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Nota di contenuto	Shifting Identities in Computing: From a Useful Tool to a New Method and Theory of Science -- On the Big Impact of “Big Computer Science” -- On Informatics, Diamonds and T -- Leadership and Balance in Research -- Rational ethics -- Ethics for the digital age: where are the moral specs? -- Digital Sovereignty and IT-Security for a Prosperous Society -- Women in Computing and the contingency of informatics cultures -- Ada - poet of computing.
Sommario/riassunto	This book is open access under a CC BY-NC 4.0 license. This volume discusses the prospects and evolution of informatics (or computer science), which has become the operating system of our world, and is today seen as the science of the information society. Its artifacts change the world and its methods have an impact on how we think about and perceive the world. Classical computer science is built on the

notion of an “abstract” machine, which can be instantiated by software to any concrete problem-solving machine, changing its behavior in response to external and internal states, allowing for self-reflective and “intelligent” behavior. However, current phenomena such as the Web, cyber physical systems or the Internet of Things show us that we might already have gone beyond this idea, exemplifying a metamorphosis from a stand-alone calculator to the global operating system of our society. Thus computer scientists will need to reconsider the foundations of their discipline to realize the full potential of our field. Taking often contradictory developments into consideration, researchers will not be able to tackle specific technological or methodological problems in the future without also a broader reflection on their field. The papers in this book take a first step forward and reflect on these issues from different perspectives. The broad spectrum of topics includes Informatics: a discipline with a (short) history and a high impact Interdisciplinarity: how to do research Ethics: what is our responsibility Diversity: why are there so few women in informatics Combining informatics, history and art: a special contribution. This book is intended for all informatics researchers, in academia as well as in industry. It is our responsibility – not only as scientists but also as citizens – to make the public aware of the dichotomies and dialectic relationships of computer science.