EVERYWARE, THE TECHNOLOGY THAT IS ALREADY HERE AND EVERYWHERE

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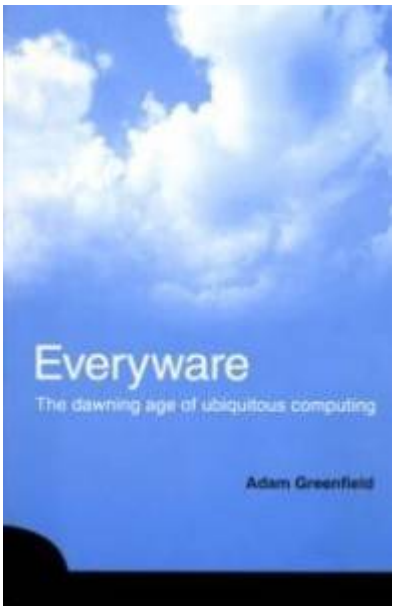

Starting in 2012. 2006, the year Adam Greenfield published his well-known book Everyware. The dawning age of ubiquitous computing which, read today, is mainly surprising for the way in which it anticipated some of the things that we are observing today about the growing generalization of systems that have **little by little colonized our daily life**, mainly through the extension of personal mobile devices but also other ubiquitous responses to the day-to-day. At that time, I remember, the **ipad** did not exist, the idea of the **internet of things** had practically not come out of the most specialized laboratories and the academic field and technologies such as **RFID tags**, **augmented reality** or **QR codes** were not part of the landscape of everyday objects that we carry with us. A magnificent play on words to go beyond the software-hardware dichotomy, Everyware is the technology that makes invisible computing a reality, "*computing without computers*", described through **81 theses**, organized through several chapters, in which Greenfield discusses why everyware is different from other technologies we are familiar with, what factors are driving its adoption, what issues are most controversial and need to be carefully considered, who should participate in shaping it, when to expect it to be fully deployed, and what limits we should agree to in order for it to serve our personal and societal needs.

Everyware is the mobile, connected, localized, and indistinguishable technology to which we have grown accustomed. The rapid adoption of devices that keep us permanently connected and that we carry in our pockets and backpacks and the progressive availability of more and more fixed devices on targets and surfaces capable of processing digital information represents a huge change in our experience as users and protagonists of our everyday behaviors. A technology that is present (or that promises to be introduced) in our homes, in buildings, on the streets and in public spaces and, who knows, also in our own bodies. A technology that has arrived quietly through a **smooth, seamless transition** from the personal computer to ubiquitous computing. Everyware is a technology or, better, a situation, the way in which we are progressively doing more and more of our daily life: social relations, relations with public services and with private companies, transportation, control of functionalities of comfort in the home, the record of our activities, etc.

How do we deal with such an invasive technology without it being invasive? Being, to a large extent, an invisible and imperceptible technology, how can we be aware of its **consequences**? These questions are the ones that serve as the background of a book that explores fundamental issues to adopt a non-deterministic vision of technology in everyday life. Our relationships, to a large extent, have become subject to technical interventions through digital interfaces that we have perfectly assumed. More and more personal information is leaving traces in a latent and hidden way (security cameras that record us when we walk, public transport tickets, bank cards, access control to buildings,...). We expand our capacities for social interaction and streamlining daily procedures while we lose human capacities gained through evolution (memory, for example). As I have stated on other occasions in the blog, it is not a dichotomy but (and it is the position that Greenfield correctly takes) of **debating and analyzing beyond the technological** to take advantage of the best of this technology from a greater awareness of its risks, limits and possibilities. Throughout the book, points of conflict can be discovered from a pragmatic and everyday perspective on concrete facts of life within everyware: the difficulty in diagnosing errors in increasingly complex and interdependent systems (at what point in the entire system is the malfunction?, who to hold responsible?, how then to make the system more stable?), the margin that remains for the reconfiguration of these systems (how to make an open urban computing system possible?, How far will unforeseen uses be possible? How to deal with an omnipresent system in which designers, regulators and companies actively participate while the majority of the population seems to have no ability to influence the composition of this everyware?), etc. are questions that have

consequences on our day to day in the form of conflicts of privacy, reliability, instability,... while, at the same time, we enjoy the advantages of personal devices and the growing network of digital public objects that are appearing in the daily flow of life in the city.

Faced with these risks, the book proposes a framework for reflection that should be present in the enormous commotion that the debate on smart cities is causing right now. On the one hand, an obvious but necessary proposal: maintain an active vision regarding the possible risks of these technologies, that is, not assume as a matter of principle that there is good will and zero counterproductive effects in the design of ubiquitous services and objects because, at After all, experience teaches us that despite being intelligent creatures, the more complexity and sophistication we introduce into any advance, the more problems arise. On the other hand, a system whose main characteristic is invisibility -how many digital traces we are leaving without even being aware- has to work and make an effort to make the user aware of the processing of their data and make these information transactions understandable. It is even more fundamental to add simplicity: that the system that promises to automate any daily behavior -let us think, for example, of home automation and the simple act of entering the house, filtered this time by an automatic presence detection method- does not do this more complex situation, even in the event of possible incidents or unforeseen events. How much irritating confusion will be saved if these systems are actually designed with the user in mind, not adding unnecessary complexity! And finally, a key approach: the user of these systems must ultimately have the option of not going through the system and have a less "smart" alternative. This strongly clashes with the tendency to replace traditional service systems -from customer service to highway toll payment- with systems that optimize the provider's operation but make the user bear the burden of change in the form of remote designs. of the real needs of the user.

It's already here. How to configure it depends more on design decisions and on understanding its social implications than on specific technical solutions, precisely because the detail of these solutions is where it is most critical.

More information:

Adam Greenfield on Everyware
Everyware
Designing for Everyware: An Interview with Adam Greenfield

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- *Everyday scenes in a smart city*
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There are no comments yet.