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HIGHLIGHTS

- The special issue on metaphors in futures studies is introduced by the editors
- The editors present the role of metaphors in futures studies in a biographical context
- The articles, essays and reports in the special issue are summarized

This special issue, as might be expected in a networked world, searching for proof that collaboration can work, is edited by four of us. It began with a conversation in 2014 over bland conference food in Helsinki between Osmo Kuusi, Matti Minkkinen and Sohail Inayatullah about the need to highlight metaphors in futures research. We noted that while extensively used, they remain inadequately theorized and lacking mindfulness. Further conversations between Inayatullah and Aleksandra Izgarjan focused the issue. We introduce the special issue with short openings by each one of us, theorizing in a biographical context. These are followed by a summary of the articles, essays, and reports, written by Minkkinen. Our intent is not just to focus on metaphors in futures research, but as well to see futures research as narrative-based itself: as not just describing reality and possibility but creating new worlds, on opening up of shared pathways.

Sohail Inayatullah

Personal context

My first encounter with metaphors in futures research came from the works of Tony Judge (Judge, https://www.laetusinpraesens.org/docs/govmet87.php, 1988). He argued that we enter arenas of discourse—in this case, the governance structure and design of conferences—with a clear track laid out of how power should be distributed, clear nominations of what constitutes representation. A conference was like a train station: one got on the train and then the rest was given—the order of the speakers, the time allotted for questioning, the informal tea breaks—until the final destination was reached. He suggested that if we wished to have different conference outcomes—insights, strategies—we need to challenge the metaphor we used to organize the conference. Instead of a train station, what were some other possibilities? A caravan trip? An airport? A village circle? A forest? At issue here is not the particular alternative but the way

metaphor can be used to understand a particular given reality and then create authentic alternatives. For me, as a futurist-in-training, his research was stunning. I suddenly could see metaphors shaped and reshaped reality differently. It would be later in the works of Michel Foucault, particularly in his classic, the Order of Things (Foucault, 1973, p. XV), where he presents us with a list from traditional China on the division of animals, that I understood how metaphors could disrupt epistemology. The traditional Chinese list to us appears peculiar, indeed, even nonsensical. He uses this to alert that our own lists of what we see as real is not given but created, not set in stone but carved through particular frames of knowledge, of historical practice. These historical practices are not universal but genealogical—based on how particular frames of knowledge have evolved. And thus, to the normal list of speaker, speech, audience, room, we might throw in donkey, river, airplane or tree. It is this ordering of knowledge that again makes the present remarkable, to some extent, unreal, or differently real. This I took as then the purpose of futures studies: to challenge not just the current reality, but the ordering of current reality, how it presumes to make sense to us, and is a given. Breaking out of the ordering of things can be done in many ways—genealogy (how a particular discourse, a way of seeing reality has become hegemonic, or more real than others), questioning assumptions, creating scenarios (particularly in their ability to distance us from the present, to allow for temporal ruptures), for example. But over time, I have found that by changing metaphors, new pathways can emerge, the train station view of conferencing, for example, can be transformed to an ecological park, with many pathways or to a market place as open space technology suggests.

Metaphors disrupt

Moving from theory to practice, I remember at the World Futures Studies Federation conference in Budapest in 1990 sitting with Tony Judge as he questioned the power of the chair to control the entire paper presenting session. The chair wished for complete authority, not allowing other voices in the room to speak. He was there to make sure all the trains ran on time, and which train was first and second. Judge suggested that perhaps we should see the park as a more organizing metaphor. The chair, now irritated, said: "ok, let's go outside and sit on the ground and be like hippies—flower power, right?" He had found an alternative metaphor, story, that mocked those of us that wished to challenge his authority. Taken aback, we were unable to counter with an alternative story, nor provide systemic solutions forward. He had framed our challenge as frivolous, as no one in suits and ties—scholarship is serious business after all— wished to get our fancy clothes dirty on the grass. With no other metaphor emerging, he used his narrative backed by his authority to take us back to the train station, though minus some passengers.

Having been alerted to the power of metaphor through Judge, and later through the works of William Irwin Thompson (1971) and Joseph Campbell (1988), I sought ways in which to embed metaphorical thinking within futures methodology. This effort led to the creation of the Causal Layered Analysis approach to theory and methodology, with metaphor occupying a critical part, the deeper aspect of social and strategic change (Inayatullah and Milojević, 2015).

While there is little resistance to this approach now, in earlier days, managers and systems thinkers saw this as problematic. I remember well one meeting—a doctoral defense—where the student focused on the empirical, on the truth of the situation, challenging the metaphorical, the narrative. As the doctoral candidate remarked, "this is heavy duty research." And of course, the critical theorists in the room laughed, reminding that the "heavy duty" was a term borrowed from a series of battery commercials.

Creating reality

Insofar as language does not just describe reality but constitutes reality, metaphors do not just describe but shape and create organizational strategy. In the past ten years or so, I have facilitated nearly a hundred sessions on using metaphors to transform. For example, one organization saw itself as the "scorekeeper"—reactive, merely counting. After going through a CLA process, they changed their story to that of the "trusted expert." They saw themselves now as proactive and part of the national conversation on what should be measured. Among their first strategies was to make the data that was previously secret, open. They released endless bytes, and, of course, citizens needed the data to be interpreted by the "trusted expert." Metaphorical shifts that lead to strategic change are not without tension. With one large company, there was tension between two core metaphors. The first was that of the "men of steel" who focused on their particular commodity. The second were less tied to the commodity and more to market opportunities given global climate change initiatives. They saw their story as that of "Optimus Prime," i.e. having the ability to change, to shift. Over time, it has become clear that the former are on a "leaking oil tanker," and thus either need to gracefully sink, jump ship, or transform, that is, move to the "Optimus Prime" narrative.

There is a personal and deeply inner dimension to metaphors as well. One senior governmental analyst saw himself as a introverted, and not extending himself, challenging himself, and indeed, influencing national strategy as much as he could. His metaphor of his own life story was that of the "kiwi" bird—flightless and shy. However, this was in tension with his desire to truly make a difference to his organization and nation. Once he went through the CLA and narrative foresight (Milojević and Inayatullah, 2015) process, his new life metaphor was that of the Tui bird. Its shape allows for excellent maneuverability. It is also far more assertive. The new metaphor thus becomes his personal framework for seeing his world differently.

Another organizational leader found himself caught between competing needs for security and freedom. His metaphor for his current situation was that of a horse in a cage, trapped by the financial institution. His new emergent story was that of a wild horse, free to pursue new ventures. Concretely, this meant leaving the bank and setting up his own think-tank focused on entrepreneurship and innovation. But in the long run, another story compelled him. This was the metaphor of the unicorn. Different. Unique. While currently impossible the new narrative created a strategy where perhaps in the distant future he could create such a novel reality.

Metaphors thus create new personal and strategic pathways. They do not just describe reality but they constitute reality. They are foundational in disrupting the present, unlocking alternatives, and creating new futures.

All levels

Finally, the contribution of CLA is not just to change the metaphor, but to be alert to worldviews, systems and the new litanies. After there is a shift in story, there needs to be new ways to measure the new direction, otherwise it is seen as "just talk." And there needs to be ways to systematically support, incentivize the new future. CLA also helps create alternative futures by by bringing in different worldviews and stakeholders into the futures process. By including the "other" the resultant strategy is often more resilient and robust.

Ulimately, though by challenging the current reality - its epistemological power base, its frame of reference - CLA allows and helps create authentic alternative futures. Otherwise, even if one engages in scenarios, by not challenging core worldviews and mthys/metaphors, scenarios merely continue the present while appropriating the language of futures. CLA intends to challenge and re-create. In response to the metaphor of "lets hit the ground running," one internet meme suggests: "how about a bit of a meander." For me, what this means at the worldview level is that we move from linear reductionist approaches to life to ecological frames where there are many pathways. Systemically, this means slowing time down, personally, and in organisations ensuring that there is time for foresight, for being alert to new possibilities before we reactively decide to attack a problem (hit the ground the running). At the litany level, this means that we measure not just our force and speed, but our direction, where we wish to go.

I am thankful for the conference chair in Budapest. His ability to frame the debate for his purposes, while not pleasant, showed me the power of using narrative to create the future. I wished I had been prepared better then and offered a more effective metaphor to participants, other than the train and the train station. We hope this special issue of Futures will better prepare you in your journey to create alternative futures.

The articles and essays in this volume all offer such possibilities.

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Aleksandra Izgarjan

When I was a third grader in primary school, together with my classmates I was made to learn by heart a poem "Building of Skadar" from the Kosovo Cycle. It was one of many poems we had to learn from that cycle as it is considered a cornerstone of Serbian culture. However, this one stayed with me through the years because it filled me with terror. I remember crying as I recited it in class. It tells a story about a young woman who is walled-in alive in the foundations of the town Skadar as a sacrifice so that the town could be built. Only two openings are left for her breasts, which were necessary so could continue to nurse her baby boy for a year. As a little girl, I could not comprehend such cruelty towards a woman and a mother. Later I understood the prevalence of the metaphor of female sacrifice in patriarchal society, but it pained me to think that thousands of children in Serbian schools are still learning this poem by heart and most of them never get to discuss with their teachers the dominant discourse that underpins it. Together with my colleague and futurist Ivana Milojević, I decided to do something about it.

We wrote a book *Who is Afraid of the Big Bad Wolf? Awesome Stories for Curious and Courageous* in which we gave new versions of fairy tales and folk stories and poems (including the Kosovo cycle). We deliberately created two versions of "Building of Skadar" because we wanted to show the children that many versions of one story can be created, even if that story is presented to them as sacred and not to be meddled with. In one, the young woman challenges the norms and proves that female sacrifice is not needed by building the castle-she goes on to become a successful architect. In the other, her fairy godmothers prevent her victimization and take her to another country where she works on creating a safe and gender equal society. For me, the new versions of stories featuring brave, strong and adventurous female characters which are in stark contrast to beautiful, but passive princesses from traditional fairy tales, embody the magic of metaphors. Working with teachers, librarians, pedagogy students and children on the deconstruction and reconstruction of fairytales and myths that are an important part of our western culture, I realized the enormous reframing potential of metaphors. By giving ourselves the right to change the stories we learned as children, we were able to address violence, and gender and cultural stereotypes in Serbian educational materials and society through the creation of alternative narratives that promote diverse and peace-oriented worldviews and skills and help create alternative futures.

The application of the Causal Layered Analysis (CLA) as futures tool was especially helpful in the workshops since it challenged the participants to develop a critical approach and to examine the pervasiveness of the myths and metaphors which underpin dominant, 'colonized' futures, and to create critical distance from them (Milojević and Izgarjan, 2014). Thanks to CLA, we turned our attention to the importance of working at the myth and metaphor level in order to challenge existing, and provide alternative frameworks of meaning via non-confrontational strategies. By putting side by side different versions of the stories, we emphasized that one version of events does not exist, rather history consists of many layers of stories and their readings. Awareness of the instability of the dominant discourses is particularly relevant in post-conflict societies such as Serbian is. As members of the generations who were born in Yugoslavia and witnessed the disintegration of their country, civil wars, NATO airstrikes and rampant inflation and poverty, the workshops participants became keenly aware of the importance of the presentation and representation of master narratives through metaphors which are an integral part of any culture. Using CLA enabled them to read dominant discourses critically and recognize underlying

structures and metaphors. Creating their own versions empowered them to envision alternatives, and understand that master metaphors are social constructions and, as such, are subject to change, rather than being inexorable.

I now see the power of working with metaphors in all the fields of my work. In English and gender studies, I focus on the works of contemporary writers who deal with their different cultural, ethnic and racial origin and whose lives are marked by their navigation between different shores. They move away from nationalism by bringing into foreground varied socio-historical contexts, reshaped myths and oral histories, patriarchal and matriarchal perspectives. These varied perspectives inspired me to write a book with my colleague Diana Prodanović-Stankić titled, *Approaches to Metaphor: Cognitive, Translation and Literary Studies Perspective* in which we use interdisciplinary approach to the study of metaphors. I encourage my students to also embrace hybridity and to struggle against narrow, homogenous perceptions of culture and language, because they can be perceived as heterogeneous concepts with metaphor as immanent part of their creation.

All the articles in this issue prove that metaphors are incredibly vibrant and permeate all structures of our societies. They can be used to buttress patriarchal societies and conflicts of civilizations, in which various Others, who embody the threat, are presented as enemies. On the other hand, metaphors also have transformative potential by offering alternative future perspectives and opening space for different interpretations. I have found that working on changing metaphors is not only engaging, but also powerful and liberating. As the fictional young woman can be liberated from the walls of Skadar, we can also learn how to use stories and metaphors to adopt new perspectives which can change the way we think and free us from the bondage, the walls of restrictive old paradigms.

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Osmo Kuusi

The first time I wrote about metaphors was in the Finnish book *Strukturalismia, semiotiikkaa, poetiikkaa* (Apo et al., 1974). This happened when Eero Tarasti and I were young students in philosophy. At the beginning of the 1970s, we had started a student circle that looked for new ways of thinking from structuralism, semiotics and poetics. Tarasti was especially inspired by the structuralism of the Claude-Levi Strauss. I admired Umberto Eco based on the translation of his book "La struttura assente" (Eco, 1971; 1968) . The student circle developed into the Semiotic Society of Finland and it was the beginning of Tarasti's long and influential career in semiotics. From 2004 until 2014, he was the President of International Association for Semiotic Studies. In this issue, Tarasti discusses the futures related metaphors from the semiotic perspective.

My long career in the futures studies got the starting point from the mentioned student circle. I made my graduate work in philosophy in 1974. It was the first version of the General Theory of Consistence (GTC) (Kuusi, 1999), which is my basic philosophy of the futures research. This philosophical approach is inspired by the language based approach of semiotics and similarities defined in the terms of metaphors.

I am the "scientific polymath" who likes both rich qualitative approaches and the exact thinking and hard facts. At university, besides philosophy, I studied different kinds of research fields e.g. psychology, mathematics, physics, economics, management science, sociology and political sciences. An important source of my "qualitative education" has been my strong interest in history. On the other hand, I have also degrees in mathematics and in economics and I have made economic models. Based on my Delphi studies, I have learned to understand different technologies, especially gene technologies. My focus on futures research and on innovations studies is a kind of "synergic compromise" of my qualitative and exact sides. The stage of my career where I had the most influence was more than ten years ago when I was the scientific adviser in futures research and in technology assessment for the Committee for the Future of the Finnish Parliament.

I think that the above short description of my career is needed in order to understand my special relationship to metaphors. In the 1970s, I learned the central role of the metaphors in the human language based learning (Kuusi, 1999). In the 1980s, the focus of my interest was the metaphoric actantial model of Julien Greimas (Greimas, 1980). In the 1990s, I developed the anticipation approach of emerging technologies based on "leitbilds" or "guiding images" of innovation communities (Gustafsson et al., 2015). In the 2000, a focus of my interest has been weak signals of emerging technologies (Linturi et al., 2014). The sense making of the weak signals is based to a high degree on the metaphoric guiding images.

I appreciate the CLA and the critical school of the futures studies that is based on the challenging of conventional or "fossilized" metaphors (Inayatullah et al., 2015). This is a much discussed theme of this special issue and the personal histories of Sohail Inayatullah and Aleksandra Izgarjan nicely illustrate the strength of this approach. The articles of the Finnish futurists in this issue also look for new metaphors that challenge conventional ones. However, it is also important to realize that metaphors that people have used already thousands of years ago can challenge recent litanies. E.g. old proverbs and other sayings related to trust do include metaphors that function very well also today as is discussed in the article of Kuusi et al.

In my personal history, the metaphor of the "two wings" was the guiding image of the Finnish Ecobank initiative in the 1990s. When I was the managing director of the bank we decided to follow the "two wings strategy". One wing was the collection of the further basic capital for the independent Ecobank. The other wing was the starting of the ecological banking business in another bank. The two wings strategy is almost my life story, integrating the qualitative and the quantitative.

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Matti Minkkinen

My personal story of metaphors in futures studies is much shorter than those of the co-editors but perhaps the memory traces are all the more vivid. My first encounter with metaphors in futures research was a brief introduction to critical futures studies and Causal Layered Analysis (CLA) at an introductory futures studies course when beginning my Master's degree in futures studies at the Finland Futures Research Centre. The second spark came upon reading *Rescuing all our Futures* (Sardar 1999). I had come across many of the related theoretical strands (critical theory, post-colonial theory, social constructionism) in my previous studies in sociology and European thought, but an explicit orientation to alternative futures seemed to add much more potential to this type of scholarship.

However, the final spark that ignited my interest in metaphors in futures research was a lecture by the late Anita Rubin at the Otavan Opisto Folk High School in spring 2012. The lecture was a thorough introduction to CLA and critical futures research. Finland is far away from Australia, and therefore I was introduced to CLA via an intermediary, but this was also a strength since I experienced Anita's interpretation of the method. In particular, I still remember the metaphors that Anita used when questioning how we think about the future. We were shown a painting which depicted a group of people, all but one of whom were under an umbrella. The single person that had put down his umbrella noticed that in fact it was not raining. Another metaphor was related to change and motion: when we consider motion, whose perspective do we adopt? Do we consider it from the perspective of a human being or of an inchworm that moves extremely slowly?

Anita Rubin's lecture was the primary reason why I sought more information on CLA and eventually chose to use the method in my Master's thesis. This is the path that I am still on, since I plan to use this approach in my doctoral dissertation. In fact, it is more fitting to speak of multiple pathways than a single path, since CLA as method and the use of metaphors in futures research in general opens many possible approaches for rigorous futures research, as the articles in this special issue demonstrate.

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Summaries of articles, essays and reports

This special issue consists of diverse articles, essays and reports focusing on different facets of metaphors and futures. In this way, they do justice to the wide scope of the topic and the multiple avenues for research that it opens.

Tony Judge, a founder of the use of metaphors in futures studies, and Eero Tarasti examine foundational philosophical questions of metaphors and futurity in their respective essays. In *Metaphors as Fundamental to Future Discourse*, Judge argues that metaphors offer an opportunity to question current ways of thinking and dialogue in the context of information overload and disagreement, whether intercultural or political. For Judge, a shift of paradigm or a cognitive "quantum leap" away from linear thinking to genuine polyphony is needed in order to embody otherness and difference. Judge likens the resulting interplay of metaphors and worldviews to polyphonic music, in particular multi-part singing and musical improvisation. Each voice frames the overall discourse from a different worldview and thus challenges and enriches it.

Tarasti, as a well-known semiotician of music, also refers to music in his discussion on the connections between semiotics, metaphors and futures research. Tarasti claims that the future, like music, is one of the complicated facets of life which can only be discussed via metaphors. In Tarasti's existential semiotics, subjects are active agents that can change the future through activities driven by their values. Tarasti argues that the future is transcendental, it is 'not yet', but it touches everyday reality through empirical transcendence, that is, the virtualisation and metaphorisation of everyday experiences.

The discussions of both Judge and Tarasti evoke foundational questions for further inquiry and the essays lay important groundwork for an understanding of metaphors in futures research. Both essays argue for opening futures research beyond the familiar visual metaphors of visions and images of the future.

Kuusi, Lauhakangas and Ruttas-Küttim contribute a primarily theoretical article which examines the analysis of metaphoric texts in futures research, using trust-related metaphors and the Northern Sea Route as a case study. More specifically, Kuusi et al. investigate the connections between Causal Layered Analysis and semiotics and the use of these tools in constructing scenarios. The authors argue that metaphors may be present in each CLA layer. Like Tony Judge, Kuusi et al. suggest that a better understanding of the metaphors that are utilised may bridge cultural differences.

The empirical contributions focus on a variety of topics: policy metaphors, television drama, futuristic building projects, education in Taiwan and the Ebola outbreak. Bin Larif (with a theoretical contribution by Inayatullah) traces metaphors that are prevalent in contemporary policymaking, utilising Lakoff and Johnson's (1980) conceptual metaphor theory and Causal Layered Analysis (Inayatullah & Milojević 2015). Bin Larif's argument is that metaphors construct and frame political problems by attributing responsibility, identifying solutions and directing our thinking on social actors and relations. In particular, Bin Larif discusses war metaphors and notions of the nation as a body and demonstrates that particular ways of framing issues have serious consequences for policymaking and perceptions of agency. Similarly, Izgarjan and Djurić in their discussion of representation of terrorism in the contemporary British

TV drama *Spooks*, focus on the metaphor of the nation as the body in pain and terrorism as a disease which attacks the body and has to be neutralized through macro-securitization.

Utilising the same theoretical foundations as Bin Larif, Carbonell Perez analyses another broad field of metaphors, those relating to the brain and artificial intelligence, and argues that clashes of metaphors condition the evolution of technologies as well as our perceptions of reality. For the author, metaphors act as a framework in a two-way process of influence between technologies and everyday life.

Izgarjan and Djurić also trace dominant discourses and narratives, but their empirical focus is discourses of the future in the British TV drama *Spooks*. The authors discover three dominant discourses: the manageable future, the future as judgment and the future as apocalypse, drawing on Polak's (1973) archetypical images of the future and echoing de Jouvenel's (1967) distinction between manageable and dominating futures. Moreover, Izgarjan and Djurić suggest that the narratives in *Spooks* also contain alternative worldviews on the future which can be discovered by using Causal Layered Analysis, thus also contributing to methodological innovation by analysing a television series using CLA. The alternative worldviews present potential for changes in power relations.

The interplay between dominant and alternative futures is also present in Heinonen and Minkkinen's analysis of futuristic building projects. Heinonen and Minkkinen utilise Causal Layered Analysis to deconstruct futures-oriented messages of building projects. The authors divide messages into three groups (natural, technological and social) and construct two ideal-typical futures for each group, a 'used' future and an alternative future, based on conventional metaphors and novel metaphors, respectively. Building projects in each category suggest novel mappings and alternative future worldviews and lifestyles.

Two of the articles focus metaphors within the field of education in Taiwan. Kuo-Hua Chen reports the findings of a survey conducted among Taiwanese high-school students belonging to the so-called "strawberry generation". Metaphors of the future were a central part of the survey: the students were given a choice of seven metaphors including 'a roller coaster ride' and 'a game of dice' and the possibility to explain their chosen metaphor. Chen concludes that the students' chosen metaphors and their general outlook on the future demonstrate that they are more eager to become change agents for their preferred future than past generations. Thus Chen's article links to Tarasti's notion of subjects as active agents and the alternative futures discussed by Izgarjan and Djurić, and Heinonen and Minkkinen.

Mei-Mei Song explores metaphors in the teaching of futures studies in Taiwan. She divides her metaphors into those that describe current reality and those that can be used to transform. For example, the metaphor of the gold fish, is used by students to illustrate the short attention span of the people, which attributed to recurring societal crises. A transformative metaphor is for the library – from a *fort* that passively awaits worships to *fire* that actively passes knowledge to people. Song then presented the benefits of using metaphors in futures thinking – they can thus be used to analyze and can play a role in the transformation process.

The remaining contributions are more personal in tone. In an evocative essay, Kamara narrates the story of *Voices Against Ebola*, an awareness-raising event held in New York City which asked what will be the story of Ebola that is told in the future. Kamara asks critical questions

about the origins and treatment of the epidemic, and concludes with a hopeful new metaphor: "We are all healers under the big tree".

Running through both the theoretical and empirical articles as well as the essays in the special issue is the realisation that the study of metaphors is not a literary exercise that is irrelevant to everyday life or the 'hard' issues of economy, society and politics. On the contrary, metaphors play a key role in framing issues and thus in defining how we decide to act and play our roles in creating the future.

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