

## **Introduction to National Cultures of Animals, Care and Science**

**Carrie Friese\*, Tarquin Holmes and Reuben Message**

Corresponding author, Carrie Friese, Email: [c.friese@lse.ac.uk](mailto:c.friese@lse.ac.uk)

Carrie Friese is an Associate Professor in the Sociology Department at the London School of Economics and Political Science. She is a medical sociologist with a focus on nonhuman animals in science, technology and society.

Tarquin Holmes is an independent researcher who recently worked as a Research Officer on the Wellcome Trust project 'Care as Science: The Role of Animal Husbandry in Translational Medicine' at the Department of Sociology, London School of Economics. He is a historian and philosopher of science with a specialisation in the laboratory life sciences.

Reuben Message is a Research Fellow in Responsible Research and Innovation in Science, Technology and Innovation Studies, School of Social and Political Science, College of Arts, Humanities and Social Sciences, University of Edinburgh. He is a sociologist with a focus on fish and fish culture.

This special section comes out of a workshop that explored national cultures of animals, care and science. It was organized in response to our shared scepticism regarding the nation state as a unit of analysis. The unit of nationality and the theme of national cultures can give rise to the worst of what Karine Chemla and Evelyn Fox Keller (2017) refer to as culturalism in studies of science: fixed and essentialist units of the external society that determine the internalities of science. And yet our feeling was that something like national culture and nationality was making itself felt in important ways within our various research projects.

Our goal with this conference was to ask if we might think about nationality in a manner that differs from political scientists who, for example, compare attitudes reported through the Eurobarometer based on nationality. After all, anthropologists have successfully shown how certain ideas have histories that are linked with the

nation while also being dynamic, including kinship in Britain (Franklin, 2007) and the idea of immunity (Martin, 1994) and mania (Martin, 2009) in the United States. Meanwhile, Sheila Jasanoff's (2005) notion of 'civic epistemologies' allows for an analysis of 'the systematic practices by which a nation's citizens come to know things in common and to apply their knowledge' (Jasanoff, 2005). While we were not exploring science policy, we found inspiration in Barbara Prainsack's (2006) extension of civic epistemologies through Foucaultian discourse analysis in order to ask how certain taken-for-granted assumptions are linked to nations in a manner that may not travel more generally.<sup>i</sup> Building on Prainsack's work, we suggested that 'care' and 'animals' may represent a particular kind of granted assumption, or civic epistemology, that differs across nation states.

But rather than map out all the possible concepts and approaches that one could take to the question of national culture, animals and care, we instead decided to juxtapose the different ways in which scholars across sociology, anthropology, geography and history might explore the theme of national cultures of animals, care and science across different case studies, in different national contexts and in different time periods. Juxtapose is a crucial word here. Our goal is not to compare different case studies, trying to hold as many variables as possible as the same in order to understand the difference that nation makes. Rather, juxtapose brings different case studies close together, side by side, in order to see differences and commonalities. Through juxtaposition, we hope to also see the taken-for-granted ideas regarding not only nationality but also animals, care and science that circulate (or don't) in different case studies. We hope juxtaposition can facilitate the sparking of new approaches to the intertwined questions of nation, care and science.

'National cultures' and 'Care'

The last several decades of research in Science and Technology Studies (STS) has problematized the notion of internal versus external explanations for scientific knowledge production, and the corresponding notion that there are micro- versus macro-levels of social life. Troubling these dichotomies was central to Actor Network Theory (ANT), for example, with its focus on following key actors and actants around as they make society durable and questioning traditional boundaries in identifying the distributed forms of agency animating particular processes of knowledge-making. This approach to understanding how everyday scientific practices make society is summarized in Bruno Latour's ([1983, 1986] 1999) famous and importantly provocative article title "Give me a laboratory and I will raise the world."

Meanwhile other models of science and society within STS and in sociology more generally have similarly pushed on the internal elements of science and its organisation in order to see how social life is produced. This includes social worlds/arenas, where the methodological approach is less 'following' actors around and instead 'peering over the shoulders' of *all* the different social groups who come together through a set of scientific practices, including those implicated by these practices but not necessarily 'enrolled' within them (Clarke, 2005; Clarke and Montini, 1993; Fujimura, 1996). The idea of 'society' is likewise rejected here, though it is replaced not with actor-networks but with the image of social life as a collage of social worlds that variously intersect through different areas of shared interest and concern.

Other sociological models that operate methodologically at the meso- to macro-level - such as Bourdieu's (2006; 1987) notion of fields and Andrew Abbott's (1988) notion of professionalization processes - also push on internal factors to understand the content of scientific knowledge and the corresponding creation of

social orders. The competitive organization of fields shapes who has the power and authority to make a truth claim in field theory. And the organization of professions informs how individuals conduct themselves, shaping what they value in making and assessing truth claims.

All of this scholarship makes the possibility of national cultures of animals, care and science seem highly suspect. But nonetheless, something like national culture – one that may be diffuse and contradictory but that is nonetheless constitutive – does seem to be emerging in the scholarship. In Sociology, for example, Bourdieuan perspectives are being taken up to articulate the idea that national culture could be important for science. Marion Fourcade's (2009) has for example famously argued that there are national cultures of economics, and she roots the idea of a national culture in institutional factors. Gad Yair (Published online 2019) locates institutional differences instead in deep cultural codes, or a habitus that is (often) formed within a national context long before people become scientists.

Meanwhile in Anthropology we see a more fluid approach to something like a national culture, one rooted in descriptions of how discourses get taken up. Sarah Franklin (2007) has shown how Dolly the Sheep was a distinctly British sheep, rooted in specific notions of sheep as live-stock and in ideas about industry, countryside and colony that are unique to British-ness. Emily Martin (1994) asks if the shift in ideas about immunity from the 1950s to the 1980s is related to other changes in the United States; she links the notion of flexibility in immunity to the rise of post-Fordism and flexible production. S. Lochlann Jain's analysis of cancer likewise offers an analysis of what it is like to live in a state of vulnerability within the United States.

So national cultures is an explicitly troubling analytic category, one that raises the dangers of stereotypes, but one that nonetheless does seem to be important for raising the emplacement of ideas, and the ways in which those ideas get into us and thereby into knowledge and knowledge practices. But care is also a troubling analytic category, one that scholars have pointed out can be all too easily romanticized (Murphy, 2015; Giraud and Hollin, 2016) but that nonetheless has also been extremely important for considering emplaced, embodied and affective relations between humans and animals in science. It is through care that the laboratory animal ceases to be a symbol or a mirror for humans, but instead becomes an embodied actor in the doing of science who can – following Eduardo Kohn (2013)– ‘think’, or represent in worldmaking ways. As people like Lesley Sharp (2019) as well as Eva Giraud and Greg Hollin (see also Giraud and Hollin, 2016; Giraud, 2019) remind us, we cannot romanticize this care; killing is a crucial part of the laboratory. But care does analytically help us make the laboratory animal present.

In this context, this special section explores the tensions that arise in juxtaposing ‘national cultures’ with ‘care’. The former tends to raise the theme of ideas and discourses, institutions and habitus. The later tends to raise the theme of practices in intersubjective and affective activities and relationships. For us, national cultures of care forces us to ask: what is/are the idea/s of care circulating in each of our case studies? Where do particular ideas of care come from? How do these ideas of care get embodied in humans and animals, in their relations to one another, and instantiated in institutions and discourses, and with what consequences.

#### Overview to the Special Section

Each article comprising this special section explores how the nation is made rhetorically but also in practice through specific alignments between animals, care

and science. Each paper shows that these alignments incorporate earlier ideas, therein doing the work of socially reproducing the nation. As Mette Svendsen makes clear in her article, across this special section the nation emerges not as an a priori context for science, animals and care but rather as enacted in and through these alignments.

Across all four papers, we see that care for and regulation of animals is entwined with the care for and regulation of people. How animals are positioned as inside or outside the nation is further interlinked with how the boundaries between citizens and noncitizens are made. This is shown, through a range of methods that includes historical case studies, genealogies and ethnography. Taken together, the articles show that while there are scientific translations across a global science, these translations are also partial due to the spatial and temporal dimensions of how care is articulated in meaning and practice.

Mette Svendsen shows how pigs have been the soil of the Danish welfare system, both in the sense of feeding the national community and as a constituent species of a human-pig symbiopolitics through which Danish 'rootedness in the soil' (Saraiva 2016) is determined. It is therefore not surprising that humans and pigs are regulated in ways that are linked without collapsing into one another, as part of reproducing the border of Denmark, with the central practice of delineating who belongs and who does not as both an inter-and intra-species concern. Svendsen emphasizes that transspecies collectivities are the site of governance regimes, and that selection is a key practice that occurs with both humans and with pigs in remaking Denmark as a welfare state. Selection necessitates that some pigs and some humans are included while others are excluded, and it is the ability to sustain the welfare of the current state of human life in Denmark that provides the optic through which both pigs and people are chosen. Drawing on ethnographic research combined with

documentary analysis, Svendsen provides a rich analysis of how the nation state is enacted through the discourses and practices of care across humans and animals in ways that include and equalize all the while also excluding and restating inequities.

Reuben Message shows how the stereotype that the British care more for animal welfare than Europeans was deployed in Brexit campaigns as an explicit political tool, one that he refers to as ‘animal welfare chauvinism,’ to remake Britain. Message emphasizes that this is a strategy used by not only political elites trying to forge their version of the nation state, but also by animal welfare advocates. Using genealogy as a method, Message shows how animal welfare chauvinism is deployed across political positions (e.g., by Leave, Remain and animal welfare activists) in a manner that reproduces linked but also divergent imaginaries of a British community. Message emphasizes that the relationship between these rhetorical performances and the practices of everyday life (whether in the home, the clinic, the farm or the lab) is and remains questionable. Indeed, his point is certainly not to assess the veracity of the claim that Britain is a country of animal lovers. Rather, Message emphasizes that there is a decidedly top-down element to everyday life, and so as researchers we need to listen carefully and critically to the ways in which these discourses play out in the everyday practices of animals, care and science that we seek to understand.

Lesley Sharp explores how animals figured in US aerospace science during the mid-20<sup>th</sup> century space race – a moment when demonstrations of science and national power were at something of a zenith. Nonhuman primates sourced from the tropics were the species of choice in the US, which contrasted with dogs in Russia and cats in France. Sharp explores how some specific primates (e.g., the squirrel monkey Miss Baker) became icons of American science in this context. She tracks how Miss Baker was presented to the public to both highlight the successes of the US

in the space race, while managing failures. The ‘fact’ that scientists cared about and liked Miss Baker and other nonhuman primates involved in space flights was crucial to these performances, but was also constantly questionable given their ordeals. The issue of animal suffering was however elided through the presentation of nonhuman primates who survived space travel as American animal hero/ines. ‘Failures’, by contrast, were not in death granted publicity or even formal names. Here, we see belonging and citizenship as tied to success and national service more than indigeneity, although there were also efforts to present US captive-bred animals as ‘native-born’. The differential treatment of successes and failures can further be seen in attitudes towards animal remains, with the reduction of ‘failures’ to taxidermied display objects being much less controversial than when similar treatment was proposed for ‘heroic’ animals, such as the chimp HAM, who were publicly perceived as having earned not only the American ‘good life’ but also a respectful full body burial.

Lastly, Tarquin Holmes and Carrie Friese offer an analysis of the ‘cynical scientist’, a figure Friese describes as rhetorically emerging as an ‘other’ in contemporary social spaces forming around animal care in science, towards which concerns about resistance to reforms are oriented. We unpack this figure using genealogical methods, historicizing the cynical scientist as a late 19<sup>th</sup> century outgrowth of the ‘sceptical scientist’, an earlier figure presented by British agnostics such as TH Huxley and John Tyndall as a scientific ideal but which became emblematic for British religious conservatives of a godless, Continental materialism. The matter came to a head at the 1875 Royal Commission on Vivisection, where supporters of animal experimentation failed to defend assertions that British scientists could be trusted to self-regulate due to the apparent open or implied cynicism of some



scientific witnesses towards animal suffering. Scientists were subsequently, however, able to use their claims as experts on what constituted animal welfare to effect significant influence over the licensing process established after the 1876 Cruelty to Animals Act. In demonstrating how the discursive formation of the cynical scientist emerged in Britain, we show how this figure inherits efforts to distinguish science from religion, Britain from Europe and experts from governance. We also show how, in retaining authority through their expertise and influence over how care is interpreted behind the closed doors of laboratories, cynical scientists, as largely invisible but powerful figures, continue to remain sources of anxiety for those who seek to regulate animal care in science.

### Conclusion

Questions of the national cultures of animals, care and science are important to consider so that we as researchers do not risk engaging either in methodological nationalism (Wimmer and Schiller, 2002) or project a homogeneous picture of cosmopolitan science. Indeed, questioning science as a smoothly global project seems especially crucial today. Catherine Mason (2016) has, for example, shown that problems arise when a transnational class of scientific experts become more concerned with their international peers (in her case epidemiologists) than the people they are meant to serve (in her case inter-state migrants in China). Meanwhile, Sarah R Davies (2021) argues that international scientists experience themselves as existing between the particular and the general in a manner that acknowledges but also delimits 'global science'. Raising quandaries such as these requires that the nation-state be considered as an ongoing practice, one that animals, science and care all participate in.

More widely, it has in recent years become clear that the institutionalisation of STS knowledge coincided with an era of unparalleled globalisation based on US hegemony. As this political milieu continues to fragment, and countries around the world adopt increasingly assertive industrial strategy policies in response, it is possible that questions of nation and national culture and how we approach these categories analytically will feel increasingly urgent in our accounts of scientific practice. We hope that this special section can begin to provide some tools for exploring national cultures of science, not to reproduce stereotypes but rather to expose the ways in which the internal concerns of science as a field are co-constituted with the ongoing reproduction of nation states. In this way, any given area of scientific activity can contain the aspirations of both a transnational and cosmopolitan field of inquiry while also reproducing nations in ways that are exclusionary and potentially xenophobic.

### Bibliography

- Abbott A (1988) *The System of Professions: An Essay on the Division of Expert Labor*. Chicago: University of Chicago Press.
- Bourdieu P (1987) *Homo Academicus*. Cambridge: Polity.
- Bourdieu P (2006) *Science of Science and Reflexivity*. Cambridge: Polity.
- Chemla K and Fox Keller E (2017) *Cultures without Culturalism: The Making of Scientific Knowledge*. Durham: Duke University Press.
- Clarke AE (2005) *Situational Analysis: Grounded Theory After the Postmodern Turn*. Thousand Oaks, CA: Sage.
- Clarke AE and Montini T (1993) The many faces of RU486: Tales of situated knowledges and technological contestations. *Science, Technology and Human Values* 18(1): 42-78.
- Davies SR (2021) Atmospheres of science: Experiencing scientific mobility. *Social Studies of Science* 51(2): 214-232.
- Fourcade M (2009) *Economists and Societies: Discipline and Profession in the United States, Britain, and France, 1890s to 1990s*. Princeton: Princeton University Press.
- Franklin S (2007) *Dolly Mixtures: The Remaking of Genealogy*. Durham, NC: Duke University Press.
- Fujimura JH (1996) *Crafting Science: A Sociohistory of the Quest for the Genetics of Cancer*. Cambridge, MA: Harvard University Press.
- Giraud E and Hollin G (2016) Care, Laboratory Beagles and Affective Utopia. *Theory, Culture & Society*. Published online before print, doi: 10.1177/0263276415619685.

- Giraud EH (2019) *What Comes After Entanglement: Activism, Anthropocentrism and an Ethics of Exclusion*. Durham, NC: Duke University Press.
- Jasanoff S (2005) *Designs on Nature: Science and Democracy in Europe and the United States*. Princeton: Princeton University Press.
- Kohn E (2013) *How Forests Think: Toward an Anthropology beyond the Human*. Berkeley, CA: University of California Press.
- Latour B ([1983, 1986] 1999) Give me a laboratory and I will raise the world. In: Biagioli M (ed) *The Science Studies Reader*. London: Routledge, pp.258-275.
- Martin E (1994) *Flexible Bodies: Tracking Immunity in American Culture from the Days of Polio to the Age of AIDS*. Boston: Beacon Press.
- Martin E (2009) *Bipolar Expeditions: Mania and Depression in American Culture*. Princeton: Princeton University Press.
- Mason KA (2016) *Infectious Change: Reinventing Chinese Public Health After an Epidemic*. Stanford: Stanford University Press.
- Murphy M (2015) Unsettling care: Troubling transnational itineraries of care in feminist health practices. *Social Studies of Science* 45(5): 717-737.
- Prainsack B (2006) Negotiating life: The regulation of embryonic stem cell research and human cloning in Israel. *Social Studies of Science* 36(2): 173-205.
- Sharp LA (2019) *Animal Ethos: The Morality of Human-Animal Encounters in Experimental Lab Science*. Berkeley, CA: University of California Press.
- Wimmer A and Schiller NG (2002) "Methodological Nationalism and Beyond: Nation-State Building, Migration and the Social Sciences." *Global Networks* 2: 301-334.
- Yair G (Published online 2019) Hierarchy versus symmetry in German and Israeli science. *American Journal of Cultural Sociology*. DOI: DOI

<https://doi.org/10.1057/s41290-019-00069-8>.

---

<sup>i</sup> Prainsack explored the permissive governance of cloning and stem cell research in Israel, arguing that neither Jewish moral systems nor Israeli pronatalism alone could explain the permissive approach to biotechnologies in Israel. Rather, Prainsack contends that the two discourses of religion and pronatalism were instead overlapping in the self-governance of Israeli ethicists and users alike, generating a kind of common sense that is deeply embodied, internalized and taken for granted. Prainsack states that pro-natalism is not and does not need to be imposed in this context, but is rather 'a discursively created truth ... being translated by individuals into their own choices and commitments' Prainsack B (2006) Negotiating life: The regulation of embryonic stem cell research and human cloning in Israel. *Social Studies of Science* 36(2): 173-205..