

Goldsmiths Research Online

*Goldsmiths Research Online (GRO)
is the institutional research repository for
Goldsmiths, University of London*

Citation

Núñez Casal, Andrea. 2023. Ways of healing: exploring more-than-biomedical cures as emancipatory and biopolitical knowledges-practices. *Body & Society*, ISSN 1357-034X [Article] (In Press)

Persistent URL

<https://research.gold.ac.uk/id/eprint/33080/>

Versions

The version presented here may differ from the published, performed or presented work. Please go to the persistent GRO record above for more information.

If you believe that any material held in the repository infringes copyright law, please contact the Repository Team at Goldsmiths, University of London via the following email address: gro@gold.ac.uk.

The item will be removed from the repository while any claim is being investigated. For more information, please contact the GRO team: gro@gold.ac.uk



Ways of healing: exploring more-than-biomedical cures as emancipatory and biopolitical knowledges-practices

Journal:	<i>Body and Society</i>
Manuscript ID	B-22-093-BOD-NC
Manuscript Type:	NC - Notes & Commentary
Key Words:	healing, more-than-biomedical, biomedicine, biomedicalisation, traditional medicine, care, cures
Abstract:	<p>Healing is loosely defined as the process(es) of becoming well. Despite its all-embracing multispecies quality, social and scientific significance(s) across spaces, times and cultures, there is a lacuna concerning critical ontological and epistemological frameworks of healing, particularly in the areas of Science and Technology Studies (STS), feminist theory and body studies. As an initial attempt to approach these questions and limitations, we organised the open panel Ways of healing as part of the Society for the Social Studies of Science (4S) 2021 Annual Meeting. The panel engaged with local, traditional, and profane healing knowledge-practices as relational and sustainable health care approaches as well as biopolitical tools of neoliberal (individual) responsabilisation. By focusing on how to analyse, establish and build on 'good relations' between (1) traditional health cultures and biomedicine, and (2) lay and professional expertise, this conference report addresses pluralistic ways of healing in unequal and uncertain worlds.</p>

1
2
3
4
5
6
7
8
9
10
11
12
13
14

*Ways of healing:
exploring non-biomedical cures as emancipatory and biopolitical
knowledges-practices*

15
16

Introduction

17
18
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35

Healing is loosely defined as the process(es) of becoming well. There are long genealogies and vast bodies of literature on the entanglements among healing, medicine and religion, particularly coming from cultural and medical anthropology (López-Pavillard, 2018; Lüddeckens & Schrimpf, 2018; Hsu & Harris, 2010; Hsu, 2012; Taussig, 1987), including a growing body of literature around healing rituals, biomedicine and pharmaceuticalisation (see Gaudilliere & Sunder Rajan, 2021; Sanabria, E, 2021; Talin and Sanabria, 2017; Talin, 2021). Despite its all-embracing multispecies quality, socio-cultural and scientific significance(s) across spaces, times and cultures, there is a lacuna concerning critical ontological and epistemological frameworks of healing, particularly in the areas of Science and Technology Studies (STS), feminist theory and body studies. As an initial attempt to approach these questions and limitations, we organised the open panel *Ways of healing* as part of the Society for the Social Studies of Science (4S) Annual Meeting celebrated in a hybrid format (online and in Toronto, Canada) between the 6th and the 9th of October 2021.

36
37
38
39
40
41
42
43
44
45
46
47
48
49

Framed within the conference theme, ‘Good relations: practices and methods in unequal and uncertain worlds’, *Ways of healing* invited scholars, activists and medical practitioners to engage with local, traditional, and profane healing knowledge-practices as relational and sustainable health care approaches as well as biopolitical tools of neoliberal (individual) responsabilisation. By focusing on how to analyse, establish and build on ‘good relations’ between (1) traditional health cultures and biomedicine, and (2) lay and professional expertise, the panel addressed the heterogenous ‘modes of existence’ (Latour, 2012; Souriau, 2015) and pluralistic ways of healing ‘in unequal and uncertain worlds’. The panel was organised by Author jointly with colleagues Author, Author and Author.

50
51
52
53
54
55
56
57
58
59
60

The main aim of the panel was to initiate a critical conversation around the heterogeneity of medical and socio-cultural onto-epistemologies of healing and its implications for bodily and earthy habitability in times of ecosystems degradation and increasing biosocial inequalities. Themes included status of knowledges (local, traditional, profane); more-than-human and spiritual healing; health inequalities; tensions and synchronicities among traditional medicine(s), local health cultures and biomedicine; women, (health)care and authority; and geographies of health in recovery and convalescence. We structured the panel into two interlocking sessions:

1
2
3 The first session "Pluralism and *differance* in non-biomedical healing and wellbeing",
4 consisted of four presentations by Author, Author, Author, Author, Author, Author,
5 Author. The session focused on the contemporary state of local health cultures and
6 traditional medicines in Asia (mostly India and China), Europe, North and South
7 America. We were interested in juxtaposing the tensions and the points of encounter
8 among the hegemonic biomedical understanding of life, environments, health and bodies
9 and what we call 'more-than-biomedical' approaches. With the phrasing 'more-than-
10 biomedical', we refer to (mostly non-western) heterogenous cosmologies and elements
11 such as traditional medicines, local herbal and food remedies, and biodiversity as
12 indissociable from local climate, states of consciousness, transgenerational wisdom, and
13 bodily and spiritual practices. Likewise, the first session of *Ways of healing* tackled the
14 ecologies of human health as part of larger wholes, inclusive of wider communities of
15 humans, non-human animals, plants, built environments, rituals, infrastructure, collective
16 memory, and popular cultures centred on attaining and maintaining individual and
17 collective health.

18
19
20
21
22
23 The second session, "Emancipation, profane cures and bioinequalities in more-than-
24 biomedical healing", addressed the ubiquitous tensions between biomedical non-
25 compliancy, emancipation, plurality of expertise in traditional and popular medical
26 systems and their biomedicalization (e.g., Ayurveda). The panel consisted of Katerina
27 Kolarova, Tereza Stockelova and Lukas Senft (Institute of Sociology of the Czech
28 Academy of Sciences), Author (XXXXX), Author (XXXXX), and Xisai Song (Cornell
29 University). Complementing the previous session, contemporary profane and ad hoc
30 knowledges-practices of health were brought into conversation through the lens of specific
31 'diseases' and 'conditions' such as diabetes, antimicrobial resistance (AMR) and chronic
32 kidney disease, as well as feminist approaches at the intersections of caring, healing, and
33 recovery during the COVID-19 pandemic. Coming from varied disciplinary traditions
34 and perspectives within the social sciences and humanities, this collection of
35 presentations unveiled the historical, contemporary, and cross-cultural significance of (1)
36 home as a place of resistance towards biomedical authority and biomedicalisation of life
37 and lifestyle, and (2) home as a re-emerging space for both self and collective
38 experimentation with (herbal and food) remedies and more-than-human socialites (e.g.
39 fermentation). This twofold dimension of home as a space of resistance and a space of
40 co-generative more-than-biomedical cures, has gained an unprecedented relevance since
41 the COVID-19 pandemic emerged in December 2019.

42 43 44 45 46 47 48 49 **More-than-biomedical healing**

50
51 Humans have always been conscious and (pre)occupied with health, disease, and death.
52 The use of different curative processes coming from natural elements such as plants,
53 rocks, water, soil, and the sun, along with orations, sacrifices and other ritual practices
54 associated with keeping and preserving health, while avoiding disease and finitude, are
55 common, in all their differing ways, cross-culturally. For example, in Galicia, Northwest
56 Spain, these complex and intertwined processes of local health cultures were developed
57 and enacted by stigmatised peoples locally known *bruxas* and *meigas* (witches),
58
59
60

1
2
3 *curandeiras* and *curandeiros* (female and male healers), *adiviñas* (fortune-tellers), and
4 compostores (bone 'arrangers'). With the advent of 'modern science' (Stengers, 2000)
5 and the global expansion of biomedical precepts of health and disease (see Lock and
6 Nguyen, 2010), traditional and popular knowledges and ways of healing have been
7 relegated to the domain of the occult or pseudoscientific, at times condemned as
8 'primitive', ignorant and dangerous, as risky remedies to be avoided. As a result of binary
9 oppositions inherent to system of thought in which biomedicine develops, grows and
10 expands (primate vs modern; science vs superstition; health vs disease), both public and
11 global health practices, policies and recommendations have homogenised differences and
12 established a (mono)culture, which establishes sharp contrasts, oppositions, between
13 professional knowledge and authority and popular traditions, experiences, and expertise,
14 for over the past centuries. For the purpose of this panel, we contextualised biomedicine
15 as a Cartesian onto-epistemology that, whilst now global in practice and universal in
16 aspiration, has its origins in Europe. Its current hegemonic status is concomitant with the
17 imperial expansion and colonial Euro-American brutality, associated neoliberal
18 globalisation, ongoing environmental degradation, and increased precarity of middle and
19 lower social classes (Earle, 2012; X and Author, forthcoming).

26 In our contemporary context, biomedicine is promoted and favoured almost globally as
27 the normative state-sanctioned medical practice. Biomedicalisation "overlooks our
28 interdependence with other beings, the environment and biosphere" (Author et al., 2021:
29 2). Our understanding of biomedicalization here aligns with Gaudilliere's and Sunder
30 Rajan's concept of 'capitalisation' of health, which operates by rendering health "less a
31 state of embodied, subjective health and more a form of value that can be grown" (2021:
32 313). Mediated by "globalised attempts at institutional homogenisation", the
33 capitalisation of health and illness involves a "*reduction* to something that can be
34 addressed through access to and consumption of drugs, emptying the idea of healthcare
35 of meanings that do not involve access to medication" (ibid). Whereas many Asian health
36 cultures, some which are also state-sponsored, "encourage values like vulnerability and
37 respect to facilitate an inherent relationship with the internal and external environment"
38 (Author et al., 2021:2), (western) national health care systems and scientific enterprises
39 frequently neglect, coerce, and condemn vast bodies of health systems and popular
40 wisdom around healing and living to modes of subaltern existence. Aimed at the exclusive
41 benefit of 'western' sciences and supposedly global markets, the biomedicalisation of life
42 (Rose, 2007) created structural impoverishing, displacement and environmental
43 degradation through (neo)colonial practices of cultural appropriation and bioprospecting
44 biodiversity.

51 Yet the contraposition between 'modern science' and 'local', 'traditional' or 'indigenous'
52 is precisely what our phrasing of 'more-than-biomedical' aspires to open, rather than
53 capture. We believe that an exclusive focus on the oppositional logic of modernity (i.e.,
54 modern or global science vs local, traditional, indigenous, etc.) conceals more relational,
55 interdisciplinary and thus richer analysis of the elements and characteristics of healing.
56 In fact, we believe that biomedicine is a composite of practices, infrastructure, and
57 knowledges by which the 'scientific' method mingles with domestic health cultures,
58
59
60

embodied cognition, local wisdom, traditional medicines, and collective experimentation and innovation. Inspired by the notion of 'more-than' in David Abram's *The spell of the sensuous* (1996), what we call 'more-than-biomedical healing', (re)centres relationalities among humans, non-humans, and biomedicine towards embodied worlds and practices that are more numerous than, and irreducible to, biomedicine.

Local health cultures and embodied knowledges

In our paper 'Revitalising more-than biomedical healing through a 4th tier' we drew on our research insights and lived experiences with Ayurveda, movement/meditation practices, and Galician popular medicine to experiment and speculate on the potentialities that consciousness and embodiment have for a critical theory-practice of more-than-biomedical healing. We based our argument on Author and colleagues' proposition for a complementing public and global health approach in health care, what they call the '4th tier'. The '4th tier' refers to "a fourth non-institutional, community and household-based tier of health care services, where in the providers are millions of knowledgeable homes who practice health care for their own benefit" (Author et al., 2022:3). Coming from the Ayurvedic concept 'Svasthya' (i.e., 'being rooted within'), their proposition of the 4th tier is rooted on health as a multidimensional composite of "biological, psychological, spiritual, ecological, metaphysical factors" and "intergenerational, bio-culturally embedded knowledge, which communities in India have been practising for generations" (ibid). It is exactly through this plural and multi-layered understanding of health and healing that "population self-reliance", the main element of the 4th Tier, emerges.

For us, a 4th tier means nourishing individual and collective knowledge, shared values, and restorative practices focused on respect, acceptance, and consciousness. We understand consciousness here in its multiple dimensions: individual, collective, and ecological. This consciousness or, better, these "consciousnesses", are tied to a sense of resistance towards rigid managerial structures in which pace gets accelerated and therefore time, especially its lack, is used as a coercive and extractivist mechanism of neoliberal subjectification centred on productivity and measurable outputs in waged labour (including in academia). Having (more than making) time for inter- and intraspecies care (Puig de la Bellacasa, 2011, 2012, 2015) requires organising wage labour differently, and living life differently, which is practically an impossibility in neoliberal capitalism. However, as countries like Ecuador and Bolivia show, it is possible to aspire to make time for (and create a politics of) care. Care is a constitutional right in these two countries. It not a privilege that money can buy through the outsourcing of care work, which, in turn, involves the precarisation of (mostly) racialised women. It is at these intersections where feminist theories of care coalesce with decolonial theories of *Buen Vivir* (living well (Author, 2019; see also X and Author, forthcoming).

Buen Vivir emerged in Latin America in the early 2000s as a critique of Western individualism and capitalist economy as well as a proposal for ecological awareness. As a concept springing from Latin American indigenous cosmologies and recent decolonial scholarship, *Buen Vivir* has been implemented in public policies, and is now a constitutional right in Ecuador (2008) and Bolivia (2009). *Buen Vivir* as a constitutional

1
2
3 right includes nature or ‘sentient beings’ such as mountains, soil, or air in the ‘public
4 political arena’ (De La Cadena, 2010, p. 363). Nature is ‘broadly understood as the
5 constitutive conditions and practices—sociocultural, territorial, spiritual, ancestral,
6 ethical, epistemic, and aesthetic—of life itself’ (Walsh, 2010, p. 18). Crucially, the
7 revaluation of care is an essential (feminist) reformulation of productivity for *Buen Vivir*.
8 The 2008 Ecuadorian constitution acknowledges care as part of the economy, referring to
9 ‘organization of forms of family and home production, as well as self-consumption labour
10 and human care as productive activities’ (p. 28) (Author, 2019).

11
12
13
14 Exploring how gendered conceptions of *Buen Vivir* are articulated in the context of both
15 rural and urban Galician, particularly around fermented, I [Andrea], frame *Buen Vivir* as
16 a situated example of Author et al’s and Author et al’s proposition of the 4th tier (2020,
17 2022, 2021) in which socio-political struggles for sovereignty are rooted, as occurs with
18 Ayurveda, in transgenerational transmission of knowledge practices of living (and dying)
19 well. This goes beyond static and/or understandings of health; Living well, the *Buen Vivir*,
20 in Galician, “*a boa vida*”, occurs throughout all life processes, since birth, during health
21 and disease, towards as well as beyond death.

22
23
24
25 For our proposition of a ‘revitalisation of more-than biomedical healing’, we had in mind,
26 as inspirational examples, initiatives like the Indian Foundation for Revitalisation of
27 Local Health Traditions (FRLHT), a National Centre of Excellence for medicinal plants
28 and traditional knowledges. Finally, the paper discussed the potentialities of smaller-
29 scaled local community projects like community centres and associations for enhancing
30 the local social fabric through initiatives such as children storytelling, community gardens
31 activities, food cooperatives, and other mutual aid projects and activities focused on the
32 commons.

33 34 35 36 37 **Pluralism and universality in medical systems**

38
39 In her presentation, “Medical pluralism: equitable mosaic rather than homogenised
40 composite” Author explained that “pluralistic health systems bring together allopathy and
41 various combinations of traditional, complementary, and alternative systems of medicine
42 (TCAM) under formal administration”. Author explained that while various local health
43 traditions (LHT), and many formal systems of non-allopathic medicine are practised
44 worldwide, they are marginalised by “epistemic hegemonies and prejudice”. She argued
45 that these systems of medicines “have diverse histories, philosophies, and practices, not
46 suited to being studied and evaluated using a uniform framework, and not suited to
47 blending select aspects to yield a hybrid system of ‘integrated medicine’”. Author warns
48 against the dangers of integration and standardisation of the heterogenous systems of
49 medicine (Author et al., 2021, Author et al., 2020, 2022), particularly in terms of trained
50 and certified practitioners and health care benefits to people.

51
52
53
54
55 Author’s argument was shared by Author in her presentation “XXXXX”. Author explains
56 that “ecologically sustainable networked conceptions of well-being in Ayurveda, and
57 several other indigenous healing traditions have historically been nested in the lived
58 contexts of communities and their knowledge traditions. In consonance with Author’s
59
60

1
2
3 argument for keeping the mosaicism of LHC and medical traditions, Author emphasises
4 on the importance of situated practices of Ayurveda in contemporary medical systems.
5 Exploring the decontextualization and biomedicalization of innate Ayurvedic worldviews
6 that gave birth to its ecology and community sensitivity, Author's presentation
7 emphasised the importance of engaging with stressors of Ayurvedic worldviews in the
8 Indian context. It is in this way that indigenous identity and diverse healing traditions
9 could be sensitively preserved.
10
11

12
13 Contrasting with the first three presentations of the first panel session, Author's
14 "Exploring universals among medical systems", examines "medical universals" as a
15 potential way "to alleviate the socio-political dominance of biomedicine". Author
16 explored the idea of "identifying sameness" to improve understanding among the different
17 medical systems and traditions. In doing so, she classifies and discusses three "universal
18 philosophical demands" based on the "perceptions that drive people to create functional
19 medical models and systems, and one practice-oriented, focusing on vibration as a
20 "mechanism that is universally employed in delivering medical care, both in diagnosis
21 and in treatment." With regard to vibration, "sickness can be interpreted as vibration out
22 of sync with healthy life", and thus wave forms can be understood as a "universal" medical
23 intervention at the heart of body/minds, homeodynamis, and healing.
24
25
26
27

28 Central to the discussions these presentations generated were questions of what
29 foregrounded the suppression, tensions, and reconfigurations of embodied states and
30 cultures of health in traditional medicines and (non-western) medical systems.
31
32

33 **Profane practices of healing**

34
35 With a contemporary approach, the second session of the panel "Emancipation, profane
36 cures and bioinequalities in more-than-biomedical" included exploration of themes of
37 informal healthcare economies, non-compliance in biomedicine, and convalescence as an
38 act of resistance towards the values, pace, and practices of biomedicine/biocapitalism.
39
40

41 In her presentation, "Who resists?: historicities of home, AMR, and the cultures of
42 healing", Author retraced the history of women healers and its links with the history of
43 penicillin in Spain (see Author, 2018), as a lens through which to examine a "cultural
44 epistemology of home" and home care as spaces of resistance. Author argued that, in the
45 current context of the coronavirus pandemic, the visual cultures of contagion are shaped
46 by collapsed hospitals and graphisms of morbidity, while home care remained absent in
47 such representations. Yet, home, she suggested, "is the main place of healing, the place
48 in which to resist". Vitaly, the concept of home "introduced the gendered dimension of
49 healing". Healing cultures and medicine developed and practised by women over
50 centuries have been systematically devalued. At home, Author argued, women remain
51 healers from long before the early days of the invention of hygiene as a health practice.
52 Author's presentation provided the grounds for a historical reconstruction of (health)care
53 and healing at home as a meaningful spaces and temporalities of inclusive
54 historiographies of medicine and healing (Author, X & X, 2017; Author, 2018, 2020).
55 Examining the 'connected histories' (Subrahmanyam, 1997) around gendered medical
56
57
58
59
60

1
2
3 authority in the context of medieval Catalan texts on women's health, the recent work of
4 historian of medicine provides a contextual example of such a historiographical
5 endeavour. Cabré demonstrates "the recognitions of women as original sources of
6 healthcare knowledge" and authority in late medieval Catalan medicine (Cabré, 2022:
7 213).
8
9

10 Author's presentation, "Practices of reversal towards remedying diabetes in urban India"
11 examined "diabetes as not an illness that needs 'control' through medication, but as a
12 problem of the attuning to the body and its needs". Drawing on ethnographic fieldwork
13 of diagnosed residents in urban India, Author explained how and why people with
14 diabetes began to engage in practices of "reversal" because of stress, long-term damage,
15 and poor control through insulin-based medications. Reversal practices started by
16 "reducing or removing diabetes medication, and were complemented by self-driven
17 dietary changes, herbal supplements and advice from dietary influencers advocating
18 reversal". She argued that reversal "signalled a possible end to diabetes, enabling [the
19 study] participants to question the temporally (dis)orienting rhetoric surrounding the
20 chronic, never-ending nature of diabetes". "As medication reinforced biomedical and
21 epidemiological notions of time such as mealtime (...) reversal helps subvert
22 chronocracies and shifts the temporal focus to the body" (Kirtsoglou and Simpson, 2020).
23 In this way, Author suggested, diets and medication are tinkered with, through attuning
24 to the body and listening to its 'time', rather than orienting it to the timeframes imposed
25 by biomedicine. In between emancipation and biopolitical subjectification (Rose, 2007),
26 this presentation showed that reversal practices "are not 'anti-biomedicine', rather, they
27 stem from a view of 'health' as a continuous process of self-improvement towards an
28 ideal, a conception which differs from the 'backward-looking' reactive approach used by
29 biomedicine to problem-solve" (Alter, 1999).
30
31
32
33
34
35
36

37 In 'In Search of a Cure: Chronic Kidney Disease and Migrant Workers in Contemporary
38 China', Xisai Song offered an ethnographic account of how migrant workers struggle
39 with chronic kidney disease (CKD) in contemporary China. Through the journeys of Jin,
40 a male middle-aged construction worker, Song argued that the regimes of care for CKD
41 in biomedicine are underlain by normative institutional, social, and temporal orders that
42 displace socio-economically underprivileged people in nuanced ways. The CKD
43 treatment plan in biomedicine requires regular clinic visits, routine medication, proper
44 exercise and diets, and light practice of labour, which Jin found incompatible with a blue-
45 collar worker's lifestyle. In addition, his inability to comply with medical advice made
46 him extremely anxious that his CKD would progress to kidney failure quickly. As a result,
47 migrant workers embrace alternative therapeutic attempts to attain different prognoses,
48 and to grasp new possibilities of life.
49
50
51
52
53

54 Weaving another social dimension of self and collective experimentation in human-
55 microbe relations, in "Peripheral embodiments, cohabitation with microbes and practices
56 of care", Katerina Kolarova, Tereza Stockelova and Lukáš Senft explored how complex
57 subject positionings come to matter across the human/microbe border in health- and life-
58 sustaining practices of people with disabilities, and how the materiality of these
59
60

1
2
3 cohabitations produces specific “situated biologies” (Niewöhner and Lock, 2018). To
4 unpack these questions, Kolarova and colleagues built on ongoing ethnographic
5 fieldwork and feminist disability conceptualisations of “peripheral embodiments”
6 (Mitchel and Snyder, 2015) and “leaky bodies” (Shildrick and Price, 1998) to examine
7 how the microbial agents may be included in the concepts of porous, unstable, non-unitary
8 embodiments, and how the practices of care extend to the care for the microbes.
9

11 **Conclusion**

12
13
14 In liminality, in tension, even in (epistemic, symbolic, material) violence, local health and
15 cultures and medical traditions and systems worldwide have been in an unequal
16 coexistence with what we might call (Euromerican) “biomedical hegemony”. We believe
17 that to deepen our understanding of what is health and healing it is necessary to look at
18 tensions and power relations as much as at convergences, synchronicities and overlaps
19 (Orr and Orr, 2022). One of the key questions that emerge from the panel was how to
20 make accountable and methodologically feasible the compromise with diverse cultures
21 and environments of healing, their social values, cultural roots, traditions, their rituals.
22 How to dissect details while keeping empirically plural to evaluate the diverse ways in
23 which healing is catalysing, fermenting, and expanding today, including with relation to
24 state and private biomedical informed institutions, staffing, and their practices.
25
26
27
28

29 The *Ways of Healing* panel showcased diverse social and cultural studies of science
30 research around what we call ‘more-than-biomedical healing’, that is, plural and situated
31 knowledge-practices that are expansive and inclusive of health beyond individuals and
32 beyond humans alone. The panel thus served, for us, as a first step to bring the inherent
33 inter/transdisciplinarity and intersectionality of the themes (i.e., the public, life sciences,
34 clinical practice, biomedicine, policymaking) into conversation with calls for
35 demedicalisation, decolonisation and democratisation of the uses of scientific knowledge
36 in health. We envision the conceptual and methodological perspectives that populated the
37 panel to highlight the heterogeneous modes of existence of healing into (future) public
38 and global health agendas. We did so by analysing how in many places they are already
39 there, albeit often invisible to, and unacknowledged by, those tasked with managing state
40 health systems.
41
42
43
44

45 In sum, coming from varied backgrounds (including TCAM practitioners) and
46 disciplinary traditions, and inspired by our colleagues’ proposition of a complementary
47 public global health framework (Gaudilliere & Sunder Rajan, 2021; Author et al., 2021;
48 Author et al., 2020, 2022) centred on “how to live in tune with [our] changing external
49 environment and [our] inner nature and consciousness” (Author et al, 2020, p. 3 [my
50 emphasis]), we conceived the *Ways of Healing* panel at 4S 2021 as a collective effort to
51 engage with and resituate healing as a composite reality.
52
53
54
55
56

57 **Acknowledgements**

58
59
60

We are grateful to all the speakers of the panel 'Ways of healing: exploring non-biomedical cures as emancipatory and biopolitical knowledges practices' held in Toronto and online in October 2021. Special thanks to the local organisers of the Society for the Social Studies of Science (4S) 2021 Meeting.

References

Abram, David (1996) *The spell of the sensuous: perception and language in a more-than-human world*. New York: Pantheon Books.

Alter, Joseph Stewart (1999) Heaps of health, metaphysical fitness: Ayurveda and the ontology of good health in medical anthropology. *Current anthropology*, 40 Suppl(February). doi: 10.1086/200060.

Cabré, Monserrat (2022) Female authority in translation: medieval Catalan texts on women's health. *Osiris*, 37: 213 – 232.

De la Cadena, Marisol (2010) Indigenous cosmopolitics in the Andes. Conceptual reflections beyond "politics". *Cultural Anthropology*, 25(2): 334–370.

Author

Earle, Rebecca (2012) *The body of the conquistador: food, race and the colonial experience in Spanish America, 1492-1700*. Cambridge, England: Cambridge University Press.

Gaudilliere, Jean-Paul & Sunder Rajan, Kaushik (2021) Making valuable health: pharmaceuticals, global capital and alternative political economies. *BioSocieties* 16: 313–322.

Hsu, Elizabeth (2012) Plants in medical practice and common sense: on the interface of ethnobotany and medical anthropology. In: Hsu, Elizabeth and Harris, Stephen (eds) *Plants, health and healing: on the interface of ethnobotany and medical anthropology*. New York: Berghahn Books.

Hsu, Elizabeth & Harries, Stephen (2010) *Plants, health and healing: on the interface of ethnobotany and medical anthropology*. New York and Oxford: Berghahn Books.

Kirtsoglou, Elizabeth and Simpson, Bob (2020) *The Time of Anthropology: Studies of Contemporary Chronopolitics*. Routledge: London and New York.

Latour, Bruno (2013) *An inquiry into modes of existence: an anthropology of the moderns*. Cambridge, Massachusetts: Harvard University Press.

Lock, Margaret & Nguyen, Vinh-Kim (2010) *An anthropology of biomedicine*. Oxford, England: Wiley-Blackwell.

López-Pavillard, Santiago (2018) *Chamanes, Ayahuasca y sanación*. Consejo Superior de Investigaciones Científicas: Madrid.

1
2
3 Lüddeckens, Dorothea & Schrimpf, Monika (2018) *Medicine, religion, spirituality: global perspectives on traditional, complementary and alternative healing*. Transcript:
4
5 Verlag, Bielefeld.
6

7 Author

8 Author

9 Author

10
11
12
13 Niewöhner, Jorg and Lock, Margaret (2018) Situating local biologies: Anthropological
14 perspectives on environment/human entanglements. *BioSocieties 13*: 681–697.
15

16
17 Orr, Yancey and Orr, Raymond (2022) Deception-based knowledge in Indigenous and
18 scientific societies: American Indian tricksters and experimental research designs. *HAU:*
19 *Journal of Ethnographic Theory, 12*(1): 46- 62.
20

21 Author

22
23 Puig de la Bellacasa, María (2011) Matters of care in technoscience: Assembling
24 neglected things. *Social Studies of Science, 41*(1) : 85–106.
25

26
27 Puig de la Bellacasa, María (2012) Nothing comes without its world: Thinking with care.
28 *Sociological Review, 60*(2):197–216.
29

30
31 Puig de la Bellacasa, María (2015) Making time for soil: Technoscientific futurity and
32 the pace of care. *Social Studies of Science, 45*(5): 691–716.
33

34
35 Rose, Nikolas (2007) *The politics of life itself: biomedicine, power, and subjectivity in the twenty-first century*. Princeton, NJ: Princeton University Press.
36

37
38 Sanabria, Emilia (2021) Vegetative value: promissory horizons of therapeutic innovation
39 in the global circulation of ayahuasca. *Biosocieties, 16*: 387 – 410.
40

41 Author

42 Author

43 Author

44
45
46 Shildrick, Margrit and Price, Janet. (1998). *Vital signs: Feminist reconfigurations of the*
47 *bio/logical body*. Edinburg: Edinburg University Press.
48

49
50 Stengers, Isabel (2000) *The invention of modern science*. Minneapolis, MN: University
51 of Minnesota Press.
52

53 Souriau, Etienne (2015). *The Different Modes of Existence*. Minneapolis: Univocal.
54

55
56 Subrahmanyam, Sanya (1997) Connected histories: notes towards a reconfiguration of
57 early modern Eurasia. *Modern Asian Studies 31*(3):735 – 762
58
59
60

1
2
3 Talin, Piera (2021) Healing with the Brew. Ayahuasca reconfigures addiction',
4 in *Ayahuasca Healing and Science*. In: Labate, Beatriz and Cavnar, Clancy. Cham, CH:
5 Springer.
6

7
8 Talin, Piera and Sanabria, Emilia (2017) Ayahuasca's entwined efficacy: An
9 ethnographic study of ritual healing from 'addiction' *International Journal Drug*
10 *Policy*, 44, 23-30
11

12
13 Taussig, Michael (1987) *Shamanism, Colonialism, and the Wild Man: A Study in Terror*
14 *and Healing*. The University of Chicago Press: Chicago and London.
15

16
17 Walsh, Catherine (2010) Development as Buen Vivir: institutional arrangements and
18 (de)colonial entanglements. *Development*, 53(1):15–21.
19
20
21
22
23
24
25
26
27
28
29
30
31
32
33
34
35
36
37
38
39
40
41
42
43
44
45
46
47
48
49
50
51
52
53
54
55
56
57
58
59
60

For Peer Review