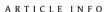# Narrative foresight

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ABSTRACT

Narrative foresight focuses on the stories individuals, organizations, states and civilizations tell themselves about the future. Narrative foresight moves futures thinking from a focus on new technologies and generally to the question of what's next, to an exploration of the worldviews and myths that underlie possible, probable and preferred futures. It is focused on transforming the current story – metaphor or myth – held to one that supports the desired future. From a theoretical account of the narrative turn, case studies are presented of the practice of narrative foresight.

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1. Introduction: context, theory, and practice

This article builds on our previous theoretical work (i.e. Inayatullah, 1990, 2002a, 2002b, 2004, 2010; Milojević, 2002, 2008, 2014; Milojević & Izgarjan, 2014; Inayatullah & Milojević, 2015 and pedagogical practice. It develops a significant focus within our overall pedagogy in futures studies, utilised in many countries (i.e. Australia, Pakistan, Serbia, Singapore, Iran, Bangladesh, South Korea, the United States, Taiwan, and Malaysia[1]), settings (i.e. governments, universities, non-governmental organisations, corporations, professional associations) and within various teaching frameworks (i.e. speeches, half or one-day courses, week-long courses, and semester or year-long courses) over the past twenty plus years.

Very recently, a significant number of academic articles has emphasised the great potential of narrative approaches for futures thinking and strategy development (i.e. Milojević, 2014; Bussey, 2014; Jarva, 2014; Li, 2014; Miller et al., 2014; Spencer & Salvatico, 2015; von Stackelberg & Jones, 2014). Others have called for a general "shift to a narrative paradigm" (Paschen & Ison, 2014, p. 1083). Further, the past several decades have seen what some have termed "an explosion of interest in narrative" (Herman, Manfred, & Ryan, 2005; p. ix), wherein narrative based inquiry became a "central concern in a wide range of disciplinary fields and research contexts" (ibid.). Initially mostly found in literary theory and then linguistics, narrative approaches in communication theory, education, psychology as well as social sciences in general have since increased in popularity. Indeed, a whole new field of narrative therapy has emerged (i.e. Angus & McLeod, 2004; Denborough, 2010; Monk et al., 1996; Morgan, 2000; White, 2000), helping individuals move away from unhelpful and

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[1] These are countries where we conducted most of our teachings and workshops. Other countries where narrative foresight has been used include (alphabetic listing): Austria, Belgium, Canada, Croatia, Denmark, Indonesia, Luxembourg, Netherlands, New Zealand, the Philippines, Switzerland, Thailand, and Turkey.

distressing storytelling towards stories that shape their identities and relationships in line with the possibilities of desired presents and futures (Milojević, 2014).

The use of narrative has been critical for futures studies as well. Various uses of narrative, e.g. framing of new and reframing of old narratives, have been part and parcel of futures thinking from the very beginning. In a similar way that narrative has been used in history – to investigate patterns of change – narrative has also been used in futures studies since the development of the field. Thick descriptions of potential events and conditions through the use of scenarios, for example, have heavily relied on the use of narrative. Trend analysis, as well, outlines a particular sequence of events wrapped as a meaningful story, even as it claims to be narrative-free, that is, it is quantitative and thus story is controlled for. Visioning and backcasting provide detailed and robust narratives presented as a sequential movement through time—from preferable to plausible futures towards the present moment. Utopian and science fiction literature is as well based on the power of story. Indeed, the skilful use of narrative is the foundation of all six pillars of futures studies[2] and within all four types of futures studies[3] - empirical, interpretive, critical and anticipatory action learning.

Mapping narrative shifts is crucial when investigating social change. Various social change agents and social movements have utilised the telling and re-telling of stories about pasts, presents and futures as one of the key strategies within their overall activism. Yet it was only after the poststructuralist, postmodern turn and the advance of social constructionism that terms such as narrative in general or meta-narrative in particular have entered into broader academic use. This article focuses on further understanding the role of narrative when thinking about the future; both through synthesising previous theoretical work and via the more practical use of narrative as a strategy for engaging individuals and organizations during futures workshops.

When teaching futures studies (and/or engaging in transformative action research) in previously mentioned diverse places and settings, the crucial importance of a more explicit engagement with a narrative—an overarching story, a guiding myth[4] or expressed as a metaphor—has increasingly become apparent to us. Our initial work in the area, more implicit and intuitive, has since been crystallised in explicit and structured ways. This article thus defines and describes our pedagogical focus in futures studies, summarises the evolution of narrative foresight approaches in our work, overviews some theoretical influences that facilitated narrative foresight approaches we use and, lastly, depicts case studies, examples of action research and learning that assisted in developing it.

In terms of context, narrative foresight straddles the boundary between the empirical, interpretive, critical, and action learning modes of futures studies. It uses the forecasts of the empirical but recasts them as possible stories. That is, unlike the empirical approach of futures studies, which sees narratives (qua data) as accurate and a precise description of an objective reality, narrative foresight, in the tradition of interpretive, critical and poststructural futures studies, sees reality as constantly negotiated by stakeholders. It focuses on metaphors and myths within the interpretive. Like the critical, it challenges assumptions and interests but does so to transform or enrich the worldview of the questioner, not just to disrupt the categories of that which is being questioned. Action emerges from this deep questioning of data, meaning, worldview and metaphor. Narrative foresight as well inquires as to the implications of deep narratives and the relationship of the narratives held by self and other.

However, narrative foresight does differ from these core approaches of futures studies as it is neither the control of empirical science, the intimacy of the interpretive, nor the distancing of poststructuralism that informs. Narrative foresight focuses not on the veracity of the future—is a future true or false—but on discovering and creating new stories that better meet needs and desires. The purpose of narrative foresight is thus to facilitate desired (preferred/wished for) futures.

2. Narrative: importance, meaning and change

It has been recognised for quite some time that narrative is one of the primary modes of knowing for humans. The destiny of the world, wrote Harold Goddard (1951, p. 208), "is determined less by the battles that are lost and won than by the stories it loves and believes in". Battles are fought and later forgotten, unless immortalised within a story (ibid.). Stories, on the other hand, are told and remembered even as they grow old (ibid.). From our very birth, writes narrative therapist Michael White (2004, p. 38), we are all "active, impassioned meaning makers in search of plausible stories". As soon as we are born, we "emerge into a plot thick with anticipation of our arrival" (Osatuke et al., 2004, p. 194). The narratives that we encounter "represent a rich mixture of historical, societal, cultural, and family influences" and much of our socialising consists of hearing other people's own personal experiences and understanding of the world via sharing of stories (ibid.).

Narrative and time are intrinsically linked. "A static description cannot be a narrative" (Talib, 2011), it is movement through time which is essential to it. As Paul Ricoeur (1984, p. 3) has explained, time becomes human time to the extent that it is organised by a manner of narrative; likewise, narrative is only intelligible and meaningful to the extent that it portrays

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[2] The six pillars of futures studies: 1. Mapping the past, present and future (methods: shared history, environmental scanning, futures triangle, futures landscape), 2. Anticipating the future (methods: emerging issues analysis, futures wheel), 3. Timing the Future (methods: macrohistory and the Sarkar game), 4. Deepening the future (methods: causal layered analysis and metaphors), 5. Creating alternatives to the present (methods: scenarios, nuts and bolts), 6. Transforming the present and creating the future (methods: visioning, backcasting, and, anticipatory action learning). Inayatullah, 2007.
[3] Four Types of Futures Studies: Empirical, Interpretive, Critical and Anticipatory Action Learning. Inayatullah, 2007, p. 198–199.
[4] A collective story that gives meaning, not a 'mistaken tale' to be corrected via rationalism or empiricism.

the features of temporal existence. In other words, David Carr writes (1991, p. 4–5), narrative is our primary way of organising our experience of time, and it is through the narrative and from the perspective of the end that the beginning and the middle make sense (ibid., p.7).

Narrative imposes on the events of the past, present and the future a particular structure that they in themselves do not have. In such way narrative always mediates our understanding across the three time dimensions, making choices, action and strategy possible. Time, therefore, "assumes a main role in the narrative not only as an episode structuring and organizing element, but also as a dynamic mechanism for constructing meaning through the integration into the narrative of the past, of the present and of the anticipation of the future" (Meira & Ferreira, 2008). Personal agency and intention, living in and through time, as well as the experience of belonging within a society and culture are all reflected in a meaningful narrative (White, 2004, p. 38). For a narrative itself to be functional and become a meaningful story, it should have a beginning, middle, and end (Osatuke et al., 2004, p. 195). Further to this, narratives require an active, agentic protagonist inspired with intentionality, as well as a moral and evaluative standpoint (ibid.). It is through a process of constructing and reconstruction stories, that their power to shape our (individual and social) reality becomes manifest.

This is why since times immemorial each human group and society has had its most important narratives, or dominant discourses, that have made movement of its members through space and time intelligible. The narratives we are born into therefore not only help shape our identities, they also provide meaningful frameworks for seeing, indeed, constituting reality. In doing so they also simultaneously shape boundaries for what is perceived plausible and desirable. Therefore, argues cognitive linguist George Lakoff (2004, p. xv), once those frameworks of meaning are changed, everything changes. Reframing of cognitive frames, or "mental structures that shape the way we see the world" (ibid.) is consequently not merely a process that facilitates social change. Rather, "reframing *is* social change" (ibid.).

Amongst social change agents, one of the foremost strategies has indeed been the reinterpretation of current stories of past, present and future. Social movements are thus "dominated by stories and story-telling, and narrative goes to the heart of the very cultural and ideational processes . . . including frames, rhetoric, interpretation, public discourse, movement culture, and collective identity" (Davis, 2002, p. 4). These narratives often point out at "the key features of identity-building and meaning-making . . . [which lie at the core of all] social activism" (Davis, 2002, p. 4). Identified as "constructive story telling" such narratives are "inclusive, foster[] shared power and mutual recognition, create[] opportunities for openness, dialogue, and insight, [and] bring[] issues to consciousness" (Senehi, 2010, pp. 111–112). Most importantly they can be "a means of resistance" (Senehi, 2010, p. 112) to the detrimental –destructive and/or outdated - frames of meaning.

Narrative is then not only a "social product (story)" but also a "social process or performance in action" (Paschen & Ison, 2014, p. 1084). It refers to both storied ways of knowing as well as structures of knowledge that are broader (Cortazzi quoted in Paschen & Ison, 2014, p. 1084). It is simultaneously a "text, shared discourse and emergent cognitive and communicative process" (Paschen & Ison, 2014, p. 1084). Most importantly, the ways in which individuals, groups and societies "story" (ibid.) their "past experiences and actions ultimately determines how [they] understand[] and practice[] future adaptation[s]" (ibid.) and current actions. Whether it is entrepreneurs contextualizing innovation (e.g. Garud et al., 2014), communities constructing narratives on climate change related disasters and vulnerability (e.g. Varma, Kelkar, Bhardwaj, Singh, & Mishra, 2014) or governments constructing terrorism futures (Kenny, 2015) narrative is always also a strategic force which is socially structured. Beyond individual and organisational use of stories, social and civilizational worldviews always determine the limits of what is to be imagined. For example, deep-seated western civilizational narratives such as that "human ingenuity can always unlock new sources of energy" (Lowe, 2015) blinds us to the possibility of seeing "inconvenient truths". Narratives, such as, for example (ibid.): "progress is inevitable", "the economy above all else", "(certain) jobs mustn't be lost" and "growth is the most desirable", create an overarching limits to change. Specifically they frame consumption as almost a citizen "duty" (ibid.), something citizens "owe" to their societies – to make sure they "prosper".

It is therefore important for futurists, Jarratt and Mahaffie (2009, p. 10) argue following Lakoff (2008), that "to be as effective as possible, futurists will benefit from learning how to use stories and to frame and reframe experiences and ideas so that they can be heard, seen, and understood emotionally". Understanding of how narrative is used to both maintain the status quo supported by dominant frameworks of meaning as well as to how various narratives are utilised to create individual/social transformations is therefore at a core of any narrative futures work.

3. Narrative: power and transformation in the external world

"We are working to discount stories. Stories are dangerous!" said a conference participant (at a European Commission 2014 International Conference on Future-Oriented Technology Analysis) exasperated by the suggestion to more explicitly engage with narratives in futures work. His point was that reliable futures work requires accurate and well-founded data as well as the logical and impartial interpretation of empirical findings. Stories are thus not only irrelevant in this process; they actually stand in a way. And so he told a story of why empirical approach within futures studies trumps over other approaches – i.e. interpretative, critical, anticipatory action learning and narrative ones.

Narrative foresight, on the other hand, does not aim to discount the significance of reliable data and quantitative analysis. Rather, it focuses on linking the empirical findings with the socio-cultural context within which they are "discovered" and presented. Rather than arguing that a particular narrative (qua data) is an accurate and a precise description of an objective reality—void of stories and particular worldviews—it seeks to link "the litany" of numerical with the underlying frameworks of meaning. It is thus acutely sensitive to the practice of framing: how reality is framed and reframed through power and

language at individual and collective levels (Foucault, 1971; Scheufele & Iyengar, 2012; Shapiro, 1992). It is this reframing - particular nominations of the real constructed as natural - that explain how subjective and inter-subjective come to be considered objective.

> Narrative thus plays a crucial role not just for the social sciences and futures studies but the natural sciences as well: Taken as a symbolic form, narrative is a universal means by which individuals come to represent and organize their knowledge of the world, themselves, and others. The scope of this universalism transcends the boundaries of mythic and everyday consciousness as they are organized in everyday life, for narrative provides even the most exact sciences, however much they might begrudge the intrusion, a formalism of sorts with which to track knowledge and its development within their specialized traditions. In the end, scientific theories are ways of reading/writing the world, where beginnings (causes), middles (processes, laws), and ends (outcomes/effects) are related in attempts at understanding organic and inorganic process. Russell, Bryant, Castilino, Jones, Wandrei, & Piette et al., 2004, p. 212).

Indeed, a particular scientific narrative may at times be the narrative that needs to be questioned, especially if potentially destructive or outdated. It is the key task of futurists, write Peter Bishop and Andy Hines (2012, p. 210), to evaluate the quality of the assumptions required to support claims about the future made by others, usually in the form of forecasts. However, once different assumptions are chosen, Bishop and Hines continue, different futures appear almost automatically (ibid.). This process is therefore critical for the development of novel and important plausible, alternative futures, as even scientific narratives need to be understood within a particular storytelling context to be of use. For example, no amount of scientific data is going to sway a climate change denier towards the implementation of environment protective policies. In his recent text, Ian Lowe (2015) argues that both the public and the politicians who hold outdated myths and metaphors (such as "growth is good", "Earth yields to the dominion of man") are unlikely to change environmentally damaging decision-making practices and behaviours if simply given more information. Forty years since *The Limits to Growth* report "most decision-makers still behave as if limitless growth is possible" (ibid., p. 109). A new story, a new metaphor is thus required so to accommodate new data and, consequently, new strategies for different futures. Indeed, it may be wise to move the debate from growth/no growth to "are we cooking" the planet to "are we caring" for the planet, or to some other potent new stories. Whilst many groups and individuals have worked to provide alternative narratives better able to address climate change and environmental issues, a new meta-narrative, replacing outdated "Growth is God" narrative is yet to emerge.

Which raises the question of what makes some narratives more and some less powerful? Why do some narratives inspire change and others remain marginal?

To start with, most people believe that they are perfectly rational agents whose views are based on impermeable logic, "common sense" approaches or methodologically rigorous study. They – we – do not believe that our thoughts are anything else but an accurate reflection of an objective reality. We also commonly do not experience or believe that we have a particular (and limited) worldview, which is based on own historical, spatial and social setting. This sets up the framework in which pasts, presents and futures are "colonised" by dominant frameworks of meaning. Such dominant frameworks of meaning continue to be communicated via mass media and, outside rather small academic or activists' circles, they continue to make "the most sense" to the general public. Narratives are thus framed and heard depending on the worldview that legitimises them. This is crucially connected with power relationships, as they are manifested at micro, meso and macro levels. Various instances of massive physical violence, for example, from the 2001 attacks in New York, 2011 attacks in Oslo and Utøya and 2015 attack in Garissa, are rarely framed in connection to the gender of assailants (i.e. in these mentioned instances, the proverbial "elephant in the room" is the data showing assailants are 100% of male gender). This is because it is not a feminist worldview that legitimates common/dominant understandings of presents or possibilities for our futures. Rather, maleness is invisible because it remains "the norm"—the signifier for humans in general. Bringing gendered perspective into the picture is still largely premised on the gender of the researcher (mostly females) as societies are still informed by and large by the patriarchal framework of meaning. They rarely give this alternative narrative any credence. That is, the possibility for the subaltern to speak (Spivak, 1988) is extremely limited and so is the hearing of narratives spoken by the marginalised groups and worldviews.

At the same time, it is only by various narrative transformations that it is possible to develop alternative futures which inspire the implementation of different strategies in the present. Indeed there is a rich tradition within contemporary futures studies which focuses on such transformations. The very notion of *alternative futures,* the core of most contemporary futures work, can then be seen as fundamentally transformative. Unlike planning, which "seeks to control and close the future" (Inayatullah, 2007, p. 1), or strategic analysis which is about choosing one "rational and goal oriented" (ibid., p. 3-4) policy amongst many; futures studies seeks to move participants from "likely" future to alternative futures. In such ways not only does the field of futures studies assist in "opening up the future" (ibid., p. 1), futurists themselves become agents of social change. So while strategic analysis tends to search for ways to reduce risk and optimize benefits within the current paradigm, futures studies seeks to explore risk in alternative paradigms. Narrative foresight seeks to further map and explicitly address metaphors surrounding understandings of risk, and then transform – deconstruct and reconstruct – them, if and when appropriate.

Such narrative transformations are intimately linked to identifying and challenging underlying assumptions. If alternative futures of gender relationships are to be proposed, the underlying dominant – patriarchal – frameworks of meaning also need to be challenged. If it is not, we will gain alternatives that look different at surface level but are remarkable similar at deeper levels, in their essence. Likewise, if a new ecologically responsible and socially just global society is to

emerge, industrial and materialistic narratives have to be replaced by a new story about what is meant by "progress". These include, for example, underlying "stories" which are implicitly narrated and explicitly measured by the Global Peace Index, the Social Progress Index, the Global Gender Gap Report, the Mothers' Index, and various Happiness and subjective Well-Being indices.

Thus, analysis of power is foundational to understanding which narratives succeed and which fail. Challenging power is not just about providing more data to individuals so they make better or more optimum or wiser decisions but about understanding the worldview – the cognitive framework – context of the person or organization/institution. To create change, first normalized categories must be challenged. Second, alternative futures and new worldviews are created, and then, third, data and a new metaphor – a story – can be presented which supports the change and aids in creating the alternative future.

To challenge powerful narratives from the past we thus need to question their underlying assumptions. For example, while exploring the futures of the university at a number of workshops, a common conventional paradigm is that of the university within physical space, as contoured by physical buildings such as the administration, the hall of natural sciences, the hall of philosophy, and more recently social sciences. Challenging the assumption of a particular physical space needed for higher education has led to the redefining of the university as an "app" – the physical notion declining and the movement of information being enhanced. A third assumption is who teaches, generally that of the professor to 10–100 students. Challenging that assumption are, for example, virtual learning video experiments by the Khan Academy, where there is one teacher sending out "how to learn" videos to millions. A final assumption is related to the type of energy use of the university – i.e. based on current non-renewable sources. This questioning leads to the alternative future of a green university, where while curriculum is crucial, becoming carbon neutral is even more so. The green campus redesigns space so that the well-being of nature and students (through gardens, wellness centres) are put first. Another strategy towards creating a greener university is the fossil fuel divestment movement, for example, by universities such as Stanford, Glasgow and Australia National University. Finally, conventional assumptions around the ranking of universities are based on research publications and their quantified quality. An alternative rendering is reordering world hierarchy by grading universities based on their research impacts to "the bottom billion", as some universities we have worked with (i.e. University Sains Malaysia; BRAC University, Bangladesh) wish to. Thus, by challenging underlying assumptions behind core narratives enables the possibility of significantly different and disruptive alternative futures to be created. The links between assumptions, old and new metaphors and alternative futures are summarised in Table 1.

4. Transforming dysfunctional narratives: disowned and used futures

In addition to issue of seeing reality as given instead of created, i.e. as an unquestioned reality, another issue in understanding which narratives gain traction is attachment of individuals and groups to stories that are no longer beneficial.

The concept of *disowned futures* (see Inayatullah, 2007; Stone & Stone, 1989) implies that "our excellence is our fatal flaw" (Inayatullah, 2008, p.5):

What we excel at becomes our downfall. And we do not see this because we are busy focusing on our strategic plans. It is the self disowned, the future pushed away, that comes back to haunt us. The busy executive, focused on achievements, only in later life remembers his children. It is later in life that he begins to think about work-life balance, about his inner life. The organization focused on a strategic goal denies the exact resources it may need to truly succeed. In the story of the tortoise and the hare; we often focus on the hare – wanting to be the quickest and the smartest – but it is the tortoise, our reflective self that may have the answer to the future. Plans go astray not because of a lack of effective strategy but because the act of creating a particular direction ignores other personal and organizational selves. The challenge is to integrate our disowned selves: for the school principal to remember what it was like to be a child, to use her child self to create curriculum; for the army general to discover the part of him that can negotiate, that can learn from others. This means moving futures closer: from a goal oriented neo-Darwinian approach to a softer and more paradoxical Taoist approach.

The term the *used future* enables us to identify outdated stories; stories about futures most commonly created by others in the past. Used futures are based on assumptions that are no longer current, meaning these old assumptions about the nature of reality have been significantly challenged by economic, ecological, technological, demographic and cultural changes, to

Table 1
Rethinking growth and the university

Issue	Assumption	Old metaphor	New metaphor	Alternative future
Climate change	Growth is good	Limitless growth	Limits to growth	Ecological healing (Lowe, 2015)
University futures	Universities need physical spaces	The quad	An app	Digital/on-line learning, widely distributed content free for all
University rankings	Hierarchical arrangements	The "top dogs" outcompeting others	Research for the "bottom billion"	Knowledge for the most vulnerable/ Pro-poor foresight

name but a few. Or in other words the concept of used future refers to people being "busy designing for a future, based on the assumption that our world would essentially stay the same" (Matheson, 2008, p. 262). Therefore, strategies based on the used future overtime become increasingly unproductive, hurtful to the individual and barriers to change for organizations. This is well known in the field of psychology, when it is commonly a task of a psychologist to assist people in changing no longer functioning narrative schemas.

But despite story always being "a critical element in mapping the human journey" (Spencer & Salvatico, 2015, p. 78) it was only in recent years that the creation of robust and novel stories has been identified as "a centrepiece within organizations, governments and social structures for building unique strategic designs, crafting dynamic and long-lasting visions, and intentionally constructing pathways for meaningful change" (ibid., p. 79). In organisational settings, write futurists Frank W. Spencer IV and Yvette Montero Salvatico (2015, p. 80):

> Stories are the personification of an organization. When processes and rules are the driving force, the organization takes on the metaphor of a machine, lifeless and inanimate. Humans are organic—we are living, breathing and often messy. We embody stories of triumph and success, shame and defeat, love and loss. When stories are front-and-center, the organization becomes a living entity made up of people rather than a machine filled with cogs and gears. We empathize with that which is alive, transferring experiences so that we can feel what others feel. In this way, stories help us to synchronize our activity, the closest thing to developing a "hive mind" within organizations.

Due to the centrality of story, the process of transforming narratives has already become "a popular format for addressing large change management, culture assessment, and organizational transformation efforts" (ibid., p. 84), including, as previously mentioned, a format for challenging used futures. Examples of used futures in organizational and institutional settings that we have come across are numerous. For policing, traditionally "maleness" and "physical strengths" were requirements for acceptance, and certainly for promotion in the police force. However, with new arenas of crime, cyber, to mention one, but as well tracking terrorists, physical strength has given way to pattern recognition. Yet policing still too often operates from the used future of hyper masculinity. For example, at a recent international policing conference, one senior federal police leader said: "I miss the days when you had to be *a six foot tall male*[5] to get into the force." Another example is related to the traditional policing security strategy based on, "driving around" to give citizens a sense that they are protected. This appears less and less useful given the big data revolution and the spread of security cameras, as police are better able to predict likely areas and times of criminal behaviour, or at the very least, identify perpetrators from CCTVs' recordings. Policing by driving around is certainly a used future: carbon intensive and a general waste of resources, and yet it continues. Likewise, in universities and schools, the factory model and requirement of surveillance ("clock-in and clock-out") is considered a used future by most professors and teachers, since learning is now more personalized, 24/7, and being "on campus" is not correlated with productivity. And yet, the narrative of the factory overwhelms the practicality of working from home and other sites. As one senior university administrator commented when asked during a workshop as to why academics should not be allowed more flexible working hours, "I don't trust them". And, "I have to be here, why shouldn't they?!" The narratives of "employees are not to be trusted" and "I suffer, so should they" override any official proclamations related to the flexibility of time and space work arrangements.

What often stops new futures from being created is that assumptions are not sufficiently challenged, or, when done so, the deeper narrative basis for the assumptions are not transformed with a new "ending" – old wine, but just in new bottles. To be potent, to become a new "meme" a new narrative has to have some power – champions (from the top, middle or bottom) and emotive energy behind it.

Along with the discovery of new metaphors, there are other factors that assist in strengthening the narrative and ensuring it is relevant to the future. For example, In *Moćne Priče*[6], traditional narratives as to how girls and women in Serbian and European literature are meant to behave are challenged through the retelling of stories. Storytelling remains the medium; endings are transformed so that instead of the girl being killed or walled, for example, she finds her freedom, or instead of the prince saving her, she finds her own salvation, or success is created through the mutuality of a community. In these stories, the beginnings may be the same, but as we move through conflicts, as we move through time, the endings change. The future is transformed through the exploration of alternative possibilities and a new conclusion and through the exploration of alternative possibilities. The next steps include students writing their own stories and taking concrete actions in the present with the goal of moving towards their own desired endings (Milojević & Izgarjan, 2014). This project (ibid.) is an example of narrative foresight in action. It consists of: (1) the deconstruction of outdated narratives, including the used futures of gender relationships; (2) the writing of new endings - of as many novel alternatives as possible; (3) dialogue about many possibilities and personal and group decision as to which alternative is desired and preferred; and lastly (4) actions in the present that are oriented toward the creation of preferred futures.

Narratives are clearly contested, with different renderings of reality leading to different strategies. For example, part of the challenge of "fixing" the global economy from the impact of the global financial crisis has been the differing renderings of the nature of the crisis (Inayatullah, 2010). For many international policymakers, the crisis showed that many individuals and nations were "living beyond their means" and austerity was the best way forward. For others, the issue was and remains that

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[5] Emphasis ours.
[6] http://www.mocneprice.com/about-storiesproject.html.

"banks are too big to fail," and thus more effective national banking regulation is needed. For still others, the real issue was "overly porous financial borders," and thus global surveillance and regulation of capital flows is required to safeguard the world economy. For still others, the issue is the "rise of East Asia –the savers" and thus a foundational challenge to the American dream and the West. For others, the issue is about "Gaia"- a shift from coal to solar, from brown to green, and thus a call for global investment in renewable energies. And finally, for many, the global financial crisis was caused by the lack of "fairness" of the capitalist system, and is early warning indicator of the transition from capitalism to a more equitable system. Some of these stories are narrow requiring technical fixes. Others are deeper requiring major adaption. And still others require a major transformation in the nature of the system itself. What is clear is that the story one uses and where on sits in that story defines the strategy one takes.

A recent study empirical study of security best illustrates how narrative frames strategy. Participants were given similar data on criminal behaviour in their neighbourhood with only the metaphor changing. When crime was defined as a beast, a statistical significant percent of participants preferred funding to go toward policing and jailing. However, when criminal activity was described using the metaphor of a virus, participants favoured funding for education and anti-poverty programs (Thibodeau, McClelland & Boroditsky, 2009). To thus paraphrase a famous quote attributed to the Roman poet Virgil[7]: we make our own destinies and our own futures by our choice of narratives. And when the world turns, it is narrative that helps us make sense of this changing shift.

5. Narratives and metaphors—the use of CLA

Along with questioning the future – disowned and used – and challenging underlying assumptions, one practical way to create new narratives is through Causal Layered Analysis (CLA). Indeed, for us, narrative foresight has developed from the application of CLA and the poststructural turn. To remind, CLA (Inayatullah, 2007 p. 55) is based on the "assumption that the way in which one frames a problem changes the policy solution and the actors responsible for creating transformation". CLA consists of four levels: litany (quantitative problems, trends, often exaggerated); social cause (interpretation given to quantitative data, i.e. STEEPLE[8] analysis); discourse/worldview (core perspectives on time, space, power) and metaphor/ myth (deep stories, collective archetypes, images).

While CLA does not privilege any of these levels (ibid., p. 56), narrative foresight clearly does focus on the deepest level. This is because in our communication with workshop participants, it has become increasingly clear to us that it is these deep stories that not only provide frameworks on what is possible but also often set limits for change. Deep stories, collective archetypes, and the (often) unconscious metaphor about the future, always mediate information presented. This is especially apparent in workshops with diverse groups of participants, or in globally more marginalised spaces. The richness of narratives and metaphors provided there, challenges the official frameworks of meaning (most commonly proposed by centres of power) and further helps explain why agreed upon strategies "do not work" (or do not work as well as they do in other places). Problematic or non-functioning metaphors are almost always based on either "used futures" or "disowned futures" (what has been pushed away, made invisible, the proverbial "elephant in the room"). The disconnection between an official vision or strategy and a particular story-metaphor that does not support it thus needs to be uncovered, if implemented strategies are to actually work. In place of an old, used or disowned narrative a new or integrated metaphor is then articulated. The final goal of this process is to help participants discover a supportive story and a supportive metaphor, better in line with their values and visions of preferred futures.

Just as CLA was developed (Inayatullah, 2004) to better negotiate diverse worldviews which lie beneath surface phenomena – thus expanding the range and richness of scenarios – narrative foresight aims to make these deeper layers of reality even more explicit and usable. Metaphors, for example, are the vehicles of myths. Myths are not platonic ideals but created through concrete historical events, from which meanings are passed down through generations. They are epistemically contextual; indeed, changes in deep stories are often one indicator of an epistemic shift (Thompson, 1971). Myths and metaphors are not best judged as true or false, but as mentioned earlier, as helpful and enabling, serving, or as misaligned, mismatched, and double-bind creating. In the CLA process, narrative in a technical sense is focused at the fourth level. However, in a deeper sense, insofar as the negotiation of reality is narrative based, one can argue that all levels to some extent are narrative based. The first two levels are more external and data oriented, while at the worldview and metaphor level, narrative is far more explicit and subjective, individual and cultural. Integration of narratives at all four levels is what gives narrative foresight more power and effectiveness.

Like narrative, metaphor itself is also recognised as "one of the deepest and most persisting phenomena of theory building and thinking" (Paprotté & Dirven, 1985). As such it is "deeply engrained in cognitive processes, social acts and verbal usage . . . metaphor in fact is a constitutive factor of all mental constructions and reconstructions of reality" (ibid., p. viii). Metaphor is most commonly defined as a "device for seeing something in terms of something else" (Burke, 1945, p. 503). It refers to the use of language to point out at "something other than what it was originally applied to, or what it "literally" means, in order to suggest some resemblance or make a connection between the two things" (Knowles & Moon, 2006). The

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[7] The quote in question is: 'We make our destiny by our choice of gods'. Even though this quote appears in several academic texts we were unable to find its exact origin.

[8] Analysis of Social/demographic, Technological, Economic, Environmental, Political, Legal and Ethical Factors.

language used is less specific and more concerned with evoking visual images; metaphor touches the heart instead of reading the head (Inayatullah, 2007, p. 56). Not uncommonly metaphor can help reveal a paradox, as well as the unconscious, often emotive dimensions of the problem (ibid.). Given that it is symbolic and figurative rather than literal, metaphors facilitate the connection between images and conceptual thought. Our understanding of things is both mediated as well as conditioned by the metaphor (Knowles & Moon, 2006). Like storytelling in general, metaphor can help convey a meaning in a more interesting and creative ways. And like storytelling or telling of longer narratives engagement with metaphors is also a powerful method of participatory futures work. This is not only because of universal human receptiveness to stories and metaphors but also because such approach is typically "a more indirect and respectful rather than prescriptive and didactic method of teaching" (Senehi, 2010 p. 112) or of conveying previously prepared content. As such it "engages people, both teachers [facilitators] and students, at the deep level of their own experience rather than through abstract or disembodied ideas" (Matheson, 2008, p. 270–271). It invites us to "connect our seemingly isolated individual experiences with those of our fellow classmates, and with larger social and cultural histories and structures" (ibid.). The very act of narration always "implies an audience, that is to say, a dialogue with another person, and it is from this dialogical relationship that new meaning may emerge" (Meira & Ferreira, 2008). Methods focused on "the narrative metaphor" (ibid.) therefore integrate "the assumption that the construction of meaning in the context of the discursive relationship between the author and potential "addresses", real or imaginary, establishing itself by its nature, as a dialogical process"(ibid.). In that way, narrative approaches allow people to "experience themselves both as autonomous individual and as members of a cultural group, and in the process often create powerful experiences of unity and belonging" (Matheson, 2008, p. 271).

6. Narrative foresight pedagogy: the process

We often ground our futures workshops by framing the process as a learning journey, focusing on multiple loop learning. To remind, zero loop learning refers to no learning at all, for example to feelings of being overwhelmed if a "zone of proximal development" (Vigotsky, 1978) is too wide or if participants have (mentally) "better things to do". Zero learning also often occurs in an organizational setting when "fresh imperatives or problems arise, yet members fail to take corrective action" (Romme & van Witteloostuijn, 1999, p. 439). Sometimes, participants attend futures workshops not due to their own interest but due to interest of their seniors within the organisational hierarchy. Their lack of interest can then tell quite a bit about the organisation itself, as it can also be a symptom of their lack of agency and/or being in charge of routine and repetitive tasks. In that instance, zero loop learning is a real possibility and it is a task of a facilitator to move those "resisters" or "disintegrators" to at least the single loop learning phase. Single loop refers to incremental learning, or one or two "take-aways" from the workshop. In organisations, it refers to "simple adaptations and taking corrective actions" (ibid.). Double loop learning involves "reframing", that is, "learning to see things in totally new ways" (ibid.). And finally, triple loop learning "entails members developing new processes or methodologies for arriving at such re-framings" (ibid.). In management studies these four processes are also referred to as "Fragmentation" (zero loop), "Consolidating" (single loop), "Transforming" (double loop) and "Co-Inventing" (triple loop) (Snell & Chak, 1998).

Narrative learning, focused on finding and creating one's own story, metaphor or archetype, starts with the double loop learning. It then aims to move participants from consolidating to transforming (by "collectively reframing problems, developing new shared paradigms or mental maps, modifying governing norms, policies and objectives" (ibid.)) and, lastly, to co-inventing. Snell & Chak (1998, p. 340) define triple loop learning or co-inventing as "collective mindfulness". Examples of activities within this third loop of learning include the movement from "brainstorming to rigorous self-critique; from serious discussion to playful banter; and from paradigm-shift to paradigm invention" (ibid.).

The pedagogical process we employ is based on moving individuals and organizations from the de facto—unexamined, taken-for-granted, often "used" future to alternative futures and then to the preferred future. It is most commonly based on the "Six Pillars" conceptual framework, which is designed to help participants (1) map, (2) anticipate, (3) time, (4) deepen, (5) create alternatives to, and (6) transform the futures that they envision. The pillars include futures methods and tools such as the futures triangle, emerging issues analysis, the futures wheel, macrohistory and the Sarkar Game, CLA, scenario planning, visioning and backcasting. Prior to using these tools to create deeper alternative futures, we begin the process by questioning the current future. This entails a series of seven questions. The questions are employed to help participants research their core question (my life story, my organization or nation in 2030, governance 2025, etc). The questions which we use to guide groups to new transformative narratives are:

(1) What is the history of the issue?
(2) What is your forecast if current trends continue?
(3) What are the critical assumptions you used in your forecast?
(4) What are some alternative futures based on different assumptions?
(5) Out of these alternative futures what is your preferred one?
(6) Which strategies can be used in order to realize your preferred future? and,
(7) What is a new narrative or metaphor that would support your preferred future?

This last question is critically important within the narrative foresight framework. Participants are asked that question because when there is no underlying narrative that can support the desired future, then it is unlikely that the desired future can be realized, since neither story nor existing cognitive frame will permit it.

After this process of questioning, the participants engage in the six pillars process. The narrative foresight work, of course, has already begun through question seven where participants articulate new metaphors to match their preferred visions. The narrative dimension is further reinforced and articulated in the fourth pillar (Deepening). Using CLA, in particular, participants deconstruct an issue through the four layers of CLA—the litany, system, worldview and metaphor – and then they reconstruct the alternative futures, either based on the viewpoint of a different stakeholder or from the perspective of their preferred future.

7. The inner narrative

Narrative foresight can be applied to external reality and to inner worlds, indeed, both interpenetrate and constitute each other. We have already more specifically discussed "external worlds" and "outer narratives" in sections 2, 3 and 4 of this article. At the individual level, individuals can use the CLA process to create their own personal new narrative. The litany becomes the words we say about ourselves over and over. The system is the behaviour rules we use to organize identity and expression. The worldview is how we map our mind, do we believe it is neural pathways, or the Freudian id, ego and superego, or the Maslow layers of actualization or the Hal and Sidra Stone (1989) approach focused on the multiplicity of selves? At the metaphorical level is "the story of our life". Through a questioning process, we can thus use CLA to create a new life story with a new life strategy, if the previous one is no longer seen as functioning or beneficial.

The challenge, as with all foresight work, is to move from fragmentation to the preferred future, the integrated way forward. By identifying the issues (the internal research question) and the double binds that restrict their solutions, individuals create alternative maps of their consciousness and then move toward a new metaphor, a new life narrative, and consequently an alternative future.

As presented elsewhere (Inayatullah and Milojević, 2015, p. 26) the questions we use to lead individuals to new transformative narratives are:

1. What are the things I say over and over about the way the external world is? What are the things I say over and over about how I feel about the world?
2. What is disowned in this process, what do I push away, which selves are seen as less important? What external behaviours in others irritate and upset up? Can this provide insight into the disowned selves?
3. What are the origins of the issue? Are there any trigger events that have created this overarching inner worldview about the ways things are or should be?
4. Is there a core metaphor that describes this situation?
5. What might be a new story, a new metaphor that can reduce or transform the double-bind?
6. How can this new metaphor be supported by behaviour and practice?
7. What new indicators or measurements lead on from this new behaviour?

These questions thus begin from the litany to the system to the worldview and then to the current metaphor. The new metaphor then is solidified by a new system and a new litany. It finds support going forward.

Take, for example, an individual who was pressed for time—stressed by decisions that needed to be made. The metaphorical transformation was from "running out of time" to "making time". The worldview switch was from a linear-leaking view of the future to an ecological view, with far more pluralism. Systemic changes included rethinking of how the day was organised including spending more time on reflection and meditation. Litany changes included not just how much got done – the mind as a check-list—but how present an individual is while doing. This is summarised in Table 2 (Inayatullah and Milojević, 2015, p.14).

As presented elsewhere (Inayatullah and Milojević, 2015, pp. 14–15), in another example, a CEO found herself to be losing efficacy. This was largely because the external world had become more complex. The story of her life that had previously worked was the tennis match. This was played on one surface. However, she was finding that now she was becoming confused as the business world appeared to be like playing on different surfaces and she was never sure which surface she would play on next. Her first new systemic shift was to develop new skill sets to play on grass, clay and hard courts: new languages, scenario planning and emotional intelligence. But the deeper shift was recovering her inner child – playing for the

Table 2
CLA on time management

	Current	Emergent
Litany	The checklist of activities	Being present while doing
Systemic	Daily chores	Meditation and reflection
Worldview	Linear	Pluralistic-ecological
Myth/metaphor	Running out of time	Making time

fun of it – and at the same time envisioning that in the long run, metaphorically, she wished to become a coach. Playing for fun required a recovery of her child self, which she had repressed as she became serious about the competitive nature of business and life. The first phase was enhancing her ability to deal with new types of competition. Phase two was moving outside of competition to "the flow", to fun.

In another case a woman used CLA to rethink marriage. While pondering if she should marry, she realized that her two core stories were in conflict (as she wanted them both, she was in a double bind) – that of freedom and autonomy (a bird in flight) with security and safety (bird in a cage). Her solution was to get married but reconstruct her story as "bird on the ledge" i.e. she would find ways to while being married keep her autonomy. At the litany and systemic level, this could mean keeping her maiden name to negotiations about accounts and other matters. The process relieved her from the "one future" binary worldview she had inherited from her parents.

In yet another case, a senior public servant in the Australia government – head of innovation – was driven by the metaphor of "looking through the rabbit hole," from *Alice in Wonderland*. For him this meant the systemic search for new models of innovation. His measures of success included the annual number of innovation strategies or projects he had initiated in government. After the questioning process, he integrated the external and internal by metaphorically becoming the rabbit. Innovation was not exclusively an external function; rather, he had to become the innovation.

Such insights at the individual level, participants frequently report, help them to restore their own individual agency and move away from cynicism and helplessness, toward renewal.

8. Working directly with metaphors

Narratives of the future can be used as a form of colonialisation through structuring fields of discourse in a process of "chronological imperialism" (Galtung, 2006). However, narratives of the future can also be used to disrupt these attempts to colonise through surfacing problematic assumptions in order to explore alternative scenarios and then move toward preferred futures.

In addition to applying full-length CLA processes we have also worked with metaphors and narratives directly in order to both "decolonise" the future as well as open up futures alternatives on a number of issues. The importance of metaphor is such that "every ten to twenty-five words spoken one metaphor is used, which is around six metaphors a minute" (Larif, 2015, p. 91). Because of the "brevity, simplicity and emotional impact" (ibid.) of metaphors, they are perhaps more consciously used by writers, advertisers and politicians and perhaps more routinely, in everyday life. In any case, they are "not just figures of speech, [but] ways of interpreting and conceptualising our world" (ibid.).

Insight into metaphors, as part of narrative learning, is also an insight into the internal and external stories of persons and organisations as well as insight into societies. Such insights help with the removal of poorly functioning schemas, which often colonise futures with detrimental visions and images. For example, a recent article by Noni Kenny (2015) shows how governing metaphors such as "us versus them", "the West versus the rest" and "society must be defended" continue to govern terrorism knowledge systems. Not only that, but there is an unquestioned reliance by theorists and decision-makers on "worst case scenarios", including "the accepted wisdom" that terrorism is "an ever-present and expanding threat"; a view which, in turn, sets the direction of counter-terrorism policy. Decolonising the future from such dead-ends and self-fulfilling narratives via the metaphor of a "maze" (Kenny, 2015) for example, disrupts problematic assumptions and opens up spaces for the exploration of alternative scenarios.

Larif (2015, p. 92) as well points out that the ubiquitousness of war metaphors in business, sport and politics naturalises (and perpetuates) "the militaristic, aggressive and competitive behaviour, values and structures commonly enacted within those domains." In Australia, Larif further reveals, positioning asylum seeker issue in terms of the metaphors of the body (refugees as potential carriers of physical and ideological "diseases"), or in terms of national disaster, crime and security metaphors, not only forecloses the futures in terms of available strategies but can have a life and death implications to real people, the refugees in question. But there are many other possible metaphors, continues Larif (ibid., p. 103) including "the provision of asylum as 'protection of the persecuted'", those of "a guardian angel, a crime-fighter/superhero, a warrior, a carer . . . a justice figure . . . [or even of a] fruit tree or flower seedlings looking for a fertile place to grow". When such metaphors are utilised, as they commonly are within human rights and refugee advocates' organisation, very different strategies and solutions emerge. For example, a group called "Welcome to Australia", in their daily postings via social media, evokes a different metaphorical reading and conceptualising (and consequently solutions proposing) of asylum seeker issue. These alternative metaphorical readings include: "different journeys, same destination", "because our future is shared", "you are welcome here" and "common people, common dreams".

Work with metaphors has also been directly utilised in a project by Milojević & Izgarjan (2014, p. 51) wherein storytelling was implemented with the goal of "promoting educational strategies which challenge the continuation of the dominator society's status quo and facilitate the emergence of alternative, progressive and socially inclusive futures". Via storytelling, and through citizenship and literature classes, several hundred children participated in a process of reinventing alternative narratives and metaphors, conducive towards nonviolent conflict resolution, gender equity and cultural diversity. This then enabled both them and their teachers to devise a whole range of strategies in order to deal with some long-standing and detrimental issues in a novel and even a fun way (ibid.).

So, whether at the level of a society, or individuals (young and old) or organisations, if people wish to create new stories (or visions) of the future, they first need to understand their existing stories and the metaphors about themselves and the

future, as well as people and organisations they seek to engage. Narrative Foresight aims to assist in that process; the ultimate goal being the shrinking of the gap between desired futures and present realities.

The final two examples are from a workshop participant who subsequently implemented insights from a narrative foresight process to a local setting. She reported that "the metaphors help[ed] the participants (and me) think deeper about the issues and discover more about their assumptions, especially, the process of unpacking, extending and perhaps modifying the metaphor":

Example A: One friend used the bowling alley as the core metaphor for her work. She felt that she was a bowling ball in a queue with her current manager in front of her. However, the manager never had a perfect score, always only hitting one or two pins. Still, he always came back and took the position in front of the queue. She was never able to get her turn. Previously, when she shared her dilemma with the manager, the conversation was about "career climbing" and "being a leader"—her waiting for her manager to leave (he is leaving soon) so that she could lead the team (as she was one of the potentials to be promoted to management). However, as she was going through the exercise, she realised that it was not about her being a leader and "climbing"; rather, it was about being part of a culture of excellence. Her exact words were "now that I think about the metaphor, I realise that I want to be the bowling ball that strikes a perfect score. However, the ideal scenario in my mind is that all the balls are constantly striking perfect scores, not just me."

Example B: Another friend said her relationship with her boss is like the earth (boss) and a star (her). She said that they were far apart and that while connected, they do not really support one another. When I probed her further about her being the star (because the friends who were there were surprised that she was the star as they had assumed the boss would be the star), she believed she was the star because she was burning bright with passion but her boss was not able to see it. She felt underutilized. She also elaborated on how she wished to be nearer to her boss (earth) but if that happened, it would be disastrous (star crashing on earth). When asked about her ideal metaphor, she used the wheel and axle (a mundane metaphor compared to earth and star), and from this she realised that while she would like to shine, it was not her priority. She was more concerned that they were working in tandem (one part affects the other).

In both cases, narrative foresight enabled openness towards more collaborative and supportive professional engagements, which previously were not possible because of the strength and the unconscious nature of the old stories the participants were living. As Larif (2015, p. 92) reminds (quoting J. Geary), "the less conscious we are of a metaphor as a metaphor, the more literal it becomes."

9. Conclusion: deconstruction and reconstruction

Narrative foresight – through questioning, the search for new stories, through the CLA process or directly working with metaphors – is both a theoretical framework and a practice. Like futures studies in general, narrative foresight seeks to investigate current modes of knowing the world, challenge detrimental and non-functioning schemas and open up alternatives. These alternatives use the future to change the present. And the story does not end – there is no static happy ending nor an "end of history" – as each new future needs to be deconstructed and reconstructed. Narrative foresight is an evolving pedagogy, a process that gives primacy to story and uses narratives to make specific strategies for change more viable. It is a tool that enables those who utilise it to become more proficient creators of their own narratives.

In one sense, narrative foresight furthers critical futures studies by linking personal and cultural, individual and archetypal, psychological and social, inner and outer. It looks at our deep stories – often unconscious and archetypical – about the future which give meaning to our actions in the present. It proposes processes and methodologies by which this dance between inner and outer, individual and collective, reality and possibility can become more elegant and more conscious. It brings story for transformation from the background to the foreground, making it more explicit. Whilst many narrative strategies within futures studies stay either implicit or "hanging in the air" – as can be the case with scenarios – the narrative foresight process ensures that the story is linked with the strategy and vice versa. It ensures that the "action plan" is iterative, based on "informed choices" that explicitly engage with narratives about alternative and preferred futures.

While these changes in narratives have so far been powerful for individuals as they underwent them, it would be beneficial to investigate if such changes lead to long-term changes in individual and collective (organisational, societal) behaviour. At this stage, we have relied on an immediate feedback given by participants to comment about the personal usefulness and organizational utility of narrative foresight approaches. The experiences they communicated to us, as well as our own personal engagement with various narratives, have strengthened our resolve to engage with the more focused, explicit and thick use of stories, myths and metaphors in order to deconstruct and reconstruct individual and collective futures. In other words, if we are to engage in a process aimed at the deeper understanding of alternative – possible, probable and preferred - futures then it is also crucial to engage with the worldviews, stories, myths and metaphors that underlie them.

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