



UNIVERSITY OF LEEDS

This is a repository copy of *A bridge over troubled waters*.

White Rose Research Online URL for this paper:
<https://eprints.whiterose.ac.uk/182037/>

Version: Accepted Version

Article:

Venot, J-P, Vos, J, Molle, F et al. (14 more authors) (2022) A bridge over troubled waters. *Nature Sustainability*, 5 (2). p. 92. ISSN 2398-9629

<https://doi.org/10.1038/s41893-021-00835-y>

Reuse

Items deposited in White Rose Research Online are protected by copyright, with all rights reserved unless indicated otherwise. They may be downloaded and/or printed for private study, or other acts as permitted by national copyright laws. The publisher or other rights holders may allow further reproduction and re-use of the full text version. This is indicated by the licence information on the White Rose Research Online record for the item.

Takedown

If you consider content in White Rose Research Online to be in breach of UK law, please notify us by emailing eprints@whiterose.ac.uk including the URL of the record and the reason for the withdrawal request.



eprints@whiterose.ac.uk
<https://eprints.whiterose.ac.uk/>

A bridge over troubled waters

Jean-Philippe Venot,^{1†} Jeroen Vos,² François Molle,¹ Margreet Zwarteveen,³ Gert Jan Veldwisch,² Marcel Kuper,⁴ Anna Mdee,⁵ Maurits Ertsen,⁶ Rutgerd Boelens,² Frances Cleaver,⁷ Bruce Lankford,⁸ Larry Swatuk,⁹ Jamie Linton,¹⁰ Leila M. Harris,¹¹ Jeltsje Kemerink-Seyoum,³ Michelle Kooy³ and Klaas Schwartz³

¹ UMR GEAU, IRD, University of Montpellier

361 rue Jean-François Breton, BP 5095, 34196 Montpellier Cedex 5, France

² WRM Group, Wageningen University

P.O. box 47, 6700 AA Wageningen, The Netherlands

³ Water Governance Department, IHE-Delft

PO Box 3015, 2601 DA Delft, The Netherlands

⁴ UMR GEAU, CIRAD, University of Montpellier

361 rue Jean-François Breton, BP 5095, 34196 Montpellier Cedex 5, France

⁵ water@leeds, School of Politics and International Studies, University of Leeds,

Leeds LS2 9JT, United Kingdom

⁶ Civil Engineering and Geosciences, TU Delft

PO Box 5048, 2600 GA Delft, The Netherlands

⁷ Lancaster Environment Centre, Lancaster University

Lancaster LA1 4YQ, United Kingdom

⁸ School of International Development, University of East Anglia

Norwich Research Park, Norwich NR4 7TJ, United Kingdom

⁹ SEED, University of Waterloo

200 University Avenue, Waterloo, Ontario, Canada N2L 3G1

¹⁰ GEOLAB, University of Limoges

39E Rue Camille-Guérin, 87036 Limoges Cedex, France

¹¹ IRS, GRSJ, University of British Columbia

Vancouver, BC V6T 1Z4, Canada

†corresponding author: jean-philippe.venot@ird.fr

In a recent (August 2021) editorial, the editors of *Nature Sustainability* argue that little innovative research seems to emerge in water studies. They invite the community to reinvent what they see

as a 'stagnant' field. Central to their argument is the statement that 'water studies as a field may have largely given up on historical context and institutional change as [... it] has become more quantified and technically driven, it has also become less grounded'.

While we – a too homogeneous sub-set of critical water researchers – agree that much water science still has a functionalist orientation and a distinct preference for quantification, we find this statement rather surprising as there is actually plenty of research – to use the editors' terms – 'on the messy institutions, norms and processes that underlie our relationships [...] with water'.

We would like to offer the view that this research is not reflected in *Nature Sustainability* submissions –hence publications- because of a mismatch between what we perceive to be the Journal's paradigmatic orientation and the nature of that research.

Rather than attempting to circumscribe 'the water question' to make it amenable to prescriptive policy recommendations –often on the basis of ever more sophisticated, 'cutting-edge' modelling tools and decision support systems, this research resists any form of commensuration. Instead, it sets out to investigate the ways politics and water are entangled and analyse how researchers themselves are part of such entanglements.

Drawing from a long research tradition and interdisciplinary fields such as political ecology and critical geography, many scholars investigated extensively the politics and historicity of water and infrastructure, and their connectedness to social and epistemic hierarchies.¹ More recently some also engaged with science and technology studies and Indigenous scholarship and thought to stress the multiplicity of water worlds.² They proposed concepts such as the hydrosocial cycle³ and hydrosocial territories⁴ in an attempt to bring together natural and social science approaches with vernacular knowledge systems in transdisciplinary approaches. Such research nurtures suspicion of irrigation technologies⁵ and development pathways,⁶ or of water policy models and institutions⁷ that are presented as universal solutions or panaceas. It unravels the multiple dimensions and diverse consequences of the search for water efficiency⁸ and water security,⁹ and investigates everyday water governance practices in relation to community water management¹⁰ and urban water services,¹¹ including in their gendered dimensions. Finally, it foregrounds practices of bricolage and social mobilisation as holding transformative potential for – among others – irrigation development in sub-Saharan Africa,¹² groundwater governance,¹³ and water justice.¹⁴

Beyond this diversity in topics and approaches, this research is grounded in a common understanding that knowledge is contingent upon and related to cultural constructs and power

relations, and it pays specific attention to the unequal material and socioeconomic effects of discursive and methodological framings. Researchers resist and challenge the pressures of commensuration and universalisation (still commonly attached to much water related science) because they have learned how the hegemony of some forms of knowledge has eclipsed or even violently erased others, in the process also disqualifying their bearers and allowing or justifying water dispossession. Next to exposing the politics and power relations shaping water technologies and policy-making, this research hence also actively seeks to expand ways to understand water. We therefore welcome the call of the Editors to expand the breadth of water sciences and further invite scholars to reflect on (the effects of) their methodological choices and framings, and to reveal more explicitly their foundational assumptions. We believe this attention to the politics and plurality of water is important if we are to contribute to just and sustainable water transformations. The authors declare no competing interests.

References

-
- ¹ Ertsen, M. *Improvising Planned Development on the Gezira Plain, Sudan, 1900-1980* (Palgrave Macmillan, 2016)
 - ² Yates, J.S., Harris, L. & Wilson, N.J. *Environ. Plan. D: Soc. Space* **35**:787-815 (2017)
 - ³ Linton, J. & Budds, J. *Geoforum* **57**, 170– 180 (2014)
 - ⁴ Boelens, R., Hoogesteger, J., Swyngedouw, E., Vos, J. & Wester, P. *Water Int.* **41**, 1-14 (2016)
 - ⁵ Venot, J.P., Kuper, M. & Zwarteveen, M. *Drip irrigation for Agriculture: untold stories of efficiency, innovation and development* (Routledge, 2017)
 - ⁶ Harrison, E. & Mdee, A. *Third World Q.* **39**, 2126-2141 (2018)
 - ⁷ Molle, F. *Geoforum* **40**, 484-494 (2009)
 - ⁸ Lankford, B. et al. *Glob. Environ. Change* **65**, 102182 (2020)
 - ⁹ Zeitoun, M. et al. *Glob. Environ. Change* **39**, 143-154 (2016)
 - ¹⁰ Whaley, K., Cleaver, F. & Mwathuhga, E. *World Dev.* 138, 105286
 - ¹¹ Ahlers, R., Cleaver, F., Rusca, M. & Schwartz, K. *Water Altern.* **7**, 1-14 (2014)
 - ¹² Woodhouse, P. et al. *J Peasant Stud.* **44**, 213-233 (2017)
 - ¹³ Zwarteveen, M. et al. *Curr Opin Environ Sustain* 49, 88-97 (2021)
 - ¹⁴ Boelens, R., Perreault, T. & Vos, J. *Water Justice* (Cambridge University Press, 2018)