Ask Susi! Analyzing open search technology between German hacker ethics and Asian start-up culture

Astrid Mager, Austrian Academy of Sciences (ÖAW)
Track #8: Öffentliche Güter und Räume jenseits von Staat und Markt

Ask Susi – more recently known as Susi.AI – is an open source personal assistant[i] that grew out of the YaCy peer-to-peer search engine ecosystem[ii]. YaCy has its roots in decentralized search technology, peer-to-peer principles and the German open source community. It was created in 2003 by Michael Christen and is still further developed by the YaCy community. With the transformation of internet search and the move towards the "conversational web", as the YaCy developers call it, a new technology was introduced: the personal assistant Susi.AI. Susi.AI builds on YaCy components and the YaCy developer community, but also attracted new developers from different parts of the world, Asia most importantly. With the move towards Asia the developer culture changed, as did the German open source community as well, as Michael Christen explained in a personal interview. Now the software is developed in a multi-cultural setting with different types of developers from all parts of the world. It is still heavily relying on the open source community, but also making use of the Google summer of code program funding open source projects. Google summer of code provides young (and cheap) developers over the summer months, such as those from India, who are now contributing to Susi.AI as well.

Susi – and its predecessor YaCy – occupies a communal space distant from both the state and the market, as the Title of Track #8 suggests. It is developed as an open source technology, its code is on GitHub, it is open to contributors and it is shaped and owned by the community. It is devoted to the traditional ethics code of the German Hacker culture as represented at the Chaos Communication Congress (CCC), the annual conference by the Chaos Computer Club, where Michael Christen and his co-developers are regularly present with their technologies. With the move towards Asia, and the participation in the Google summer of code program etc, however, the start-up spirit entered the Susi ecosystem. At the Open Tech summit in Singapore – that was born by Susi.AI developers with the aim to bring open source technology to Asia – many big companies including Facebook, Google, Microsoft, Red Hat and so forth – are present; both as speakers and as advertisers of their own products. This reflects the fact that the open source culture is not entirely independent from corporate players, quite on the contrary (Birkinbine 2020). Big companies are sponsoring the event in Singapore where they are "buying" their way into the developer culture by offering prizes, funding programs and support of other sorts. At the same time, they are recruiting from the community, using open source components for their own proprietary products, and hence making use of unpaid work that is done by the community. In a sense, both hands are feeding each other, but one of them is much more powerful than the other. What are the consequences of this tight entanglement of open source software and corporate tech? How do open source developers perceive this balancing act? What challenges do they face and how do they cope with them? What

compromises are they willing to make to reach their broader goals of creating emancipatory technology and making an impact? Where is the line to draw? Would public money in terms of funding programs be a better fit for such projects than going to corporate tech (especially for European IT projects praised with "European values" (Mager 2017))? And what are the broader sociopolitical implications in terms of free and open source software (FOSS) and its (global) community more broadly?

These are the questions to be discussed in this paper by "Asking Susi". Using Susi.AI as a case study I draw on a rich repertoire of qualitative research materials including a large number of interviews with German, Asian and US-American open source developers, participatory observations of open tech events in Frankfurt (CCC), Berlin and Singapore (FOSSASIA) and a workshop as part of the Open Tech Summit in Singapore. All materials are focusing on Susi, but also go beyond this particular project and discussing broader sociotechnical, political and cultural issues related to open source technologies and their ecosystems and cultural environments. Drawing on science and technology studies, critical software studies, values by design studies, and the political economy of free software (Jasanoff and Kim 2015, 2019; Hilgartner 2015; Wenger (1998); Barney et al (2016); Kelly 2012); Scholz and Schneider (2017); Von Hippel (2012); Coleman (2013); Birkinbine (2020) etc) the study will analytically focus on visions, values and imaginaries driving Susi, how they get translated/ encoded into technology, what compromises are to be made in order to remain capable to act and where the line is to draw in order to remain authentic and reliable. Moreover, cultural aspects will be analyzed in order to tease out differences between the German hacker culture and the Asian Start-Up spirit and their larger sociopolitical implications. Finally, broader questions of how to support FOSS between (beyond) the state and the market and how to make it sustainable in the long-run will be discussed.

References

Barney, D., G. Coleman, C. Ross, J. Sterne, T. Tembeck (2016) *The Participatory Condition in the Digital Age*. Minneapolis: University of Minnesota Press.

Birkinbine, B. (2020) *Incorporating the Digital Commons. Corporate Involvement in Free and Open Source Software*. London: University of Westminster Press.

Coleman, G. (2013) *Coding Freedom. The Ethics and Aesthetics of Hacking*. Princeton and Oxford: Princeton University Press.

Hilgartner, S. (2015) Capturing the imaginary. Vanguards, visions and the synthetic biology revolution. In S Hilgartner, C Miller and R. Hagendijk (eds) *Science and Democracy. Making Knowledge and Making Power in the Biosciences and Beyond*. London: Routledge: 33-55.

Jasanoff S and Kim SH (2015) *Dreamscapes of Modernity: Sociotechnical Imaginaries and the Fabrication of Power*. Chicago, IL: University of Chicago Press.

Jasanoff S and Kim S.H (2009) Containing the Atom: Sociotechnical Imaginaries and Nuclear Power in the United States and South Korea. *Minerva* 47:119–146.

Kelly, M. (2012) *Owning our Future. The Emerging Ownership Revolution: Journeys to a Generative Economy*. Oakland: Berrett-Koehler Publishers.

Mager A (2017) Search engine imaginary. Visions and values in the co-production of search technology and Europe. *Social Studies of Science* 47(2): 240-262.

Scholz, T. and N. Schneider (2017) *Ours to Hack and to Own. The Rise of Platform Cooperativism, A new Version for the Future of Work and a Fairer Internet*. NYC: OR Books.

Von Hippel, E. (2006) *Democratizing Innovation*. MIT Press.

Wenger, E. (1998) *Communities of Practice. Learning, Meaning, and Identity*. Cambridge (UK): Cambridge University Press.

---

[i] https://dev.susi.ai/, https://github.com/fossasia/susi.ai
[ii] https://yacy.net/