

objects plays an important role in shaping cultural practice, expression, and imagination; it is a highly cultural gesture. Looking at the similarities between language and software can help us to understand the nature of our currently complicated technosocial situation; it can also make us see that freedom of technical creation is a form of freedom of speech. It is the duty of the humanities to seek out what that could mean.

References

- Adorno, T., and Horkheimer, M., 1988, *Dialektik der Aufklärung*, Fischer, Frankfurt a. M., first published in 1944.
- Benjamin, W., 2002, Der Autor als Produzent, in: W. Benjamin, *Medienästhetische Schriften*, Suhrkamp, Frankfurt a. M., pp. 231–247, first published in 1934.
- Castells, M., 2000, *The Information Age: Economy, Society and Culture*, Blackwell, Malden, MA, 3 volumes, first published in 1996.
- Certeau, M. de, 1994, *L'invention du quotidien*, Gallimard, Paris, first published in 1980.
- Ciborra, C., 2004, Encountering information systems as a phenomenon, in: *The Social Study of Information and Communication Technology: Innovation, Actors, and Contexts*, C. Avgeronou, C. Ciborra, and F. Land, Oxford University Press, Oxford, pp. 17–37, p. 19.
- Collins, H., and Kusch, M., 1998, *The Shape of Actions: What Humans and Machines Can Do*, MIT Press, Cambridge, MA.
- Coyne, R., 1995, *Designing Information Technology in the Postmodern Age: From Method to Metaphor*, MIT Press, Cambridge, MA, p. 32.
- Dyson, F. J., 1998, Science as a craft industry, *Science* 280(5366):1014–1015.
- Friedman, B., ed., 1997, *Human Values and the Design of Computer Technology*, Cambridge University Press, Cambridge.
- Graham, P., 2003, Hackers and Painters, Lecture at Harvard, <http://www.paulgraham.com/hp.html>
- Jenkins, H., 2002, Interactive audiences?, in: *The New Media Book*, D. Harries, ed., British Film Institute, London, pp. 157–170.
- Kay, A., and Goldberg, A., 2003, Personal dynamic media, in: *The New Media Reader*, F. Wardrip and N. Montford, eds., MIT Press, Cambridge, MA, pp. 393–404, first published in 1977.
- Kapor, M., 1996, A software design manifesto, in *Bringing Design to Software*, T. Winograd, ed., Addison-Wesley, Boston, pp. 1–10, p. 4.
- Latour, B., 1992, Where are the missing masses?, in: *Shaping Technology / Building Society*, W. Bijker and J. Law, eds., MIT Press, Cambridge, MA, pp. 225–258, p. 255.
- Latour, B., 1999, *Pandora's Hope: Essays on the Reality of Science Studies*, Harvard University Press, Cambridge, MA.
- Monarch, I. A., Konda, S. L., Levy, S. N., Reich, Y., Subrahmanian, E., and Ulrich, C., 1997, Mapping sociotechnical networks in the making, in: *Social Science, Technical Systems, and Cooperative Work: Beyond the Great Divide*, G. C. Bowker, S. L. Star, W. Turner, and L. Gasser, eds., Lawrence Erlbaum Associates, Mahwah, pp. 331–354, p. 337.
- Raymond, E. S., 1998, The cathedral and the bazaar, *First Monday* 3(3), http://www.firstmonday.org/issues/issue3_3/raymond/
- Reeves, J. W., 1992, What is software design?, *C++ Journal*, Fall 1992.
- Turing, A. M., 1948, *Intelligent Machinery*, National Physical Laboratory Report (http://www.alanturing.net/turing_archive/archive/I/132/L32-001.html).
- Winograd, T., and Flores, F., 1986, *Understanding Computers and Cognition: A New Foundation for Design*, Addison-Wesley, Boston, p. xi.

