where gaps in organization members' understanding of reality are filled in by leaders or top-down visions. But when Weick (1995, p. 30) writes that "The dominance of retrospect in sensemaking is a major reason why students of sensemaking find forecasting, contingency planning, strategic planning, and other magical probes into the future wasteful and misleading if they are decoupled from reflective action and history" he is, rather than rejecting the prospective orientation, underscoring that the prospective necessarily must be coupled with the retrospective. What binds these temporal orientations together is that they are both socially constructed products of cognition and action enacted in the present. Moreover, this social constructionist view emphasizes the connections that narrative reasoning forges between interpretations of the past as well as possible futures. Seeing Weickian sensemaking as differentiated from prospective sensemaking or sensegiving breaks this link; sensegiving also privileges hegemonic actors and undermines the emphasis championed by Bruner and Fisher on narrative reasoning being a democratic practice everyone uses—an important consideration especially for futurists interested in making futures work more participatory and open.

Scenario planning as sensemaking understood in social constructionist terms has been most notably so far explored by Alex Wright (2004, 2004a, 2005). Wright acknowledges that the analysis of the underlying discursive text and language that constitute social construction processes is rare in the scenario field and that "this conception of scenarios as social constructions is not identified in the practitioner-focused literature" (Wright, 2005, p. 89). This lack of attention is understandable, given the subversive irony that the reflexivity of social constructionism can provoke. As Wright (2004, p. 12) points out in his "social constructionist's deconstruction" of Royal Dutch Shell's scenario planning methods that while "Scenario planning is located ontologically and epistemologically as an alternative strategy approach to rationalist techniques, such as forecasting... positivism remains present in much of the unspoken assumptions in the most widely known examples...." Furthermore, he notes that "some of [the field's] most prolific advocates appear to be suffering from epistemic uncertainty... and seek to deny scenario planning's social and constructive natures... and go so far as to apologise for these interpretive properties."

While positivism envy in scenario planning may lead to defensiveness about social constructionism's implications, Weick's sensemaking perspective has subversive potential when applied to any kind of rationalistic planning effort. This subversiveness entails a postmodern wryness about strategizing that is neither simply affirmative nor simply critical. (It is, however, controversial and it should be stressed that Weick here is out of step with much organizational theory thinking which tends to see more straightforward value along with nuanced reflexivity in planning practices.) Weick argues that rather than as guides to future action, plans should be considered primarily as symbols or signals, advertisements, instruments of political gamesmanship, and excuses for interaction and conversation. He concludes: "Plans are a pretext under which several valuable activities take place in organizations, but one of those activities is not forecasting." (Weick, 1979, p. 10). More recently,

Weick has emphasized that reliance on plans and the assumptions they embody can undercut an organization's mindfulness and its ability to deal with complex and unexpected events. Planning processes may lull personnel into complacent, limited expectations about their roles and the environments around them (Weick & Sutcliffe, 2007, pp. 66-67).

This counter-rationality of Weickian sensemaking is disconcerting for the instrumental view of planning (broadly equivalent to management and strategy in the organizational sciences literature) that sees planning as a means of gaining control over the future of an organization and its environment through formalized decision-making procedures (Mintzberg, 1994). Forecasting is integral to instrumentalist planning (Makridakis, 1990). Even when it is most important for *symbolizing* reason (Mintzberg, 1994) and there is negligible confidence about an organization's knowledge about its future, planning is instrumentally useful for an organization's self-maintenance and sense of efficacy in the face of turbulence and uncertainty. Yet the Weickian reflexive ironic account of planning need not be only subversively used. Weick is emphatic that the affirmative purpose of organizational analysis be as important as the critical (Weick, 1979).

From the Weickian perspective, then, scenario exercises are controlled sites for conscious organizational sensemaking that disrupt and remake existing mental models through group narrative-making in the present. This dovetails with Weick's observation that when routinized interpretative schema breaks down and an urgent occasion for sensemaking arises, what is presently needed is "something that preserves plausibility and coherence, something that is reasonable and memorable, something that embodies past experience and expectations, something which resonates with other people, something that can be constructed retrospectively, but also can be used prospectively; something that captures both feeling and thought, something that allows for embellishment to fit current oddities, something that is fun to construct. In short, what is necessary is a good story." (Weick, 1995, pp. 60-61)

Reminiscent of a well-known futures tactic, Weick's advice includes imagining and narrating futures events as if they have already taken place in the past—a perspective that encourages participants to feel more confident about imagining and engaging with those events. They are able to deploy references to past experiences and causal histories that have the legitimacy of established consensus and facticity in the discourse. Weick calls this thinking in the "future perfect tense" (1979, pp. 198-199). This recommendation combines two common temporal definitions of strategy described by Mintzberg (1994, pp. 23-25)—intended strategy as a plan for the future and realized strategy as a pattern over time assessed in hindsight—in a way that embodies the coupling, crucial to how Weick understands organizations should actively use futures imagination, of the prospective and the retrospective within the sensemaking of the present. As Patriotta (2003, p. 353) argues: "the strength of narratives as interpretive devices stems precisely from their ability to link the present to the past and the future, anticipation to retrospection and repetition" which consolidates the principle that both the prospective and the retrospective are ultimately reconcilable as a construction of the present.

While there have been significant work already on connecting scenarios and sensemaking, as well as scenarios and narratives, so far little has been done on specifically developing the links between the three subjects. ANT's "translation" concept is a useful starting point for developing the Weickian perspective on

scenarios further.

## The Narrative Perspective of Actor-Network Theory

ANT refers to an analytical approach to how naturalized ideas of nature, technology and society are constructed through power/knowledge networks that organize humans and non-human material entities. It originates in Science, Technology and Society studies (STS) and is associated most notably with French theorists Michel Callon and Bruno Latour (Latour, 1987; Callon, 1987). ANT has become increasingly popular in a wide variety of social science and related disciplines. Its principal interest is the analysis of how socio-material alliances made up of humans and non-humans are created and decomposed by power struggles in order to constitute, maintain, and challenge accounts of reality. Its concept of 'network' is a rhizomatic one (Latour, 1999) rather than being based on technological or organizational structures; "network" here refers to the redistribution of action (Latour, 2011). In the organization sciences, ANT has been a lead element in the recent 'post-modern turn' (Alcadipani & Hassard, 2010). An important part of its appeal is that ANT understands reality as being constructed discursively from social relations whilst at the same time refusing to detach sociality from materiality.

This paper does not attempt a comprehensive ANT approach to scenario work; nor will it engage the debates over ANT's status as theory or methodology<sup>2</sup>. Rather, this paper will focus on the usefulness for rethinking scenario work through the key ANT concept of "translation", which has been particularly popular in organization studies (Demers, 2007). Latour (2005) describes translation as a process of organizing through which the creation or maintenance of socio-technical arrangements is attempted. In this definition, heterogeneous—often radically different—entities are brought together by actors to build a possible network with a shared agenda. If the actors acquire (or "enroll") sufficient allies for their networks to make the socio-technical arrangement materially and discursively robust and durable, the sociotechnical arrangement is considered—in retrospect—benign and stabilized. Translation, then, describes the negotiation of socio-technical relations through which heterogeneous entities, having been convinced that their differences can be bridged (or set aside) and their interests at least in part aligned with an actor's, are mobilized in support of the actor's agenda. The organizing actor is able to promote its agenda by speaking on behalf of, and with the force, of its allies. Latour (1987) describes this as a socio-material networked form of rhetoric. Entities, including ones that have been previously allied, which resist translation by an "actornetwork" may be excluded or attacked. These maneuvers are thought of in ANT in terms of strategies of association and disassociation (Callon, 1986; Latour, 1986). Importantly, the term "actor-network" reminds us that all actors are themselves constituted by networks of heterogeneous aligned interests, relationships, objects, and organizations etc. while also creating, challenging, absorbing, engaging etc. other networks (Callon, 1991). While bearing this in mind, for purposes of clarity here only "actors" and "networks" will be referred to from this point.

ANT's theorizing of power and of narrative is intermeshed. The development of ANT by Callon & Latour (1981) grew in part out of the work of the semiotician and narrative theorist Algirdas Greimas (1990) who, building on the work of folklorist Vladimir Propp (1984), proposed that narratives could be broken down analytically in terms of 'actants'—idealized, abstract generic story elements that lack specific

character, detail, facticity or agency until they are operationalized within a storytelling plot by the author.

In the ANT perspective, actants are human and non-human material entities that are operationalized through their translation or enrollment into networks/narratives created by the authorship of actors. The vital difference between actors and actants is that actors have the agency to compose networks. Actants may develop into actors themselves. These networks create and support stories that the actors hope are accepted over rivals' as more legitimate or important accounts of social reality.

There is a significant direct correspondence between Michel Callon's writings on networks and the scenario discourse. In his 1991 essay "Techno-economic networks and irreversibility", Callon casts translation as the key operation through which networks are created by actors recruiting actants. The enrollment of these contingent allies into networks is inscribed in material objects and structures or "intermediaries" (e.g. paper documents and published reports, office architecture, computer databases, telecommunication links, knowledge embodied in humans etc.). Callon lays out his basic definitions of ANT concepts and writes:

"All groups, actors and intermediaries describe a network: they identify and define other groups, actors, and intermediaries, together with the relationships that bring these together. When such descriptions include the imputation of authorship, then actors emerge in the stopping places, asymmetries, or folds.... But the network of intermediaries accepted by an actor after negotiation and transformation is in turn transformed by that actor. It is converted into a scenario, carrying the signature of its author, looking for actors ready to play its roles. For this reason I speak of actornetwork: for an actor is also a network." (Callon, 1991, p. 142)

The particular use of "scenario" here implies that a network and the processes by which its relationships are maintained, stabilized, strengthened and challenged is a narrative with an author and roles that needs to be acted out. Without the "imputation of authorship" (and therefore of narrative), the conception of network would seem inert and inoperable. This authorship—the actor's driving of the network—is the voice that translates the interests of enrollable actants into its own agenda; as Callon notes elsewhere (1986, p. 26): "Translation is a definition of roles, a distribution of roles and a delineation of a scenario. It speaks for others but in its own language."

This correspondence is reinforced by Callon's Acting in an Uncertain World: An Essay on Technical Democracy (Callon, Lascoumes & Barthe, 2009). The authors describe how modern policy decision-makers face destabilizing controversies created by new scientific and technical uncertainties. They suggest decision-makers typically respond by both rationalizing the uncertainties into risk and probability calculations, as well as through expressing their strategic options in terms of the alternative future world-states that they believe, in the manner of a self-fulfilling prophecy, they will help bring about to answer the crises. Whether this belief is borne out by future actions or events or not (and Weick reminds us that such an accounting would be formed and justified retrospectively in any case), it is necessary to give a virtual sense of power and efficacy to the imagined alternative futures along with the policy options and alliance networks that they imply:

"A state of the world is defined first by the list of human and non-human entities that make it up, and then by the interactions between these entities with which we decide to live but also the type of history we are prepared to share with them. We refer to possible states of the world because we know of causal chains that could

produce them. Another way of talking about these states of the world is to employ the notion of scenario, a notion dear to futurologists." (Callon, Lascoumes & Barthe, 2009, p. 20)

Here again, and more clearly, the scenario (the "possible state of the world") is presented as marking a potential and virtual network of human and non-human actants allied together through "interactions" (or translations) and constituted through narrative ("the type of history" and "the causal chains") but waiting for an actor ("with which we decide to live", "we are prepared to share with them") to put them into play as rhetoric.

While there is a distinct and strong tradition of scenario planning (*La Prospective*) in his native France (Bradfield et al., 2005), Callon has not written so far on the potential connections between futures scenarios and ANT. But the correspondence here is intriguing. If the organizational use of scenario work is considered in terms of translation—that is, the negotiation and contestation of network alliances around the legitimacy of various accounts of future realities—then scenario work can be thought of as a narrative medium of power, with the scenarios and scenarists being the intermediaries of rivalrous or collaborative networks organized around the future. Both qualitative and quantitative modes of argument and their apparatuses and experts are recruited and combined in these networks. Translation operates in a dual way here: both in the sense of composing a space for mutual dialogue in which different conceptions and agendas regarding alternative possible futures are brought together and in creating new rhetorical and political linkages and assemblages amongst the various stakeholders.

Scenario work activities as a sensemaking medium can be thought of usefully in terms of three main narrative levels of translation. There is the macro-level of the scenarios themselves where they are vehicles for communicating an organization's view of the future either internally, throughout its community or even publicly. At this level the scenarios themselves are intermediaries inscribed with visions of the future (both hopeful and fearful) that can be used to enroll and translate other entities in support of various networks' agendas. At the meso-level, there is the story of the scenario work as an organizational process. This involves the question of how scenario processes can be constituted and made viable within a specific organizational context. Simultaneously, there is also the question of how valued these scenario processes are when compared with other organizational processes, including rival strategizing processes. The narrative at the micro-level is driven by the problem of how the network assemblage of scenario work itself is constructed and comprehended through cognition and action—that is, how sense is made of it when it is practiced. These levels are collapsible into ANT's preferred rhizomatic network topology, in which the macro-level and meso-level scenario practices can be understood as constituted by locally framed sensemaking acts that are mobilized across the nodes of competing and collaborating power structures.

The qualitative-quantitative tensions in scenario discourse can be understood in this perspective as the politico-epistemological consequence of the meso-level encounter of scenario work sensemaking with rival, more positivist and quantitatively-driven organizational processes. The practitioners' struggle to make better sense of the value of scenarios—for both themselves and for their clients—in the face of this challenge has led to their emphasis on searching for more scientistic rigor and common standards of instrumentality in the hope of unifying and

strengthening the scenario methods discourse. But this focus overlooks the scope of scenario work as a narrative method—one which is not simply about what or how stories are told by and within organizations but also how the storytelling is itself a crucial means through which organizing itself occurs. Exploring the convergence between the cognitive mode articulated by Weickian sensemaking theory and the strategic mode of the ANT notion of translation is an useful way of better comprehending the value of this scope.

# The Convergence of Translation and Sensemaking as Narrative Theories

The convergence of translation and sensemaking as explanations of organizational storytelling is built upon a recognition of the essential isomorphism between organization and narrative. That is, organizing and storytelling should be "analyzed as coextensive because they both consist of anticipating a series of articulations whose meaning is attributed retrospectively" (Cooren, 2001, p. 180). This perspective echoes Polkinghorne's (1988, p. 18) observation that "narrative is a meaning structure that organizes events and human actions into a whole, thereby attributing significance to individual actions and events according to their effect on the whole". Taylor & Van Every's (2000) account of how organizing and narrating are both semantic processes fundamental to the human cognitive construction of social reality is partly founded on the same semiotic narrative theories of Gremais that helped shape ANT. Cooren (2001) has elaborated on this connection in modeling the translational strategies of association and disassociation involved in organizational coalition-building in terms of a Greimasian quest narrative. The Greimasian quest narrative is an ideal type of story form in which the protagonist of the narrative recruits and mobilizes actant helpers and overcomes obstacles and rivals in order to achieve its agenda<sup>3</sup>.

It is important here to note that the actants may be subject simultaneously to strategies of association and disassociation from actors in different quarters, for disparate purposes, and at different levels of discourse. Furthermore, they may be allied to, or claimed by, multiple networks/narratives whilst also retaining the possibility of sometimes becoming or being (in another network) an authoring actor themselves. Therefore, as Cooren (2001, p. 185) describes it, a "narrative interpenetration of several sensemaking activities" is typical, affirming Weick's (1979, 1995) position that effective collective action requires neither any consensus about goals nor shared meaning so long as the articulated experience of collective action as an occasion and arena for sensemaking—storytelling—is shared. This view of translation as a typically multivalent, pluralistic operation is supported by the understanding that narratives may be authored by any possible actor—not just victors which dominate—and can co-exist pluralistically as well as rivalrously. Crucially, this pluralistic multivalency also points to the virtuality of narratives within the scope of translation. Virtuality is addressed here in terms of Callon's. Definition of network formation as a process where actants are "converted into a scenario, carrying the signature of its author, looking for actors ready to play its roles" (1991, p. 142, my italics). The interpenetrated sensemaking that Cooren delineates as a space of translation is where many potential, as well as ongoing, narrative schema of organizational realities are circulated. These schema are ready to be made sense of in retrospect through the enactment of networks/narratives of social reality by actors. These potential narrative schema carry a rhetorical weight *prior* to their actualization. Simply being ready and sought as a new addition to another network means that an actant may bear a virtual influence on those networks that it already belongs to—as their actors must consider the possibility of those new alternative arrangements coming into play.

The dovetailing of translation and sensemaking, then, undergirds a narrative approach to organizations that focuses upon the deep isomorphism between organizing and narrating, the multivalency of the constituents of networks, and the influence of virtual narratives. These qualities expand our understanding of the characteristic *modality* of scenarios as a narrative form. The importance of modality as a narrative characteristic of scenarios has been well asserted in Booth & Clark (2009) and Booth et al. (2009). They state that every use of futures narratives can be understood in terms of a modal narrative—that is, a narrative which is primarily concerned with the necessity, possibility and contingency of the worlds we live in. Modal narratives ask "what if?" Their special purpose is to consider how necessary and possible the facts of reality are and how they may have possibly turned out differently. Scenarios are a primary form of future-orientated modal narratives in organizational and public discourse.

Booth et al. argue that modal narratives operate through cognitive estrangement at the doxastic-axiological level of beliefs and values. A liminal zone is generated by modal narrative devices such as scenarios between the accepted consensus knowledge and values about reality and the tentative, partial knowledge and values articulated through different alternative accounts of reality. This liminal zone is an institutionally or discursively legitimated space for participants to experiment with the "strange newness" of alternative accounts of reality (Booth & Clark. 2009, p. 92).

For Booth et al., the primary purpose of the modal narratives is to "subvert our belief in what is accepted as real" (Booth & Clark, 2009, p. 93) through their effects as "sensitizing agents to the multiple possible worlds that might have been and that could still emerge" (Booth et al., 2009, p. 118). They also see strong parallels with the promises of scenario planning to liberate organizations from entrenched patterns of thought about the future and to enhance their learning capabilities with new habits of thought. They also argue that "modal narratives are most valuable... when employed as 'surprise machines', highlighting gaps or contradictions in belief (doxastic) or value (axiological) systems" (Booth et al., 2009, p. 124). This emphasis on the doxastic-axiological value of scenario narratives as "surprise machines" is a more disruptive and destabilizing version of Wack's (1985) characterization of scenario methods as "the gentle art of reperceiving". Both versions are parallels to Weick's notion of occasions for sensemaking (Weick, 1995) but Booth et al.'s version provokes organizational controversy about the future rather than seeking to manage it. While there may be limited appetite in the current professional scenario planning discourse for exercising scenarios as confrontational "challenge artefacts" (Wright, 2005, p. 12) against hegemonic structures within organizations and society, scenarios as modal narratives could be certainly be deployed in this way.<sup>4</sup> The idea of scenarios as "surprise machines" is also an alternative perspective to the wellknown analogies of scenario planning as a "wind tunnel" and as a method that creates "memories of the future". The "wind tunnel" metaphor implies that the most

important product of scenarios be something that is measurable and reproducible. And while the "surprise machines" could certainly help produce "memories of the future", the memories metaphor tends to reduce the effects of scenarios to a cognitive instrumentality, a kind of innate version of contingency planning. The doxastic-axiological dimension is largely set aside in the two popular metaphors, as it is too in the emphasis by those who favour steering the scenario discourse towards greater positivist efforts of measurement. The narrative power of scenarios in the Fisherian sense of argumentation and rhetoric is marginalized here in favour of greater methodological rigor and a suppression of the, potentially destabilizing, self-reflexivity that the modality of scenarios can generate.

Treating scenario methods as modal narrative generators bolsters the Fisherian paradigm as an approach to futures narratives. Modal narratives create sensemaking occasions that constitute a translational space for organizations considering alternative futures. If storytelling and organizing are co-extensive, processes of modal narration can be considered as processes of modal organizing—that is to say, a scenario exercise about the future does not merely create 'what if?' narrative objects, but is simultaneously an organizing process that creates a liminal zone for doxastic-axiological reflection on the organizational context itself. This liminal zone corresponds with the translational space where both virtual and actualized networks/ narratives can be proposed and exercised. These are the "what if?" rhetorics of organizing where sensemaking is operationalized through strategies of association and disassociation. The multivalency of the actants mobilized by these strategies underscores that modal narratives could be simultaneously claimed by multiple actors for disparate purposes. Just as the organizational meaning of plans is rarely simply about the actual rational implementation of policies, the "what if?" narratives here will be made sense of and used differently by different interests.

This Weickian-ANT influenced understanding of the power and purpose of scenarios explicitly moves away from the trend of emphasizing focus on positivism and instrumentality in scenario theory-building. Instead, it favours Bell's stance (2003, p. 317) that sees scenarios as an umbrella term for the narratives that are ultimately the rhetorical products of all futures methods. The convergence of translation and sensemaking in the modality of scenario narratives that has been elaborated in this paper provides theoretical depth to understanding how the umbrella conception of scenarios operates. In this perspective, the special value of futures narratives is how they create a legitimate liminal sensemaking space within organizations for translation work around possible futures.

# **Practical Applications**

It is hoped that this paper provides starting points for practical innovation.

For instance, ANT-trained analysts could be tasked with making scenario planning processes more transparent and democratic, by using ANT modeling to represent how participants' and scenarists' power/knowledge relationships during the experience are constructed (Dudhwala, 2011)—thereby supporting critical futurists seeking to fashion more participatory futures methods (Ramos, Mansfield & Priday, 2012).

This means developing typologies of translation specific to different assemblages of futures techniques in different organizational contexts across micro-meso-macro levels of rhetoric. Such analyses, in contrast to empirical or objective instruments,

should reflexively engage with subjects' understanding and use of scenario work in terms of socially constructed narratives. Moreover, these analyses should be used to develop models that can also help futures practitioners and their partners to engage in translation more effectively and so gain advantage over rivals' (with their competing strategy tools) narrative sensemaking about futures.

Further ways that such applications could be extended include:

- Modeling successful rhetorical interventions/translations made by both new and traditional futures techniques to help their practitioners learn from each other
- Although the micro-meso-macro ANT-narrative sensemaking approach here
  has a different focus from the four layer Causal Layered Analysis (CLA)
  methodology (Inayatullah, 2004), it might usefully complement it with models
  of how CLA's litany, systematic causes, worldview/discourse, and mythmetaphor layers are assembled/translated and rhetorically contested through
  narrative sensemaking.
- Scenarios communicate futures across diverse audiences' boundaries. Curry (2007) has usefully borrowed the STS term of "boundary objects" (Star & Greisemer, 1989) to describe this. Turner (2008) has also applied this idea in analyzing Silicon Valley's rise, including Global Business Network's scenario planning success. This paper's approach might be used to model and improve how scenarios translate across boundaries and gain influence.

### Conclusion

This paper has argued for the importance of understanding the organizational use of scenarios as a narrative sensemaking practice in terms of ANT and Fisherian rhetorical analysis. This provides theoretical depth in support of Wendell Bell's (2003) view of scenarios as a vehicle common to all futures practices. What is being advocated for here is a theory-building direction that reconciles qualitative/ quantitative tensions through narrative understanding that supports the link between scenario insight and action. This should complement efforts to develop more rigorous standards and more reliable measures of scenario efficacy important for enhancing the legitimacy of scenario work as a strategy practice. Scenario work is well served too by the elaboration of typologies and theoretical models that increase the clarity and intellectual weight of its discourses. However, pursuing positivist instrumentality alone is insufficient for supporting philosophical unity and enhanced effectiveness in scenario planning and futures narratives more generally. Strengthening the presence of the insightful critical and interpretivist traditions of futures studies (Inayatullah, 1990; Slaughter, 2004) is also crucial. This paper's framework aims to help futures theorists and practitioners encompass both critical and affirmative directions through deeper understanding of scenario work's roles in organizational narrative sensemaking.

# Correspondence

Zhan Li University of Southern California 3502 Watt Way Los Angeles CA 90089 United States of America Email:zhanli@usc.edu

#### Notes

- 1 There is a far-from-settled debate over defining story vs. narrative in the organizational sciences, but this is beyond this paper's scope.
- 2 For critiques of ANT, see e.g. Amsterdamska (1990), Whittle & Spicer (2008).
- 3 Detailed examination of Greimas' relevance for organizational sensemaking theory is unfortunately beyond this paper's scope, but see Taylor & Cooren (2006) for more.
- 4 Although there are important precedents for scenarios as an *ungentle* device of reperceiving e.g. Kahn's *On Thermonuclear War* (1960) deliberately created public controversy through its shocking content.

#### References

- Aaltonen, Mika & Theodor Barth. (2005). How Do We Make Sense of the Future? *Journal of Futures Studies*, 9(4), 45-60.
- Alcadipani, Rafael & John Hassard. (2010). Actor-Network Theory, organizations and critique: towards a politics of organizing. *Organization*, *17*(4), 419-435.
- Amsterdamska, Olga. (1990). Surely, You Must be Joking, Monsieur Latour! *Science, Technology and Human Values*, *15*(4), 495-504.
- Barry, David & Michael Elmes. (1997). Strategy Retold: Toward a Narrative View of Strategic Discourse. *The Academy of Management Review*, 22(2), 429-452.
- Bell, Wendell. (2003). Foundations of Futures Studies: History, Purposes, and Knowledge: Human Science for a New Era. Vol. 1. Piscataway, NJ: Transaction.
- Berger, Peter & Thomas Luckmann. (1967). *The Social Construction of Reality: A Treatist in the Sociology of Knowledge*. New York: Anchor.
- Bishop, Peter, Andy Hines & Terry Collins. (2007). The Current State of Scenario Development: An Overview of Techniques. *Foresight*, *9*(1), 5-25.
- Booth, Charles & Peter Clark. (2009). Modal Narratives, Possible Worlds and Strategic Foresight. In Laura Costanzo & Robert MacKay (Eds.), *Handbook of Research on Strategy and Foresight* (pp. 113-127). Cheltenham, UK: Edward Elgar Publishing.
- Booth, Charles, Michael Rowlinson, Peter Clark, Agnes Delahaye & Stephen Procter. (2009). Scenarios and Counterfactuals as Modal Narratives. *Futures*, *41*(2), 87-95.
- Bradfield, Ron, George Wright, George Burt, George Cairns & Kees van der Heijden. (2005). The origins and evolution of scenario techniques in long range business planning. *Futures*, *37*(8), 795-812.
- Bruner, Jerome. (1986). Actual Minds, Possible Worlds. Harvard University Press.
- Bruner, Jerome. (1991). The Narrative Construction of Reality. *Critical Inquiry*, 18(1), 1-21.
- Bruner, Jerome. (2001). Self-Making and World-Making. *Journal of Aesthetic Education*, 25(1), 67-78.

- Callon, Michel & Bruno Latour. (1981). Unscrewing the Big Leviathan: how actors macrostructure reality and how sociologists help them to do so. In Karin Knorr-Cetina & Aaron Cicourel (Eds.), *Advances in Social Theory and Methodology: Toward an Integration of Micro- and Macro-Sociologies* (pp. 277-303). Boston, MA: Routledge and Kegan Paul.
- Callon, Michel. (1986). Some elements of a sociology of translation: domestication of the scallops and the fishermen of St. Brieuc Bay. In John Law (Ed.), *Power, Action and Belief: A new sociology of knowledge* (Vol. 32) (pp. 196-233). Boston: Routledge and Kegan Paul.
- Callon, Michel. (1987). Society in the making: the study of technology as a tool for sociological analysis. In Weibe Bijke, Thomas Hughes & TrevorPinch (Eds.), *The Social Construction of Technological Systems: Directions in the Sociology and History of Technology* (pp. 83-103). MIT Press.
- Callon, Michel. (1991). Techno-economic Networks and Irreversibility. In John Law (Ed.), *A Sociology of Monsters? Essays on Power, Technology and Domination, Sociological Review Monograph* (pp.132-161). London: Routledge.
- Callon, Michel. (2001). Actor Network Theory. In Neil Smelser, James Wright, Paul Baltes (Eds.), *International Encyclopedia of the Social & Behavioral Sciences* (pp. 62-67). Amsterdam: Elsevier.
- Callon, Michel, Pierre Lascoumes & Yannick Barthe. (2009). Graham Burchell (Trans.), *Acting in an Uncertain World: an essay on technical democracy*. MIT Press.
- Candy, Stuart. (2010). The Futures of Everyday Life. Ph.D. dissertation, University of Hawaii.
- Castells, Manuel. (2009). Communication Power. Oxford University Press.
- Cooren, François. (2001). Translation and articulation in the organization of coalitions: the Great Whale River case. *Communication Theory*, 11(2), 178-200.
- Curry, Andrew. (2007). Acting on the future. In Bill Sharpe & Kees van der Heijden (Eds.), *Scenarios for Success: Turning Insights into Action* (pp. 339-372). Chichester, UK: Wiley.
- Czarniawska, Barbara, & Pasquale Gagliardi (Eds.). (2003). *Narratives We Organize By*. Amsterdam: John Benjamins.
- Daft, Richard & Karl Weick. (1984). Toward a Model of Organizations as Interpretation Systems. *The Academy of Management Review*, *9*(2), 284-295.
- Demers, Christiane. (2007). *Organizational Change Theories: a synthesis*. Thousand Oaks, CA: SAGE.
- Dudhwala, Farzana. (2011). Opening Up the Future to Inspection: Actor-Network Theory and Futures-Scenarios in UK Government. Presentation, JRC European Commission's 4th International Seville Conference on Future-Oriented Technology Analysis.
- Fisher, Walter. (1984). Narration as Human Communication Paradigm: The Case of Public Moral Argument. *Communication Monographs*, 51(March), 1-22
- Fisher, Walter. (1987). *Human communication as a narration: Toward a philosophy of reason, value, and action.* University of South Carolina Press.

- Inayatullah, Sohail. (1990). Deconstructing and reconstructing the future: Predictive, cultural and critical epistemologies. *Futures*, 22(2), 115–141.
- Inayatullah, Sohail (Ed.). (2004). *The Causal Layered Analysis Reader: Theory and Case Studies of an Integrative and Transformative Methodology*. Tamsui, Taiwan: Tamkang University Press.
- Inayatullah, Sohail. (2009). Questioning Scenarios. *Journal of Futures Studies*, 13(3), 75–80.
- Jarva, Vuokko. (2014). Introduction to Narrative for Futures Studies. *Journal of Futures Studies*, 18(3), 5-26.
- Kahn, Herman. (1960). On Thermonuclear War. Princeton University Press.
- Kleiner, Art. (2008). The Age of Heretics: A History of the Radical Thinkers Who Reinvented Corporate Management. San Francisco, CA: Jossey-Bass.
- Latour, Bruno. (1986). The Powers of Association. In John Law (Ed.), *Power, Action and Belief: A new sociology of knowledge?* (pp. 264-280). London: Routledge and Keagan Paul.
- Latour, Bruno. (1987). Science in Action: How to follow scientists and engineers through society. Maidenhead, UK: Open University Press.
- Latour, Bruno. (1999). On Recalling ANT. In John Law & John Hassard (Eds.), *Actor Network Theory and After* (pp. 15-25). Oxford: Oxford Blackwell and The Sociological Review.
- Latour, Bruno. (2005). *Reassembling the Social: an introduction to actor-network-theory*. Oxford University Press.
- Latour, Bruno. (2011). Networks, Societies, Spheres: Reflections of an Actor-Network Theorist. *International Journal of Communication*, *5*, 796-810.
- Li, Zhan. (2013). A Canticle for Mary Sue: What Transmedia Aesthetics might do for Futures Communication. *Journal of Futures Studies*, 17(3), 137–140.
- Lindgren, Mats & Hans Bandhold. (2009). Scenario Planning: The Link Between Future and Strategy—Revised and Updated Edition. Basingstoke, UK: Palgrave Macmillan.
- Mintzberg, Henry. (1994). *The Rise and Fall of Strategic Planning: Reconceiving roles for planning, plans, planners*. New York: Free Press.
- Nordfors, Lennart. (2007). The Power of Narrative. In Bill Sharpe & Kees van der Heijden (Eds.), *Scenarios for Success: Turning Insights into Action* (pp. 197-216). Chichester, UK: Wiley.
- Patriotta, Gerardo. (2003). Sensemaking on the Shop Floor: Narratives of Knowledge in Organizations. *Journal of Management Studies*, 40(2), 349-375.
- Polkinghorne, Donald. (1988). *Narrative Knowing and the Human Sciences*. Albany, NY: SUNY.
- Propp, Vladimir. (1984). *Theory and History of Folklore*. University of Minnesota Press.
- Ramírez, Rafael & Cynthia Selin. (2014). Plausibility and probability in scenario planning, *Foresight*, *16*(1), (in press). Retrieved on February 24, 2014, from http://www.emeraldinsight.com/journals.htm?issn=1463-6689&volume=16&issue=1

- Ramos, Jose, Tim Mansfield & Gareth Priday. (2012). Foresight in a Network Era: Peer-producing Alternative Futures. *Journal of Futures Studies*, 17(1), 71–90.
- Rasmussen, Lauge. (2005). The Narrative Aspect of Scenario Building—How storytelling may give people a memory of the future. *AI & Society*, *19*(3), 229-249.
- Roney, Curtis. (2010). Intersections of Strategic Planning and Futures Studies: Methodological Complementarities. *Journal of Futures Studies*, 15(2), 71–100.
- Schroeder, Karl. (2011). Fiction as Foresight: Presenting Foresight Findings as Fiction. Ontario College of Art & Design University Major Research Paper.
- Schultz, Wendy, Christian Crews & Richard Lum. (2012). Scenarios: A Hero's Journey across Turbulent Systems. *Journal of Futures Studies*, *17*(1), 129–140.
- Slaughter, Richard. (2004). Futures Beyond Dystopia: Creating Social Foresight. London: Routledge.
- Star, Susan & James Griesemer. (1989). Institutional Ecology, 'Translations' and Boundary Objects: Amateurs and Professionals in Berkeley's Museum of Vertebrate Zoology, 1907-39. *Social Studies of Science*, *19*(3), 387-420.
- Sutcliffe, Kathleen, Andrew Brown, & Linda Putnam. (2006). Introduction to the Special Issue 'Making sense of organizing: In honor of Karl Weick'. *Organization Studies*, *27*(11), 1573-1578.
- Taylor, James & François Cooren. (2006). Making Worldview Sense: And Paying Homage, Retrospectively, to Aldgirdas Greimas. In François Cooren, James Taylor & Elizabeth Van Every (Eds.), Communication as organizing: Empirical explorations of the dynamic of text and conversation (pp. 115-138). Mahway, NJ: Lawrence Erlbaum.
- Taylor, James, Andrew Flanagin, George Cheney, & David Seibold. (2001). Organizational communication research: Key moments, central concerns, and future challenges. *Communication Yearbook*, *24*, 99–138.
- Taylor, James, & Elizabeth Van Every. (2000). *The Emergent Organization: Communication as Its Site and Surface*. Mahway, NJ: Lawrence Erlbaum.
- Turner, Fred. (2008). From Counterculture to Cyberculture: Stewart Brand, the Whole Earth Network and the Rise of Digital Utopianism. University of Chicago Press.
- Van der Heijden, Kees. (2004). Scenarios: The Art of Strategic Conversation. Chichester, UK: John Wiley & Sons.
- Varum, Celeste & Carla Melo. (2010). Directions in scenario planning literature A review of the past decades. *Futures*, 42(4), 355-369.
- Wack, Pierre. (1985). Scenarios: Uncharted Waters Ahead. *Harvard Business Review*, 63(5), 73-89.
- Weick, Karl. (1979). *The Social Psychology of Organizing*. New York: McGraw-Hill.
- Weick, Karl. (1995). Sensemaking in Organizations. Thousand Oaks, CA: SAGE.
- Weick, Karl, Kathleen Sutcliffe & David Obstfeld. (2005). Organizing and the Process of Sensemaking. *Organization Science*, *16*(4), 409-421.

- Weick, Karl & Kathleen Sutcliffe. (2007). *Managing the Unexpected: Resilient Performance in an Age of Uncertainty* (2<sup>nd</sup> Edition). San Francisco, CA: Jossey-Bass
- Wilkinson, Angela. (2009). Scenarios Practices: In Search of Theory. *Journal of Futures Studies*, 13(3), 107–114.
- Wilkinson, Angela & Ramírez, Rafael. (2010). Canaries in the Mind: Exploring How the Financial Crisis Impacts 21st Century Future-Mindfulness. *Journal of Futures Studies*, 14(3), 45-60.
- Whittle, Andrea, & André Spicer. (2008). Is Actor Network Theory Critique? *Organization Studies*, *29*(4), 611-629.
- Wright, Alex. (2004a). A social constructionist's deconstruction of Royal Dutch Shell's scenario planning process, *University of Wolverhampton Business School Working Paper Series*, WP004/04.
- Wright, Alex. (2004b). The use of scenarios in the social construction of sense, *University of Wolverhampton Business School Working Paper Series*, WP001/04.
- Wright, Alex. (2005). The Role of Scenarios as Prospective Sensemaking Devices. *Management Decision*, 43(1), 86-101.