The Tablet Book 2

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Tablet Technostories

The Academic Ingress

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Introduction

The rapid proliferation of digital devices is present across all levels of society, walks of life, and fields. One of the latest digital trends involves touch-tablets – computational devices equipped with a touch screen, highly portable, and hailed as a new type of device, rendering a novel experience. The academic environment is also influenced by these technological developments. The use of tablets in higher education is growing, and among students and scholars alike, tablets are becoming increasingly fashionable. In the US

there is a high adoption rate of the tablet in universities and schools with almost half of college graduates owning a tablet in 2013 (Zickuhr, 2013). Ownership in Europe is expected to follow the trend (Lomas, 2013). In some respects, the tablet could be seen as a possible new academic tool.

This paper starts from that premise, seeking to reveal the way tablets were used in an academic context, shortly after the device became available on the market. The aim here is to look at how academia and touch-tablets are intertwined and mutually configured, ultimately answering the following questions: in what way are tablets used by academics? And in what way can this usage add to a greater discussion of tablet experiences? An empirical case study is used to address these questions, a pilot initiative involving iPads and academics from Maastricht University (UM) in the Netherlands. The case study is time bound, and as such it portrays early academic experiences with a tablet device.

Less than a year after the iPad tablet was launched in April 2010, the Maastricht University iPad project was initiated in January 2011. The project was a pilot organized by several UM faculties and the UM Library, with the general aim of exploring how a mobile touch-tablet such as the iPad can support learning, education, and day-to-day activities within the university context (Interview: Vesseur, 2012). Eleven iPads were assigned to the Faculty of Arts and Social Sciences (FASoS) at UM, where the devices were offered through a competition open to all academic staff, PhD candidates and master's students.

At this faculty, the iPad Project was focused on finding out "in what way iPads could support education, research and operations management" (Annex I: Stoffels, 2012). Therefore, the faculty-wide competition was framed in

terms of "proposals that would have an added value from a didactical point of view. All proposals were assessed by the faculty IT-committee" (Annex I: Stoffels, 2012). From the total of eleven iPads available, six were assigned to academic staff, three to PhDs, and two to master's students, one of them being myself. One of the professors participating in the project contributed his own device, while one tablet was shared among three other professors. The accepted proposals focused on themes such as less paper, easier organization, mobile office, online surveys, digital archives, virtual libraries, and interactive and creative tools for education.

I interviewed eight of the academics involved in the pilot at FASoS., as well as the educational technologist from the university library who was involved with the organization and evaluation of the project. Additionally, three other participants offered their insights through email, together with the E-learning, IT, and education coordinator of the faculty, who offered guidance and support for all participants throughout the process.

The approach used for the interviews was an open and flexible conversation (Byrne, 2004), which would allow the interviewees to share their attitudes, views, tablet screens, and impressions of their experiences with the iPad. The idea behind these interviews was not to prove or disprove whether tablets are useful for academic activities, but to discover how a device such as the touch-tablet was used in academia at that point in time.

The interviews revealed nuances and layers of usage that transgressed clear categorizations. There was no single iPad experience, but instead many accounts that shared certain impressions, while diverging in others. Their experiences with the tablet can best be described as a landscape of expectations, wishes and dreams combined with practical hurdles and

physical objects – the landscape of touch-tablet usage in academia, in the early days of the tablet. It is this landscape of tablet experiences that provides the main focus of this paper.

To expose the tablet-usage landscape in detail, I use storytelling as a stylistic tool for representing personal experience with the tablet. These stories combine realistic elements with idealizations, and they offer the possibility of intertwining thoughts on past, present, and future iterations of the device as seen through the eyes of the interviewed academics. Because the stories are focused specifically on touch-enabled technologies, a more appropriate appellation would be technostories. By using technostories, there will be no claim that this case study is representative of the research world, but that does not mean it is not relevant for a growing discussion about how these kinds of technologies can be used in education and academia. Moreover, merely revealing common themes would only take the interviewees' accounts so far. It would limit the richness of their impressions, the interesting ambiguities, and the subtleties of meaning when using a tablet.

The technostories are in the same vein as the technobiographical approach used in Science and Technology Studies (STS) (Henwood et al., 2001; Ching and Vigdor, 2005; Brushwood-Rose, 2006; Nevejan, 2007). Henwood et al. (2001) propose a story-based perspective to technological experiences, by exploring the relationship between people and technologies through autobiographical accounts. The stories function as a platform for analyzing the usage of technologies, taking into consideration the contextual specificities of the different accounts. As a method for analyzing digital experiences, as well as the connection between online and offline aspects of these experiences, technobiographical works are reinforced by David Bell's (2001) argument that "cyberspace is created through the stories we

tell about it" (Kennedy, 2003). The stories contribute to the culture around the digital, together with technologies and the people experiencing and using them.

The same approach is used for the technostories, with the aim of preserving as many details and nuances of the scholars' accounts as possible. The biographical elements are not present, but the interviewees shared their personal iPad experiences with me, and I take the role of the narrator in relating their stories. Therefore, snippets of analysis and reflection will be woven together with the stories themselves, as well as some observations and my own theoretically informed reflections about the conversations. In this respect, storytelling is the best suited way to represent the iPad experiences as constructed in collaboration with the interlocutors (Clandinin and Connelly, 1994), resulting in technostories co-produced by myself and the interviewees.

As a narrator of these technostories, I emphasize the interviewees' account, but at the same time acknowledge the presence of my own observations, which add a layer of interpretation to the stories. Furthermore, one of the technostories will be my own experience with the device, as I was one of the UM iPad Project participants. My technostory, then, will be a technobiography, including my personal impressions and notes I took during the project as primary materials.

My involvement in the project itself has to be taken into account. As a participant in the pilot, my closeness to the project could be seen as hindering my analysis. At the same time, I supply the inside knowledge for advancing the conversations with the interviewees and for providing a detailed account of the context in which the project was initiated. Reflecting

on these issues, I choose a "playing the stranger" (Shapin and Schaffer, 1985) approach, with a "calculated and an informed suspension" (p. 6) of taken-for-granted beliefs and perceptions. In this way, I can make apparent the context in which the tablets were used, leading to a more informed appreciation of the results. I try to do justice, in this manner, to the stories of the participants with the overall result of offering an alternative view into how touch-enabled devices could be used in an academic context. But before presenting the stories themselves, I will outline the main patterns of usage and the main issues raised by the interviewees.

Bringing tablets and academics together

The UM iPad project was evaluated internally by the organizers and faculty coordinators, so I will not replicate a job well done here, but will summarize the main conclusions. The aspects identified in the official evaluation highlighted the user-friendliness of the device, as well as the advantages of a light, compact, beautiful device, with long battery life and suited for a paperless and mobile academic. The touch-tablet was also considered very useful in communication, collaboration, as well as teaching, and as a tool in the tutorial meetings. All in all, the project was judged to be successful (Annex I: Stoffels, 2012; Interview: Vesseur, 2012).

From the interviews, similar impressions emerged. The participants shared the feeling that overall, the touch-tablet was an interesting technology to experiment with, and most of them seemed content to have tested and played with the device. In most cases, the initial participants' goals when using the iPad, as outlined by them during the competition, were reached, be they a paper-free teacher, having a mobile office, archive, or digital library.

Balancing the positive aspects of using the device, the negative points that emerged from this experimental project were also addressed in the evaluation. Issues of synchronization across devices, limited storage capabilities, lack of permanent access to the Internet, or fewer functionalities when compared to a laptop were taken into account as well (Annex I: Stoffels, 2012).

Similarly to the evaluation, the interviewees maintained a critical attitude towards the tablet. Some acknowledged the cumbersome process of using the technology for the first time, the distraction it can create, the storage and connectivity limits it has, and the lack of specific apps, or sufficient support from the university ICT department. In addition, the iPad was not seen as a great device for academic work (i.e. research, papers, reports, etc.). The tablet user is rather "stuck in a consumption position" (Annex I: Post, 2012), which meant that the tablet is much more suited for consuming media and text, than for producing or typing. Besides these rather technical considerations, both positive and negative, the interviews revealed more nuanced experiences presented below as technostories.

Touch meets the visual – a performance

His world is a world of images. Working with iconography, or historical-visual materials, assistant professor Karel Vanhaesebrouck was enthusiastic about the iPad. He envisioned the potential of the tablet to store a visual archive, a portable database for the researcher to take along with him and to play with on the go. For him, the touch-tablet could make a "fantastic database for research, a good tool to construct a digital library." The touch aspect was important, because it allowed for "a virtual-physical contact with [images]," a visual-haptic combination. By being able to touch the virtual counterpart of the physical images, "you have the sense of having the

primary material present." The sense of closeness to the research material, even if visual, was enabled by tactility - the separation between the senses linked by the device.

The importance of the physical research material was emphasized through his own labeling as a 'book fanatic' and his preference for printing important emails or papers. He would like to relinquish paper to some extent, but at the same time, he prefers a physical manifestation of things that he cherishes. The iPad, though, might be the turning agent, as it can still offer a sense of physicality (enhanced by the sense of touch), with added mobility.

But despite the promises of this technology and the enthusiasm it brought, Vanhaesebrouck handed back his iPad not long after receiving it. For him, getting acquainted with the tool took more time than he could gain by using it. He acknowledged the inescapable situation, that in order to use the tablet to its full potential, one needs to invest time in it. In his case, the efficiency that could be obtained was not balanced out by the initial wasted moments of synching, installing, and finding out the best ways of using the device. Nevertheless, he would like to use the iPad for presenting visual material and recognized some advantages the device could have for his work.

Together with visual culture, theatricality is another research interest of his, therefore the performative potential of the tablet featured prominently in our discussion. With gestures to accompany his words, he believes in the positive aspects of presenting one's work with the touch-tablet: "I saw a colleague presenting his visual material and sliding his way through all his material, and it's beautiful to look at. It would be great, and it's also during a presentation, if you like the free-style presentation in which you hop from one fragment to the other, it would be great to use it." The 'sliding' through

the images conveyed an effortless and fluid handling of images, while the 'hopping' between different items would add visual effects and enrich the presentation. In turn, it would help reveal the richness of the research material to the intended audience.

The touch-tablet emerged a good performative tool not only because it can present data in an appealing way, but especially because it enacts "a simulation of the actual physical movements" of managing material and handling pictures. This adds to a convincing presentation and to the naturalness of the presenter 'performing' his or her research. In this sense, tablets could enable academics to communicate their work in a novel way.
(Karel Vanhaesebrouck, personal communication, April 4, 2012)

The digital academic

For the European Studies Director of Studies Patrick Bijsmans, the touch-tablet made a big difference towards reducing paper usage and being organizationally more efficient. Taking part in a variety of meetings, Professor Bijsmans noticed the advantage of the tablet as a support tool for discussing a common document or notes of previous meetings, and for helping the conversation in terms of clarifications and reaching agreements. The device becomes a reference point around which the meetings are structured or through which discussions are facilitated: "I don't print anything anymore, so that's really convenient. It's also convenient if you're in a meeting and someone wants to discuss something and no one has the paper there, or you want to refer to a previous meeting or another type of meeting you can quite easily just get the document on the screen and refer to it and explain what you've been doing there." The convenience comes from the ability to access a variety of documents on the spot, but also from the possibility to share the digital documents with the other participants at the meeting.

Furthermore, the atmosphere during meetings where a tablet is used instead of a laptop seemed different to the professor. Typing on the touch-tablet was not as intrusive as typing on a laptop – no ticking noise from pressing keys on the keyboard, and no hiding behind the laptop screen. Therefore "in a meeting with an iPad you notice that things are more open", an openness supported by less noise and more engagement. However, when it comes to typing 'proper' research, the laptop or PC are the tools of choice. The tablet is preferred for small tasks, like emailing and note-taking, and for travelling.

The sharing-enabling capabilities of the iPad were experienced by the professor at conferences and other networking events. Sending an email instead of exchanging business cards, or sharing papers and references as the discussion progressed were examples of how the tablet enables a different way of getting in touch with peers and of sharing knowledge. But the sharing possibilities, Bijsmans felt, were dimmed by the access people have to these technologies in general. Other scholars or students might not have a similar device, so sharing apps or certain formats is not possible.

The tablet, in many ways, was a duplicate of other objects in his office. The device was meant to be a replacement for paper, but it was also used as a second screen. In the case of paper, apps simulated the advantages of pen-and-paper note-taking and commenting, but digital: "GoodReader is a very nice app, as long as you have documents in PDF, that is, because you can make all kinds of comments in the document, and you can really work in the documents as if you're working on paper, so it's extremely, extremely easy." But the tablet was also a collection of life snippets for the professor, which one could guess by looking at the apps he had installed – apps for work, apps aimed at research, ones used for scheduling, writing,

taking notes, editing, or personal ones like newspaper-reading apps, music apps, and others. The relationship with the apps was interesting - "if you download one app first, that will probably be the app that stays with you", he said, revealing the affectionate relationship that can develop with this digital device.
(Patrick Bijsmans, personal communication, March 26, 2012)

Paperless teaching

Political Science Professor Nico Baakman was satisfied with the tablet and, when we spoke, he was in the middle of preparing another project using iPads – how tablets can be used as an educational toolkit for students in a tutorial session.

An Apple fan for the user experience focus of their technologies, he enjoyed using the iPad during the pilot project and beyond: "Reading from the iPad is a pleasure. It is as good as having a book, even better I think sometimes because you have all you want in there, it's handier." The added features were the possibility of highlighting phrases, translating words, or searching within the text for similar terms, all by simply holding one's finger on the respective word. This enhanced reading experience inspired his second iPad project.

The situation is reversed when it comes to writing or typing. At the beginning of his academic career, Baakman wrote by hand. With time, typing replaced handwriting. Nowadays, copy and paste digital options are even more commonplace. Technology disabled him in this respect, making him more dependent on the computer. Other processes were affected too, like looking for data and referencing. In the past he went to libraries to access books, but now digital tools seemed to make these activities easier.

The touch-tablet discontinued this trend, contributing to a loss of typing ability rather than improving it. The tactile interface was "a very handy way of operating a machine, but then you are disappointed by your own expectations because you cannot type. It works, but it's not great." Typing on the computer keyboard was much better than typing on the iPad, which had a small and hard-to-use keyboard feature.

The difference between the computer keyboard and the tablet keyboard was one of many with regards to the two devices. The iPad was also different in look and feel from books and archives, even if it was a replacement for such material objects. This signaled a distinct way of doing research and of gaining new knowledge, which the professor was aware of, especially when it came to how students find information nowadays. However, disseminating knowledge in the 'old-fashioned' way, through words and sentences was preferred for communicating his research results.
(Nico Baakman, personal communication, March 20, 2012)

It's nice, but…

PhD candidate Claudia Engelmann also wanted to use the iPad to consume less paper in her role of bachelor papers supervisor. The supervision process involves reading numerous drafts of student papers, and offering comments and advice. The touch-tablet was initially considered a good way to avoid the paper overload and to enhance the communication with the students. But even if the tablet was fun to experiment with, it also produced more work.

Managing various supervision tasks through the tablet minimized paper usage. The same was the case when attending conferences or trainings in different locations. It was nice to be able to relinquish printouts and to

be more mobile thanks to the iPad. The mobility features also allowed Claudia to use alternative locations for reading and emailing. The weight of the device made a big difference here.

However, the added value for her educational duties or her research work was minimal. Commenting on the bachelor drafts was difficult. Using a word-processor with a comments function on the iPad was not ideal, especially because, at the time, few apps were available geared towards these types of activities. The device slowly became superfluous: "A tablet as such does not make a lot of sense to me. The nice thing was you could also sit around on the sofa and surf a bit around, but you can't properly work, I have to write a lot and that's not working and just for surfing, it's not really worth it." The technology became in this case a device which was "nice to play with" but not useful in terms of enhancing teaching or research-related activities. The blend between work and leisure environments did not make the iPad experience more interesting or more pleasant, on the contrary.

Further issues with Internet access when travelling, the inferior writing and commenting capabilities as compared to a computer, finding a healthy posture when using the device (especially as it can be used in different locations), or the potential to get distracted rather than focused when using an iPad in meetings – all led to a rather skeptical position towards the device. Nevertheless, Claudia acknowledged the fact that she did not use many apps, and did not explore extensively enough the possibilities that the tablet can offer. Even so, for her, the device was not that different from a computer. The new device did not occupy a special, or a different space amongst the tools used for her academic activities.
(Claudia Engelmann, personal communication, April 3, 2012)

The many faces of mobility

For Professor of European Institutional Politics Thomas Christiansen, the tablet had a marginal value for his research activities. By using the iPhone before, he was already acquainted with the technology: the touch-screen, the app-system and the overall functioning of the device. He liked the iPad, but the line between the advantages and the downsides of the device was fuzzy.

The iPad was useful for him in some respects. It acted as a catalyst for discovering new digital research tools which might have gone unnoticed: "I discovered a few quite useful applications, which I use a lot now and which I probably wouldn't have even thought of if I didn't have the iPhone and the iPad. And actually they make much more sense for research in general than just for the iPad. The iPad is of marginal additional value, it's useful of course, but it is not groundbreaking." The tablet became a platform for experimenting with new software, which was then transferred into other devices, like the desktop computer or the laptop, but more importantly into Christiansen's research practices. In particular, referencing software for managing bibliographies, sharing documents and folders in a research team, or collecting web clippings were the new tools that these new technologies highlighted. But when it comes to using the new software tools, the professor predominantly used the desktop versions, which puts the tablet on a secondary place in terms of a hardware device.

He also saw some advantages in the mobility the tablet could offer. For one of his research projects, the tablet is used in the field for interviewing people remotely. However, he encountered some issues, like having Internet access on the device when traveling to a different country or continent. From this perspective, the efficiency of the tablet as a mobile device varied, and it was

instated only if certain conditions (Internet access in this case) were met. Furthermore, the danger of distraction was also acknowledged. The tablet could be used for work but also personal activities, like reading non-academic books or watching movies. This means that the tablet can easily move between the professional realm where focus is important, to the leisure sphere. This is a move that cannot be easily controlled by the user, which has the potential of disrupting concentration.

Christiansen's view for the future – to be as paperless as possible through digital devices such as the iPad – was combined with a preference for "things to look like they do when they are printed, to have pages, to have page numbers, and to have text, and not to have other fancy stuff." That was especially important for teaching, where physical books are still considered the norm in his field.
(Thomas Christiansen, personal communication, March 15, 2012)

Touching images

Archival research had undergone a number of changes triggered by digital media, argued PhD candidate Ruud Geven at the start of our conversation. He works with historical archives, and the tablet was the latest addition to his research practice, which involved visits at the archives in Maastricht. Dealing with archives was a time-consuming experience: selecting the right material and then photographing it for later reference. With the touch-tablet, dealing with archival work was improved, as handling the pictures became easier and faster.

Through the iPad, the researcher could have a portable digital library of the archived physical materials, which enhanced the management of his research corpora. Furthermore, the tablet functioned as a clone of the actual texts,

but easier to manipulate and control. The photographed material, seen and used through the iPad, became the actual text:

> *The real advantage of the iPad working with this material is that you have these photographs […], then it becomes really like a text, it becomes a piece of paper in front of you, and that's great. So you don't have to print it, and at the same time you can easily zoom in. This is becoming commonplace at the moment and it might not be remarkable, but for me it was ideal, because I was working with this laptop where I cannot zoom that fast, I have to make all sorts of movements to do that, and with the iPad it feels effortless, I have more control on what I'm doing. And I can also remain more focused, I don't have to discontinue all sorts of processes in my head just to scroll down.*

The one-to-one correspondence, from archival text to the image on the tablet, was an important aspect for his research. The sense of touch enabled a duplication of archival experiences - just like handling the real archives, the ability to handle their digital counterparts was enhanced by the tablet, and it contributed to the research process. Through the tactile features, the researcher was closer to his research object. Even more so: the ability to control the images, by zooming in with the touch of a finger, supported the thought processes while studying the material.

However, working with images on the iPad was not easy from the beginning. Geven tested a number of possibilities and searched for a suitable app for archiving photographs. "But nothing really worked," he admitted. There was no app specifically developed for his purposes, and the sync between different software was also problematic. In the end, the iPad was a useful

tool for managing the digitized archival material, but more functionality is needed still: "I think there is a lot of fuss about something that is highly portable and has touch capabilities, that's great, but I haven't seen the real promise yet." This did not mean future potential was not in sight. Although the iPad is just another device that researchers could use, its functionality can differ greatly depending on the apps and the way in which the tablet is used.

(Ruud Geven, personal communication, March 22, 2012)

"A bit the same, a bit different"

With research interests closely related to film, media, technology and semiotics, senior lecturer Jack Post was one of the initiators of the UM iPad Project, participating with his own iPad. His particular interest was in the flow of documents between digital devices, a flow which appeared to be hindered by certain issues: the cumbersome synchronization across different technologies, the lack of a filling system on the tablet itself which meant that there was no unified platform from which to read and manage documents, or the constraints of one account per device which did not allow multiple users.

The different problems highlighted the versatility of the technology, but also its ambiguity: "It's not one device, it's not one problem. It's a clustering of problems. And all simulating the interaction with the book." For the professor, the tablet represented an electronic simulation of a paper book, and therefore is a device that tries to replicate the way in which we use books; it is also a semi-replica of a computer, and even of a smartphone. When typing, the professor observed how the screen changes its function and becomes a keyboard. However, the change from image to keyboard is not clear, with the two functions blending with each other: "the ambiguity

of the touch screen, continuously changing between different functions, so on the one hand it's a screen that is communicating an image, at the same time it's an input device, merging the two functions." The ambiguity allows different meanings and interpretations with regards to how we classify the tablet: an electronic book-reading device, a touchscreen computer, a bigger smartphone, as well as the sum of all, a purpose-shifting hybrid.

More than that, he also reflected on the way tablet experiences connect to previous experiences we might have. Reading an e-book on the tablet is not easy because the layout changes depending on the book and on the software used to open it. The experience of reading a book is stretched and shifted through the touch-tablet. The professor considered that the iPad "is moving into the semantic field of the book," which reinforced the idea that this technology is capable of acquiring multiple meanings in different cases.

From another perspective, the tablet was seen as an oversized smartphone: "I would compare it [the iPad] with my mobile phone, they are more or less on the same level. So I do the same things as I do on the iPad because they are exactly the same. […] The first reaction I had when I bought the iPad and I pushed the button and the screen came up, I was really confusing it with my phone. It's too big! A big phone…" This offered yet another instance where the tablet has no fixed functionality, but its position is in between. "A bit the same, a bit different," this is how Post positioned the technology.

The professor also placed the iPad into a greater context of changes in academia and knowledge endeavours. The ways and means of doing research are different and education is changing, shifts that were considered to be

"far more fundamental than new devices." These changes were triggered by the printing press, Post explained, while further alterations ensued with the advent of the computer: "if [the iPad] is an extension of the computer, then it's a correction or an addition on the computer, or you can say it's totally different. But I think not, I think it's integrating into a landscape which is in general changing. You cannot separate the iPad from the other [technological developments]." The device can be seen as both a continuation of previous computational media, but concomitantly as something new, while being part of a larger network of technologies, a landscape of interconnected devices. **(Jack Post, personal communication, March 12, 2012)**

The answer to what problem?

European Studies master student Joris Korbee participated in the iPad Project because he had high expectations of the device. His project focused on tutorial sessions, where he believed the technology can be used to improve minute taking. Compared with a laptop, the iPad would not represent a physical barrier, but as he used the device more and more, Joris observed the emergence of other types of obstacles.

In terms of the physical aspects of the device, there was nothing wrong: it was light, portable, easy to share around the room between students. But the iPad also distracted them from the minutes-taking activity. So instead of allowing them to share and produce knowledge and information faster, the tablet slowed down the meeting. The technology disrupted the educational environment by bringing in entertainment and fun: "the iPad is a gadget, it's not yet a tool."

For Joris, the tablet has potential nonetheless: "the strength of the iPad lies in its intuitivity" which comes from the simplicity of using it and the small

learning curve needed to operate the device. No manual or instructions were needed, and the touch capabilities supported very well this intuitive aspect.

Yet in his tutorial groups the tablet functioned in a paradoxical manner. The students played with it, tried out different apps, and tried to take minutes, but typing did not work that well. Still, for sharing course information or lecture slides, the device was useful, and even easier to share than a laptop. The paradoxical nature of this technology was acknowledged as it became obvious to the students that even if the tablet was at the time hailed as bringing forward new and potent capabilities, it did not seem to excel at any of them: "It's nice for a thousand things, but not nice enough for one thing," he explained.

Joris believed that more discussion is needed on the ways in which the iPad could be used in education, and not so much on its technicalities (light, thin, long battery life), which for him highlighted the gadget side of the device, rather than its educational value. At the same time, he realized that sometimes there was no value to be found when using this technology: "I think you shouldn't look for a way to use state-of-the-art facilities like the iPad, but you should use them the other way around: make them the logical answer to problems you face, and not look for problems and then address them with an iPad."

(Joris Korbee, personal communication, April 12, 2012)

On the sides of a screen – a technobiography

I was one of the participants in the UM iPad project, for which I proposed research with a focus on creativity and education. More specifically, I wanted to look at the role the iPad can play in the process of brainstorming, and

in tutorial meetings for graduate students. I was enthusiastic to start working with the new "seductive digital fruit" (Boym, 2010) - that was the way I perceived the device even before using it. As soon as I received it, I wanted to turn it on and start experimenting immediately. Unfortunately, it was not as easy as that. The device needed a lot of customization before it could work.

When the initial installation was done, I accessed the App Store and tried a bit of everything, feeling like a child in the candy shop. I wanted to get an impression of the breadth of possibilities the tablet offers through these apps, so I experimented with a variety of them. However, the magical experience I was looking for was elusive, caught between walls of software: downloading apps, reading reviews of what makes similar apps perform better over others, making accounts to activate apps, reading privacy statements, agreeing to GPS localization, etc. Installing or updating the older apps became a weekly mantra, but not one that I enjoyed.

When using the tablet in my tutorial groups, I found it a great device for sharing information, for looking at a website or paper in a group, and for showcasing ideas and visuals. The tablet functioned as a common denominator for group work, as if we were sharing a piece of paper which everyone could see, everyone could discuss, with the added value of Internet access. All hurdled around the device, we had an interactive content holder, a repository of documents we were discussing, or a trigger for different ideas in the group. In this case its hybrid nature of in-between paper and computer played to our advantage. That was not always the case, and here is where the versatility of the device became both its greatest value and its greatest downfall. It worked well as trigger for discussions, but it was also a device soon forgotten when

the brainstorming evolved into a more concrete action plan for our next meeting, or even less so for collaborative writing.

To find creative ways of brainstorming in the group, I experimented with a number of apps, but at that moment in time the apps offering was still in development. However, I appreciated the simplicity and intuitiveness of basic apps such as the map, with the possibility of zooming in and out, controlling the degree of depth with just two fingers. It felt empowering and easy. Nowadays these aspects seem trivial and commonplace, but at the beginning it made me wonder how these simple movements will form my future expectations of maps, texts, images, or ideas. The potential of the tablet was felt already then, although due to its hybrid nature and versatility it is hard to pinpoint how a device that encompasses many other devices and multiple purposes can have a direct effect on the way we collaborate and brainstorm in academia.

The story of the technostories

From the stories above, a number of key themes can be fleshed-out. For some of the academics, the touch capability of the tablet was important for their overall experience with the device. One professor argued that touch was "nicer than having a mouse with you all the time, this is much easier, the easiness with which this goes is very nice" (Annex I: Bijsmans, 2012). The ease of use that touch enables advances the speed of use, but it also highlights the intuitive side of the device. The intuitiveness supports the knowledge creation process because manipulating the tablet does not hinder concentration and thought processes (Annex I: Geven, 2012).

The interactive capabilities of the tablet were highlighted by a few only, and when acknowledged it was in connection with future scholarly

communication and publishing trends. However, in one instance a clear use was made of the interactivity the tablet can offer. Professor Valentina Mazzucato (Annex I: 2012) describes her use of the iPad:

> *[W]e used it [the tablet] as an interactive tool to communicate with our respondents […]. We were collecting information on their social networks: who is important to them in terms of material, emotional and social support. We developed a name generator tool which gave us information on the name, sex and location of each person mentioned. After that we drew the network in terms of circles (men) and squares (women) with lines connecting them when they knew each other and a colour depending on where they were located geographically. We used the App Omnigraffle to draw the networks and then went to the respondents with the iPad to show them their network visually. The software allows people to move the shapes around, to add or delete shapes, etc. This way, we could interview people about their network by allowing them to shift relationships around, see if they forgot some, or check if we had understood correctly. Respondents enjoyed this exercise and it enhanced our communication with them, aside from the most important thing: it increased the quality of our data.*

Here, the sense of touch contributed to the interactivity of the device, which was useful for the researchers in two ways: as a communication tool and as a research instrument, playing a significant role for the quality of the research data. This example reinforces that argument that as a communication device, the iPad allows certain interactive features that increase the users' participation and engagement. But the way in which interactivity was used as a research instrument reveals, what at that point in

time was an unexpected potential for the interactive tablet – the potential to simulate different realities or networks, and to use the simulation as a guiding tool towards better research data.

Mobility aspects featured prominently across many of the participants' experiences. The possibility to carry the device with ease to meetings, conferences, or while travelling was seen by the majority of the Project participants as an advantage. But portability is also conducive of a more informal way of working: "you can sit in a chair and relax a little bit, you don't have to stand behind a desk and you can be much more mobile, you can basically sit wherever you want" (Annex I: Bijsmans, 2012). From this perspective, the tablet expands the working space of the academic. The desk is no longer the only working zone, but the train becomes a good spot to respond to emails or correct papers, or the armchair and even the bed become article reading havens. The expansion of the working space also increases the possibility that other types of 'spaces' will overlap. Family activities and entertainment, for example, are some of the areas that the tablet blends in. The device unites professional and personal settings.

But besides touch, interactivity, and mobility, there were a wide array of insights and thoughts after using the iPad. To better frame all these different experiences and to reflect on what these nuances mean with regards to using a tablet in general, I will compare the device with the Zimbabwe Bush Pump as analyzed by de Laet and Mol (2000). The comparison might seem unsuitable, but I want to show how the tablet is, just like the bush pump, a fluid object.

A fluid object is defined as "an object that isn't too rigorously bounded, that doesn't impose itself but tries to serve, that is adaptable, flexible,

and responsive" (de Laet and Mol, 2000, p. 226), being able to travel to 'unpredictable' places and variable over time. The lack of boundaries means the device is entangled on many levels: although a solid object, the pump is used in many different ways. It is adapted, repaired, and altered according to the people using it or the circumstances in which it is used. This leads to many identities or configurations that the object can take.

The touch-tablet shares with the bush pump this absence of sharp boundaries. In particular, the media tablet takes on multiple identities. It can be used as an Internet-browsing device, an e-reader, a multimedia platform, an interactive object, a note-taker, recorder, camera, or a video-conferencing device. Its identities multiply over time as designers develop further add-ons (for example the addition of two photocameras for the later generations of tablets). There is no one identity, not just one purpose for the tablet, but a convergence of technologies, which leads to a wide array of usage possibilities.

The idea of technological convergence is not new, and as many scholars have shown, it is important to look at this phenomenon not only in terms of old and new media colliding (Jenkins, 2006; Bolter and Grusin, 2000), or different channels of communication and texts coming together (Landow, 1997), but also from the perspective of various spaces of human activity coming together, in a combination of work and play (Holt and Perren, 2009), serious and casual, where "the virtual, social and physical world are colliding, merging and coordinating" (Rheingold, 2000). So media convergence impacts the way we consume media, bringing together at times contradictory worlds. The versatility of the tablet enables the device to be potentially useful for a variety of tasks, in different circumstances. This, however, does not mean it is useful all the time, or that for certain

actions other devices do not outperform the tablet. Choosing the iPad as an (academic) tool remains highly contextual. Nevertheless, the device offers a multiplicity of potential uses.

The Zimbabwean bush pump also shares certain characteristics with other water pumps, being similar, from some points of view, with some bucket pumps, and differing, from other perspectives, from other such devices – this web of similarities and differences gives the device a continuous aspect. Similarly, the iPad is positioned in the tablet world as not-a-computer and not-a-mobile-phone, yet it has characteristics that are similar to both PCs and smartphones. This framing makes the digital device as continuous as the bush pump is advocated to be. The tablet occupies a flexible position in-between other technologies – a fluid object suspended between desktops and mobile devices.

This in-betweenness of the tablet has its advantages as well as its disadvantages. The matter, however, is not black and white. Just like de Laet and Mol (2000) argue that for the bush pump one cannot talk about its success or its failure, but rather a fluid continuum between the two extremes, the same can be said of the tablet. The digital device can be seen as a failure in some cases, with its limited keyboard function that does not perform as well as a desktop keyboard, or the way the screen is lit up, as opposed to e-readers that work better against eye fatigue. In other situations, these features are not seen as impediments, while other features make it a useful device – the interactivity, the quality of the images, and so on.

The parallel does not hold up in all aspects. When it comes to the reparability of the devices, the bush pump is more transparent (in terms

of its structure and components) than tablets, and much easier to fix. Nevertheless, the touch-tablet can still be seen as a fluid device in terms of the absence of clear boundaries and the multiple identities that it can have, and its success or failure to address certain tasks that vary across contexts. The technostories reinforce this argument, as with each account a slightly different facet of using the tablet is showcased.

Taking a technostory approach to presenting this case study highlights the ambiguity and hybridity of the tablet as a device that can be used in many ways, has a number of different identities, and can adapt to various environments and circumstances. The comparison with the bush-pump further drives the point that tablets are fluid objects, which results in contradictory experiences. For the academics, the tablet was both fun, useful, and distracting and not really adding value. Nevertheless, the use of this technology showed how boundaries shift and change. Through the technostories, this fluidity was made apparent, offering an alternative view into the complex configurations that such devices are part of once they are included in our social ecosystems.

Afterword

This chapter, focusing on a technology which at that time saw its first adoptions in the academic space as well as the world at large, is permeated by a feeling of outdated-ness. The tablet has evolved in a short time span, together with its uses and apps. Its rapid versioning brought along different experiences just as much as different technological updates. Time-bound, the technostories might resonate less now than they did two or three years ago, but as such they highlight the special tensions between past and present that we have to confront when analyzing ever evolving technologies.

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Annex I

For the empirical part of this paper which focused on the UM iPad Project from 2011, I conducted nine interviews and I received further feedback by email from four other participants to the project. The majority of the respondents are affiliated with the Faculty of Arts and Social Sciences (FASoS). Below, there is a list in alphabetical order with details concerning interviewees' names, their department or field, and date of personal communication.

Interviews

Baakman, Nico (Dr.) – Political Science, FASoS – 20 March 2012
Bijsmans, Patrick (Dr.) – Political Science, FASoS – 26 March 2012
Christiansen, Thomas (Prof. Dr.) – Political Science, FASoS – 15 March 2012
Engelmann, Claudia (PhD candidate) – Political Science, FASoS – 3 April 2012
Geven, Ruud (PhD candidate) – History, FASoS – 22 March 2012
Korbee, Joris (MA student) – European Studies, FASoS – 12 April 2012
Post, Jack (Dr.) – Literature and Art, FASoS – 12 March 2012
Vanhaesebrouck, Karel (Dr.) – Literature and Art, FASoS – 4 April 2012
Vesseur, Antoinette (Drs.) – Educational Technologist, UM University Library – 27 March 2012

Feedback provided by email

Fronk, Elena (PhD candidate) – Literature and Art, FASoS – 19 March 2012
Mazzucato, Valentina (Prof. Dr.) – Technology and Society Studies, FASoS – 2 April 2012
Stoffels, Sjoerd (Drs.) – E-learning & IT & Education Coordinator, FASoS – various dates
Vink, Maarten (Dr.) – Political Science, FASoS – 2 April 2012

Author biography

Ana-Maria Raus is a graduate of the research master programme "Cultures of Art, Science and Technology" at the Faculty of Arts and Social Sciences of Maastricht University in the Netherlands. Her academic research spans from technology studies and science communication, to interactive media studies.

As an academic visitor at the Institute for Science, Innovation and Society (InSIS), Saïd Business School, Oxford University, Ana-Maria investigated practices of digital mapping of social controversies and the use of digital tools in social sciences. Ana-Maria also conducted research on interactivity and enhanced publications at the Royal Netherlands Academy of Arts and Sciences in Amsterdam, with the eHumanities group, which focuses on digital humanities.

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