

ourselves to this common life of no guarantees. We collectively face the imaginative challenge of navigating a journey without a detailed map of where we wish to travel. Collaboratively surviving in precarious times, and we would add thriving for all species, requires curiosity (Tsing 2015) and a provisional, reflexive and anticipatory approach to place change. This requires a deepening awareness of and commitment not only to place, but also to hope. Like Solnit (2016), our view of hope is not a belief that everything will be fine; it is about developing broad perspectives with specific possibilities: ‘hope locates itself in the premises that we don’t know what will happen and that in the spaciousness of uncertainty is room to act’ (p. xiv). In this book, we have explored the spaciousness of the uncertainty created by global challenges, and in that spaciousness we can (re)discover new possibilities and emergent senses of place that work together to provide a hopeful path forward.

References

- Armitage, D., Berkes, F., Dale, A., Kocho-Schellenberg, E. and Patton, E. (2011) ‘Co-management and the co-production of knowledge: learning to adapt in Canada’s Arctic’, *Global Environmental Change*, vol. 21, no. 3, pp. 995–1004. <https://doi.org/10.1016/j.gloenvcha.2011.04.006>
- Bartel, R. (2014) ‘Vernacular knowledge and environmental law: cause and cure for regulatory failure’, *Local Environment*, vol. 19, no. 8, pp. 891–914. <https://doi.org/10.1080/13549839.2013.798636>
- Bauman, Z. (2013) *Liquid Modernity*, Chichester, Wiley.
- Berkes, F., Colding, J., and Folke, C. (eds) (2008) *Navigating Social-Ecological Systems: Building Resilience for Complexity and Change*. Cambridge, Cambridge University Press.
- Borie, M., Gustafsson, K. M., Obermeister, N., Turnhout, E. and Bridgewater, P. (2020) ‘Institutionalising reflexivity? Transformative learning and the intergovernmental science-policy: Platform on Biodiversity and Ecosystem Services (IPBES)’, *Environmental Science and Policy*, vol. 110, pp. 71–76. <https://doi.org/10.1016/j.envsci.2020.05.005>
- Briassoulis, H. (2017) ‘Response assemblages and their socioecological fit: conceptualizing human responses to environmental degradation’, *Dialogues in Human Geography*, vol. 7, pp. 166–185. <https://doi.org/10.1177/2043820617720079>
- Buijs, A., Hansen, R., Van der Jagt, S., et al. (2019) ‘Mosaic governance for urban green infrastructure: upscaling active citizenship from a local government perspective’, *Urban Forestry & Urban Greening*, vol. 40, pp. 53–62. <https://doi.org/10.1016/j.ufug.2018.06.011>
- Caniglia, G., Luederitz, C., von Wirth, T., et al. (2020) ‘A pluralistic and integrated approach to action-oriented knowledge for sustainability’, *Nature Sustainability*. <https://doi.org/10.1038/s41893-020-00616-z>
- Carrozza, C. (2015) ‘Democratizing expertise and environmental governance: different approaches to the politics of science and their relevance for policy analysis’, *Journal of Environmental Policy & Planning*, vol. 17, no. 1, pp. 108–126. <https://doi.org/10.1080/1523908X.2014.914894>
- Cresswell, T. (1996) *In Place/Out of Place: Geography, Ideology and Transgression*, Minneapolis, University of Minnesota Press.
- Cresswell, T. (2011) Mobilities I: catching up. *Progress in Human Geography*, vol. 35, no. 4, pp. 550–558. <https://doi.org/10.1177/0309132510383348>

- Cresswell, T. (2012) 'Mobilities II: still', *Progress in Human Geography*, vol. 36, no. 5, pp. 645–653. <https://doi.org/10.1177/0309132511423349>
- Deleuze, G. and Guattari, F. (1980) *Capitalisme et schizophrénie*. Paris, Les.
- Di Masso, A. (2015) 'Micropolitics of public space: on the contested limits of citizenship as a locational practice', *Journal of Social & Political Psychology*, vol. 3, no. 2, pp. 63–83. <https://doi.org/10.5964/jspp.v3i2.322>
- Di Masso, A., Williams, D. R., Raymond, C. M., et al. (2019) 'Between fixities and flows: navigating place attachments in an increasingly mobile world', *Journal of Environmental Psychology*, vol. 61, pp. 125–133. <https://doi.org/10.1016/j.jenvp.2019.01.006>
- Fazey, I., Schöpke, N., Caniglia, G., et al. (2020) 'Transforming knowledge systems for life on earth: visions of future systems and how to get there', *Energy Research and Social Science*, vol. 70, article 101724. <https://doi.org/10.1016/j.erss.2020.101724>
- Funtowicz, S. O. and Ravetz, J. R. (1993) 'Science for the post-normal age', *Futures*, vol. 25, no. 7, pp. 739–755. [https://doi.org/10.1016/0016-3287\(93\)90022-L](https://doi.org/10.1016/0016-3287(93)90022-L)
- Gauchat, G. (2011) 'The cultural authority of science: public trust and acceptance of organized science', *Public Understanding of Science*, vol. 20, pp. 751–770. <https://doi.org/10.1177/0963662510365246>
- George, C. and Reed, M. G. (2017) 'Operationalising just sustainability: towards a model for place-based governance', *Local Environment*, vol. 22, pp. 1105–1123. <https://doi.org/10.1080/13549839.2015.1101059>
- Giddens, A. (1991) *Modernity and Self-Identity: Self and Society in the Late Modern Age*, Stanford, Stanford University Press.
- Goetz, E., Lewis, B., Damiano, A. and Calhoun, M. (2019) 'The diversity of gentrification. Multiple forms of gentrification in Minneapolis and St. Paul. Center for Urban and Regional Affairs (CURA)', University of Minnesota. Available at: <http://gentrification.umn.edu/sites/gentrification.dl.umn.edu/files/media/diversity-of-gentrification-012519.pdf> (accessed 12 April 2020).
- Gulsrud, N. M., Hertzog, K. and Shears, I. (2018) 'Innovative urban forestry governance in Melbourne? Investigating "green placemaking" as a nature-based solution', *Environmental Research*, vol. 161, pp. 158–167. <https://doi.org/10.1016/j.envres.2017.11.005>
- Hill, G., Kolmes, S., Humphreys, M., McLain, R., and Jones, E. T. (2019) 'Using decision support tools in multistakeholder environmental planning: restorative justice and subbasin planning in the Columbia River Basin', *Journal of Environmental Studies and Sciences*, vol. 9, pp. 170–186. <https://doi.org/10.1007/s13412-019-00548-x>
- Hölscher, K., Frantzeskaki, N., McPhearson, T. and Loorbach, D. (2019) 'Capacities for urban transformations governance and the case of New York City', *Cities*, vol. 94, pp. 186–199. <https://doi.org/10.1016/j.cities.2019.05.037>
- Kelkar, S. (2019) 'Post-truth and the search for objectivity: political polarization and the remaking of knowledge production', *Engaging Science, Technology, and Society*, vol. 5, pp. 86–106. <https://doi.org/10.17351/ests2019.268>
- King, T. L. (2019) *The Black shoals: Offshore formations of Black and Native studies*, Durham, NC, Duke University Press. <https://doi.org/10.1215/9781478005681>
- Kinnvall, C. and Mitzen, J. (2020) 'Anxiety, fear, and ontological security in world politics: thinking with and beyond Giddens', *International Theory*, vol. 12, no. 2, pp. 240–256. <https://doi.org/10.1017/S175297192000010X>
- Kirke, X. (2020) 'Anxiety and COVID-19: the role of ontological security and myth', *E-International Relations* [Online]. Available at: www.e-ir.info/2020/05/29/anxiety-and-covid-19-the-role-of-ontological-security-and-myth (accessed 8 December 2020).

- Koontz, T. M., Gupta, D., Mudliar, P. and Ranjan, P. (2015) 'Adaptive institutions in social-ecological systems governance: a synthesis framework', *Environmental Science & Policy*, vol. 53, no. B, pp. 139–51. <https://doi.org/10.1016/j.envsci.2015.01.003>
- Laing, R. D. (1960) *The Divided Self: An Existential Study in Sanity and Madness*, London, Penguin Books.
- Langhoerst, J. (2018) 'Enacting landscape democracy: assembling public open space and asserting the right to the city', in Egoz, S., Jorgenson, K., and Ruggeri, D. (eds), *Defining Landscape Democracy: A Path to Spatial Justice*. Aldershot, Edward Elgar, pp. 106–118.
- Loorbach, D., Wittmayer, J., Avelino, F., von Wirth, T. and Frantzeskaki, N. (2020) 'Transformative innovation and translocal diffusion', *Environmental Innovation and Societal Transitions*, vol. 35, pp. 251–260. <https://doi.org/10.1016/j.eist.2020.01.009>
- Marulanda, A. and Martí, M. (2019) 'Desafiando la gentrificación. Resistencias a los desplazamientos en los centros históricos de Quito y Cuenca'. *Scripta Nova*, vol. 13, no. 607, pp. 1–27.
- Moore, M.-L., Olsson, P., Nilsson, W., Rose, L. and Westley, F. R. (2018) 'Navigating emergence and system reflexivity as key transformative capacities: experiences from a Global Fellowship program', *Ecology and Society*, vol. 23, no. 2, p. 38. <https://doi.org/10.5751/ES-10166-230238>
- Mitchell, S. (2009) *Unsimple Truths: Science, Complexity and Policy*, Chicago, University of Chicago Press.
- Muiderman, K., Gupta, A., Vervoort, J. and Biermann, F. (2020) 'Four approaches to anticipatory climate governance: different conceptions of the future and implications for the present', *Wiley Interdisciplinary Reviews: Climate Change*, vol. 11, no. 6, pp. e673. <https://doi.org/10.1002/wcc.673>
- Nagel, T. (1986) *The View from Nowhere*, New York, Oxford University Press.
- Nightingale, A. J., Eriksen, S., Taylor, M., et al. (2020) 'Beyond technical fixes: climate solutions and the great derangement', *Climate and Development*, vol. 12, no. 4 <https://doi.org/10.1080/17565529.2019.1624495>
- Nuttall, M. (2010) 'Anticipation, climate change, and movement in Greenland', *Les Inuit et le changement climatique/The Inuit and Climate Change*, vol. 34, pp. 21–37.
- Pinheiro, J. (2013) 'Time, a slippery challenge. *Bulletin of People–Environment Studies*', vol. 39, pp. 8–13.
- Quay, M. (2010) 'Anticipatory governance: a tool for climate change adaptation', *Journal of the American Planning Association*, vol. 76, no. 4, pp. 496–511. <https://doi.org/10.1080/01944363.2010.508428>
- Raymond, C. M., Kaaronen, R., Giusti, M., Linder, N. and Barthel, S. (2021) 'Engaging with the pragmatics of relational thinking, leverage points and transformations: a reply to West et al. 2020. *Ecosystems and People*, vol. 17, no. 1, pp. 1–5. <https://doi.org/10.1080/26395916.2020.1867645>
- Relph, T. (1976) *Place and Placelessness*, London, Pion Limited.
- Ryan, A. and Walsh, T. (2018) 'Reflexivity and critical pedagogy', in Ryan, A. and Walsh, T. (eds), *Reflexivity and Critical Pedagogy*, Leiden, Brill Sense, pp. 1–14. <https://doi.org/10.1163/9789004384507>
- Schaab, G. L. (2013) 'Relational ontology', in Runehov, A. L. C., and Oviedo, L. (eds), *Encyclopedia of Sciences and Religions*, Dordrecht, Springer. https://doi.org/10.1007/978-1-4020-8265-8_847
- Sibley, D. (1995) *Geographies of Exclusion: Society and Difference in the West*, East Sussex, Psychology Press. <https://doi.org/10.4324/9780203430545>
- Soja, E. (2010) *Seeking Spatial Justice*, Minnesota, University of Minnesota Press.

- Solnit, R. (2016) *Hope in the Dark: Untold Histories, Wild Possibilities*, Chicago, Haymarket Press.
- Tengö, M., Hill, R., Malmer, P., et al. (2017) 'Weaving knowledge systems in IPBES, CBD and beyond: lessons learned for sustainability', *Current Opinion in Environmental Sustainability* vols 26–27, pp. 17–25. <https://doi.org/10.1016/j.cosust.2016.12.005>
- Tsing, A. L. (2015) *The Mushroom at the End of the World: On the Possibility of Life in Capitalist Ruins*, Princeton, Princeton University Press. <https://doi.org/10.2307/j.ctvc77bcc>
- Werner, E. E. (1988). 'Size, scaling, and the evolution of complex life cycles'. In *Size-Structured Populations*. Berlin: Springer, pp. 60–81.
- West, S., Jamila Haider, L., Stålhammar, S. and Woroniecki, S. (2020) 'A relational turn for sustainability science? Relational thinking, leverage points and transformations', *Ecosystems and People*, vol. 16, no. 1, pp. 304–325. <https://doi.org/10.1080/26395916.2020.1814417>
- Williams, D. R. (2013) 'Science, practice, and place', in Stewart, W. P., Williams, D. R. and Kruger, L. E. (eds), *Place-Based Conservation: Perspectives from the Social Sciences*, Dordrecht, Springer, pp. 21–34. <https://doi.org/10.1007/978-94-007-5802-5>
- Williams, D. R. (2018) 'Spacing conservation practice: place-making, social learning, and adaptive governance in natural resource management', in Marsden, T. (ed.), *The SAGE Handbook of Nature*, vol. 1, London, SAGE Publications, pp. 285–303.
- Williams, D. R. and Van Patten, S. R. (2006) 'Home and away? Creating identities and sustaining places in a multicentered world', in McIntyre, N., Williams, D. R. and McHugh, K. E. (eds), *Multiple Dwelling and Tourism: Negotiating Place, Home, and Identity*, Cambridge, CABI Publishing, pp. 32–50.
- Wyborn, C. (2015) 'Co-productive governance: a relational framework for adaptive governance', *Global Environmental Change*, vol. 30, pp. 56–67. <https://doi.org/10.1016/j.gloenvcha.2014.10.009>
- Wyborn, C., Yung, L., Murphy, D. and Williams, D. R. (2015) 'Situating adaptation: how governance challenges and perceptions of uncertainty influence adaptation in the Rocky Mountains', *Regional Environmental Change*, vol. 15, pp. 669–682. <https://doi.org/10.1007/s10113-014-0663-3>