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

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Abstract:	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) responsibilisation. 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.

Ways of healing:

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Introduction

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.

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) responsibilisation. 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.

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:

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

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

More-than-biomedical healing

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

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

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

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

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

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

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

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

Pluralism and universality in medical systems

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

Author´s argument was shared by Author in her presentation ¨XXXXX¨. Author explains that ¨ecologically sustainable networked conceptions of well-being in Ayurveda, and several other indigenous healing traditions have historically been nested in the lived contexts of communities and their knowledge traditions. In consonance with Author´s

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

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

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

Profane practices of healing

With a contemporary approach, the second session of the panel ¨Emancipation, profane cures and bioinequalities in more-than-biomedical¨ included exploration of themes of informal healthcare economies, non-compliancy in biomedicine, and convalescence as an act of resistance towards the values, pace, and practices of biomedicine/biocapitalism.

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

authority in the context of medieval Catalan texts on women´s health, the recent work of historian of medicine provides a contextual example of such a historiographical endeavour. Cabré demonstrates ¨the recognitions of women as original sources of healthcare knowledge¨ and authority in late medieval Catalan medicine (Cabré, 2022: 213).

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

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

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

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

Conclusion

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

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

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

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