

What is so fascinating with Computer Science?

How we, computer scientists and others, deal with IT.

Session 10, STS-conference Graz Mai 2015

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In fascination we mix both, excitement and anxiety/anger. Something draws us hither, but this very feeling pushes us thither. Information technology fascinates. We communicate, collaborate, organize easier; but it narrows our ways, forms us, we depend on it. IT as the “spider in the net”.

For us, informaticians and others, this fascination leaks from technology into science (Siefkes in SGI98): Through our research we better IT, we help our culture forward. CS has become an important field. But does it not push other fields aside? What type of science is it anyway? It does not deal with technology alone, but neither belongs it to the humanities.

In an interdisciplinary project “Social History of CS” (SGI97ff) we found that early people dealing with computers and later CS follow a pattern of orientation we called *hybridisation*: As computers take over mental activities, in dealing with them we consider man and machine at the same time, *hybridize* them.

We cannot deal with IT without hybridisation. But is also dangerous, produces errors (“software crisis”), alters our culture. Through it, our ideas about mental activities influence our technical constructions, and vice versa. How can we use it fruitfully? We must investigate this interdependence. People from CS and the humanities have to collaborate to create a *Cultural Theory of CS* (Sief07ff), part of a general *Theory of CS* (Tdi09 e.a.). I plan a book under the above title.

Literature

(SGI97) Peter Eulenhöfer, Dirk Siefkes et al.: Die Konstruktion von Hybridobjekten als Orientierungsmuster in der Informatik. TU Berlin, FB Informatik, Bericht 97-23.

(SGI98) -”- : Sozialgeschichte der Informatik. FIF-Kommunikation 2/98, S. 3-4, 28-48.

(Sief07) -”- : Theorie der Informatik zwischen den Stühlen. Gegensätze in der Informatik durchmustern und füreinander fruchtbar machen. TU Berlin, Fak. Elektrotechnik & Informatik, Bericht 07-21.

(Sief13) - ,, - : Digital Natives in Symbiosis with IT-systems? Abstract, Conference „Futures Past: Design and the Machine”, MIT, November 21-23, 2013.

(Sief14) -”- : But is it art? Only what has been thought machinelike, can be brought onto the machine. Abstract, Workshop Lev Manovich and Frieder Nake, Lüneburg, July 4-5, 2014.

(Tdi09) Andreas Möller, Frieder Nake, Arno Rolf, Dirk Siefkes: Beiträge zu einer Theorie der Informatik. Zum kritischen Selbstverständnis einer Disziplin. E-Journal Communication, Cooperation, Participation, Heft 5 (Sonderausgabe), 08/2009.

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For more information and literature look into my publications: <http://tal.cs.tu-berlin.de/siefkes>