# **Enriching Intergenerational Decision-Making with Guided** Visualization Exercises

Jordi Honey-Rosés · Marc Le Menestrel · Daniel Arenas · Felix Rauschmayer · Julian Rode

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Abstract Seriously engaging with the needs, hardships, and aspirations of future generations is an emotional experience as much as an intellectual endeavor. In this essay we describe a guided visualization exercise used to overcome the emotional barriers that often prevent us from dealing effectively with intergenerational decisions. The meditation and dreaming technique was applied to a diverse group of researchers who engaged in a visualized encounter with future generations. Following the exercise,

Jordi Honey-Rosés and Marc Le Menestrel shared lead authorship.

J. Honey-Rosés · D. Arenas ESADE-Ramon Llull University, Av. Pedralbes 60-62, 08034 Barcelona, Spain

### J. Honey-Rosés

Centro de Investigaciones en Geografía Ambiental (CIGA), Universidad Nacional Autónoma de México, Antigua Carretera a Pátzcuaro 8701, 58190 Morelia, Michoacán, Mexico

Present Address:

J. Honey-Rosés (⊠) School of Community and Regional Planning, University of British Columbia, 433-633 Memorial Road, Vancouver, BC V6T 1Z2, Canada e-mail: jhoney@ubc.ca

#### M. Le Menestrel

Department of Business and Economics, Universitat Pompeu Fabra, Ramon Trias Fargas 25-27, 08005 Barcelona, Spain

#### M. Le Menestrel

INSEAD Social Innovation Center, Boulevard de Constance, 77305 Fontainebleau, France

#### F. Rauschmayer · J. Rode

Department of Environmental Politics, Helmholtz Centre for Environmental Research, Permoserstraße 15, 04318 Leipzig, Germany we concluded that a serious analysis of intergenerational conflict requires us to confront our own mortality. Also, somewhat surprisingly to workshop participants, our desire to become stewards of the planet was driven by our fear of death as well as our egoist yearning for immortality. We posit that imagining the unknown with visioning practices might increase our emotional resilience, and hence improve our ability to confront the burdens of intergenerational responsibility.

**Keywords** Climate change · Decision-making · Death anxiety · Intergenerational · Environmental responsibility · Experiential learning · Future · Generations · Management education · Visioning

When global leaders convene at the annual UN Climate Change Conference later this year, they will be confronted with a most difficult question: how should decisions made today account for the interests of future generations? Decisions with vast time horizons that surpass our own existence on this planet raise intellectual, ethical, and emotional challenges. While the research community has addressed many of the philosophical and economic complexities of intergenerational decision-making (Brennan 1995; Worrell and Appleby 2000), few have engaged with the emotional challenges associated with decisions that will affect our unborn descendants.

The climate change debate has brought issues of intergenerational decision-making into clear focus. And while there might be disagreement over the causes, impacts, or appropriate responses to climate change (Gardiner 2006; Lomborg 2007) there is agreement that decisions made today will impact future generations (Stern et al. 2006; Dunlap and McCright 2010). To analyze intergenerational tradeoffs, social scientists have developed several technical and quantitative tools (Solow 1974; Kolstad 2011). Classical decision methods offer us both quantitative approaches as well as heuristic principles to address the underlying uncertainty that surrounds decisions about the future (Hogarth 2010). For economists, balancing the needs of current and future generations largely boils down to fixing an appropriate discount rate (Howarth 2003; Scarborough 2011). The Stern Report on the economic consequences of climate change sparked a heated debate among economists regarding the appropriate discount rate for future income streams when conducting an inter-temporal cost-benefit analysis (Stern et al. 2006; Tol and Yohe 2006; Nordhaus 2007; Weitzman 2007; Dasgupta 2007) as well as the practice of deriving policy recommendations from global cost-benefit analysis (Spash 2007).

To account for the interests of future generations, political reforms have also been proposed, including mandates that would oblige democratic parliaments to include guardians for future generations in their decision processes (O'Neill 2001; Göpel and Arhelger 2010). These measures may increase fairness by mitigating some of the power imbalances between present and future generations. However they do not help decision-makers cope with the emotional challenges that arise when considering such vast time horizons. In some respects, these cold calculations and policies may even obfuscate deeply held anxieties we have about accounting for future generations in decisions made today. Therefore decision-making that spans several generations cannot be reduced to a cognitive process bounded within the framework of rational choice. Rather, we believe that reflection and decision-making that seriously engages with intergenerational tradeoffs must tap our emotional capacities as an integral part of our human judgment. Evidently, when wrapped in a strong emotional context, intergenerational decision-making is likely to provoke feelings of vulnerability, fear, regret, remorse, guilt, contempt, or nostalgia (Rosenberg 2001). These fears and phobias, held by researchers, policy makers, and business leaders alike, are feelings that must be confronted to deal effectively with intergenerational tradeoffs (Jonas 1984). Failing to engage with strong emotions is a missed opportunity for insight and enlightenment (Whiteman 2010).

Most sustainability challenges are comprised of intergenerational tradeoffs: our energy use, our waste management, our travel decisions, our food system, and even our choice to have children. These decisions invoke multiple concerns of both efficiency and fairness (Konow 2003). Intergenerational conflicts also arise within many businesses and organizations (Hernandez 2012; Joshi et al. 2010). This is especially true for leaders of global organizations who hold the power to change the course of planetary processes. But even for leaders in small- and medium-sized organizations, they often must make decisions that have long-term consequences for their organization that will outlast their tenure (Wade-Benzoni 2002a). Thus leaders of any organization, large or small, would benefit from learning to navigate intergenerational decision-making.

As social scientists interested in intergenerational decision-making, we organized a workshop that brought together researchers in the fields of economics, psychology, philosophy, management, decision sciences, and environmental planning. The workshop was part of research seminar on intergenerational decision-making organized by ESADE Business School in Barcelona, and in collaboration with Pompeu Fabra University and the Autonomous University of Barcelona. The goal of the workshop was to exchange knowledge, ideas, and research being conducted on the subject of intergenerational decision-making. Participants came from multiple fields but were not necessarily experts on the subject of intergenerational choice. Four invited participants presented papers in economics, management, and philosophy.

The workshop brought together 18 participants from five countries: France, Germany, Spain, the United Kingdom, and the United States, for one and a half day. Most participants were professors, while a few were Ph.D. students and one was a practicing consultant. We acknowledge a likely bias in our group since the mere participation implied an interest in the subject. The workshop was led by three facilitators, [Arenas], [Le Menestrel], and [Rode]. There was no fee to participate and those who came from abroad had their expenses paid.

The workshop differed from traditional research gatherings by providing an opportunity to reflect, meditate, and experience the emotional and spiritual dimensions of intergenerational choice. Experiential learning has been known to enrich the creation of knowledge through transformational experiences (Kolb and Kolb 2005, 2009). Experiential learning can be successfully used by professors to foster learning among their students (Klimoski 2005). Thus we sought to develop an experiential process that would foster faculty development and help advance their research agendas on intergenerational decisionmaking.

Our meeting began with an unexpected guest. During the classical round of introductions, one of us, [Rauschmayer], introduced the workshop participants to a woman named Ming Xu—born in Inner Mongolia, China, in the year 2150. [Rauschmayer] invited us to sit in Ming Xu's chair at some point in the workshop to look at ourselves from the future. [Rauschmayer] told us that Ming Xu was participating in our meeting to understand our views on intergenerational decision-making in the beginning of the 21st century. This

invitation was designed to help participants view our deliberations from her perspective and make the vague notion of "future generations" more specific and concrete.

As [Rauschmayer] introduced us to Ming Xu, all while speaking to an empty chair, an awkward feeling spread across the room and most of us forced smiles or fidgeted. Our discomfort with this introduction to Ming Xu reflected our estranged relationship with future generations and revealed a wider unease, sometimes tainted with guilt, which arises when thinking about future others. Ming Xu's biographical details made it even more difficult for the workshop participants to relate to her life. While the introduction of Ming Xu caught participants and workshop organizers by surprise, it proved to be a useful way to invite participants to think about intergenerational tradeoffs from the perspective of a future person. Several participants referred to Ming Xu in our discussions, although only a few moved to sit in her chair to explore her perspective or to speak on her behalf. In retrospect, we found that the introduction of Ming Xu was effective in capturing the attention of workshop participants, and eased the way for the visualization exercise the next day.

Seriously engaging with the needs, hardships, and aspirations of future generations is an emotional experience as much as an intellectual endeavor. This emotional aspect of intergenerational decision-making requires us, as researchers, business leaders, or policy makers to enrich or transcend our objective models, predictable equations, and rectilinear thinking. Emotions are intrinsic to ethical decision-making (Gaudine and Thome 2001) and to learning processes (Fineman 1997). Their influence on decisionmaking has been recognized in economics (Frank 1988; Elster 1996) and in the cognitive sciences (Damasio 1994). The ability to engage with our emotions is also an essential skill for transformational leadership (Rubin et al. 2005), and leadership development programs that include emotional or conscious-raising experiences are highly effective at catalyzing personal transformation (Mirvis 2008; Pless et al. 2011). Especially within the field of sustainability, scholars have called for pedagogical strategies that allow students and practitioners to engage emotionally with their education (Omann and Rauschmayer 2011; Shrivastava 2010).

At our workshop, the conversation on intergenerational decisions quickly turned to the emotionally charged topic of death, mortality, and legacy. We found that a serious analysis of intergenerational conflict required decision-makers to confront their own mortality. Thinking about how our choices will impact future generations elicits a reflection on what the world will be like when we are gone. According to Terror Management Theory (TMT), individuals react defensively to the prospect of death (Becker 1975; Pyszczynski et al. 1999), and might exhibit denial or

distal defenses that enhance one's own world-view or increase outgroup antagonism (Wade-Benzoni and Tost 2009). When TMT is connected to the threat of climate change, Dickinson (2009) notes that "terror management theory predicts that we will focus our attention and resources on discovery and mitigation for global climate change at the expense of actions that will stop the process from occurring in the first place" (Dickinson 2009, p. 34).

Research has shown that reflecting upon our own death may help us develop stronger bonds with future generations (Wade-Benzoni 2002b). And experiments suggest that when individuals are primed with "death-thoughts", they are more likely to be generous with future generations (Fox et al. 2010; Wade-Benzoni et al. 2012). Legacy motives can be strong, trumping short-term incentives for immediate well-being and prompting intergenerational giving or sacrifice (Fox et al. 2010). Interestingly, the fear of leaving a negative legacy may be more powerful than the desire to leave a positive legacy (Fox et al. 2010; Wade-Benzoni et al. 2010; Wade-Benzoni et al. 2010).

In our own conversation, the responses we heard to questions such as, "How does thinking about your own death affect your attitude toward future generations?" lead to answers consistent with the findings from the academic literature. Participants suggested that our desire to become stewards of the planet was closely related to our fear of death as well as our egoist yearning for immortality, in line with what theorists have proposed about egocentric tendencies in intergenerational contexts (Wade-Benzoni et al. 2008; Fox et al. 2010). The combination of egoism and altruism demonstrated the emotional complexity of intergenerational decision-making. When thoughts of our mortality lurk in the background, feelings become intertwined, with both selfishness and selflessness influencing our reasoning (Wade-Benzoni and Tost 2009). In the context of ethical intergenerational choices, we suggest that the ability to understand and disentangle the different sources of our motivations fosters emotional maturity, and developing these skills is essential to address problems that will outlive us.

To enrich our reflections about intergenerational decisions with an experiential dimension, [Le Menestrel] led us through a guided visualization exercise in which participants engaged with future generations though an imaginary encounter and conversation. This "day-dreaming" method has been used in experiential teaching sessions with business executives (Hoare 2012), and is related to other "guided visualization" techniques that envision the future in education (Bateman 2012; Hicks 1996), sports (Porter and Foster 1990), clinical psychology (Rogers et al. 2012), or indigenous cultures (Jennings 1995). These meditation exercises are designed to help us access consciousness levels beneath the cognitive realm with an enhanced emotional range (Sparrow 2008).

[Le Menestrel] began by describing the intent of the visualization exercise. In this case, the intent was "to meet a descendant or future being and ask about his or her needs with respect to our current decision-making". Participants were invited to reformulate this proposal in their own words, so as to orient their dream toward a personalized intention. Next, participants were invited to sit or lie down in a comfortable position and close their eyes. Supported by a musical composition, the guide invited participants to imagine a place where they felt safe and comfortable and then recall their intention. A few suggestions were made to help visualize the encounter. Participants were encouraged to be attentive to their senses so as to enrich the experience with an emotional dimension. Then the participants were invited to engage in a conversation with the person they met. It was suggested to ask questions such as "Who are you?" or "What are your needs?" The visualization exercise lasted approximately 20 min, after which, participants were invited to terminate the encounter and return to the present reality in time and space.

After being led through the dreaming encounter, we held a debriefing session to share what we saw and the messages received. We used a written exercise and role-play to review what we saw. Participants had mostly positive experiences visualizing their encounter with members of future generations, and described the experience as both "humbling" and "emotionally liberating". Yet they also shared surprising messages. For instance, participants shared recommendations to be less concerned about the future and to not worry in excess about the welfare of future beings. For many this was unexpected. To some extent, the deep meditation on the future *relativized* certain aspects of the present, including reducing the importance we attribute to our own wellintended behaviors. Our debriefing session concluded that caring about future generations should not cover-up current wrongdoings. Also somewhat counter-intuitively, our group suggested that the greatest gift to future generations might be doing well to those who surround us today. Of course, how we treat contemporaries affects the legacy we leave for the future. But we realized that it is not necessary to make burdensome sacrifices for distant generations if we succeed in creating a better society for the next generation or overlapping generations (Gosseries 2001; Arenas and Rodrigo 2013). By helping foster a more just and sustainable society in the near future, we are also more likely to support distant generations (Arenas and Rodrigo 2013). Past, present, and future societies each inherit specific social values and material conditions. This suggests a degree of path dependency between generations and a cumulative character to social norms and conditions. Thus our most effective strategy for helping distant generations may be through our active support of near and overlapping generations to reorient them toward sustainability.

The visualization exercise allowed us to rethink our place in this world and the impact we might have on the future. While it would be inappropriate to overgeneralize based on the limited experience of this workshop, we posit that imagining the unknown with visioning practices might increase our emotional resilience, and hence improve our ability to confront the burdens of intergenerational responsibility. Visualization and meditation exercises may serve to broaden our sense of temporal depth, and allow us to contextualize decisions and consequences across greater time horizons (Bluedorn et al. 2006). Imagining the future has also been identified as a catalyst for creative thought and problem solving (Byrne et al. 2010). Thus, guided visualization exercises are a promising method to prepare ourselves for decisions that span generations, and may offer an innovative pedagogical format to teach business ethics (Leclair and Ferrell 2000) or decision-making more generally. In science, business, or public policy, but also in our personal decisions, experiencing the emotional complexity of intergenerational tradeoffs may lead to stronger leadership, transformative learning, and more ethical decisions. Mastering these skills today will help us construct a better future tomorrow, long after our names have been forgotten.

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