WE HAVE SEEN NOTHING YET

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Abstract: I will first present some unusual arguments that will show that we are not in for small changes in the near future, but for massive restructuring of how we live, think and learn. I will then explain in what way the strong convergence of cell phones and PCs is likely to develop. I will show clips of prototypes of new devices that overcome the small screen-size of cell phones and their small keyboards. I will then explain how dramatically this will change society and education: we will have with us a permanent powerful assistant. This brings both great benefits and great dangers. I will also address the issue whether large amounts of information help us or rather brainwash us and influence our decision making in a negative way. I will show at least one example that will surprise the audience. I will then argue that no matter how much one is using modern information technology oneself, one does not react the same way when compared to "digital natives", i.e. people (like our students in university) that have grown up in such new environments. I will report on two surprising recent experiments that seem to prove this point conclusively. Finally, I will show that the statement we always hear that the value of technology is ambivalent (like "a hammer can be used to drive in a nail or to kill a person by hitting the head") is not even close to the truth. Rather, some technologies are inherently good, others inherently bad, and many in between. I will present a number of examples to verify this provocative idea and show how computers and networks are classified if one looks at them that way.

BRIEF BIOGRAPHY

Dr. Hermann Maurer is Professor Emeritus at Graz University of Technology. He started his career at the University of Calgary as Assistant and Associate Professor, was appointed full professor at Karlsruhe just before he turned 30, and has been now Professor and Dean in Computer Science at Graz University of Technology since 1978, with some interruptions, like guest-professorships of more than a year at Denver University, University of Auckland, and shorter visits to Edith Cowan University in Perth, SMU in Dallas, Waterloo, Brasilia and others. Chair of the Informatics Section of Academia Europaea, "The Academy of Europe" since April 2009, and receiver of many national and international distinctions, Professor Maurer is author of over 650 papers and 20 books, founder of a number of companies, supervised some 60 Ph.D. and over 400 M.Sc. students and was leader of numerous multimillion Euro projects. More about him than you ever want to read under http://www.iicm.tugraz.at/maurer.