## EDITORIAL NOTE

## Is the 21st century the age of biomedicalization?

Eileen Moyer & Vinh-Kim Nguyen

The diverse contributions that make up this issue of MAT, we gingerly suggest, could initiate a provocative conversation in response to the following question: what if biomedicine, or to be more precise 'biomedicalization' (Clarke 2003), is to the twenty-first century as industrialization was to the nineteenth?

The industrial revolution ushered in a step-change in humanity's ability to transform the material world. Massive factories, teeming with workers, set about the business of producing the stuff of which a new world would be created. Cities sprouted, bustling during the day but also at night, bathed in artificial light. Shops, goods, and leisure activities were born, and though today these might seem routine, at the time they conjured unimagined possibilities. Cities were linked to their hinterlands and to distant metropolises by new modes of transportation including steamships and railroads. Journeys previously counted in days or weeks now only took hours. Life was transformed, old certainties washed away by the gleaming tide of modernity that expressed itself in art, literature, and new structures of feeling. 'All that is solid melts into air', noted Karl Marx (1848), in 'The Communist Manifesto', an aphorism invoked again by Marshall Berman in his 1982 book on modernity.

In the midst of the wealth it created, the industrial revolution also led to unprecedented human misery. This paradox – the conjugation of wealth and poverty – drove Marx to develop the science of historical materialism. For Marx, the conjoined generation of wealth and poverty was not an inevitable, 'natural' consequence of inherent differences between rich and poor. Rather, it was a mechanical consequence of the social conditions that enabled industrialization and that placed the modes of production in the hands of the élite.

The question of whether biomedicalization will be the twenty-first-century equivalent to industrialization sprang to mind in reading Catherine Waldby and Melinda Cooper's important book, Clinical Labor, reviewed in this issue by Neil Singh (and is also raised by another important volume, Lively Capital, edited by Kaushik Sunder Rajan). Singh underlines the central argument of the book: surrogacy, participation in clinical trials, donation of body parts, and other practices enabled by a global regime of biomedicine can be theorized together as forms of clinical labour that are derived from the body's inherent potential for regeneration. There is, in this, a parallel to the assemblage of machines in factories, which enabled the emergence of a working class united by their engagement in industrial labour. Industrialization signed the transformation of the relationship between consciousness, embodiment, and human engagement with the material world, increasingly subsumed into raw material for transformation through industrialized labour into the commodity form.

Building on the thesis of *Clinical Labor*, can we posit that biomedicalization indexes another such transformation, one that also is hinged on how harnessing vital bodily substances produces value. While Waldby and Cooper focus on the forms of labour so engendered, we can range further, following in the footsteps of Marx and contemporary post-Marxist theorists such as Michael Hardt and Antonio Negri (in their 2001 work on affective labour), to query what forms of value, consciousness, and indeed embodiment result. We would share Waldby and Cooper's caution that in taking stock of biomedicine in our inauspicious era we still lack adequate theoretical tools. The interconnection of jihad and the Internet are an obvious example of how social theories of the nineteenth century, with all due respect to Marx, remain woefully under-researched in light of our contemporary realities.

Clinical trials exemplify the contemporary experimental regime of global health. In addition to 'off-shored' clinical trials - clinical trials of pharmaceuticals intended for Northern populations that are executed in Eastern Europe or the global South where trial subjects are readily available but unlikely to be able to afford the drugs once they are approved for market – interventions are also being tested that are intended for local populations. What makes these interventions now available are humanitarian regimes of global health in the global South. Denielle Elliott (2011) uses the term 'philanthrocapitalism' to refer to these third-party markets where donors pay for treatments for the poor. Trial participants are not unwitting victims of a ruthless pharmaceutical complex, so brilliantly depicted in John le Carré's 2001 novel The Constant Gardener. Rather they adhere strategically, adeptly adapting to the moral economy embedded in the trial's social organization to better position themselves for when the trial – and the benefits that accrue through participation – inevitably end. Life is already so biologically and economically precarious that even meagre benefits outweigh any potential risks. Trial participation is a concatenation of face-to-face enrolments that constitute the clinical. Intersubject encounters are generally accidental (Le Marcis 2015). The clinical trial ethnographically examined in this issue by Charlotte Brives offers important

insight into the global experimental regimes that mutually stabilize drug effects and trial populations. She deftly demonstrates the everyday work of standardization of people, of bodies, and of effects that this stabilization entails within what she calls a 'biomedical package'. The work of standardization is what allows this package to then travel and achieve reproducible effects. Brives' article challenges the idea that the biological and social lives of drugs can be disentangled.

Brives' article offers ethnographic insight into the early processes of pharmaceuticalization, a key aspect of biomedicalization. For medical anthropology the conceptual groundwork was laid by the work of Susan Reynolds Whyte, Sjaak van der Geest, and Anita Hardon (2002) in their seminal volume on the social lives of medicines. In this issue, Pierre-Marie David reviews French anthropological analyses of pharmaceuticalization as presented in the edited volume by Alice Desclaux and Marc Egrot. The authors pursue this original focus through detailed and rigorous empirical studies of pharmaceutical practices in everyday life. A dynamic community of anthropologists, largely publishing in French, has sustained a critical medical anthropology since the 1990s, engaged on the terrains of the fight against HIV, urban poverty (under the rubric of 'social exclusion'), and the struggles of legally precarious migrants, many from France's postcolonial hinterlands. French anthropology reflects its institutional landscape (its material conditions of production, if you will): an unusually staunch division of labour exists between teachers (in universities) and researchers (in highly centralized national research agencies such as the Centre national de la recherche scientifique (CNRS), or the former colonial overseas research bureau, now called the Instituut de la recherche pour le développement (IRD)), and between those with secure employment and those who live from contract to contract. The focus on highly labour-intensive collaborative empirical studies visible in this volume may explain the contrast with studies published in English more commonly derived from individual fieldwork. The signal contribution of this volume has been to give greater ethnographic texture to pharmaceuticalization, particularly through empirical studies of drugs 'at the margins' and in the global South. While Brives' study focuses 'upstream', examining processes of biosocial drug stabilization, these studies are located 'downstream', after drugs are considered stable enough to be released into the 'wild' of everyday life.

Biomedicalization and its corollary of pharmaceuticalization produce subjectivity beyond clinical trials. An important site is the management of 'key populations' through public health interventions, a process that has been the subject of much engaged and critical ethnography in anthropology and public health for the past two decades. What makes groups 'key' is the local/global articulation of social identity and the biomedical mitigation of epidemiologically calculated health risks. Don Seeman and his coauthors contribute to this extensive and important literature that has criticized the prevailing assumptions that

noncompliance with public health measures must be equated with 'irrational' cultural beliefs, what Paul Farmer (1992) and Jean-Pierre Dozon and Didier Fassin (2001) term 'culturalism' in public health. As Seeman and colleagues argue, this is a manoeuvre that inaccurately devalues decisions not based on a biomedical calculus of risk mitigation. In their study of homeless African American women in shelters in the southeastern United States, the authors show that decisions around pregnancy and contraception mobilize forms of spirituality and religious engagement that are a powerful and effective response to economic and social contingency – demonstrating the poverty of simplistic public health accounts that see religion as antithetical to reproductive control and planning.

Moving north, Lindsay Bell's think piece on addiction, care, and recovery among Canadian First Nations also moves us beyond the rationalism/culturalism dichotomy to think about the twinned subjects of late liberal recognition and care for structural harms. In a moving account of a Dene woman's struggle with homelessness and addiction in the wake of cutbacks to social programs, Bell channels Elizabeth Povinelli's (2011) work (on settler governmentalities and the 'future anterior' righting of past wrongs through legal redress) to focus attention on overlapping and at times conflicting economies of care in deprived communities. Anna Lavis's think piece on anorexia pursues the focus on care and subjectivity in a very different site: an eating-disorder clinic in the United Kingdom. She reveals the flipside of care, glossed as illness as a form of being-in-the-world and as subject of desire, and shows how through the diagnosis of anorexia bodily experience and desire are gradually sutured into subjectivity. Lavis urges us to move beyond the binary of disease/cure to acknowledge the ambivalence and complexity of illness as a 'way of living through distress'.

Another perspective on the articulation of biomedicalization and subjectivity is offered by Alexandre Baril and Kathryn Trevenen's challenging article on transability, in our *Found in Translation* piece for this issue, translated by Julien Brisson. This theoretical text, originally published in French, is offered in an English translation here for the first time. Transability, which refers to deliberate bodily modification to acquire a disability, offers a radical, new politics. Biomedicine's normative epistemological-ontological architecture, first analysed by Georges Canguilhem (1991), generates here a specific politics of resistance. Bodily modification against able-ism demonstrates a praxis of consciousness through practices of bodily impairment. This text echoes some of the positions that have emerged in 'crip theory'. Crip theorists and activists, echoing the Queer Nation movements of the 1990s that later gave us queer theory, articulate a politics of 'disability' that not only rejects normative notions of ability but celebrates 'disability' as diversity. In an era of global economic crisis, however, material and pressing constraints – filtered through cutbacks to medical and social programs – can drive those less able into dependence or poverty. A recent ethnographic engagement with the 'independent life' movement in Catalonia (Criado, Rodríguez-Giralt,

and Mencaroni 2016) has documented a radical activist response that makes autonomy possible again through creative political, civic, and mechanical engineering. Emily Yates-Doerr's review essay on recent important works by Anna Tsing and Marisol de la Cadena suggests another take on transability, and indeed the politics of resistance to biomedicalization. Referencing the recent rise of 'postrepresentational anthropology', Yates-Doerr asks: 'how do we rebuild vocabularies for difference and division that do not rely on the cut of the dichotomy?' The 'cut' of transableism might then be viewed as an ontological politics, a way of remaking the world through the body.

Photo essays are firmly located within a politics of representation, and this issue's photo essays offer a compelling portrait of North American homelessness, one that Robert Desjarlais notes advances a 'glossary of perceptions' but, we would argue, also lays the groundwork for a theoretical visual lexicon. Homelessness has been a staple of anthropology and before that sociology, and the photo essays here add to a genealogy that stretches from recent haunting ethnographies (such as Angela Garcia's *Pastoral Clinic*) to seminal studies by Desjarlais (1997) and Philippe Bourgois (1995) and indeed all the way back to the Chicago School of urban sociology (Park, Burgess, and McKenzie 1925), and before that Georg Simmel ([1903] 1971). While much has changed since then, what is remarkable about these photo essays is the apparatus that made them possible. From Anchorage to Vancouver to Milwaukee to London, Ontario, these photos are not 'sociological' but represent the troubled confrontation between a public health apparatus (in which these photographers were embedded) and precarious lives they seek and often fail to protect. They visualize a reflexive and critical praxis that reveals the kind of interplay between subjectivity and social witnessing that triggered the critique of industrialization in the nineteenth century.

So where might this conversation lead, focused on the parallel transformative potentials of biomedicine and the industrial revolution? These articles offer further evidence that the scale of human inequality and misery is at least equivalent to, and perhaps dwarfs, that witnessed by Marx. In this context, global biomedicine has generated an unprecedented and historically transformative differentiation of human bodies and futures clearly visible in contemporary struggles over pharmacological access, care, legal redemption, and therapeutic sovereignty. As these papers show, struggles over biomedicalization are not limited to white middle-class concerns around assisted procreation or enhancement – they enfold global multitudes otherwise not articulated to global regimes of production: the homeless, unemployed urban populations in Africa, etc. These struggles are also articulated with global geopolitics too, as the ongoing public health crisis in Palestine attests. We take our cue from Marx to see these struggles as symptomatic of underlying historical dynamics, as tremors from the shifts in tectonic plates. But the theoretical architecture we have inherited from the nineteenth century is no longer adequate to describe and analyse the historical processes at stake in this

biomedical revolution, or to answering the question of whether biomedicalization is to the twenty-first century as industrialization was to the nineteenth. Developing this theoretical architecture through distributed, global, and rigorous ethnography, we suggest, will be one of the tasks of our journal in the years to come.

Once again, we would like to thank our growing community of readers and contributors for their engagement, and the support of our Advisory Board. We would also like to thank the European Research Council and the University of Amsterdam for their continuing support. And we are particularly excited to announce that the Department of Anthropology and Sociology of Development at the Graduate Institute for International and Development Studies in Geneva has also committed to supporting our open-access journal.

## References

- Berman, Marshall. 1983. All That Is Solid Melts into Air: The Experience of Modernity. London: Verso.
- Bourgois, Philippe. 1995. In Search of Respect: Selling Crack in El Barrio. New York: Cambridge University Press.
- Canguilhem, Georges. 1991. *The Normal and the Pathological*. Trans. Carolyn R. Fawcett and Robert S. Cohen. New York: Zone Books.
- Clarke, Adele E., Janet K. Shim, Laura Mamo, Jennifer Ruth Fosket, and Jennifer R. Fishman. 2003. 'Biomedicalization: Technoscientific Transformations of Health, Illness, and U.S. Biomedicine'. *American Sociological Review* 68, no. 2: 161–94.
- Criado, Tomás Sánchez, Israel Rodríguez-Giralt, and Arianna Mencaroni. 2016. 'Care in the (critical) making: Open prototyping, or the radicalization of independent-living politics.' Special issue, 'Disability and Care', edited by Emmanuelle Fillion, Myriam Winance, and Aurélie Damamme, *Alter European Journal of Disability Research* 10: 24-39. http://dx.doi.org/10.1016/j.alter.2015.07.002
- Desjarlais, Robert. 1997. Shelter Blues: Sanity and Selfhood among the Homeless. Philadelphia: University of Pennsylvania Press.
- Dozon, Jean-Pierre, and Didier Fassin, eds, 2001. Critique de la santé publique: Une approche anthropologique. Paris: Éditions Balland.
- Elliott, Denielle. 2011. "Changing Lives": The Ethics, Politics, and Possibilities of Mobile-Money in Kenya'. Paper presented at the American Anthropological Association as part of the panel 'Anthropologies of Philanthrocapitalism: New Hybrids of "Old" Collusions, Collisions, and Capitals', Montreal, 19 November.

- Farmer, Paul. 1992. AIDS and Accusation: Haiti and the Geography of Blame. Berkeley: University of California Press.
- Garcia, Angela. 2010. The Pastoral Clinic: Addiction and Dispossession along the Rio Grande. Berkeley: University of California Press.
- Hardt, Michael, and Antonio Negri. 2001. *Empire*. Cambridge, MA: Harvard University Press.
- Le Carré, John. 2001. The Constant Gardener. London: Hodder & Stoughton.
- Le Marcis, Frédéric. 2015. 'Life Promises and "failed" family ties: Expectations and Disappointment within a Clinical Trial (Ivory Coast)'. Special issue, 'Museum of Failed HIV Research,' edited by Patricia Kingori and Salla Sariola. *Anthropology & Medicine* 22, no. 3: 295–308. http://dx.doi.org/10.1080/13648470.2015.1081671.
- Marx, Karl. (1848) 1994. *Selected Writings*, edited with introduction by Lawrence H. Simon, 157–86. Cambridge: Hackett Publishing.
- Park, Robert E., Ernest W. Burgess, and Roderick D. McKenzie. 1925. *The City*. Chicago: University of Chicago Press.
- Povinelli, Elizabeth. 2011. Economies of Abandonment: Social Belonging and Endurance in Late Liberalism. Durham, NC: Duke University Press.
- Reynolds Whyte, Susan, Sjaak van der Geest, and Anita Hardon. 2002. *The Social Lives of Medicines*. Cambridge: Cambridge University Press.
- Simmel, Georg. (1903) 1971. 'The Metropolis and Mental Life'. In *On Individuality and Social Forms*, edited by Donald N. Levine, 324–39. Chicago: University of Chicago Press.
- Sunder Rajan, Kaushik, ed. 2012. Lively Capital: Biotechnologies, Ethics, and Governance in Global Markets. Durham, NC: Duke University Press.