



DIGITAL OBJECTS AND SOCIAL TRANSFORMATIONS IN A GLOBAL WORLD

indo-french perspectives

**THURSDAY 29TH
OF JUNE 2017**

Université Paris Descartes
45, rue des Saints Pères 75066 Paris
Salle des thèses – Bâtiment Jacob

CONTENTS

Paris Workshop Schedule 3

Research Context 4

Who We Are 7

References 9

DIGITAL STUDIES IN THE GLOBAL SOUTH

DIGITAL OBJECTS AND SOCIAL TRANSFORMATIONS IN A GLOBAL WORLD : INDO-FRENCH PERSPECTIVES

**THURSDAY 29TH
OF JUNE 2017**

Université Paris Descartes
45, rue des Saints Pères 75066 Paris
Salle des thèses - Bâtiment Jacob

9h - Opening by Rigas Arvanitis (IFRIS/CEPED)

9h30-11h : Digital Concepts

« Prehistories of the Database: Body, Evidence, Law in India » by Itty Abraham (University of Singapore)

« An exploration of Google's PageRank: From authority to personalized prediction? » by Dominique Cardon (Medialab, Sciences Po)

11h15 -13h : Digital Health

Chair person/Discussant : Ashveen Peerbaye (LISIS)

« The Techno-Finance of Data Driven Health and the Welfare State: Case of RSBY in India. » by Rajiv Mishra (CSSP-JNU) .

« Mobiles (for) development : mHealth and technological imperialism » by Marine Al Dahdah (CEPED)

13h-14h : Lunch Break

14h-15h30 : Digital Sport

Chair person/Discussant: Marianne Noël (LISIS)

« Technology, Speed and Consumerism: India through the lens of cricket and the Indian Premier League » by Vidya Subramanian (HT, Delhi)

« Play the game, Know the game, Shape the game. Football Manager: mutual shaping between game, sport and community » by Alexandre Hocquet (Université de Lorraine)

16h-17h30 : Digital Migration/Space

Chair person/Discussant : Sohan Prasad Sha (CSSP-JNU)

« Inclusions/Exclusions: Databases and the politics of citizen-making » by Khetrimayum Monish Singh (CIS, Delhi)

« Digital space and digital places: web-based visualizations of mobilities » by Marta Severo (DICEN-idf)

17h30 : Apéro convivial

Research Context

Since the inception of the Internet, social scientists have engaged in research related to online communities, cyberspace and cyber-identities. Research in this area has attracted many different perspectives dispersed across multiple interests, whether it is called 'digital humanities', 'new media studies', 'cyberculture studies'. While 'cyber' was the dominant term used in the 1990s and early 2000s, it has been largely replaced by the term 'digital' now that the internet has become much more pervasive, moving from desktops to devices that can be worn on the body and transported anywhere, allowing the user to be constantly connected to the internet. 'Digital studies' encapsulates the concerns previously addressed by social scientists in the 1990s and extends into this new era of mobile digital usage. It is a neat descriptive term that also encompasses other disciplines and their use of the term 'digital'.

'Digital studies' focus on the way emails, mailing lists, digital forums, blogs, social networks or mobile applications change the way people work and live (Rainie, Wellman 2012). Whether called the network society (Castells 2010) or the connected revolution (Brown, Green, and Harper 2002), the fusion of Internet and multiple digital devices further expands the influence of these objects in our daily lives. The particular uses of those new devices have been documented so far by economists, historians and especially sociologists conducting studies about innovators and users of arising online services, relying primarily on ethnography but also extensively on new data mining and so-called "virtual ethnography" approaches (Beuscart, Dagiral et Parasie, 2016).

Moreover, the growing uses of digital technologies accelerate and intensify the production and circulation of digital data worldwide. Flash cookies or smart captors are discreetly collecting data on the digital users' pattern and navigation, several scholars show that those devices are producing new forms of quantification, control and surveillance over life itself (Haggerty et Ericson 2000 ; Lyon 2011; Lupton 2016; Raley 2013). But raw data does not exist as such, it has to be generated, used and analysed; and this process implies a substantial use of interpretative work (Gitelman 2013 ; Dagiral and Peerbaye, 2016). Data is framed, organised, classified, separated or assembled. In this process of collection and classification resides the discreet and almost invisible power of the datafication of life. French STS scholars have studied the science behind those new forms of quantification, as 'data science', and highlighted

the numerous social worlds that this science now encompasses (Dagiral and Parasie 2016) and the construction of the algorithms that guide its structure (Cardon 2015).

The use of data as arguments is another power issue. Far from being neutral, data can be used for different purposes and framed in particular ways. Numerous scholars emphasize the uses of personal data for marketing purposes or by governments and private companies without the explicit agreement of the users (Lyon 2014; Mansell 2011; Uimonen 2016). The processes and strategies organizing data collection and connecting this activity to government practices have been shown to be a major feature of the contemporary exercise of power.

The digitalization of life is a worldwide phenomenon, but it has been less studied in the Global South. Most current works focus upon what is taking place in highly developed countries, often assuming that the changes in Europe or in the USA will expand to developing or emerging countries sooner or later. This assumption does not withstand close examination. First of all, it is now widely acknowledged that game-changing projects can be experimented first in the Global South. The extent to which "mobile money" (payment via mobile phone) has developed in Kenya is a first example (Park and Donovan 2016); the current implementation of national biometric identification run in India is another one (Abraham and Rajadhyaksha 2015, Cohen 2016). Second, the changing equilibrium between users and producers in the markets makes it more important to pay attention to technological infrastructure in the Global South. For fields such as entertainment and sport (television and cinema, online entertainment portals such as Netflix, national and international sports leagues for instance), countries such as India are a huge market. Massive financial investments, the creation of technological infrastructure, anti-piracy mechanisms, etc. have been put in place in the hope of a high return on investment (Gupta 2004, 2009; Joshi 2007). Kampala in Uganda, Nairobi in Kenya or Santiago in Chile have also recently emerged as technological hubs which attract more and more investments in the field of media technologies - sites such as the 'Silicon Savannah' of Nairobi bring in new techno scientific imaginaries. Such technosocial influxes in Global South societies remain largely understudied and under-theorised. Third, the ways in which technologies are used and adapted to local environments also differ from one setting to another. The emergence of technological entrepreneurship like Chaebols (e.g. Samsung), led semiconductor revolution in Newly Industrialized Economies, in particular South Korea, have revolutionized digital technologies and deeply transformed the societies in which they have been developed.

Fourth, economic globalization often results in the interconnectedness of projects and sites. It is therefore necessary to look at how technologies developed in one place can be used in another and how this changes technologies in return.

New ways of governing, of producing and capturing value, of shaping subjects through information technology are at play in the Global South. An increasing body of work is catching up with the necessity of giving a proper account of policies, processes and practices regarding digital infrastructure technologies and cultures in the Global South, especially in India, such as Usha Ramanathan (2015), Nishant Shah (2009, 2011, 2013), Ashish Rajadhyaksha (2013), and Ravi Sundaram (2009). Therefore, there is both scientific and political importance to this: a view too narrowly focussed upon traditional centres of power need to be enriched by new mechanisms, and at the same time one has to understand to what extent older modes of relation such as imperialism have disappeared or not.

Of course, this stance raises difficulties. First, the relevance of the notion of a 'global' South must be discussed, as it might flatten the specificities of countries whose economic development, history and cultures greatly differ. At the same time, it seems important to keep the notion at least temporarily in order to gather studies which are often dispersed even though they deal with common issues such as digital divide, uses of data, providing access to marginalised communities, social activism via mobile and internet technologies, etc. Second, conceptual and analytical tools shall integrate both geopolitical and cultural views upon technological development and circulations. The tools offered by several trends of anti- and post-colonial critique can help us in this task, from the critique of unequal development (Frank 1966, Amin 1973) to postcolonial, subaltern or decolonial studies (Said 1978, Guha 1983, Spivak 1999, Chakrabarty 2009, Mignolo 2000, Quijano 1994) and to works trying to integrate these different approaches (Samaddar 2010, Mezzadra, Neilson 2015). Third, and this might be the most important: fieldwork studies are greatly needed, since postcolonial STS cannot be conducted 'from above' and without in depth knowledge of the social characteristics of countries where changes are taking place. As multi-sited as our studies can be, they have to be located or rather 'situated' (Harding 2004, 2008).

For these reasons, the choice of a French-Indian partnership, benefiting from the experience of the group set up last year in India, through a monthly seminar and participation to two workshops, seems relevant. In addition, India is a major site for technological change. Given the increasing emphasis on technology-driven industries and start-ups in

the current governance paradigm and the almost three-decade old thrust in ICTs and related technoscientific advancements in industry and research, India is a useful site for the simultaneous study of technological proliferation, and the lack of it. According to recent studies (Internet World Stats 2015), the number of internet users worldwide has increased from 360 million in 2000 to more than 3 billion in 2014 (an increase of 753%). According to the Telecom Regulatory Authority of India (TRAI), there are roughly 400 million internet users in India, with a penetration of 34.8%. As a comparison, in the United States of America alone – which has a penetration rate of 86.9% – there are a total of only 277 million users (as reported in June 2014). This makes India one of the most fascinating sites in which to engage in ‘Digital Studies’ – being both a huge market for digital technologies and a land of major inequalities in terms of use and access to these technologies.

Who We Are

We are STS scholars from ‘the East’ and ‘the West’ (or the ‘Global North’ and the ‘Global South’) working on digital technologies and practices in our respective fields. This collaboration began with the creation of the Digital Studies Group in Jawaharlal Nehru University (JNU) in 2015. At the Annual 4S meeting in Barcelona 2016, around a series of discussions on digital perspectives from the global south, ideas emerged on a possible collaboration between early career researchers in France and India.

This group of four French, one Nepali, and three Indian researchers aims to question and attempt to reshape the manner in which STS has engaged with digital technologies and practices in the north and the south so far. Our initial statement was that STS has dealt with digital issues mostly with an approach focused upon the Global North and framed in the only perspective of a digital divide/»catch-up» concern for the Global South, inevitably putting forward specific technologies and trends. The digital issues, which are dealt with in the Global South, overlap only partly with this approach and one needs to broaden the scope of study. In order to achieve this aim, we envision a long-term collaboration encouraging exchange of ideas and methods between scholars of both countries over a period of time.

Eric Dagiral is Assistant professor at Paris Descartes University (CERLIS) working on the making and uses of digital data infrastructures in the fields of health, medicine and wellbeing technologies.

Khetrimayum Monish has submitted his PhD thesis to the Centre for Studies in Science Policy (CSSP, JNU) and is working on digital infrastructures and database politics in India at the Centre for Internet & Society, New Delhi.

Marianne Noël is a PhD Candidate at LISIS (CNRS-UPEM-INRA-ESIEE) working on the governance of global open access infrastructures.

Marine Al Dahdah has completed her PhD at CEPED (UPD-IRD) working on the use of mobile phones for health in the global south (India and Ghana).

Mathieu Quet is Permanent Researcher at IRD (CEPED-CSSP, JNU) working on circulation and securitisation of pharmaceuticals in the global south.

Rajiv Mishra is a PhD Candidate at CSSP, JNU working on large information systems, development and the case of unique identity and health informatics in India

Sohan Sha is a PhD Candidate at CSSP, JNU working on comparative innovation policies in the global south.

Vidya Subramanian has submitted her PhD thesis to CSSP, JNU and is working on ICTs, sport, and social networking cultures in India. She currently works with the Hindustan Times in New Delhi.

References

- ☞ Abraham, Itty, et Ashish Rajadhyaksha. « State Power and Technological Citizenship in India: From the Postcolonial to the Digital Age ». *East Asian Science, Technology and Society* 9, no 1 (mars 2015): 65-85.
- ☞ Amin, Samir, *Le Développement inégal. Essai sur les formations sociales du capitalisme périphérique*, Paris, Ed. Minuit, 1973.
- ☞ Arnold, David, *Everyday Technology, Machines and the Making of India's Modernity*, Chicago University Press, 2013.
- ☞ Beuscart J.-S., Dagiral E. et Parasie S., *Sociologie d'internet*, Paris, Armand Colin, 2016.
- ☞ Brown, Barry, Nicola Green, et Richard Harper, éd. *Wireless world: social and interactional aspects of the mobile age. Computer supported cooperative work*. London ; New York: Springer, 2002.
- ☞ Cardon, Dominique. *A quoi rêvent les algorithmes: Nos vies à l'heure des big data*. Seuil, 2015.
- ☞ Castells, Manuel. *The rise of the network society*. 2nd ed., With a new pref. *The information age : economy, society, and culture*, v. 1. Chichester, West Sussex ; Malden, MA: Wiley-Blackwell, 2010.
- ☞ Chakrabarty, Dipesh, *Provincialiser l'Europe, la pensée postcoloniale et la différence historique*, Paris, Ed. Amsterdam, 2009 [2000, trad. par Olivier Ruchet et Nicolas Vieillescazes].
- ☞ Cohen, Lawrence. «Duplicate, Leak, Deity». *Limn*, 4 mars 2016. <http://limn.it/duplicate-leak-deity/>.
- ☞ Dagiral, Eric, et Parasie, Sylvain . « La « science des données » à la conquête des mondes sociaux. Ce que le « Big Data » doit aux épistémologies locales ». In *Big Data, entreprises et sciences sociales*, par Pierre-Michel Menger et Simon Paye, Editions du Collège de France. Paris, 2016.
- ☞ Dagiral, Eric, et Peerbaye, Ashveen. « Making Knowledge in Boundary Infrastructures: Inside and Beyond a Database for Rare Diseases » , *Science & Technology Studies*, vol. 29, n°2, p. 44-61, 2016.
- ☞ Edgerton, David. « De l'innovation aux usages. Dix thèses éclectiques sur l'histoire des techniques ». Traduit par Dominique Pestre. *Annales. Histoire, Sciences Sociales* 53, no 4 (1998): 815 37.
- ☞ Frank, Andre Gunder, *The Development of Underdevelopment*. Monthly Review Press, 1966.
- ☞ Gitelman, Lisa, éd. « Raw data » is an oxymoron. *Infrastructures series*. Cambridge, Massachusetts ; London, England: The MIT Press, 2013.
- ☞ Guha, Ranajit, *Elementary Aspects of Peasant Insurgency in Colonial India*, Delhi, Oxford University Press, 1983.

- ☞ Gupta, Amit. 'India and the IPL: cricket's globalised empire', *The Round Table*, April 2009: 98: 401.
- ☞ Gupta, Amit. 'The Globalization of Cricket: The Rise of the Non-West'. *International Journal of the History of Sport*, Vol 21(2). March 2004. pp. 257-276.
- ☞ Haggerty, Richard V. Ericson, Kevin. « The surveillant assemblage ». *British Journal of Sociology* 51, no 4 (1 décembre 2000): 605-22. doi:10.1080/00071310020015280.
- ☞ Harding, Sandra. *Sciences from below: Feminisms, postcolonialities, and modernities*. Duke University Press, 2008.
- ☞ Harding, Sandra G., éd. *The feminist standpoint theory reader: intellectual and political controversies*. New York: Routledge, 2004.
- ☞ Jasanoff, Sheila & Sang-Hyun Kim, *Dreamscapes of Modernity. Sociotechnical imaginaries and the fabrication of power*, Chicago University Press, 2015.
- ☞ Joshi, Sanjay. 'Virtually there: Cricket, community, and commerce on the internet'. *International Journal of the History of Sport*, Vol 24(9). September 2007. pp 1226-1241.
- ☞ Lupton, Deborah. *The Quantified Self: A Sociology of Self-Tracking Cultures*. Cambridge: Polity Press, 2016.
- ☞ Lyon, David. « Surveillance, Power and Everyday Life ». In *Emerging Digital Spaces in Contemporary Society Properties of Technology*, par Phillip Kalantzis-Cope et Karim Gherab Martín. Basingstoke: Palgrave Macmillan, 2011.
- ☞ Lyon, David. « Surveillance, Snowden, and Big Data: Capacities, Consequences, Critique ». *Big Data & Society* 1, no 2 (1 juillet 2014). doi:10.1177/2053951714541861.
- ☞ Mansell, Robin. « Technology, Innovation, Power and Social Consequence ». In *Emerging Digital Spaces in Contemporary Society Properties of Technology*, par Phillip Kalantzis-Cope et Karim Gherab Martín. Basingstoke: Palgrave Macmillan, 2011.
- ☞ Mezzadra, Sandro and Brett Neilson, *Operations of Capital*, *South Atlantic Quarterly*, 1-9, 2015.
- ☞ Mignolo, Walter, *Local histories/global design : coloniality, subaltern knowledge and border thinking*. Princeton, NJ, Princeton University Press, 2000.
- ☞ Parasie, Sylvain , Cointet Jean-Philippe (2012) *Online press serving local democracy*, *Revue française de science politique (English)* 62 (1), 41-66.
- ☞ Quijano, Aníbal, "Colonialité du pouvoir et démocratie en Amérique latine", in Cohen J., Gómez L. et Hirata H. (éd.), *Amérique latine, démocratie et exclusion*, L'Harmattan (*Revue Futur antérieur*), 1994, p. 93-100.
- ☞ Rainie, Harrison, et Wellman, Barry . *Networked: the new social operating system*. Cambridge, Mass: MIT Press, 2012.
- ☞ Rajadhyaksha, Ashish. «In the Wake of Aadhaar: The Digital Ecosystem of Governance in India.» Bangalore: Centre for Study of Culture and Society, 2013.

☞ Raley, Rita. « Dataveillance and Countervailance ». In « Raw data » is an oxymoron, par Lisa Gitelman. Infrastructures series. Cambridge, Massachusetts ; London, England: The MIT Press, 2013.

☞ Ramanathan, Usha. «Considering Social Implications of Biometric Registration: A Database Intended for Every Citizen in India [Commentary].» IEEE Technology and Society Magazine 34.1 (2015): 10-16.

☞ Park, Emma, et Kevin Donovan. « Between the Nation and the State ». Limn, 9 août 2016.

☞ Saïd, Edward W., *Orientalism*, New-York, Pantheon, 1978.

☞ Samaddar, Ranabir, *Emergence of the political subject*, Sage, 2010

Shah, Nishant. «Citizen Action in the Time of the Network.» *Development and Change* 44.3 (2013): 665-681.

☞ Shah, Nishant, and Fieke Jansen. «Digital alternatives with a cause.» Bangalore: Centre for Internet and Society/The Hague: Hivos Knowledge Programme (2011).

☞ Shah, Nishant, and Sunil Abraham. *Digital Natives with a Cause?: A Knowledge Survey and Framework*. Humanist institute for cooperation with developing countries (Hivos), 2009.

☞ Spivak, Gayatri Chakravorty, *A Critique of Postcolonial Reason: Towards a History of the Vanishing Present*, Harvard University Press, 1999.

☞ Sundaram, Ravi, *Pirate Modernity: Delhi's Media Urbanism*, Oxford, New York: Routledge, 2009.

☞ Uimonen, Paula. « "Number not reachable" : Mobile infrastructure and global racial hierarchy in Africa ». *Journal des anthropologues*, no 142 143 (4 février 2016): 29-47.
Notes

