

Envisioning New Futuring Models: Past, Plurality, and Positionality

Carey, Hillary^{*a}; Arredondo, Rachel^b; Bansal, Mihika^a; Costes, Christopher^a

^a Carnegie Mellon School of Design, Pittsburgh, PA, United States

^b Carnegie Mellon Human Computer Interaction Institute, Pittsburgh, PA, United States

* HAC@andrew.cmu.edu

Far-future visions help align people toward positive societal change. Yet the most prominent icon of design futuring, the Voros Cone, is inadequate for social equity contexts. This workshop will draw from critical scholarship to critique the popular futures cone model and invite participants to remake tools and icons for futuring in ways that seek to shift futures practice. Our research project examined the ways that racial justice organizations describe the futures they are working toward. What we found reveals shortcomings in the futures cone: the past must be acknowledged and there are multiple, plural experiences of the present. In this workshop, we will challenge design tools that erase the past and assume a universal perspective by imagining new futures models. We will look to approaches that acknowledge history and clarify whose present is centred and cared for.

Keywords: *design futures, social justice, design justice, decoloniality*

1 Introduction

Creating visions of better futures can be a leverage point for change. Such visions help people to understand the outcomes of the difficult work towards making significant transition happen—whether shifting to new sources of energy, ending police violence, or increasing access to democracy. Emerging practices in design that seek to tackle complex systems change, such as Transition Design, Autonomous Design, and other socially oriented practices, incorporate tools for futuring. These communities of practice seek to contribute to significant societal change through new modes of designing (for example: Irwin 2015, Manzini 2015, Escobar 2018, Ortiz Guzman 2017, Costanza-Chock 2018).

Significant social and cultural change requires ways to make change seem possible and worthwhile. Futurist Jose Ramos describes the power of visions this way: “Foresight can inspire a sense of social responsibility and impetus for social action, at both political and personal levels” (2017: 825). Sociologist and futurist Francis Hutchinson asserts, “Our images of the future and those of our

children play a crucial part in what we think is real or realisable, what we feel is worth doing or not worth doing” (1996:3). Social justice advocate adrienne maree brown advocates for both science fiction worldbuilding and visionary fiction to help us all imagine the world we want to build. “If we accept the scientific and science fiction premise that change is a constant of this universe, then it becomes important that we learn to be in right relationship with change” (2017:37). Clarity and communication of what's possible is part of the work of change-making.

Design futuring can engage ideas about ideals to clarify long-term possibilities in work on social change. Shaowen Bardzell, in “Utopias of Participation” (2018), proposes that we cannot shy away from Utopian thinking because that would limit our impact and our ambitions for change. Utopia Studies posits that utopian ideals about society tell us about what matters to us today and we should use such ideals as *incomplete* and *interpretable* concepts to serve as inspiration and direction (Levitas 2013). When we imagine long-horizon futures, we can clarify ideas about the world we want to achieve, without detracting from it with current barriers. Thinking long-term and imagining the future worlds we want to create “disrupts the taken-for-granted nature of the present” (Levitas 2013:4). While a realistic understanding of past and present is needed to make change, it is possible that the current challenge occludes our vision of what we truly want, and what can be gained.

However, the dominant speculative futuring practices in design have shortcomings when it comes to grappling with ideas in a non-colonizing and non-oppressive way. Some of these tools and approaches have been developed without a social justice lens and may not be fully appropriate for working in a truly liberatory way. In particular, to imagine the future of racial justice, the popular Futures Cone falls short of what’s needed. This shortcoming became all too clear when we examined how racial justice organizations describe the just futures they are working toward. These descriptions reveal how important it is to acknowledge the oppressions of the past and to clarify what is true, for whom, in the present day. For these organizations, the past still plays a crucial role in shaping their futures and in the positioning of their present. Yet the Futures Cone, as depicted by designers Dunne & Raby (2013), implies a singular present and overlooks the past. While this cone allows for many future possibilities to be rendered, such future visions will begin from a limited viewpoint of the present and assume that the past is not a part of what comes next.

In this workshop we will draw on that work to inspire participants to reflect on their own connection to time and to reimagine visual models to guide their personal design practice with futuring. Several scholars have explored more pluralistic perspectives toward the future. We will share examples from our research project into how organizations describe the futures they want to create as well as highlights from critical futures scholars who have explored visual representations of alternative futures.

2 Research Project: Mapping Current Futures

To begin to understand how people outside of academic spaces and design practice are making use of future visions, we examined the communication material from fifteen racial justice organizations. The content available on their websites offered a wealth of insight into the concerns and passions of people working on systems change on the ground. For fifteen organizations, we collected all of the text on their websites that contained ideas about the future they are working to build, hoping to see,

or aiming to be part of. The descriptions varied greatly. Two examples include: “to enable everyone, especially people of colour, to be economically secure, live in healthy communities of opportunity, and benefit from a just society” (Policy Link), and this statement which focuses on ending race as a social construct: “...to create and nurture a new personal life story, a new community story, a new organizational story – a whole new race narrative” (New Detroit).

The futures that these organizations describe as the outcomes of their justice work are not radical or unfamiliar. In fact, they are often very similar to today but accessible to more people, making what is true for some true for everyone. The media advocacy organization Color of Change describes their future world this way: “to create a more human and less hostile world for Black people, and all people.” And the southern organization, SONG, paints their world this way, “Our work is about transformation to a just, fair and liberated society that meets the needs of its people.” To understand these descriptions as futuristic we must acknowledge that the present is very far from “just and fair” for many groups of people.

To understand the unequal present-day experiences, and to imagine a fair and just future, many organizations look to the past. Policy Link, like many, uses the language of America’s unfulfilled promises: “Unlocking the promise of the nation by unleashing the promise in us all.” The NAACP references this directly: “A chance to live the American Dream for all. Every person will have equal opportunity to achieve economic success, sustainability, and financial security.” The extension of the America’s promise for safety, access to health, and the opportunity wealth for all people is the priority for most of the future visions in the racial justice organizations that we studied.

Looking to these organizations for inspiration revealed that much of the hope for racial justice in the future is based on fulfilling promises of the past and acknowledging the plurality of experiences of the present. These are two things that depictions of the popular Futures Cone do not accommodate. Designers have adopted the Voros Cone (Hancock & Bezold 1994; Voros 2003, Dunne & Raby 2013) to map the many ways a present might unfold into different types of futures. However, this model fails in helping designers see experiences and perspectives of the past that might dramatically shift the trajectory of the future. Nor does it ask designers to reflect on whose present is used as a starting point and how other present experiences might differ.

In their Equity Manifesto, the organization Policy Link explains the need to balance multiple perspectives on time at once: “It requires that we understand the past, without being trapped in it; embrace the present, without being constrained by it; and look to the future, guided by the hopes and courage of those who have fought before and beside us.” Not only do the organizations we studied consider the past, but their actions in building these futures are directly involved in reconciling it. And when we work with multiple, plural, present-day experiences in futuring, we must look to the past to understand how we got here. What are the structures of history that need to be reckoned with to imagine new futures?

3 Critiquing the Futures Cone

As we seek ways of futuring that hold an understanding of plural current worlds and the histories that have led to present inequities, the Futures Cone is inadequate. The cone-shaped model was first

proposed for a World Health Organization publication in 1993, and then made more available in a 1994 publication by the same authors, Hancock & Bezold. It serves a useful purpose in Futures Studies to switch our thinking from “predicting the future” toward understanding that there are always multiple possible futures. Futures strategist and professor, Joseph Voros, updated the graphic and acknowledged it as “an adaptation and extension” of the previous work. Speculative designers Dunne & Raby simplified the diagram and brought it to a design audience in 2013. They credit Stuart Candy with introducing them to the diagram by Voros and say, “We were very taken by this imperfect but helpful diagram and adapted it for our own purposes” (2013:3). With each iteration, the depiction of the “present” becomes narrower, until Dunne & Raby bring it to a single point. Which is aligned with the lack of diversity and plurality throughout their book (see Tonkinwise 2014).

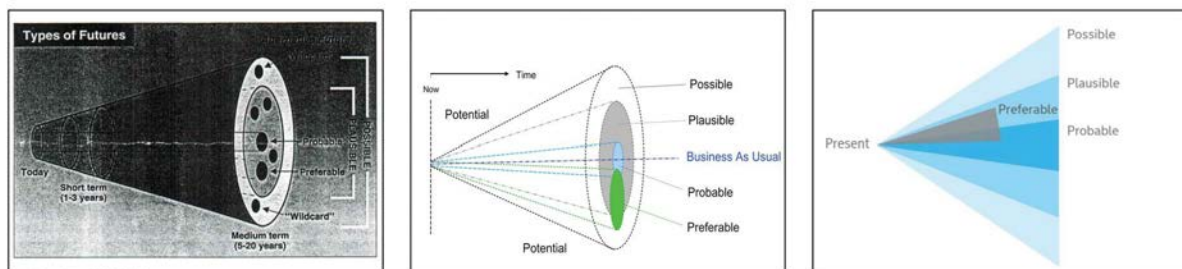


Figure 1. A brief history of the Futures Cone diagram: Hancock & Bezold (1993), Voros (2003), Dunne & Raby (2013)

We draw from decoloniality scholars to imagine tools for futuring that break free from a settler colonial perspective of only One World World (Escobar 2011) that prioritizes one privileged perspective of the present and future over the lived experiences of others. In our current world, situated in the contexts of modernity, capitalism, patriarchy, and whiteness, it is easy to assume existence within this world is a neutral, shared experience (de Oliveira & Martins 2019). However, there is no single everyday experience and to assume universality when designing visions will reduce the inherent intricacies that exist in the plurality of lived experiences. “The single-point origin of time also implies a shared present, which can obscure complexities of historical context as well as the diversity and situatedness of presents” (Kozubaev 2020). Additionally, social impact designers need to recognize that current worlds are not equitable. When looking at the futures cone of alternative visions, while the racial justice organizations’ visions of the future exist in the possible layer, the plausibility and probability of their visions are different based on their current everyday.

4 New Perspectives

Beyond extending our linear view of the future to acknowledge the past and present, decolonization scholars question deeper assumptions about time and futures. They offer additional inspiration to challenge and disrupt how we think about our connection to the future.

4.1 A Plurality of Perspectives

In *Calling for a Plurality of Perspectives on Design Futuring: An Un-Manifesto*, authors Howell et al. call attention to the Eurocentric ideals within which the futures cone was created. They offer a critical lens, highlighting the way the current cone poses time only as a linear and progressive entity, not accounting for other ideas. They also question how the cone displays the present as a dot, a

representation which flattens the complexities of current lived experiences. Additionally, the lack of acknowledgement of the past represented in the cone at all. With these critiques, they pose five new perspectives: Parallel Presents, “I Am Time,” “Epithelial Metaphors,” the “Uncertainties Cone,” and “Speculation.” All challenge our assumptions of time.

4.2 Worlding beyond the “end of the world”

Mitchell and Chaudhury (2020) point to a tendency in apocalyptic narratives that warn of dire consequences that “are motivated not by a general concern with futures but rather with the task of securing *white* futures” (1). These scholars from the field of International Relations (IR) challenge habits of using future visions in their field that can also offer sound advice for designers. Too often future stories are structured to seek to preserve Western/European ways of life, without attention to the many ways of life that have already been threatened, worlds that have already ended. These narratives assume one primary world and give little attention to the many Other ways of life that have, and are currently thriving or struggling, outside of dominant systems. We must question what it is we are trying to keep alive— emancipatory opportunities, or a continuation of supremacy and privilege?

Mitchell and Chaudhury suggest that a stronger approach to using future worlds as motivators for change is to practice “plural imaginaries, which contest and perforate the boundaries of mainstream (IR) concepts such as ‘humanity’, ‘agency’, ‘governance’, ‘threat’, and ‘harm’” (2020:2). Our envisioning practices can be stronger and more equitable if we draw from multiple sources of world-building and constantly challenge our assumptions about whether and how dominant systems persist.

4.3 Infrastructural Speculations

Speculative futures as a practice often centers around the design of specific artifacts with the conversation focusing on the design and implementation. This approach often fails to consider the social, political, and environments these artifacts would require, and the implications at this broader scale. In *Infrastructural Speculations: Tactics for Designing and Interrogating Lifeworlds* authors Wong, Khovanskaya, Fox, Merrill, and Sengers propose eight tactics to build a holistic understanding of the implicit, underlying environmental and structural forces at play in the creation of speculative artifacts.

These tactics focus on building “lifeworlds” through an application of infrastructural perspectives to the design of speculative artifacts. An infrastructural perspective shifts the critical focus from the artifact itself to the interrogation of what is needed to support that artifact. By centering on the broader forces, designers can build a more nuanced understanding of the speculative future. This lens helps designers and practitioners develop methods for building speculative artifacts with rich “lifeworlds” that reflect the plurality of human experience and the systems that affect those experiences.

4.4 Expanding Modes

In *Expanding Modes of Reflection in Design Futuring* (2020) Kozubaev and co-authors developed five reflective modes. Each of the five modes of reflection are “neither collectively exhaustive nor mutually exclusive.” These modes are: (1) Designerly formgiving, its specificity and experiential qualities, (2) Attending to temporal representations, (3) Positionality: futuring from

somewhere, (4) Engaging with the real world, (5) How design futuring generates new knowledge. The tools offered at the end of each of these modes take the form of questions meant to guide readers in investigating that reflection. While each mode addresses different elements of possible reflection within design futures research, the authors propose that all of them can be used to analyse, articulate, and generate new ideas.

These varied perspectives start the needed conversation on how to decolonize our connections to the future, embrace diversity, and in turn de-centre the Eurocentric perspectives. They open the door for diversity in who is involved in futuring and the methods they choose to use.

5 Workshop Structure

This workshop seeks to provide creative fodder for reimagining visualizations of how we intend to use futuring perspectives in our work. Interactive modules will begin with presentations by the facilitators, move into breakout rooms to give participants a chance to talk with others about time scales and positionality, then into quiet individual time to sketch, and finally sharing sessions to learn from each other's unique and creative perspectives.

5.1 Expected participant profile

This workshop will provide creative space for participants to experiment with re-defining how we orient ourselves toward ideas about the future. Anyone from the community is welcome to participate. No specific artistic skills are required. There will be moments where we are asked to talk about our perspectives, listen attentively to others, and make visual representations of ideas (which can be done as simply or elaborately, digitally, or physically as you like). No previous knowledge about futures studies or social justice is required. Participants must be willing to acknowledge that structural oppression is a current and ongoing harm experienced by people around the world and be able to listen and talk about possibilities for more equity.

5.2 Workshop Outline

3 hours

1. Welcome, goals, introductions, warmup
2. METAPHORS
 - a. Small groups: Create and share metaphors about time
 - b. Short presentation: learnings from racial justice organizations and the futures cone
 - c. Sketching: Adapt your metaphors into a tool for futuring
3. LIVED EXPERIENCE
 - a. Short presentation: decolonizing futures perspectives
 - b. Interviewing in pairs, sharing in small groups: Ways of perceiving time
 - c. Sketching: Adapt your perspective into a tool for futuring
4. CONCLUSION
 - a. Possible outputs: personal frameworks, a gallery, other ideas
 - b. What questions remain? What more to investigate?

5.3 Facilitator Bios

Hillary Carey is a Designer and Ph.D. researcher. She studies how the wisdom of anti-oppression work can inform new approaches in design, and how designing can support the work of anti-racism. Recent publications include two conference papers: Anti-Oppression Mindsets for Collaborative Design (2020) and Fictional, Interactive Narrative as a Foundation to Talk about Racism (2020). With 15 years of experience teaching both in business and college classrooms, Hillary loves to work alongside people who are engaging with creative challenges. As a white, cis-gendered woman working on topics around racism, Hillary is always practicing ways to de-centre whiteness, learn from different standpoints, and create spaces for all participants to share their perspectives.

Rachel Arredondo is currently a Master's student in HCI at Carnegie Mellon University. As a first-generation Mexican-American, she is creating equitable and inclusive design futures. She participates in the Anti-Bias Learning Committee and has worked with the Actional Futures Toolkit in her previous work. Rachel completed a degree in Digital Arts and Professional Writing from the University of North Carolina. After graduating, she lived in rural Japan for three years, teaching English. As one of the founding members of the design team at Calendly, she led talks and workshops on creating inclusive design and team culture. In her professional and academic work, she blends these experiences into actionable methods and practices.

Mihika Bansal is a senior at Carnegie Mellon University, where she is majoring in Design and minoring in Environmental and Sustainability Studies. During her time at CMU, Mihika has led two independent research projects about facilitating systemic change for diversity, equity, and inclusion related issues on campus, and received the Victor Ng Design Impact Award for her work. As an Indian-American, she also seeks to start conversations about decoloniality & inclusivity in the design field. Through her education and projects, she is working to use the power of good design and research to create positive social, economic, and environmental changes that will ultimately lead to more sustainable future societies.

Christopher Costes designs experiences, services, and strategies that prioritize people, innovation, and inclusive futures. With 7 years of experience, he's led design efforts across a number of fields, from mobile dating apps to legal technology driven by AI. Across these experiences Christopher has used design to communicate and create understanding through complexity, leveraging both creative and analytical thinking. He holds a Bachelors in English from UC Berkeley and is currently finishing a second Design Masters from CMU. He is currently working on a thesis examining how designers might use other ways of knowing alongside traditional scientific analysis.

6 Referencing

Acknowledgments. After being accepted, authors can put their acknowledgments here before the references. Acknowledgements can include information about grants, awards, or other types of funding that you have received to support your research.

References

- Bardzell, S., 2018. Utopias of Participation. *ACM Transactions on Computer-Human Interaction*, 25(1), 1–24.
- brown, a.m., 2017. *Emergent strategy: Shaping Change, Changing Worlds*. AK Press.
- Carolina, N., Weimar, B., Schulte, B. F., Holroyd, A. T., & Eden, G., 2021. Calling for a Plurality of Perspectives on Design Futuring : An Un-Manifesto.
- Color of Change. (n.d.). <https://colorofchange.org> [Accessed on January 15, 2021]
- Costanza-Chock, S., 2018. Design justice, AI, and escape from the matrix of domination.
- de Oliveira, P. J. V., & Martins, L. P. D. O., 2019. "Designer/Shapeshifter: A Decolonizing Redirection for Speculative and Critical Design." *Tricky Design: The Ethics of Things*. Ed. Tom Fisher and Lorraine Gamman. London: Bloomsbury Visual Arts, 2019. 103–114. Bloomsbury.
- Dunne, A., & Raby, F., 2013. *Speculative everything: design, fiction, and social dreaming*. MIT press.
- Escobar, A., 2011. Sustainability: Design for the pluriverse. *Development*, 54(2), pp.137-140.
- Escobar, A., 2018. *Designs for the Pluriverse*. Duke University Press.
- Hancock, T. and Bezold, C., 1994, March. Possible futures, preferable futures. In *The Healthcare Forum Journal* (Vol. 37, No. 2, pp. 23-29).
- Howell, N., F. Schulte, B., Twigger Holroyd, A., Fatás Arana, R., Sharma, S., & Eden, G., 2021. Calling for a Plurality of Perspectives on Design Futuring: An Un-Manifesto. In *Extended Abstracts of the 2021 CHI Conference on Human Factors in Computing Systems* (pp. 1-10).
- Hutchinson, F., 1996/2005. *Educating beyond violent futures*. Routledge.
- Irwin, T., 2015. Transition design: A proposal for a new area of design practice, study, and research. *Design and Culture*, 7(2), pp.229-246.
- Kozubaev, S., Elsdon, C., Howell, N., Søndergaard, M. L. J., Merrill, N., Schulte, B., & Wong, R. Y., 2020. Expanding Modes of Reflection in Design Futuring. *Conference on Human Factors in Computing Systems - Proceedings*.
- Levitas, R., 2013. *Utopia as method: The imaginary reconstitution of society*. Springer.
- Manzini, E., 2015. *Design, when everybody designs: An introduction to design for social innovation*. MIT press.
- Mitchell, A., & Chaudhury, A., 2020. *Worlding beyond 'the' 'end' of 'the world': white apocalyptic visions and BIPOC futurisms*.

New Detroit. (n.d.). <https://newdetroit.org> [Accessed on January 15, 2021]

Ortiz Guzman, C.M., 2017. equityXdesign: Leveraging Identity Development in the Creation of an Anti-Racist Equitable Design Thinking Process (Doctoral dissertation).

Policy Link. (n.d.). <https://policylink.org/> [Accessed on January 15, 2021]

Ramos, J., 2017. Linking Foresight and Action: Toward a Futures Action Research. In *The Palgrave International Handbook of Action Research*. Springer.

Simon, H.A., 1968. The sciences of the artificial. MIT press.

Southerners On New Ground (SONG). (n.d.). <https://southernersonnewground.org/> [Accessed on January 15, 2021]

Tonkinwise, C., 2014. How We Intend to Future: Review of Anthony Dunne and Fiona Raby, *Speculative Everything: Design, Fiction, and Social Dreaming*. *Design Philosophy Papers*, 12(2), 169–187.

Voros, J., 2003. A Generic Foresight Process Framework. *Foresight* 5(3): 10–21.

Wong, R. Y., Khovanskaya, V., Fox, S. E., Merrill, N., & Sengers, P., 2020. Infrastructural Speculations: Tactics for Designing and Interrogating Lifeworlds. In *Proceedings of the 2020 CHI Conference on Human Factors in Computing Systems* (pp. 1-15).