

# Submit: Code as Control in Online Spaces

An interdisciplinary, international two-day-workshop Hamburg, 17/18th January, 2013

# 1 Summary

How does software afford, frame and control behaviour in digital, interactive networked media – on social network sites and UGC platforms, in virtual worlds and MMORPGs? While practitioners and academics across disciplines alike face and ponder this question, there is a lack of shared understanding, analytical concepts and theoretical models to answer it. In January 2013, the two-day-workshop "Submit: Code as control in online spaces" will bring together about 20 international scholars and designers/developers to discuss and exchange their views, identify shared concepts and formulate plans for future research. Results of the workshop will be published in a special issue of a peer-reviewed journal, and options for an international research network to work on the issues identified will be explored.

# 2 Topic

Over the last years, Facebook users have experienced various situations where changes in the platform's architecture had a fundamental impact on their privacy and communication. From the introduction of the newsfeed (in 2006) to the "everyone" update (in 2009), to the introduction of the "timeline" (end of 2011), with various other changes and tweaks in between, Facebook is constantly reminding us of the importance of code for our daily conduct, online and off-.

Of course, the influence of software code is restricted neither to social network sites, nor to some sharply distinguishable "online" or "digital" sphere – to believe so would fall for the fallacy of "digital dualism" and ignore decades of advances not only in ubiquitous computing, but in the growing pervasiveness of software in

everyday life in general.<sup>1</sup> Software permeates all aspects of our "computational knowledge society" where we live among coded objects, coded processes, coded infrastructures, and coded assemblages.<sup>3</sup>

Various academic disciplines and practitioners' fields have tried to understand the ways in which code is framing (and framed by) the social. Lawrence Lessig's now-classical observation "code is law" has been instrumental for the Anglo-American cyberlaw discourse<sup>5</sup>, while political scientists are debating about "choice architecture" and how to 'nudge' people towards socially desirable behaviours. Researchers informed by (behavioral) economics have tackled these issues under the header "incentive-centered design," and there are similar strong research strands in Human-Computer Interaction ("persuasive technology") and game studies ("persuasive games"). From the perspective of technology ethics, questions of "value-sensitive design" have been raised, building on a long tradition of Science and Technology Studies (STS) which looks at the values and scripts embedded in technology as a "politics of artefacts." Practitioners, on the other hand, are very much interested in design principles which support certain behaviours, for example by transferring elements from digital games to other systems.

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<sup>&</sup>lt;sup>1</sup> Jurgenson, Nathan: Digital Dualism versus Augmented Reality. *Cyborgology Blog*, February 24, 2011. At: http://thesocietypages.org/cyborgology/2011/02/24/digital-dualism-versus-augmented-reality/

<sup>&</sup>lt;sup>2</sup> Berry, D. M.: *The philosophy of software*. Basingstoke: Palgrave Macmillan 2011. See also Berry, D. M. (ed.): *Life in Code and Software: Mediated Life in a Complex Computational Ecology*. Open Humanities Press 2012. At: http://www.livingbooksaboutlife.org/books/Life\_in\_Code\_and\_Software.

<sup>&</sup>lt;sup>3</sup> Kitchin, R. & Dodge, M.: *Code/Space. Software and everyday life.* Cambridge: MIT Press 2011.

Lessig, L.: Code and Other Laws of Cyberspace. New York: Basic Books 1999.

Mayer-Schönberger, V.: Demystifying Lessig. Wisconsin Law Review 2008,4 (2008), pp. 713-746. Thaler, R. & Sunstein, C.: Nudge. Improving Decisions About Health, Wealth, and Happiness. New Haven, London: Yale University Press 2008.

MacKie-Mason, J.: Incentive-Centered Design for Security. *IEEE Security & Privacy* 7,4 (July-August 2009), pp. 72-75.

<sup>&</sup>lt;sup>8</sup> Fogg, B.J.: *Persuasive Technology. Using Computers to Change What We Think and Do.* Amsterdam et al.: Morgan Kaufmann 2003.

<sup>&</sup>lt;sup>9</sup> Bogost, I.: *Persuasive Games. The Expressive Power of Video Games.* Cambridge, London: MIT Press 2007.

Flanagan, M., Howe, D. & Nissenbaum, H.: Embodying Values in Technology: Theory and Practice. In Van den Hoven, J. & Weckert, J. (eds.): *Information Technology and Moral Philosophy*. Cambridge: Cambridge University Press 2008, pp. 322-353.

<sup>&</sup>lt;sup>11</sup> Coeckelbergh, M.: The Public Thing: On the Idea of a Politics of Artefacts. *Techné* 13,3 (2009), pp. 175-181.

Lockton, D., Harrison, D. & Stanton, N. A.: The Design with Intent Method: a design tool for influencing user behaviour. *Applied Ergonomics* 41,3 (May 2010), pp. 382-392.

<sup>&</sup>lt;sup>13</sup> Deterding, S., Dixon, D., Khaled, R. & Nacke, L. E.: From Game Design Elements to Gamefulness: Defining 'Gamification'. *Mindtrek 2011 Proceedings*, New York: ACM Press 2011, pp. 9-15.

#### 3 Aim

The central aim of the workshop is to gather and review concepts and theories on the regulating, nudging or influencing power of code in online-based environments, to identify key issues and questions not yet answered, and to discuss methods and approaches to tackle them. The central question of the workshop is, in other words: How does the design of code govern users' behaviours in digital, interactive, networked media?

This raises a lot of connected questions: How is governance via code already used, by whom, and to what effect? To what extent are users aware of these modes of regulation, and if so, do they reflect on, react to and/or resist them? To what extent is law transformed into code, to what extent does code exert pressure on legal changes? Can code supplement or replace law, contracts, markets or social norms in certain situations? Which social, political and ethical challenges does regulation by code hold?

Starting from these questions, the workshop will attempt to provide four main results:

- A ,map' of existing research,
- an overview of theories, models and perspectives on code-based governance,
- a typology of governing mechanisms,
- a roadmap structuring the main open questions, including first ideas for future research organization and funding.

Based on the workshop results, participants are invited to contribute extended papers to a special issue of *First Monday*, which is already secured with the lead editor of the journal.

## 4 Contact

Jan-Hinrik Schmidt, Hans-Bredow-Institute for Media Research, Hamburg j.schmidt@hans-bredow-institut.de

#### 5 Format

## 5.1 Structure

To maximise productive dialogue and networking, this workshop "offloads" frontal presentations or position statements into pre-workshop documents: All participants will receive a presentation template with prepared questions to fill out and send in ahead of time, so that all participants can read each other's material ahead of time. The workshop itself will be run in moderated and visually documented world café discussions. In a final round, a research agenda with important open research questions and possible pathways towards their solution will be generated via backcasting.

# **Pre-Workshop**

- In December 2012, we will ask you to fill out and send in a ca. 10-slide presentation template with prepared questions
- We will send you the collected slides of all participants and ask you to read them before the workshop.

# Workshop (a more detailed timetable will be provided for the workshop)

Day -1 (Wed, January 16 <sup>th</sup> )	
19.00-open	Informal get-together for those already in Hamburg
Day 1 (Thu. January 17 <sup>th</sup> )	
10.00-11.30	Welcoming, proceedings, introduction round, summary of pre- workshop results
Workshop A: Types of governing with code	
11.30-15.30	Collecting, discussing, clustering, synthesizing of topics (+ lunch & coffee breaks)
Workshop B: Specifics of governing with code	
15.30-18.30	Collecting, discussing, clustering, synthesizing of topics (+ coffee breaks)
20.00-open	The Dinner of Ridiculously Bold Claims
Day 2 (Fri, January 18 <sup>th</sup> )	
09.00-09.45	Welcoming, proceedings, looking back on day 1
Workshop C: Open issues in governing with code	
09.45-13.30	Collecting, discussing, clustering, synthesizing of topics (+ lunch & coffee breaks)
Workshop D: Backcasting a research agenda	
13.30-18.00	Prioritizing open questions, backcasting, feedback, closing (+ coffee break)

# 5.2 Participants

The workshop is invitation-only. The following participants have been contacted over the last months and have confirmed their participation.

- 1. Sebastian Deterding, MA (Organiser), affiliated member, Hans Bredow Institute for Media Research, Hamburg, Germany
- 2. Martin Dodge, senior lecturer, School of Environment and Development, University of Manchester, Manchester, UK.
- 3. Stephan Dreyer (Organiser), senior researcher, Hans Bredow Institute for Media Research, Hamburg, Germany
- 4. R. Stuart Geiger, PhD student, School of Information, UC Berkeley, Berkeley, CA, USA.
- 5. Nele Heise, junior researcher, Hans Bredow Institute for Media Research, Hamburg, Germany
- 6. Christian Katzenbach, researcher, Alexander von Humboldt Institute for Internet and Society, Berlin, Germany.
- 7. Vili Lehdonvirta, visiting fellow, London School of Economics, London, UK.
- 8. Dan Lockton, Research Fellow, University of Warwick; Lecturer, Brunel University, Brunel, UK.
- 9. Jeffrey MacKie-Mason, professor, dean, School of Information, Michigan University, Ann Arbor, MI, USA.
- 10. Noemi Manders-Huits, assistant professor, Centre for Ethics and Technology, Delft University of Technology, Delft, NL.
- 11. Nicolas Nova, researcher, Near Future Laboratory, Sierre, Switzerland.
- 12. Jan Hendrik Passoth, researcher, Chair of Media Sociology, University of Bielefeld, Bielefeld, Germany.
- 13. Christian Pentzold, doctoral candidate, Institute for Media Research, Chemnitz University of Technology, Chemnitz, Germany.
- 14. Bernhard Rieder, assistant professor, Media Studies Department, Universiteit van Amsterdam, Amsterdam, NL.
- 15. Theo Röhle, postdoctoral fellow, Graduiertenkolleg Automatismen, University of Paderborn, Paderborn, Germany.
- 16. Jan-Hinrik Schmidt (Organiser), senior researcher, Hans Bredow Institute for Media Research, Hamburg, Germany
- 17. Jennifer R. Whitson, postdoctoral fellow, Technoculture, Art and Games Research Initiative, Concordia University, Montreal, Canada.
- 18. Malte Ziewitz, doctoral candidate, Institute for Science, Innovation and Society, University of Oxford, Oxford, UK.