



**Networking Peripheries: Technological Futures and the Myth of Digital Universalism.** By Anita Say Chan. Cambridge, MA: MIT Press, 2014. 288 pp. ISBN 9780262019712

The popular imaginary surrounding the digital, knowledge-based economy (DKE) largely consists of celebratory appraisals of an unfolding political-economic situation based on the “creative destruction” of existing economic and social practices facilitated by the informationalization of previously uncommodified aspects of human existence and social life. From the digital innovation capitals of Western “developed” states, a purportedly universal ethos of technologically facilitated economic growth and human development is diffused outward, as transnational financial, trade, and consumer markets are reorganized according to the efficiency gains offered by scalable networked information and communication technologies (ICTs). Creative classes (Florida, 2014), creative economies (UNESCO/UNDP, 2013), and so-called platform economics (Evans, 2011) are celebrated for their purportedly liberating and democratizing effects. Yet, some twenty years after the “digital economy” (Tapscott, 1996; see also Bell, 1976) was first announced and nearly a decade since the “Great Recession,” the global economy itself and the economic prospects of a number of states remain mired in stagnant growth—or worse. In this context, critical scholarship focused on this particular version of the DKE, which had largely been overshadowed in the late 1990s and early 2000s, has received renewed attention and is providing theoretical lenses for analyzing the claims made by techno-optimists as well as the actions taken by businesses, governments, and international organizations seeking to invest in and benefit from transforming political-economic structururations (cf. Fuchs & Winseck, 2011; Huws, 2015; Morozov, 2013; Ouellet, 2010; Parayil, 2005). The theoretical lens of “informational capitalism” (Fuchs, 2010; Kundnani, 1999) helps foreground concerns about inequitable DKE-based arrangements, highlighting how (and why) knowledge-based resources are converted into informational commodities, which are then marketed and exchanged in transnational trade-based networks, without necessarily benefiting the producers or consumers of these goods and services.

With *Networking Peripheries: Technological Futures and the Myth of Digital Universalism*, Anita Say Chan (Assistant Research Professor of Communications in the Department of Media and Cinema Studies at the University of Illinois, Urbana-Champaign) provides a novel contribution to this body of critical scholarship. Focusing on traditional and indigenous craft workers as well as polyvocal networks of free/libre open source software (FLOSS) in Peru and across Latin America, Chan demonstrates the ways that DKE activities rooted in trade-based, neoliberal economic frameworks are extending into the “periphery” and reorienting diverse ways of life according to market-based rationales. Rather than lamenting such changes, *Networking Peripheries* uses insights and examples gleaned from interviews and field work in rural Peruvian artisan communities and with FLOSS actors to demonstrate how Polanyian forms of

“counter-movement” activity (Fraser, 2013; Polanyi, 1944) arise in response to (perceived and real) threats to established ways of life, resulting in efforts to negotiate and secure favourable outcomes for themselves as they become part of hyper-competitive transnational markets of the DKE.

In the preface and the introduction, Chan frames her fieldwork with an argument about “digital universalism” and the ways in which various forms of intellectual property (IP) law are central to the competitiveness of individuals, communities, states, and corporations in the broader context of the DKE and the other “information society initiatives” she discusses throughout. As others have argued elsewhere, IP law has been crucial to the expansion of the DKE (cf. Coombe & Turcotte, 2012; May, 1998; McNally, 2014): by providing legal and governance mechanisms for protecting the products of knowledge-based labour, IP law enables individuals, corporations, communities, and states to market their wares and promote economic growth and human development. International trade and legal regimes, most notably through the World Trade Organization (WTO) system and its Trade-Related Aspects of Intellectual Property Rights (TRIPS) Agreement, have worked to disseminate a predominately Anglo-Saxon version of IP law, based on the economic priorities of developed states and the transnational corporations (TNCs) based in them, into the international community. As Chan argues, this dissemination of supposedly universal conceptions of IP law does not cohere with the realities and concerns of a majority of the world’s population. In particular, communities with alternative knowledge management regimes based in traditional and indigenous conceptions of knowledge and authority must actively work to ensure that the precepts of an economic system based on IP and digital universalism do not entrench historically constructed forms of exclusion and precarity through models of development based on inequitable political-economic structurations.

Part 1 of the text focuses on the how these purportedly universal norms extend “Neoliberal Networks at the Periphery.” Chan spends three chapters focusing on how state-sponsored development programs in Peru have recast the traditional pottery work of rural indigenous artisans as a form of informational labour. Through the use of a particular form of IP, Denomination of Origin (DO) titles, the Peruvian state seeks to encourage the differentiation of Chulucanas ceramics as a way of facilitating a competitive advantage based on affective attachments for these products in the global marketplace. Quoting the World Intellectual Property Organization, Chan highlights how international organizations and nation-states view the expansion of IP systems as a means to “reward creativity, stimulate innovation and contribute to economic development while safeguarding the public interest” (p. 25). In this context, DOs are used to certify the regional characteristics of a particular good, attesting to the specific geographic and cultural conditions of their production. International and domestic development efforts are increasingly adopting DOs and other forms of IP to, as Chan argues, cultivate “enterprise villages” (p. 28) based on the existence and reorientation of traditional rural activities towards economic development. In doing so, such efforts reorient existing practices according to trade- and market-based systems rooted in a neoliberal economic rationale.

As Chan demonstrates, although these initiatives offer the promise of economic growth and associated forms of human development, the application of neoliberal concepts in alternative contexts has transformative effects on the communities that become integrated into the neoliberal network(s): efforts to “improve” the “efficiency,” capacity, and cost effectiveness of rural producers so that they are able to create enough standardized products to meet the demands of their exporting partners calls into question the very “authenticity” and “native purity” of the products being produced, protected, and promoted via the DOs. As well, the introduction of competitive markets into communities with alternative forms of authority and knowledge management recasts the ways in which communities interact with one another. Chan notes how the exclusionary nature of DOs, which are used to demarcate who may use the certification mark and in what contexts, leads to competitive relationships amongst rural artisans who are seeking to secure distribution contracts and access to transnational markets. This intra-communal competition helps to drive down the prices exporters are willing to pay for products, helping to establish—or re-assert—a dependence on foreign networks and transnational political-economic realities. Chan’s research demonstrates how neoliberal norms associated with digital and/or technological universalism are absorbed, rejected, and re-articulated in diverse locales according to distinct local histories and specificities. The universal projections of information society initiatives in general, and informational capitalism in particular, are therefore called into question and re-negotiated according to the diverse concerns of the stakeholders involved.

In part 2 of *Networking Peripheries*, Chan similarly considers the activities of “polyvocal networks” of activists working within and through an alternative form of knowledge and IP management: free/libre open source software (FLOSS) activists. In general, the FLOSS Movement arose in tandem with the information society initiatives of the late twentieth and early twenty-first centuries. Importantly, however, FLOSS resists the IP universalism associated with exclusionary and individuated IP rights governance regimes and promotes collective and collaborative production of knowledge-based resources through “open source” software code. As Chan notes, for its advocates, FLOSS promises “to turn on their heads the dominant logics of software innovation and the established practices of closed, proprietary commercial development that most IT product markets relied on” (p. 117). For developing countries such as Peru, FLOSS also offers the ability to acquire and maintain software technologies at far less expensive rates than the rents necessary for purchasing and updating proprietary software from TNCs such as Microsoft.

Chan’s research chronicles how advocates for FLOSS in Latin America coalesced around the efforts of Peruvian Congressman Edgar Villanueva and his efforts to mandate the consideration of less expensive and more adaptable forms of FLOSS software for use in state computers. Microsoft resisted Villanueva’s efforts and the TNCs’ general manager in Peru attacked Villanueva’s bill “as a ‘danger’ to national security and to corporate intellectual property rights” (p. 126). The United States’ ambassador to Peru supported Microsoft’s stance and warned the Peruvian government that the passage of the bill would damage relations between the two countries. Villanueva responded to Microsoft’s claims in a 12 page letter, which “came to speak for the interests of hack-

ers and information activists, not merely in Peru and Latin America but also well around the world” (p. 126). This letter was the result of discussions and co-ordination among the polyvocal network of FLOSS advocates across Latin America, who used this collective effort to systematically refute Microsoft’s claims and provide further evidence in support of the bill’s contents. The contents of the letter and legislation were specifically tailored to “notions of citizens’ democratic rights in an emergent information society” and “became a way of critiquing contemporary political and economic structures and imagining the possibility of a more democratic, participatory public” (p. 139)—themes Chan further explores in chapters 5 and 6. The eventual successful passage of this bill helps to highlight the ways in which political counter-movements and actors are able to co-ordinate and oppose existing political-economic structurations, even when the leading promoters of a digitally universal information society are presenting them as inevitable and beneficial.

*Networking Peripheries* offers seemingly unrelated examples of local activities working in and against the expansionary nature and purportedly universalized conception of informational capitalism and the DKE. The expansion of neoliberal production networks into rural indigenous communities in Peru and the activities of polyvocal networks of FLOSS activists across Latin America demonstrate the existence of counter-movements working to re-negotiate the terms of their entrance into the DKE. Chan’s work highlights that such counter-movements must not be regarded as passive participants who are absorbed into political-economic structurations emanating from elsewhere; instead, diverse communities, individuals, and networks actively articulate and advocate their own terms of entrance and existence within the confines of transnational markets of economic relations and exchange. Chan’s case studies demonstrate the “myth” surrounding digital and/or technological universalism, highlighting how alternative realities of and futures for the DKE are possible at the so-called peripheries of the “information society.” Chan thus provides new examples of resistance against universalizing claims about the potentials offered by digital technological innovations. *Networking Peripheries* will be of interest to critical scholars working on the ever-evolving contours of the DKE, IP, and informational capitalism.

## References

- Bell, Daniel. (1976). *The coming of post-industrial society: A venture in social forecasting*. New York: Basic Books.
- Coombe, Rosemary J., & Turcotte, Joseph F. (2012). Cultural, political, and social implications of intellectual property law in an informational economy. In UNESCO-EOLSS Joint Committee (Eds.), *Encyclopedia of life support systems (EOLSS): Culture, civilization and human society* (np.). Oxford, UK: EOLSS Publishers. URL: [www.eolss.net](http://www.eolss.net).
- Evans, David S. (2011). *Platform economics: Essays on multi-sided businesses*. Competition Policy International. URL: <http://www.marketplatforms.com/wp-content/uploads/Downloads/Platform-Economics-Essays-on-Multi-Sided-Businesses.pdf>.
- Florida, Richard. (2014). The creative class and economic development. *Economic Development Quarterly*, 28(3), 196–205.
- Fraser, Nancy. (2013). A triple movement? Parsing the politics of crisis after Polanyi. *New Left Review*, 81, 119–132.
- Fuchs, Christian. (2010). Labor in informational capitalism and on the internet. *The Information Society*, 26(3), 179–96.

- Fuchs, Christian, & Winseck, Dwayne. (2011). Critical media and communication studies today: A conversation. *tripleC: Cognition, Communication, Cooperation*, 9(2), 247–271.
- Huws, Ursula. (2015). iCapitalism and the Cybertariat: Contradictions of the digital economy. *Monthly Review*, 66(8), 42–57.
- Kundnani, Arun. (1998/1999). Where do you want to go today? The rise of information capital. *Race & Class*, 40(2–3), 49–71.
- May, Christopher. (1998). Capital, knowledge and ownership: The ‘information society’ and intellectual property. *Information Communication & Society*, 1(3), 246–69.
- McNally, Michael. (2014). Information society discourse, innovation, and intellectual property. In B.C. Doagoo, M. Goudreau, M. Saginur & T. Scassa (Eds.), *Intellectual property for the 21st century: Interdisciplinary approaches* (pp. 289–309). Toronto: Irwin Law.
- Morozov, Evgeny. (2013). *To save everything, click here: The folly of technological solutionism*. New York: PublicAffairs.
- Ouellet, Maxime. (2010). Cybernetic capitalism and the global information society. In J. Best & M. Paterson (Eds.), *Cultural Political Economy* (pp. 177–196). London & New York: Routledge.
- Parayil, Govindan. (2005). The digital divide and increasing returns: The contradictions of informational capitalism. *The Information Society: An International Journal*, 21, 41–51.
- Polanyi, Karl. (1944/2001). *The great transformation: The political and economic origins of our time*. Boston: Beacon Press.
- Tapscott, Don. (1996). *The digital economy: Promise and peril in the age of networked intelligence*. New York: McGraw-Hill.
- UNESCO/UNDP. (2013). *Creative economy report 2013 special edition: Widening local development pathways*. New York: UNDP. URL: <http://www.unesco.org/culture/pdf/creative-economy-report-2013-en.pdf>.

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