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THE NINE COMMANDMENTS FOR NEWSPAPERS ON TABLET DEVICES

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Introduction – One tablet to cure them all?

*‘Nobody has designed the perfect newspaper app yet.’
Jon Hill, the design editor of The Times, in a private interview.*

The iPad, Apple’s tablet computer device, was released in April 2010. It has introduced to us a completely new field of digital publishing. It is the first of a new generation of tablet devices and the dominant market leader. In 2010, 15 million units were sold. For 2011, the estimates range from 30 million to 40 million units. From the first announcement of the device in January 2010, the publishing industry has had a keen interest in the iPad. In Europe and especially in the United States, newspapers are suffering from dwindling sales and ever diminishing advertisement revenues. Publishers have by and large been unsuccessful in their attempts to monetize the web. Thus, the iPad was welcomed as a possibility to finally make money from digital publishing. In spring 2010 some publishers stated their belief that these new tablets will save the sunset industry of newspaper publishing. Now, after only a year, we can see that this hope of salvation maybe arose from a certain desperation. There are success stories on the iPad, such as The Financial Times and The Economist, but for the most part the newspaper and magazine industry has not been able to produce hugely successful applications.

The main reason for this failure is that we do not yet really know what these devices are. As Evan Ratliff from the digital device only publication Atavist said when I asked him how he thinks people use tablet devices:

‘I’m just going off my own reading habits. All these media critics, they don’t work from data. When they say readers want this or that, it just means that’s what they themselves want.’

In the last year and a half, tens of thousands of blogposts, online articles and newspaper stories have been written about the iPad. But there are no comprehensive academic studies of the iPad yet. There have been studies and surveys into the usage habits of the device and the demographics of its users. But we are yet to have a common ground in terms of basic research findings to draw on.

During the first half of 2011 I talked with editors, developers, designers, programmers, academics and CEOs of technology startups. I have interviewed people working on tablet editions at The Washington Post, The Times, Helsingin Sanomat and The

Financial Times. In addition I have interviewed some of the leading designers and developers of iPad magazine applications and 'pure players', e.g. media content producers or application developers who work only on the tablet platform. And I have of course spent a year trying all of the more interesting applications that have been released on the device and tried to understand what makes them tick.

This paper is my list of conclusions on what newspaper publishers willing to enter the world of tablet publishing should do. I have called them nine commandments for newspapers on tablet devices. Each chapter is one of my conclusions. After these conclusions there is a summary, which also includes my view on what they future holds for newspapers on tablet devices. Generally I focus more on User Interface (UI) and design -related issues than for example the economics of tablet devices. I believe UI and design are the key areas where we need strong innovation and openness to learn. Newspapers and other media organisations must educate their staff to have a robust understanding of the fields of User Interface and User Experience, or alternatively hire professionals with such expertise. No matter how speculative some of my conclusions may appear, I believe we could agree that the question of the interface, of the changing relationship between man and machine is the heart of the matter when we move our products from paper and the computer screen to a touch screen device.

On a less philosophical level, User Interface and design are issues which will remain with us somewhat unchanged for quite some time. Other areas such as the question of tablet economics, meaning primarily the debate on subscriptions, move so fast that any study is quickly rendered obsolete. I spent weeks writing an extensive chapter on the economics of tablet publishing, only to find that later developments turned it into a historical account, with little present day relevance as such. We do not need history now and the chapter I wrote is scrapped. We need bold steps to the future, including a readiness to make decisions and accept all possible failures as part of the utterly unavoidable processes of innovation and experimentation. This paper is my small step ahead and it is my wish it could be of some use to the many wonderful, creative, innovative and sometimes just a little bit crazy people working towards a new digital future for publishers.

After one year, I think we can say that the fundamental difference between the computers we have used until now and tablet devices is the use of touch to directly manipulate and interact with media content. When the keyboard and the mouse have been discarded, the only intermediary is the transparent skin of the screen. This is a much more immediate, even an intimate relationship. As Monica Bulger, a research fellow at the Oxford Internet Institute, University of Oxford, and an expert on digital literacy has pointed out, the iPad calls for a profound question – what could be the literacy of touch? Could we learn to read not only with our eyes, but with our eyes and fingers? Without sounding trivial, one could ask at least rhetorically the question – could be the braille script for those who can see? What would a newspaper written in such a script look like?

Surprising new forms of media experience and content delivery have already emerged on the iPad, forms that are native to these new devices. In terms of news, the new generation of aggregators is quickly revolutionising digital delivery. It is because of these new forms of media experience that I myself have not given into cynicism. I do believe that tablet computers have at least the potential to become one of our main means of media consumption. It is good to bear in mind that it took the publishing industry from five to ten years – exact figure depends on who you are asking – learn what to really do with the web. It is too early to pass verdict on tablet devices, but it is exactly the right time to inspect what they are.

The project of understanding tablet devices and tailoring our products for these devices has implications for the future of the whole media industry. As the award winning Portuguese graphic designer Pedro Monteiro said of tablet publishing, ‘this is the last opportunity to make money out of digital.’

Lastly, I wish to address the question of whether tablet devices will come to dominate the market. A lasting narrative during the first year of the iPad was that it is a device primarily for the consumption of media, and not the production of media, thus running directly against the stream of all other current developments in digital media. This was mentioned for example by David Pogue in his New York Times review of the iPad in March 31st, 2010¹. It was also implicitly there in Roger Fidler’s original vision of the tablet device in 1991: ‘We may still use computers to create information, but we’ll use the tablet to interact with the information.’² This narrative had some truth to it and for some time it was very appealing. But time has proven it to be false. One argument against it is that among the three groups of most downloaded apps, one is productivity applications and another is games. It has to be pointed out that productivity apps are downloaded also for the purpose of being able to open and view a wide variety of filetypes, in other words to consume media. But in essence both productivity apps and games present very much a lean forward relationship with the device. The first widely disseminated story to counter the only for consumption -narrative was the band Gorillaz making an entire album on the first generation iPad and its applications. During the autumn term of 2010, students at USC Annenberg used the first generation iPad to make stories, writing, editing text and photos, recording and editing audio on the device. In March 2011, Nieman Journalism Lab viewed the iPad2 as a ‘mobile multimedia studio’ for journalists to shoot, edit and publish with.

Apple’s launch event for the iPad 2 was, among other things, a clear attempt to cut down these two narratives. I argue that this is the fundamental meaning of the term ‘first post-pc device’ that Steve Jobs coined at the event. If the iPad is a lean back device for merely consuming media, it can never be a consumer’s primary computer device. If

¹ <http://www.nytimes.com/2010/04/01/technology/personaltech/01pogue.html?pagewanted=all>

² See my blogpost on the history of tablet devices prior to the iPad. <http://ipadresearch.wordpress.com/2011/04/18/reasons-for-the-ipads-success-%E2%80%93-abandoning-the-restrictive-paper-and-pen-metaphor/>

on the other hand it allows for the extent of media production the average user needs, and provides an active, socially engaged lean forward experience, it can potentially become the dominant computer device for many consumers. Two new apps were introduced at the launch event. The iMovie app lets the user shoot, edit and share video on the device. The other app was Garage Band, which allows the user to make music on the iPad and share it. Apple also demonstrated Photobooth and Facetime, both a means of communication and, of actively connecting with other users. Apple used all its technological development talent and rhetorical marketing skills at the launch of iPad 2 to push this one message: the iPad is not only for consuming media, but also for producing it.

It is not an exaggeration to say that absolutely everything about the future of tablets hangs on this question of definition. The question has potentially massive economic effects for the tablet market. If the iPad and other similar tablets are devices primarily for consuming media, they would fall into the category of consumer electronics devices. According to Robert Picard, the head of research at the Reuters Institute, most consumer electronics devices reach only a 20 percent market penetration, and at best only 40 percent³. A recent survey conducted in sixteen countries and involving 14 000 internet users suggests that tablet devices are being perceived more like computers than consumer electronics. According to the survey⁴ 47 percent of internet users worldwide are interested in buying a tablet or e-reader device in the next three years. With the number of internet users at around two billion at the moment, we are left with the figure of almost a billion consumers interested in buying a tablet within the next three years.

Images, video or even music are all perfectly possible to produce and share on the iPad. Only one open question remains – writing. The touch screen keyboard is felt by many users to be too difficult for any extensive use. But it could be asked, how many average computer users produce more text than just a few emails and Facebook updates a day? This could perhaps be done on the touch screen keyboard. But the question still remains. In an ironic twist of history, it is as if the tablet devices of today seem to face the very burden which they had to shed to become the success they now are. As I have argued elsewhere, it was exactly by shedding the pen and paper metaphor that Apple was able to break tablet devices into the mainstream. Yet now it might be that their ultimate fate depends on how well they function as tools for writing.⁵

³ Private interview.

⁴ <http://www.bcg.com/media/PressReleaseDetails.aspx?id=tcm:12-72963>),

⁵ In the earlier mentioned blogpost I argue that it was abandoning the pen-and-paper-metaphor of the earlier tablet devices which made the iPad so successful: <http://ipadresearch.wordpress.com/2011/04/18/reasons-for-the-ipads-success-%E2%80%93-abandoning-the-restrictive-paper-and-pen-metaphor/> . See also my blogpost on why Microsoft failed and Apple succeeded in making tablet devices mainstream: <http://ipadresearch.wordpress.com/2011/06/14/why-apple-succeeded-in-the-tablet-market-and-microsoft-failed/>

THE NINE COMMANDMENTS
FOR NEWSPAPERS ON TABLET DEVICES

1 Tablets are a better interface for newspapers than print

The printed newspaper has a long history, dating back hundreds of years. Either subscribed or bought at the newsstand, it has become a regular feature in the lives of hundreds of millions of people around the world. Many senior editors-in-chief and managers of media companies nowadays like to use the expression ‘print is still the best interface’.

I believe this is a defence mechanism to counter the perceived threat of digital publishing, as it is really not based on any data or evidence, merely subjective experience. The media economy scholar Robert G. Picard has said it very clearly that the future of newspapers is without doubt digital⁶. What form of digital and when is still open to question, though.

Arguably, tablets are the best option around at the moment. The iOS designer Matt Gemmell describes the way tablets intuitively are a good interface to replace paper:

‘Newspaper apps are one of the ideal uses for this kind of device. You pick it up and it feels like a pad of paper and immediately creates associations to paper. The industry is still learning how to do a digital version of what they have done in the physical world.’

1.1 Cornerstones for tablet devices – content viewability, mobility and interaction

Tablet devices have already proven to be superior to print. I make this statement based on a threefold understanding of what these devices fundamentally are. This description was given by Ali Davar, the CEO of Zite, a very interesting news application that I write about more in my last chapter. I have not been able to come across a fourth term to complement these three, which would not be in some way derived from them. In other words, these three terms are the cornerstones that mark the uniqueness of tablet devices. The three terms are content viewability, interactivity and mobility.

⁶ Source: Seminar at the Reuters Institute for the Study of Journalism, Oxford University in January 26th 2011, titled ‘The crisis facing the business models of print media around the world’.

To start with the last one, mobility frees the reader. Where ever I am, as the industrialised world is now covered in a 3G network and urban environments are increasingly covered with wifi-networks, my newspaper is always available to me. As Petteri Putkiranta, Vice President of Digital Services at Helsingin Sanomat put it:

‘This device as such is a better interface for newspaper content than print, just because you don’t have to remember anything. When you have the device with you, you can always download the paper.’

This frees newspapers from the spatially limited delivery points of either the home for subscriptions, or the news stand for single copy sales. This is a radical shift in distribution. The whole expensive infrastructure of printing on paper and the logistics of moving the physical product to the end user become unnecessary. As Petteri Putkiranta pointed out, there are still several open questions as to how best to realise the potential of the interface. The main problems are economic: the most crucial hurdle is the fact that advertising revenue on tablets does not yet come close to the level of print advertising for most newspapers.

But one could ask if the modern smartphone already provide us with mobility? And the answer is an emphatic yes. In terms of fast news, the smartphone will likely dominate the market. But when we take into account the first of the three factors, content viewability, the difference becomes clear. For reading, viewing photos or watching video, the tablet screen completely outshines the tiny smartphone screen.

It is easy to see that it is exactly the combination of these two factors that has contributed to the success of one the most successful print media applications on the iPad, The Economist⁷. The magazine has reported very good figures for its iPad edition. It has no rich media. Instead it relies on the quality of The Economist content, which is very much text driven. This proves the point that even a text driven conservative approach on the tablet can yield good results. Another great text driven success has been the New Yorker app. The publisher Condé Nast reported that the app had 20 000 annual subscriptions by the end of July 2011, priced at US\$59.99. In addition 75 000 print subscribers had downloaded the app.⁸

But it is the third factor which is the really strong area of the tablet – interactivity, the fact that we can be in contact with media content directly by touch interface. The experience of interactivity, combined with the possibilities offered by rich media content, take the device far beyond both the paper interface and the passive screen interface of the traditional computer.

⁷ <http://paidcontent.org/article/419-economist-ceo-sees-tablets-unleashing-leanback-2.0/>

⁸ http://www.readwriteweb.com/archives/new_yorker_ipad_app_hits_100000_readers_begins_to.php

1.2 People want to read news on tablet devices

There are good indications that people do want to read newspaper content on their tablet devices, provided that the quality is good, the applications function well and the pricing is correct. The latest study into the subject was conducted by Pew Research Center's Project for Excellence in Journalism in collaboration with The Economist Group⁹. The study revealed that eighteen months after the introduction of the iPad, 11 % of US adults owned some kind of tablet device. Of these 53 % get news on their tablet device every day. Consuming news ranked as high on the list of daily activities on the tablet as sending an email did (53 %). The only activity which was more popular was general web browsing, at 67 %.

The study also shows that owning a tablet had increased news consumption for the majority of users, meaning that they had found new sources for news on tablets. The study gives some encouragement to the model of charging for news on tablets, particularly a bundle model which combines digital access with print subscription. Including both digital only and bundle models, the portion of users who have paid for their news on tablets is roughly a third.

Several surveys were carried out in 2010 into how iPad owners used news applications on their tablet devices. Reynolds Institute for Journalism started in 2010 a multi-year survey on how iPad users consume news content on the iPad.¹⁰ The survey is lead by Roger Fidler, the same man who designed the first tablet device in 1991.

According to the survey, keeping up with news and current events was the most popular use of the iPad for early adopters. Users preferred newspaper apps to newspaper websites, and were less likely to use print. Low price and ease of use were key factors in users' decisions to purchase newspaper subscriptions on the iPad.

84.4 % of the RIJ survey respondents said that following current events was one of their main uses for the iPad. This was the highest percentage for any activity on the device. Second most popular activity was the leisure reading of books, newspapers and magazines at 81.5 %. Third was generally browsing the web at 80.8 %. According to the survey 99 % of iPad users used their iPad for some period of time during a typical day to consume news. 75.8 % spent at least half an hour during a typical day consuming news on the iPad. 48.9 % spent more than an hour consuming news on the iPad.

Out of these, 48.9 % who consume at least an hour's worth of news daily, 71.8 % were very likely and 21.2 % somewhat likely to use a newspaper's app for reading news and feature stories instead of using a web browser to read the stories online. The same news app -favoring trend was observable also among those who spent less time daily with news.

⁹ www.journalism.org/analysis_report/tablet

¹⁰ www.rjionline.org/digital-publishing/dpa/stories/research-projects/ipad-news-survey

Poynter Media's research supported these findings in terms of iPad users' high interest in news¹¹. But the Poynter research indicated a trend which was to become more and more prevalent, that news was consumed predominantly through free apps.

According to the survey, newspaper and magazine apps were among the most downloaded free apps in the early days of the iPad, but among paid apps media content did not make it to the top of the list. In addition, if we look at just the free apps, newspapers and magazines did not fare as well as broadcasters.

The media and market research company Nielsen also did a survey about American tablet users. According to the survey, by October 2010 already four percent of American households owned a tablet device. The survey found that different kinds of media content are consumed on tablets to those on smartphones. News and music were consumed more on the iPhone, radio listening was equal between the iPhone and the iPad, but all other types of media – movies, TV shows and magazines – consumed significantly more on the iPad. The individual sessions of media consumption were longer on the iPad than on the iPhone. According to Nielsen, the top five categories of paid apps were games at 62 percent, books at 54 percent, music at 50 percent, shopping at 45 percent and news and headlines at 45 percent. Celebrity and entertainment news were at 44 percent and magazines at 41 percent.¹²

1.3 Consumer interest in tablet devices is expected to rise in the next few years

There is a segment of news audiences who are clearly moving away from print. For a fast growing number of young urban consumers, the ecological issue of buying or subscribing to what is on a yearly level a great big mass of paper, is more and more a factor behind the move into digital news consumption.

According to Robert G. Picard, at this stage there are two groups of audiences for tablet editions of newspapers:

‘First, there is a portion of technologically savvy younger readers who prefer screen delivery of news and information over print... The second realistic audience is that portion of hard-core readers who are willing to give up print. Believe it or not, this is actually a growing market segment.’¹³

¹¹ www.poynter.org/latest-news/media-lab/mobile-media/101816/early-ipad-app-downloads-dominated-by-media-offerings

¹² http://blog.nielsen.com/nielsenwire/online_mobile/connected-devices-does-the-ipad-change-everything

¹³ <http://www.editorandpublisher.com/Headlines/business-realities-of-tablets-and-ereaders-63811-.aspx>

A survey by the Boston Consulting Group suggests we might see a very dramatic rise in tablet device usage in the next few years¹⁴. BCG asked 14 000 consumers in 16 markets around the world if they are interested in buying a tablet device or an e-reader. The results were that 47 % of internet users worldwide are interested in buying a tablet device within the next three years. Currently estimated number of internet users in the world is approximately two billion. This leaves us with an astounding figure – a billion tablet devices potentially sold within the next three years.

Of course it is not this straightforward. What was measured in the survey is merely the interest to potentially buy a device. But even so, the trend is fascinating. BCG makes an interesting point in their press release: ‘These devices are gaining mass acceptance faster than VCRs, MP3 players, or other comparable products at similar stages in their evolution.’

Consumer interest is clearly slanted in favor of multipurpose tablets, not e-readers. Emarket has made useful charts out of the BCG’s survey results. In the charts you can see that people want to use a variety of media content on these devices, something that tablets can provide, but e-readers can’t.

There is a caveat. One should always take surveys conducted only on the internet with a pinch of salt. But BCG does not claim that the results of the survey would represent the entire population, but only the internet using section of it. This is nevertheless almost a non sequitur, because anyone even remotely interested in a tablet device would of course be an internet user.

Another caveat is the price. I quote from the press release:

‘Consumers in Italy, for example are willing to spend up to \$330 for a tablet. In Germany, the upper limit is about \$260, and in the U.S., about \$200. While these amounts are below the \$499 entry price of an iPad, they suggest where tablets could be selling in a year or so if prices fall in line with the price declines of other consumer-electronics products.’

Two hundred dollars is likely to be the lowest tablet device prices will ever go. Technology like this is unlikely to ever be produced at the one hundred dollar range. Already we are seeing a competition in price, with the Amazon Kindle Fire priced at 199 US dollars, as opposed to the cheapest iPad 2 price of 499 US dollars. So far Kindle Fire has only been released in the US. The device has sold very well and is the one real competitor to Apple’s iPad¹⁵.

¹⁵ <http://paidcontent.org/article/419-amazon-dances-around-kindle-sales-numbers-again-but-kindle-fire-was-hot/>

2 The interface is a vital part of the brand

2.1 New kinds of interaction

The touch screen of a tablet device is a new form of User Interface. User Interface refers to the variety of means of interaction between man and machine. In a traditional computer, a desktop or a laptop, this includes hardware devices such as the keyboard and a mouse, and software, such as an icon based system of displaying content on the screen, with different kinds of menus giving access to different categories of content. On the iPad the hardware User Interface consists of one button and a touchscreen. The software is mainly apps, meaning pieces of software designed to perform one particular function or a variety of functions which are more limited than on traditional computer versions of the same software.

Interacting with the device via the touchscreen is a different experience from the traditional computer model. Monical Bulger has coined the term 'literacy of touch' to investigate the newly emerging horizon of touch-based interaction with media content¹⁶. According to Bulger touch interaction has a heightened sense of immediacy and closeness:

'Directing text through our fingers seems different than using a mouse. It feels closer and more responsive. The iPad and the iPhone remove the mediating factor of the mouse and the keyboard. It is empowering, we are engaging with content again, turning the pages and so on.'¹⁷

The touchscreen of an iPad makes use of a variety of gestures. The four basic ones are tap, pinch, swipe and flick. Tap means to simply touch an area of the screen. It is used universally to access, open or initiate a functionality which is graphically represented in the area to be tapped. Pinch means moving two fingers towards each other. This usually has the effect of zooming in to content. The inverse pinch, moving two fingers away from each other conversely zooms out. Swipe means a horizontal movement of the finger on the screen, used commonly to access the next piece of content in a media app. Flick is a vertical movement of the finger on the screen, used commonly to move further within the particular piece of media content. The two latter gestures are less clearly defined, though, and they have a variety of functions in different apps.¹⁸

¹⁶ <http://monicabulger.com/2010/04/literacy-of-touch/>

¹⁷ Private interview with Monica Bulger

¹⁸ Apple's patent application for the screen technology, from 2004, mentions the possibility to have a multitouch functionality with up to fifteen separate and simultaneous points if input. Source: http://www.businessweek.com/technology/content/mar2007/tc20070314_109157.htm

According to the Portuguese designer Pedro Monteiro, who has designed for example the award winning Elle and Paris Match apps, standardisation of gestures is necessary:

‘You need standards for navigation and the user interface if you really want to produce digital media where most people will access your content. Right now we have different solutions that do more or less the same thing. I see some people getting annoyed by it, because they have to learn to read each application. For example, am I going to swipe up and down or left to right to read this article.’¹⁹

Monteiro sees the problem stemming from the fact that in newsrooms, it is designers who have worked on the apps: ‘Most news applications are made by print designers, and we don’t have much knowledge about User Interface.’

As always, good ideas spread through a process of natural selection. For example, an abundance of apps now use the functionality of pulling down, by using a downwards flick, to refresh or update the content. Pull-to-refresh was first used in an iPhone app called Tweetie – which was later acquired by Twitter itself. It is nowadays nearly universal and has been adopted even by Apple itself. It is used in Concierge, the app that Apple Store employees use to manage Genius Bar appointments.²⁰

2.2 The device becomes the app

The iOS developer Matt Gemmell, who works among others for Apple, made a very important remark about the iPad in his column at the Tap Mag’s Dev_Zone, dedicated to iOS developers:

‘iOS devices almost aren’t devices at all: they’re just touchscreens. A window into a virtual world, where the window itself becomes invisible the moment the screen springs to life... When your app is launched, it becomes the entire device.’²¹

From this it follows that an iPad is in fact not just one, but many devices: ‘a novel, a notepad, a sketchbook, a mixing desk, a piano or a pinball machine.’

The conclusion for development and design is that the piece of virtual hardware needs to be very simple, with no need for a manual. Also, technical concerns should not be

¹⁹ Private interview with Pedro Monteiro.

²⁰ This was pointed out to me by the iOS developer Matt Gemmell.

²¹ Tap Mag, Issue Four.

placed in front of the user. Gemmell calls this approach ‘not breaking the fourth wall’. This is an expression from drama theory referring to an actor addressing the audience as audience, stepping outside the fictional world of the play and acknowledging the presence of the audience. This occurs probably most famously in the final monologue of Puck in Shakespeare’s *A Midsummer Night’s Dream*. The actor is thus in a way breaking the fourth invisible wall in front of the stage, between the actors and the audience, with the other three being the visible material walls around the stage.

In terms of application development this means that the user should not be allowed to peek behind the stage of the application to the ropes and pulleys, as it were, of the iOS interface on which the application factually is running.

2.3 Newspapers as hardware

In an interview Matt Gemmell described in more detail what software approach to design – which he criticises – means for newspaper apps:

‘Lot of the newspaper apps are still software, not hardware. This means focusing on hierarchies of content and browsing categories, rather than focusing on what people want from the hardware, which in the case of a newspaper is readability and instant access and randomly dipping in and out and not having a barrier to getting to information.’

To do away completely with hierarchies and categories when you are dealing with a large amount of content seems to me difficult to achieve. But as Gemmell said, the point is that these should not be the focus of the design.

The aesthetics of simple and quick fits news driven apps, but today’s newspapers are much more than just news. If we don’t focus only on fast access to news content but to journalistic experiences understood more widely, we can easily argue for innovation, in the sense that branded gestures and ways of interaction become the main focus of innovation. The UI of a newspaper app can become a central part of its brand on a touch device. Not the masthead, not the typography, not even the content, but the principles by which the user engages with the content. The more the public acquires the various skills covered by the literacy of touch, the more this type of innovation becomes possible and organic.

2.4 Gestural innovation

As Pedro Monteiro said, standardisation is important. A new literacy of touch can only be built on naturally evolved standards. Yet within standards there is room for experimentation and departure from the norm. This is proven by the example of the most sophisticated art of interface design we have at the moment – games. In games there is continual innovation in terms of the interface, in the very basics of how you interact with the media. In fact this is expected of new games for them to feel new, and

not just the old game in a new set of clothes. I believe interface innovation is possible also in journalism on digital devices. But it has to build on existing conventions and departures from these conventions must evolve intuitively from those conventions.

There have already been many interesting and innovative ideas in gesture design, for example. The pull-to-refresh example I mentioned earlier is one. Al Gore's Our Choice app uses the pinch – usually limited to zooming in and out – bring up content from the menu bar in an innovative way which feels instantly intuitive.

2.5 Times Eureka app as an example of innovative interface design

The Times Eureka app, released in 2010, is generally held to be one of the best media apps of its generation. It was a one shot app, based on The Times science magazine, Eureka. The app covers the science of sport, divided into five separate sections. The app has several interesting innovations in its UI.

The lead designer in the project was Matt Curtis, the designer at Eureka magazine. Curtis is keenly aware of the gap between the present state of print publishers' content on the iPad and the potential of the devices:

‘They are very good for games. I would probably play stick golf rather than read the Time magazine on the iPad. Publishers' apps are not quite there yet. Print publications have to become more bespoke. Make it more like an arthouse experience, rather than tell news rigorously, because that can be done on a mobile device.’²²

Where Matt Gemmell spoke of newspaper apps focusing on readability and fast access, Matt Curtis differentiates between news and ‘arthouse experiences’. This means more rich media, and I argue, more innovation in User Interface design.

The Eureka app is an example of an attempt at in-house standardised interface. The menu bar at the bottom of the app is similar to the ones in the Times and Sunday Times apps. It is a transparent bar that goes across the whole width of the screen and uses colour coding to indicate the different content sections. Matt Curtis also decided that the app should be read only in portrait mode, with occasional content prompting to turn the device to landscape mode. It was a bold decision at the time and one he had to defend:

‘Early on I made the decision that I wanted to do it one way. At that point Popular Mechanics had done it one way, but most people had done it both ways. James Harding, the editor of the Times newspaper said it needs to

²² Private interview with Matt Curtis.

go both ways, but there wasn't any time to change it anymore. He said his granddad wants to read it the other way while he's eating his breakfast. I said the Eureka app should hold your attention so you wouldn't be eating at the same time.'

The Eureka app has an original concept of the contents page. As it is the introduction to the app, it immediately gives a unique character to the whole app. The contents page resembles a network of interconnected honeycombs, with central structures extending out, instead of section headings having a group of subsections listed under them.

'It is difficult to show people quickly how big something is. If I buy a big book, the experience is of having a big book. A magazine is thin. On a flat screen they are the same, there is no way of gauging how much stuff is in there. Here, with the pinch effect you can get a sense of the scale, as you move to a higher perspective. We're still thinking in pages. This would be a better structure for a newspaper app.'

Some sections of the app also have a combined text and image scroll system, which functions very intuitively and is pleasant to use. You scroll down on a column of text placed on one side of the screen next to a large image. As you come to the end of the description of the image in the text, the next image is automatically pulled up. It feels as if somehow the device knows where you are in the text and changes the image accordingly. Curtis describes the functionality and what the third party developer did to fulfill their specification for the functionality:

'It has got a hook on it basically. When you go past a particular section in the text, it hooks up and goes. I think they put a point on the bar and when it goes out of the screen the image moves. This is close to what I want the magazine to look like on the iPad. This feels more right to me.'

Curtis had a very original idea for the whole interface which would have immediately branded the app to be a uniquely interesting interface. Unfortunately the management decided it was too little like a magazine. Curtis said his inspiration came from the much applauded science app Elements, which presents the periodic table of elements with rich 3D images.

'Elements feels like an app. It does not have a running narrative. It is more like a website than a magazine. We started making an app in which you don't get a swipe through experience. We mocked it up on Flash and showed it on a laptop. They got scared and said they wanted a magazine.'

Someone even said they wanted the nasty page turning thing which we fortunately convinced them we don't need to do.

It had several bars layered across the screen. You could pull a bar up and you could swipe to move ahead in it. It parallaxed using also the z plane, not just x and y. When you are in a train, bushes outside seem to be moving really fast, but the field really slow. We did that with content. Some parts of the content were bigger and on the foreground. When you parallax through it, the rest stays on the background. Main features would be the three big ones. As in a magazine you have hierarchy of content, we did that with scale. When you get a magazine you can flip through it. That parallax thing was supposed to be that experience. Turning the pages is not the thing, but being able to look through them really quickly. That's what's interesting to me. It made it feel like an expansive box of stuff, rather than a piece of paper.'

The central importance of a branded interface is understood also by Apple. The company has recently engaged in an aggressive series of legal battles to ensure ownership of its patented touch interface, introduced by the iPhone and developed further with the iPad. In October 2010 the United States Patents and Trademark Office gave Apple several patents for multitouch interface gestures.²³ The patent wars between operating system developers and hardware manufacturers – Apple being both – will probably continue on for a long time. It is impossible to say anything definitive about the situation.²⁴ Steve Jobs took the patent fight very personally, as can be witnessed from his biography by Walter Isaacson.²⁵

What can be said is that at the level of principles, it is potentially harmful for interface development in touch screen devices that Apple has been granted these patents. Looking at it from the perspective of the rising and increasingly vital field of touch literacy, this could be compared to a situation in which a book binder and publisher had patented at the early days of book printing the method of flipping from one page to the next. The rest of the book binders and publishers would have had to figure other means of moving from one page to the next.

²³ http://www.appleinsider.com/articles/10/10/14/apple_awarded_several_key_multi_touch_patents.html

²⁴ It is customary that these conflicts are resolved by trading the rights to some patents in a company's portfolio for patents in the rival company's portfolio.

²⁵ Walter Isaacson: Steve Jobs. For example, at Location 8245 of the Kindle version of the book, Isaacson describes Jobs being 'angrier than I have ever seen him' as he speaks of the way Google has stolen Apple's patents. Jobs says: 'I'm going to destroy Android'. For additional information on the patent wars, see the article at <http://techrights.org/2011/12/26/boycott-apple-debated/> includes links to stories describing several stages of the patent wars between Apple and other developers and manufacturers.

3 Tablet design should not replicate print or a website

3.1 Building the unknown based on what is known – print or the web

In early 2010 newspaper organisations started planning and designing their tablet editions. Publishers wanted to be present on the new and exciting device, the iPad. There was a serious problem, though. The designers and the editors were not familiar with the devices yet. Most of them had not even seen them. For example, Jon Hill of The Times described how Apple allowed a few members of The Times staff into a room in which two iPad devices were chained to a table, to test them out some months prior to the release of the device. Hill and his colleagues were allowed to try the iPads for some time. They looked at some pdf-files on the iPad and tried to figure out how they could transfer their product into this new kind of device.²⁶

In my interviews it became clear that as designers, editors and marketing staff started to transfer their products to the iPad, design and UI considerations were often dictated by concerns that were either coming from outside the field of design and UI, or from the design aesthetics of print or web. All the representatives of the newspapers I interviewed said they are rethinking storytelling on the iPad. But in reality, when they were asked to list their guiding principles in design and User Interface, the principles were dictated by considerations of brand, economy, editorial principles and workflow organisation, leaving very little room for actually rethinking storytelling.

The solution to working on a platform no-one was familiar with was to build on what was known – print or web. Each of the newspapers I studied made a clear decision to build their tablet edition based either on their print edition or their website. The choice was based primarily on the pre-existing economic model of each paper and on where the line between free and for-charge digital content was situated. I will present each of the cases I studied, with background information on the subscription models they offer and the economics of each tablet edition, taken around the time of the interviews.

²⁶ Private interview, as are all the quotes from all the papers in this chapter.

3.2 The Times

The Times is a UK daily newspaper with a print circulation of approximately 425 000.²⁷ Since July 2010, The Times website has been behind a paywall, with a price of one pound for a one day access and two pounds for one week access. The price gives access to the iPad edition as well. The print subscription, rare in the UK market, costs six pounds a week and includes the digital package. At the time of the interview, in April 2011, it was just announced that The Times and The Sunday Times together had 79 000 subscribers online, on the iPad and on the Kindle.

‘Pricing is a very sensitive thing, but we are certain that it is no longer free in any format’, designer Jon Hill of The Times commented on the pricing.

The Times iPad edition is built from the print edition. ‘It’s like a newspaper but it gets better at points’, Jon Hill describes the iPad edition.

‘We publish everything from the print edition, but whenever we can make it better with interactive infographics and so on, we try to do it, and where we can carry additional information like more detailed cricket results, we will do it.’

The Times does not see cannibalisation as a threat.

‘We are ok with that. If someone buys The Times only on the iPad, that’s fine. There are new readers on the iPad whom we do not reach on any other platform.’

The exact figures of how many new readers The Times has attracted on the iPad have not been disclosed.

Of the newspapers examined, The Times makes most use of interactive features in the app. Yet still, practically all the design decisions were dictated by the paper brand. Jon Hill describes the thinking behind the design:

‘We were really conscious of taking the established newspaper aesthetics, the columns, the fonts, the masthead, the colour palettes – not because we were ignorant of what the iPad could do but because we felt our readers would respond to that. Our research indicates that they do. They appreciate the idea that it is the Times journalism. We took some criticism for doing this but I think it was ultimately the right decision. This doesn’t mean we couldn’t be more experimental in the future.’

²⁷ In February 2011, source <http://www.guardian.co.uk/media/2011/mar/29/the-times-digital-subscribers>

3.3 The Financial Times

The Financial Times has one the most successful journalistic apps on the iPad. According to Executive Editor Bede McCarthy, by April 2011, the FT app had been downloaded more than 500 000 times.²⁸ The print edition of the FT has a global print circulation of about 380 000. FT's iPad strategy is based on subscriptions. The paper does not yet even offer single issue downloads in the iPad app, although this is being considered at the moment. The FT iPad edition is part of a package which includes access to the paper's website. The standard online subscription costs £174.72 a year in the UK. A 30 day subscription costs £17.87. Premium online service includes also the Lex service, a specialist column. The premium service costs £337.48 a year. The whole package with paper and all the digital services costs £519.48 a year.

FT has two levels of users. FT.com has 3.5 million registered users and 225,000 digital subscribers²⁹, as well as 605,402 paying users (2 October 2010 to 4 January 2011). Registered users can read ten stories a month for free on the FT website or in the FT app. In addition to the ten stories, anyone, registered or not, can read stories on the FT site if they come to the stories via links from Google News or social media sources such as Twitter or Facebook. Bede McCarthy describes the system:

‘It is a funnel. If you want to read stories for free on the website, you have to register and you are in the funnel. You want to grow both the amount of registered users and paying users, since there is a direct correlation between the two. The goal is to get people to FT.com, make it good and from there the path to registration and subscription works itself.’

The FT website thus serves as an entrance point into registration and subscription. In addition to this, users can also approach the FT paid digital package from the direction of the app.

‘You can download the app for free and look at the section pages for free, but if you want to read an article, you need to register. Then you can read ten stories a month on the app, just like on the website.’

McCarthy says the FT has new customers on the iPad, but they cannot know for sure what the relationship of these customers has been to the FT prior to subscription. Elsewhere it has been said that the iPad is responsible for one tenth of new digital subscriptions last year.³⁰

²⁹ <http://paidcontent.co.uk/article/419-ft-still-negotiating-with-apple-on-ipad-subscriptions/>

³⁰ <http://paidcontent.co.uk/article/419-fts-paid-digital-subs-up-71-percent-in-a-year/> and <http://paidcontent.co.uk/article/419-apples-subs-rules-would-suck-1-million-from-financial-times/>

‘We do not know to what extent people migrate from the paper to the iPad, to what extent they are existing paper readers. For example, we do not know if that person has been buying the paper at the newsstand four days a week or if they are existing FT.com subscribers whose subscriptions have lapsed and they are just renewing it on the iPad.’

McCarthy acknowledges that tablet devices create a wide variety of new distribution possibilities.

‘We look at everything. Whether we’d stop printing at certain parts of the world and sell subscriptions just on the iPad. We are not actively looking at that at the moment, though.’

At the time of the interview with Bede McCarthy, The Financial Times had only an iPad application to be downloaded from the App Store. Since the summer of 2011 the FT introduced what they call ‘the web app’, an HTML5 optimised website. In terms of design and User Interface, the two are quite interchangeable.

Both the FT apps run off the online content, in other words, it is based on the website. ‘For us, print and online are part of the same process’, says digital editor Bede McCarthy. In 2006 the FT newsroom moved to a ‘web ready workflow’.

‘Everything is made for the web and the best of the web is published in the paper’, McCarthy describes the process. The difference between the app and the website is multimedia and the fact that the app is a limited read, without the extensive website archives.

The Financial Times app has always been very similar in outlook to the FT website. Thus it was a simple transition for them to move into the HTML5 based ‘web app’ in the summer of 2011. Again, the brand was the key consideration. Bede McCarthy described the original FT app:

‘The guiding principle was retaining the brand of the FT. We wanted to give the user some of the feel of the newspaper, the physical relationship. The skylines, structuring and lists are very similar to online.’

McCarthy also mentions restraints arising from workflow and content management issues:

‘We could not work on a blank canvas, but had to piggyback the old workflow. Constraints are good for creativity. If you start with limits it focuses you. We did this thing in five weeks. There was no time, so we had to use existing code. The iPad was not the success it has become now, so there was no question of hiring more journalists to make a new product.’

McCarthy says that as a daily paper, the FT does not do bespoke design for tablet devices. ‘With daily products it’s templates and automation.’ He acknowledges that bespoke design could be possible, but that it would require an editing interface to the application, which they do not have yet. The application merely knows how to render the content. This is fine in terms of their business strategy.

‘Templates suit us since it’s the content people are paying for. Priority for us is making sure that our content is communicated and packaged well, that the readers understand what we are saying. There are always things which are communicated very well in a newspaper with layout and design elements. There is all sorts of subtle communication going on when reading a newspaper. I think daily papers are struggling with how to achieve that with the iPad.’

3.4 The Washington Post

The Washington Post is unique in the newspapers I studied in that both the website and the iPad application are free. Circulation for the WP print edition is about 550 000 daily and 852 000 for the Sunday edition.³¹ WP does not disclose download figures for its app. WP app still says on its opening page ‘Please enjoy the complimentary service for a limited period.’

The Washington Post app runs on automatic feeds from the website, with the Top news section manually curated. The Director of digital, mobile and new product design Justin Ferrell says that, ‘philosophically, just like we don’t want to put the newspaper online, we don’t want to put the website on the iPad.’

The Washington Post has recently gone through a change in the paper’s content managing system, and eventually print, online and tablet editions will run on the same

³¹ Source Audit Bureau of Circulations, figures from March 31st, 2011, quoted in a Wikipedia article http://en.wikipedia.org/wiki/List_of_newspapers_in_the_United_States_by_circulation

CMS. This will allow more possibilities for making bespoke content for the iPad. ‘We’ve embraced the ‘create once, distribute everywhere’ model that many news organisations are adopting.’

The Washington Post approaches the question referred to by McCarthy from the FT – how subtle communication functions on the iPad – using a grid on the iPad app. Justin Ferrell says:

‘The exciting and difficult challenge was that there’s no standard User Interface for the device, and the rotating canvas and swipe functions hold a lot of possibilities. Ours is a feed-based app (as opposed to an interactive pdf), so we started by establishing a grid.’

Feed-based app means that the content comes from the website. But the grid is a print aesthetic model. Ferrell, coming from graphic design, calls himself ‘a grid guy’, who always starts with the golden rectangle and the Fibonacci principle. The WP grid is based on the golden rectangle, with proportions roughly 1,618:1 – ‘the aesthetically most pleasing shape to the human eye’, Ferrell says. The grid uses three different sizes of rectangles which are containers for the feeds and which order themselves according to screen orientation – four units wide in landscape mode and three on portrait mode.

Ferrell feels that the grid model as well as the headline font keep the reader within the brand experience of the WP. The main challenge for him again has to do with the brand. ‘For a company like mine, it is really interesting how to leverage the brand without being trapped by it.’³²

3.5 Helsingin Sanomat

Helsingin Sanomat is the largest circulation newspaper in Finland and the Nordic countries. Its daily circulation in 2009 was 398 000 and the Sunday circulation was 468 505. According to Vice President of Digital Services at HS Petteri Putkiranta, the Helsingin Sanomat iPad edition is an important addition to the digital and print combination subscription and serves to make the combo subscription more attractive.

Helsingin Sanomat provides free content online on the website HS.fi. Paying customers can also read a digital version of the paper online, both in html and in flash-format, access the paper’s archive online and read the paper on mobile devices and the iPad.

With the iPad app, Helsingin Sanomat is initially aiming to attract existing paper customers to subscribe to the digital combination package which they can add on to the print subscription by paying three euros extra per month. Helsingin Sanomat has more

³² The Washington Post Deputy Director for digital, mobile and new product design Sarah Sampsel describes the design process in her blog at <http://www.sarahsampsel.com/blog>.

than 115 000 paper subscribers who also pay an extra three euros a month for the digital service. This is much less than the paper only subscribers figure, which is almost 400 000. The role of the iPad app is to bring more value for the digital add-on subscription.

As dictated by Apple's terms, the customer can pay either in-app or by direct billing. According to Putkiranta this is not a big issue for HS. 'Our preferred model is a combination subscription, and majority of these subscriptions are done either online or by telephone.'

The HS digital subscription costs 18 euros a month. The combo or crossplatform subscription (paper + digital) costs 28 euros a month. Print only costs 25 euros a month. iTunes subscription costs 15,99 euros a month, but it is iOS only, so it does not include web access to the Archive or the digital online version of the paper and its weekly and monthly supplements. A single issue of the newspaper costs 1.59 euros in iTunes. The Helsingin Sanomat iPad app lets the user download one sample issue for free.

As of April 2011, the Helsingin Sanomat iPad app has been downloaded 18 000 times from the App Store. 'I am not completely satisfied with that number. Our expectation was that 90 percent of Finnish iPad owners would download the app and try it out, since it is free,' Putkiranta comments. The exact figures of iPad sales in Finland are not known, but estimates were at the time of the interviews at around 30 000.

On smartphones the Helsingin Sanomat app is free. According to Putkiranta, the premium service provided by the app is a more comfortable mobile browsing experience. Within the iPhone app, the user can also access the digital subscription package and read the digital daily edition of the paper. In the future the iPad strategy will be broadened to attracting new customers as well.

'In the middle term future, in about two years, we are looking at attracting new customers. Our products should be aimed at new customers.'

At Helsingin Sanomat, the iPad edition was seen right from the start as 'an evolution of print,' according to Development Manager Kaisa Aalto. The starting point was to design an edition which would be automatically built from the feed which serves the digital version of the print paper. A mere pdf edition was not enough, though. Kaisa Aalto says:

'We decided we wanted to have unique content at some point in the future but we wanted to start with a good enough product created as a by-product of the editorial process for print.'

In Helsingin Sanomat, the key design guideline was that every story in the newspaper needs to turn out looking good in the app by an automated process. The workflow decision to make an automatic process dictated the design principles and choices.

Aalto lists the main objectives from the design point of view: easy to use, pleasant reading experience, high quality design which follows print edition's design cues, cost effective and quick. Additionally, as in the case of The Times and FT, design cues were taken from the print edition. An important consideration for HS was also to keep the design distinct from the website, since the website is free, whereas the app is not.

The roadmap for further improvements of the app was built largely on feedback received from a group of selected 30 beta-testers. 'Most important for us was to come out first with a minimum level app and then polish it later, not to start with a megalomaniac project before we even knew what the users wanted', says Kaisa Aalto. In other words, the adding of further functionalities was lead by feedback from the users. HS is planning to implement tools for the newspaper staff to edit the layout of the app, and introduce additional elements. 'We will not be bringing in additional articles, but enriching existing ones', Aalto says.

3.6 The problem with conservative brand oriented design – the missing wow effect

In the Chapter for Conclusion Four I will examine in detail some of the practical choices made by each of the four papers, particularly what I think have been mistaken decisions.

But the overall sense of what was initially done on the iPad by these four papers was an insufficient readiness to leave behind the print metaphor or the website aesthetic and fully embrace the possibilities provided by the tablet interface. The key point was made by Jon Hill who said: 'We knew what could be done with the iPad but we wanted to have The Times recognisability.'

Already by autumn 2010, it became apparent that users did not flock to newspaper applications on the iPad to the extent that the publishers had hoped for – some exceptions, such as the FT. The download figures were not very big and the ratings given to the newspaper applications in the iTunes Store were consistently low, almost never reaching four out of five.

Research made by Knowledge Networks and a white paper commissioned by The American publishers consortium Next Issue Media both indicate that users are more willing to pay on the iPad for experiences they cannot get on other platforms or devices.³³

At least during these early times of tablet devices, it seems that users want a 'wow effect', a sense of wonder at the capabilities of the device. The newspaper applications did not deliver this, so the users saw them as somewhat disappointing compared to other kinds of apps on tablets, and in some cases not differentiated enough from a browser experience of reading the news.

³³ Sources for these studies: http://www.knowledgenetworks.com/news/releases/2011/011711_hpu-ipad.html and <http://adage.com/article/digital/ipad-users-prefer-advertising-pay-model-content/148247/>

4 Design and User Interface need to be simple, clear, intuitive and consistent

4.1 Definition of simple, clear, intuitive and consistent

Tablet devices provide designers and developers with an interesting new canvas to work on and on the other hand, a challenge of working in a whole new environment. I will now try to look at the design and UI choices made in the newspaper applications included in this study. I have listed a normative set of design and UI guidelines, consisting of four concepts: simple, clear, intuitive and consistent.

In terms of User Interface, I define them as follows. Simplicity means that at any given location in the app, the user is not given too many options to choose from. Clarity means that these options are clearly visible to the user. Intuitiveness means that the user can easily understand what the function is of each of the options. Consistency means that any gesture the user has learned to use in the app will deliver the same functionality throughout the app.

In terms of design these four concepts mean the following. Simplicity in design means a layout which makes the content easy to access. Clarity means that the design should convey the hierarchy and relevance of the content, with clear divisions and subdivisions. Intuitive design uses the conventions we have learned from the psychology of reading, both on paper and screens, yet sharply understands how these change on tablets. Consistent design means building a consistent look and feel throughout the app.

The Nielsen Norman Group has conducted two very informative usability tests for iPad apps, which everyone interested in iPad design should read.³⁴

I will present practical examples of how these concepts function from the HS, Times, WP and FT apps. I concentrate in most detail on the Helsingin Sanomat application.

4.2 Suggestions from Pedro Monteiro

Before going into the examples, I would like to present some suggestions for UI and design from the acclaimed app designer Pedro Monteiro. These are merely some ad hoc points Monteiro made in the course of an interview I did with him and they should not in any way be taken as reflective of the full range of Monteiro's views on the subject.

³⁴<http://www.nngroup.com/reports/mobile/ipad/>

But I find them useful as examples to illustrate the kind of issues that need to be taken into account – that designers coming either from print or from the web might not necessarily consider at all.

Standards

‘We need standards for navigation and the user interface if we want to produce digital media by which people will access our content. People want simple things. Some people get annoyed because there are different solutions to produce the same effect.’

The size and position of the hand

‘A small example. Most news applications are made by print designers and we don’t have much knowledge about user interface. For example, our hands are bigger than we want to, bigger than the pointer of a mouse. From this follows that hotspots need to be bigger and that we need to be careful that the hand does not cover the part of the screen in which something changes when you use the app.’

Amount of hand movements

‘Keep the movements of the user’s hands to a minimum. If you can open something, it should close at the same spot. Hand movements should be kept to a minimum.’

Orientation

‘Big tablets, like the iPad, are more comfortable to use in landscape orientation because of their size. If you are leaning back, in portrait mode it’s not very nice to grab it because your hands will be above your body, whereas in landscape they will be on the sides of your body. And if you make the users do big movements, they have to hold the tablet by one hand and that becomes tiring. It’s more comfortable if you can hold it by two hands.’

This is still an open debate, but Monteiro favors the landscape orientation. It is noteworthy that Apple seems to favor portrait orientation. This is indicated by the placing of the forward facing camera on the iPad 2. The norm with web cameras is that they are above the screen. With the iPad 2 this is the case if the device is held in portrait orientation.

4.3 Helsingin Sanomat design and UI

Kaisa Aalto listed the design guidelines for the HS app as follows:

‘Clarity, simplicity, automated editorial process and fast download. In addition the designer prioritised ease of use, a pleasant reading experience, high quality design following print design cues, cost effectiveness and quickness.’

The UI of the HS app is fairly simple.

In terms of clarity, there are issues. The navigation bar is difficult to find. The only cue for finding it is a tiny visual replication of a slightly turned page corner at the bottom right corner of the app. This is also not intuitive.

In terms of consistency, the vertical swipe downwards is a good example of an ambiguous gesture. Its function depends on the route the user has come to the article. This is a very minor complaint in terms of UI, but an illustrative one.

In terms of UI, the vertical swipe downwards would intuitively mean a return to a higher hierarchical level in the content structure. This is the case in the HS app. It brings the user back to the previous higher level structure. But it is not necessarily the one related to the article she is reading now. For example, if the user has opened an article from the front page, the downwards swipe brings her back to the front page. If she has opened the article on the section front page – the Foreign news section front page – brings her back to that menu. But, if she has opened the Domestic news main article from the HS front page and then, by using the vertical swipe right, moved to the Editorials section – from the first article in one section to the last article of the previous one – does the downwards swipe take her? It takes her to the Editorials front page.

All in all, it would be more consistent if the downwards swipe always just took the user to the main page of the section she is in.

In terms of consistency, it is confusing that swiping upwards at the end of an article has the same function as the swiping downwards, e.g. taking the user back to the section front page. Also it is impractical, since the user might just be willing to read the story to the end and then accidentally swipes up too much and ends up on the section front page.

Design-wise the main issue with the HS app is the use of a single column in all the articles. This is a problem in terms of simplicity, clarity and intuitiveness.

The content is not simple to access. The user has to read long articles in one column, having to swipe down again and again, while at the same time half of the screen is white and unused. The user should not have to make any unnecessary gestures.

A big problem with this decision is also that it is not optimised for landscape mode in any way. The single column remains, with even less of it visible.

Originally, the template also made it difficult to convey a hierarchy in design, especially in terms of the image-text-relationship. This is an issue which has since been fixed, but again is an illustrative one of design issues. Originally in the HS app the user was nowhere presented with a layout in which the image and text are viewed simultaneously as a whole. The text article only provided a thumbnail of the image. Once that was pushed, a popup of the image covered the text screen. Now the images are visible above the article immediately as it is opened.

Originally additional articles connected with the main article were presented only as headlines, which also opened popups, covering the main article.

Now the additional material, such as fact boxes, are immediately open and readable in the generally empty and unused column next to the text.

In addition to the navigation bar being difficult to find, it is also very large and clumsy. The navigation bar is an extremely essential tool for all newspaper apps and it should be designed with much care and thought. The navigation bar's primary function is to be a catalogue of content. The front page of the app is a tool for prioritisation. The user should be able to see the article page and the navigation bar simultaneously. The HS app navigation bar contains smaller versions of the section front pages. This seems unnecessary in terms of the user and it merely makes the navigation bar much higher in size which has the effect that the article page underneath is largely covered.

I personally think the navigation bar used in the HS iPhone app is a much more elegant and user friendly choice. It is an unobtrusive bar on top of the front page and the section front pages. It can be scrolled horizontally by swiping. It is slightly ironic that here cues were not taken from mobile, whereas the single column view used ineffectively in the article and section front page layouts seem more mobile oriented. These pages could have benefited from a more paper oriented hierarchy.

It is also noteworthy that the HS app has no visible navigation tools at all. The usual convention is that the tools are visible, either on the top of the screen or they become visible if the user taps on the screen elsewhere than close to the edges.

The front page of the HS app has also changed since the time of the interviews for this study. It now allows for more prioritisation of content by using different templates. The one template on the front page which is still problematic is the list of half a dozen or so short previews with thumbnail images. The template is rigid in that it always includes an image, even though the story might not have one. The result is that some of the previews have images, whereas some only have colored patches next to the headline.

It also has to be said that the front page templates should allow for editing text in the front page previews so that sentences aren't cut in the middle. They should stand alone as previews of the article.

The HS app has recently incorporated videos. This is a very good step as the iPad is an excellent device for viewing videos. For technical reasons, the videos are in a section of their own, not embedded within articles or even section front pages. Originally this section was listed among the sections of the paper. This was not an intuitive design from the user's perspective. Now the video listing is accessed from the new Home view incorporated into the HS app. The Home view is examined in more detail in Chapter 8.

HS uses the widely spread convention of using the company logo as a shortcut to the front page. This is not an intuitive choice, but it is a mistake so many apps have already made, that maybe users are beginning to pick up the non-intuitive convention.

In the HS app the font size change button and the sharing button are difficult to find. The lack of a search function must also be mentioned.

4.4 The Washington Post design and UI

Director of Digital, Mobile and New Product Design Justin Ferrell mentioned some of the principles that were important in designing the WP app:

‘An immediate gratification given by a simple interface, a newspaper model grid layout, leveraging the brand without being trapped by it, not losing content when changing orientation.’

As mentioned earlier, The Washington Post app is free and grid-based. These two aspects of the app largely dictate the design and UI choices.

The navigation tools are visible all the time, which adds to the sense of the app looking like a website. This is in keeping with the fact that the content is feeds from the WP website.

The top right corner of the app has a clearly marked button for Sections, for Search and a third button combining About, FAQ and Settings. The Search allows the user to save searches as well, for the purpose of returning to topics she follows. This is a useful and easy way to create micro level personalisation.

Any article on the WP app can also be saved for offline reading. The question of offline usage is a problem for a live updating edition like the WP. This is in distinction to The Times and HS which are downloaded editions, after which they can be read offline. The Times updates the app in the afternoon according to needs. FT has a downloadable offline section and a live updating Live Edition.

The grid based UI of the WP app is to a large extent simple, clear, intuitive and consistent. All in all I think the grid functions well on the iPad. It is among other things a simple solution to addressing the fact that some users prefer landscape mode whereas others prefer portrait mode.

In terms of design there are some problems. When the user opens an article from the grid based structure, a similar problem to the HS app occurs. The story reads well in portrait mode as it fills the screen from side to side. In landscape a new column appears on the right side, with the opened article filling only a part of the screen. Often the right side section lists 'Related stories', which is a very useful feature. But sometimes there is an empty slot with a dummy element which says 'advertisement'. At times there actually is an ad but often it does not fill the grey empty slot completely. These are design flaws stemming from an imperfect aligning of content on the page.

Regarding photos, the WP app has a similar problem the HS app originally had. With the story you only get a thumbnail and by touching it a floating image section appears. The floating window has heavy black frames and looks clumsy. In distinction to the HS app in the article view there is a clear button for returning to the Section front page and also a number telling the user which article she is in within the section, for example 'Article 2 of 14'. In the same bar the user has options to change the font size, share the article by email, FB or Twitter and to save it for offline reading. These are very good functionalities and clearly presented.

Similar to HS, multimedia from the different sections is collected to a section of its own.

There are issues with sharing content as well. A Day in Photos is a gallery of various news photos. If the user chooses to post one of them in Facebook, the post is a link to the whole gallery, with the first photo presented in the post. This is not intuitive.

The Live topics -section has no explanation as to what it is. This is a lack of intuitive UI.

4.5 The Times design and UI

Jon Hill of The Times described the thinking that went into the design and User Interface of The Times app:

'It is like a newspaper, but it gets better at times. We did not want it to be automatic. It needed to have the newspaper aesthetics, because that is what the readers respond to. Typeset is the blood type of the paper, everything else flows from that.'

The Times is one of the best newspaper applications around at the moment. This is most likely due to the fact that quite a lot of resources are put into it. The editions are handcrafted, not just automatically fed from the website or the newspaper.

Most of the time the app follows the guidelines of simplicity, clarity, intuitiveness and consistency. It works well in both orientations. The navigational tools are readily accessible all the time at the bottom of the screen. Pressing the button for 'Stories' opens up the navigation bar. As pointed out in the previous chapter, The Times navigation bar – used across the publisher's various apps – is so well designed and innovative in its simplicity

that I argue for it to be a case of the UI becoming a part of the brand.

Like most newspaper applications, The Times app follows a UI logic in which the movement is only in one direction. This means that the user swipes horizontally to move from one article to the next and the same horizontal swipe is used for moving forward within a single article. This is in distinction to many magazine apps in which the navigation from one story to the next is by horizontal swipes and movement within the article is by vertical swipes.

The Times uses a row of small circles on the bottom of the page to indicate for the user on which page of a multipage story she is in. The number of circles indicates the number of screens the story takes and a darker shade indicates where the user is in that progression. This form of notation is used a lot in iOS devices, and is maybe chosen because it is elegant. In other words, it is not very easy to see. This is a minor issue, since the user would be swiping horizontally forward anyway, to move on within the content. It might be more of an issue when these circles are used under an image to indicate that there is a gallery of images accessible within the frame of the image by swiping.

A consistent horizontal swiping is a safe UI choice which reassures the user of her position within the app and makes it clear that no content is missed without having to try out swiping along every axis. Jon Hill also stated that a choice was made that the user should not need to scroll content. In contrast to the HS app for example, this makes for a very intuitive and enjoyable UI. I believe that the model of only using horizontal swipes will become more prevalent even in magazines, as it is very intuitive, and as pointed out above, makes sure the user actually finds all the content. This has not always been obvious in some of the more architectonically ambitious magazine applications.

Also the model used by for example HS where the user must sometimes scroll down a long way to read the whole story, will probably become replaced by The Times type of UI, in which there is no scrolling. Each swipe introduces the user to the full content of the next screen, and then by swiping the user will move to the next one.

The Times front page has an oddly non-intuitive feature to it. The front page is divided into three. In landscape mode there is a news story on the left, a picture with a headline in the middle and four shorter stories on the right. In portrait, the first and the second are side by side, with the third forming a horizontal row under them. For some reason, the main photo and its headline in the middle are not active elements. Tapping either one of them does not open the article.

4.6 The Financial Times design and UI

Bede McCarthy mentioned some of the design principles of the FT app:

‘It replicates the feel of the paper and the FT brand. But we do not do bespoke and layout algorithms waste space.’

The Financial Times app has always been almost indistinguishable from the FT.com, the paper's website. They resemble one another even more now, as FT has removed its stand alone application from the Apple App Store, and offers a downloadable Web App for its users. This decision has far reaching implications for the whole industry, which I will address in more detail in Chapter 8.

The FT Web App uses very much the UI lessons learned from websites. Thus it manages to provide an experience which is for the most part simple, clear, intuitive and consistent. But it does not make the user feel like she is accessing the FT content in a really new manner. The Web app follows the design of the website, which in turn follows exceptionally strongly the print edition's design. FT's strategy has been to trust their content and it has paid off very well.

To access the different Sections of the FT, the user must tap on a Menu-button at the top right corner. This opens a horizontal list of all the Sections, with the current Section highlighted. Compared to The Times for example, the Menu has only one function, to open the different Sections front pages. The user can move from Section to Section by a horizontal swipe, which takes to the front page of the next Section. But there is no signal for this, so the functionality is not completely clear, although probably discovered by the user quite quickly.

The UI is quite straightforward, basically because no risks have been taken. But the 'webby' layout brings out the fact that the aesthetics of the web do not transpose unproblematically to tablets. The overall feeling is one of crowdedness. There is a lot of material and the hierarchies are not obvious. This is most obvious in the layout of the Section front pages. Within each Section there are news stories, opinion pieces and sometimes features, and videos. Additionally, there is a horizontal stripe for accessing articles under various subsections. The logic of the layout for all of these varies on each Section front page. This is of course necessary in print, where the reader must get a variety of layout, balanced by recognition of layout templates, logos and other visual cues. But on a tablet device the overall experience is of a non-consistent and non-intuitive design.

5 Tablets are mobile devices

5.1 The lean back -narrative

By the autumn of 2010 a debate was going on in the media, the technology blogs and the various parties which have an interest in the iPad concerning the role and the nature of the device. The debate concerned what the device should and could be used for and what were the design principles to be applied to the device. Possibly the strongest narrative in the magazine and newspaper business was that the iPad is a 'lean back' device. The idea stemmed from a survey made by the magazine publisher Condé Nast. The survey, conducted with the users of GQ, Vanity Fair, Wired and Glamour apps came to this conclusion:

'In an interview, Scott McDonald, SVP market research, Condé Nast, said that the amount of time spent proved at least one thing: reading apps is a "lean back activity". And since most people in the survey said they tended to leave the iPad at home, the publisher concluded that the device probably shouldn't be considered as an (sic) mobile device when devising an advertising campaign or content with that specific product in mind.'³⁵

Although some studies do indicate that the majority of users still use the iPad mostly at home,³⁶ the conclusion was somewhat premature. As people are getting more accustomed to tablet devices, they are more and more carrying them along.

In newspaper organisations, tablet devices are usually categorised as mobile devices. For example, Justin Ferrell of WP says of the iPad: 'I do see it as a mobile device. It's true too that it is a lean back device as well.'³⁷ Bede McCarthy of the FT describes the FT app: 'It is very much a mobile product.'

Designer and programmer Matt Gemmell describes the 'scenario of use' of the iPad as 'inherently variable': 'Sometimes you're sitting down, lying in bed, walking along the street or you are on the beach.'

³⁵ <http://paidcontent.org/article/419-conde-nast-study-concludes-ipad-is-not-a-mobile-device-at-least-not-now/>

³⁶ For example <http://www.rjionline.org/news/rji-dpa-spring-2011-ipad-survey-results>

³⁷ Private interview, as are all the quotes in this Chapter.

Greg Clayman, publisher of the Daily, said: ‘People who move around a lot find the iPad to be engaging and it is like their laptop. But people do like to sit back with the iPad.’

It seems that although the iPad is mostly used while sitting down or lying down – did also mention walking along the street – with a laptop, for people who move a lot, this could mean sitting down on several different seats in the course of a day.

The sense of the iPad as a portable and mobile device could be compared to the difference between a heavy old fashion TV-camera set and a modern small HD camera. In March 2011, Nieman Journalism Lab called the iPad2 a ‘mobile multimedia studio’ for journalists to shoot, edit and publish with.³⁸ Actually, already the first generation iPad was used for this purpose.³⁹

If we accept that the iPad is inherently a mobile device, with its potential as such being yet somewhat unfulfilled, then we can start to analyse what is lacking in present newspaper applications. I argue that due to the mobile nature of tablet devices newspaper applications on tablets need to be sensitive to three factors that are crucial to the user experience. These are time, location and network speed.

5.2 Sensitivity to time

Sensitivity to time means that a news application should update. This takes us immediately to the heart of the definition of newspaper applications on tablet devices. Are they essentially a digital version of the paper or a more paper-like version of the website? Here, the scales clearly favor the latter approach. It simply does not make sense to deliver a digital version of yesterday’s news, as we are used to doing in print.

Fascinating questions arise from this, which each newspaper will have to solve according to their own publishing model. WP is completely a live edition, which updates just as the WP website does. FT has a continually updating live edition within the app, in addition to the day’s stories from print. The Times iPad edition is updated in the afternoon. HS does not update at all. HS Development Manager Kaisa Aalto refers to issues with live updating editions:

‘It is technically challenging to create a frictionless user experience and at the same time easily downloadable. If the user downloads the day’s edition, she expects to have the full edition. For example, regarding progressive downloading, what if the user is able to start reading while the edition is still downloading and the download is for some reason interrupted?’

³⁸ <http://www.niemanlab.org/2011/03/takeaways-for-journalists-from-todays-apple-announcement-better-reporting-tools-and-an-ebook-boom/>

³⁹ <http://www.poynter.org/latest-news/media-lab/mobile-media/106091/usc-annenberg-class-learning-to-report-with-ipad-2/>

Some way of differentiating between updating and non-updating content within the app is necessary. Content such as feature stories and opinion pieces naturally do not update. But news needs to be updated. Technically this is not complicated, but in terms of layout and UI this poses challenges.

5.3 Sensitivity to location

Sensitivity to location is a less obvious, but in the future, equally important feature of a tablet news application. The iPad and mostly likely all its successors have a GPS which makes the device locatable and an ID system which makes it recognisable. This presents many opportunities for feeding the device with content relevant to the user's location. Whether it is hyper-local news, such as information on the local store being closed today for renovations, or municipality-level news because the user has travelled to another part of the country, this is again something which is technically not very far-fetched.

The most immediate value of a location sensitive application for publishers could be an economic one. So far basically all of the advertising on news applications has been brand advertising. Nevertheless, the majority of newspaper advertising in print is retail advertising. For example, in 2010 in Finland retail advertising constitutes 43 percent of newspaper advertising. The second largest group is car advertising, at only 10 percent. In the UK, the list for top advertisers for both national and regional papers is populated by retailers. Similar emphasis can be seen in the US.⁴⁰

Localised retail advertising based on the user's location on the one hand, and on the other a strategy for differentiated marketing in different urban areas could provide a viable way to introduce retail advertising to tablet editions.

5.4 Sensitivity to download speed

Sensitivity to download speed means that the application should actively perceive if the user is downloading content over a 3G network or Wifi.

As a mobile service, the app has to open immediately. The user might want to just pop in and pop out, when standing in the queue of a café, for example. This means the app should not be too heavy, but also that it should tailor the size of the download required to the network that is currently available. As Design Manager Kaisa Aalto of Helsingin Sanomat says: 'For a daily newspaper quick download is very important, also on 3G or even worse connections.'

⁴⁰ WAN-IFRA, World Press Trends 2010, WAN-IFRA, Zenith Optimedia 2010

If the user is in a 3G network, especially if it is not a very good one, the app should provide the user a lighter version of the app. Otherwise there is potentially a long wait for the download, or the sense of having downloaded only a part of the whole product, which can be very frustrating to the user. An important factor is also that the download is optimised so that the user can start using some parts of the app while the rest of it is still being downloaded. Again, this is not a technically complex challenge to realise.

6 Tablet editions need to be deeply connected with the social web

Soon after the iPad was released and media companies started to produce applications for the device, a certain ethos became to influence the direction of app design. The background was that publishers had for some time been troubled by the internet. Audiences were moving from print to online, but there was no substantial revenue to be made from the web.

Except for Google. The fundamental structure of the internet, meaning digital media in general, is linked. We as users of the internet, move from site to site, from service to service, from content to content, by way of links. The genius of Google is that it mastered this link economy and monetised it in a way that no other company is ever likely to do. The internet is an economy of scale. Google's principle is to take a little from many and thus make a fortune.

The link economy of the internet is inherently opposed to the silo-like structure of legacy media. A user might open the website of a newspaper in her browser, read an article and then click a link to another story. But she might as well decide to look for another article on the same subject on the web, moving away from the website she started on. Compared to the reader of a print newspaper, the average internet user is a pesky, uncontrollable creature.

The publishers have suffered from this, yet they have reluctantly agreed to Google's reign, acknowledging that Google is where their users come from, how people find media content. The one exception to the rule is Rupert Murdoch, whose somewhat misguided fight with Google is well known and well documented.⁴¹

Publishers saw in the iPad a chance to distribute digital content in a way which was disconnected from the link economy of the internet. The iPad experience was seen as a digital version of the paper, a self contained, edited experience with a beginning and an end. This model has psychological value to it. The internet experience is a sprawling, potentially endless stream of links, articles, images and videos. By contrast, the iPad offers a digital experience which is contained.

⁴¹ See for example these articles and the links in them: <http://searchengineland.com/google-to-murdoch-go-ahead-block-us-29442> , <http://opinionator.blogs.nytimes.com/2009/11/10/murdochs-google-gambit/> , <http://www.guardian.co.uk/media/2009/nov/09/murdoch-google>

The digital literacy researcher Monica Bulger has called print newspaper a ‘cognitive container’, as opposed to the distracting linked nature of the internet:

‘It’s basically us and the page. Our attentional focus is contained: it is directed toward the text in front of us, with minimal distraction.’⁴² Moving from print and the internet to tablet devices, the question according to Bulger is: ‘How can we develop cognitive containers like books or newspapers on iPads and other tablet devices?’⁴³

The first generation result of iPad editions of newspapers and magazines were cut off from the internet, like hermetically sealed texts. This model soon came under heavy criticism. Pete Cashmore of Mashable compared these apps to cd-roms of the nineties.⁴⁴ Cd-roms were old strange relics from an era when interaction meant the possibility for the user to press the odd button here and there, but ultimately in a solitary, almost solipsistic experience. Nothing could have been more humiliating for the new shiny media apps than Pete Cashmore’s comparison.

It seems that the industry is still seeking to find a balance here. On the one hand the model of the cognitive container as conceptualised by Monica Bulger has real relevance to how tablet editions are used in distinction to the link economy of web browsers. But on the other hand digital audiences have adopted thoroughly not only the underlying logic of the link economy, but also its recent further intrapersonal development, the social web. Newspaper applications must find a balance and accommodate this social layer of the internet, which for so many users now is the fundamental stratum of their digital interaction.

A 2011 study by the journalist and digital strategist Nic Newman shows that in 2011, for the first time since 2005, the role of search in driving traffic to news sites decreased, from 64 percent to 61 percent from 2009. Newman argues that this is due to the growing amount of traffic coming from social networks, where users recommend news articles to their friends or followers. The average news site gets 7.5 % of its referral traffic from social networks.⁴⁵

Of the newspapers included in this study, The Washington Post had done the most experimentation. The WP app includes the standard options for sharing, but additionally Twitter and Facebook conversations in a service called Live Topics. The most interesting topics are selected to include the option to turn on the Live Topics functionality.

⁴² monicabulger.com/201005/managing-distraction-reading-in-the-age-of-the-app/

⁴³ Private interview.

⁴⁴ <http://edition.cnn.com/2010/TECH/social.media/06/24/ipad.hype.cashmore/index.html>

⁴⁵ <http://reutersinstitute.politics.ox.ac.uk/about/news/item/article/mainstream-media-and-the-distributi.html>

Director of Digital, Mobile and New Product Design Justin Ferrell explains the concept behind Live Topics:

‘The initial concept was to deliver for the iPad not just the value of The Washington Post’s journalism, but also the conversation it creates. The high level thinking was – what does a social publication look like? Let’s take Twitter, what is a Twitter publication? It is an aggregate of a Twitter publication, consisting of three streams. Your own community, The Washington Post community and the community at large. You want to be able to talk about the story you’re reading, with the people you follow and your followers. Secondly, you want to be able to hear from the authority of the product you’re in, The Post in this case. Third stream is, you want to hear what the other experts on this subject are saying, in other words, informed tweets. And it also incorporates Facebook commenting functions.’⁴⁶

The Washington Post has outsourced the running of Live Topics. The WP staff only picks the topics to be included in the service. The social media curation, mainly the choice of experts for each topic, is done by a third party company.

Experiences with Live Topics have been mixed. ‘I don’t think our audience really understands what it is and how to use it,’ Ferrell says.

‘It is something that we are experimenting with, but maybe it is not the right fit for the people who have downloaded our app. I wanna experiment with it in a small way, until we learn what to do with it. Live topics has a lot of potential, we haven’t used it to its full potential, we are exploring it. Then maybe spin this off to its own thing, call it something else.’

⁴⁶ Private interview.

7 Don't think text first, use rich media

Newspapers are a text dominated media. Though photojournalism is an important part of newspaper journalism, it is always an exception when the images on a newspaper page aren't there to visualise a story.

Digital publishing simultaneously poses a challenge to this hierarchy and presents an opportunity to overcome it. As we move first from print to a computer screen and then to a tablet device, there is an increasing sense of the importance of visuality. In Chapter One we argued that one of three cornerstones of the unique character of tablet devices was content viewability. The iPad using audience knows this, as they are being treated to a variety of visually captivating applications. This raises the bar in terms of user expectations. We might have to agree with the iPad designer Pedro Monteiro who says that 'people will always be expecting more from a digital device than what news providers are able to provide.'

The lean-back narrative referred to in Chapter Five was mainly used in distinction to mobile and to describe the time of day and week the device is mainly used. But it grew to have another implicit meaning. The slogan with its attendant image of the user lying on the sofa after a week of hard work sliding his fingers on the screen has come to mean 'no hassle'. In other words, a guideline not to introduce too much interaction and 'gimmicks' on iPad apps, because what people want from their journalistic applications is beautiful pictures and good stories.

The main problem with the lean back narrative is that it was based on a survey conducted among readers of the very same magazine applications which were criticised and which suffered dramatic losses in readership. Magazine applications of the first generation were for the most part flawed creations, so the survey into the use of such applications gave us a very limited idea of how people actually use the device. Basically, the apps did not provide the users any other options than to lean back.

Now, after almost two years with these devices we have seen that the iPad presents opportunities for simple, mass adoptable means of manipulation of media content by the simple means of touch and movement. The three cornerstones of the iPad, content viewability, mobility and interactivity must be made use of. Even though a number of applications use these features in ingenious ways – more than any other apps – so many magazine or newspaper applications have done so.

The opportunity here is that as tablets provide the user a more pleasant visual experience than a computer or a mobile screen, this enhanced visuality could provide addi-

tional user value, which could be transformed into an incentive to pay for digital content on tablet devices.

The second factor in the threefold description of the special nature of tablet devices is interactivity. To create visually compelling, interactive rich media, technical expertise is required as well. What is needed is a combination of three sets of skills – , visual and programming, in other words of the editor, the designer and the developer.

The challenge is immediately apparent. To move from a text-first approach to a visual and interactive medium requires a paradigm shift in the thinking and organisation of newsrooms.

Next I will present experiences and insights on the subject from the newspapers I studied.

7.1 The Times

Jon Hill, the Design editor for The Times voiced the most extreme expression of the paradigm shift away from text-driven media production:

‘If I didn’t have the Times legacy, I would make the app completely different – ditch most of the writing, use interactive graphics, video and images. Make the whole thing data and graphics driven.’⁴⁷

This is significant not only because of the fact that Hill is ready to drop the standard content hierarchy of text-first and to build the product completely the other way around. But the second point he is making is that the only thing standing in his way is the legacy of the brand. He did not point to the organisation of the newsroom as a hindrance to this visually driven ambition.

Whether Hill’s comment was realistic or not, two factors support his view. First, The Times app makes exemplary use of rich media. Especially The Sunday Times, but also The Times regularly uses interactive graphics, video from the web and picture galleries. Secondly, The Times has already gone through some newsroom reorganising. This is vital, because using rich media to such an extent as The Times does means that the iPad edition can not be built automatically.

‘The digital guys wanted to have a completely automated version. The editor said he did not want that. It had to be edited. We want to make the journalism sing in each of its outputs, rather than just being kind of sausages that are pumped out where ever. We want the skill and the talent

⁴⁷ Private interview, as are all the quotes in this Chapter.

of everyone in the newsroom to be used in crafting it for online, newspaper and iPad. This costs a lot of money to make.’

According to Hill, The Times has about ‘ten core people’ who are mostly working on the iPad edition. They have roles such as an iPad editor, designer, a picture editor, and several subeditors. Hill does not actually believe in creating new job titles, but rather in integrating the new tasks to the skill palette of existing employees.

‘Now we have an iPad editor who works mainly at night shifts, but takes part in the strategic meetings. My personal view is that there won’t be any more new job titles. The guys that work for me can be working on the iPad or a magazine. I feel quite strongly, partly because we have to make sure we have careers, that we don’t want to be doing just one thing. It also has to be consistent across all the ways to publish.’

Work schedules at The Times have also been shuffled. Before, the graphics and design team used to start late and work towards the 10 pm deadline. Hill has attempted to stretch this out, so that there is somebody always working on updating graphics and building new content.

‘The dream is that the material can be hosted on the website in the morning, and the same graphic – where-ever it has been used by the evening – can then be plugged into the iPad.’

The Times builds rich media content particularly for special occasions that can be planned ahead. Examples have been the World Cup, the publication of the UK budget and the Royal Wedding of 2011. The planning usually starts a month ahead. An example of an innovative use of rich media has been live updating infographics. For example, The Times ran an infographic of the World Cup which, if the user was online, went to a live database and updated a chart of the games. This was placed into the app on a daily basis during the games. In the case of the World Cup, it was still done so that the link opened the chart in a web view. ‘We want to have these native in the app, hand coded with HTML5. That’s the gold dust of what we are trying to get to.’

According to Hill this kind of interactivity is very good for sports news, since sport is live, it is fixed to a diary and on the other hand it has a good following and people feel passionate about it. He says the infographic for the golf tournament Rider Cup was the most sophisticated so far.⁴⁸

⁴⁸ This, and other interactive features at The Times have not been produced in-house. Times uses for this the company Applied Works. Images of their work for The Times can be found here: <http://www.appliedworks.co.uk/projects/the-times-ipad-graphics/>

‘The infographic combined a live scoreboard, a video fly-through for each hole with a journalist voiceover saying why this one is difficult and so on. On top of all this was a live Twitter feed where people watching the tournament could put their comments through. So it had live stats, journalism, audio, video and Twitter on one screen. I can’t think of anything as rich that I have seen before. This for me is the ultimate news experience on a tablet device. That’s where the iPad becomes magic.’

7.2 The Washington Post, Financial Times and Helsingin Sanomat

Representatives of all the other three newspapers in this study did say that rich media is important to their product on tablet devices. Yet the applications did not really deliver such content. This is likely to change in the future, though.

Multimedia and interactive content in The Washington Post app so far has meant basically video and photo galleries. At The Washington Post the iPad work is done in the mobile team. Like The Times, The Washington Post also has a dedicated iPad editor. Justin Ferrell, Director of Digital, Mobile & New Product Design at The Washington Post, describes the team.

‘We have one editor who is in charge of it daily. The editor is part of a team of four that’s responsible for our mobile site. The other team members back-fill for the iPad editor on nights and weekends. We have one designer dedicated to mobile/new products whom we hired midway through the creation of our app.’

The editor works across departments and the rest of the team involved with the iPad do it as part of a wide variety of skills, just as Jon Hill described it being done at The Times:

‘The editor decides daily story play and works across departments (with graphics, tech, etc) to develop content-specific features and new storytelling tools. The deputy design director, mobile designer and I work with the editor and tech to brainstorm and design new forms.’

The FT also has an iPad editor. Bede McCarthy describes the job of the iPad editor:

‘He makes sure everything is where it should be, the content is in the right order, the order of stories, changing headlines, pictures in the right place. It is a polishing job, looking at how content is translated on to the iPad and making adjustments when necessary. He works on the nightside, and it will be done by the time it comes out in the morning.’

According to McCarthy, the whole team consists of ‘two editorial people and two three developers – designer and a product manager.’

The original Financial Times native iPad app and the current FT web app include videos in addition to text and images. ‘Best way to look at videos is on the iPad’, says Bede McCarthy, Executive editor for FT.com. ‘It’s HD, you’re not distracted, you want to make it fullscreen.’

The FT.com/interactive website includes interactive features. Due to the lack of native code and plugins, these features cannot currently be accessed on the FT web app.

‘Interactive graphics are done on Flash which makes it difficult’, McCarthy says. ‘HTML5 can’t do everything you can do with Flash. Until there are tools for designers to use with HTML5 the way you use with Flash, it is still a problem.’

At Helsingin Sanomat rich media is mainly still something that is planned for the future. ‘Our goal is to have one rich media feature every day’, Kaisa Aalto says. ‘For example better infographics, there is a demand for them. We are definitely experimenting with video and audio.’

Helsingin Sanomat is now providing videos produced by Nelonen, the TV-channel owned by the same media conglomerate Sanoma which owns Helsingin Sanomat. The newsrooms of the two companies are to be merged, so video production is a natural addition to the Helsingin Sanomat application. In the next section I will look into how video is integrated into the Helsingin Sanomat newspaper app.

8 One paper, many apps

Let's pause now for a moment and look at the seven previous conclusions. What kind of a newspaper application would be created, if all of them were put together?

It should have an innovative branded interface. The application should be designed specifically for tablet devices, leaving behind the conventions of print and the web. The design and User Interface should be clear, simple, intuitive and consistent. The application should be sensitive to time, location and download speed. It should be deeply connected to the social web. It should use rich media extensively.

There are not many media organisations in the world that could afford to build a single application with this level of technical and design ambition. Are these then merely ideals, not even meant to be realised?

No. The solution is that not all applications need to fulfill all of these criteria. Actually, looking at them carefully, it is obvious that some of them contradict each other. For example, if you have an application that uses rich media extensively, it does not make sense to serve a stripped down version of it for download over a 3G network. Nor does location-specific content probably lend itself easily to be designed making best use of tablet devices' functionalities.

The conclusions I have presented are not meant to apply to a single super application, – a hypothetical luxurious 'Swiss army knife application' for newspapers. That is why this, the eighth conclusion and commandment for newspaper companies is that they should produce more than one app. The functions listed in the above Chapters should be split among separate apps, with very different functions.

Already in Chapter 2 a distinction between two different types of design philosophy was drawn out. Recall that Matt Curtis of Times Eureka called for bespoke designed art house applications which make extensive use of tablet devices' capacities. But the iOS designer Matt Gemmell emphasised instead designing news applications as news hardware with the focus on simply doing the core functions, such as quick access and readability. It is my belief that newspaper companies now need to adopt both of these seemingly contradictory modes of application design and implement them for different products within their application portfolio.

I see two primary application categories that newspaper organisations should be producing now and in the near future. First is the core product, a streamlined news reading application, as Matt Gemmell described it. The second is Matt Curtis's more ambi-

tious art house application, covering all kinds of special publications, such as weekly or monthly supplements or special editions. Both are necessary.

This distinction brings us to the issue of whether to build native applications or use HTML5. The Financial Times switched in the summer of 2011 from a native iOS application, downloadable from Apple's iTunes App Store, to a web app. The web app is basically a web page built using HTML5 programming language.⁴⁹

The more ambitious arthouse applications need to be native apps, because HTML5 is not sufficient to incorporate the rich media capabilities tablets can make use of – at least not yet. The question then is, whether the news application should be an HTML5 web app in the style of the FT or a native app.

The tide in newsrooms around the world is clearly turning towards using HTML5. The reasons are primarily economic. Native applications are expensive to build and they have to be built separately for each platform – iOS, Android and Windows Mobile. A single HTML5 page works in each operating system. In addition, in the case of the iPad, native applications must be sold through the iTunes App Store. This means Apple takes 30 a percent cut not only from sales but also subscription prices. Apple also gives only some of the user data and only if the user has explicitly conceded to that. But Apple never gives for example credit card information to the publisher. The other operating systems also have their own versions of the App Store, with not so strict rules.

The example of the Financial Times is likely to be followed in the next two years. But publishers should not forget the wow-effect of tablet devices, and make use of the devices' content viewability and interactivity. In other words, ambitious art house special editions, tailored for every particular market should be designed. This is the time for publishers to learn how to make best use of the tablet interface. This is best done by one shot special publications.

The Times, which as we have seen uses rich media extensively, has a problem with special editions because of The Times subscription based payment model.

'I would like to do special editions. But it is difficult to make extra magazines etc because of the payment model', Design editor Jon Hill says. Special editions need to be charged for separately and this does not work within a subscription model, which is what publishers are moving to more and more with the proliferation of platforms to access their content.

⁴⁹ There is no room here to go into much detail about HTML5. Suffice it to say that it is the latest development of the HTML programming language used to create web pages, and it includes extensive support for rich media, mobile and location based services. For the present discussion the main feature is that web pages written in HTML5 scale and optimise almost automatically depending on the device used to access the pages. This means the same webpage would work well both on a desktop computer and a smartphone. Even though it is definitely the future and increasingly the present of web development, HTML5 is still a work in progress.

The Financial Times is somewhat cautiously interested in delivering several apps. They have published already a separate app for the supplement How to Spend It. The FT has also localised its web app in Chinese.

‘We publish special reports and magazines. Our broad strategy is to have a product with many modules and the user can choose what to download’, Bede McCarthy says.

Again, the constraints come from economical and workflow related concerns:

‘Editorially, it’s not a very good model to edit many products in your news room at a time when news rooms are shrinking.’

This modular approach is used very extensively by The Sunday Times, which is a separate product from The Times. Within the Sunday Times application, 13 different sections are separately downloadable. The application itself starts to resemble a kiosk, a channel for distributing separate modules of the product. It is not actually a digital kiosk, in the manner Zino for example, since the customer pays for the single paper and then gets access to all the 13 sections. It could be called a ‘smorgasbord approach’. I will look into this in more detail in the Summary.

A similar modular approach has recently been adopted by Helsingin Sanomat as well. Opening the HS app takes the user to a Home view with different HS products. The user can access the daily paper’s iPad app, the app of the weekly supplement Nyt, the monthly supplement Kuukausiliite, read the latest updated news from the website HS.fi, watch news clips from the Sanoma owned TV-channel Nelonen or read a localised weather report. Additionally, the home page includes a link to the service Tasku, which is a digital kiosk for a variety of Sanoma newspapers and magazines.

9 Tablet devices are perfect for a personalised media experience

9.1 Flipboard – the game changer

In 2010, the first year of the iPad, Apple gave the title of the year's best iPad app to Flipboard. Flipboard, created by a Palo Alto company named after the product, uses social media feeds and builds them instantly into a magazine-meets-web-style layout. The user can connect Flipboard to a Facebook account or a Twitter account or to a feed reader like Google Reader. Flipboard then creates a single unified experience of the source material, stories and other type of media content from different websites. Flipboard takes the photos included in the stories and presents them in the layout of the pages. The user can flip through the pages, as if in a magazine – hence the name of the application. The company dubbed its product the 'world's first social magazine' upon its July 2010 release.

Flipboard is an aggregator. Aggregation means collecting a selection of media content from various sources into a single page, service or application. The Huffington Post website is the most well known example of a website built on aggregation. Aggregation makes use of RSS (Really Simple Syndication) feeds. These are content feeds that a particular website sends for purposes of distribution and aggregation. RSS feeds are ubiquitous within the newspaper industry. The New York Times for example offers 167 different RSS feeds of their content.⁵⁰

In distinction to the older generation of aggregators, like Google Reader, Flipboard combines the function of aggregation – collecting the particular streams of media content the user has chosen – with both the unique content viewability of the iPad to display the content and interactivity, the easy touch interaction to access and manipulate the content.

News aggregators like Flipboard have been among the most downloaded apps in the News category in the Apple App Store. By December 2011, Flipboard had five million users. The figure includes users of the iPhone and Android versions of the application.

Flipboard is arguably the first successful example of personalised media. Personalisation of media means that the range of media content distributed to the end user is not

⁵⁰ <http://www.mondaynote.com/2011/03/13/rss-lenins-rope/>

completely dependent on an editorial selection and curation process, but that the end user can either make active choices as to what content she receives or that the system of distribution reads the user's behavior and provides her with content the user is expected to like, or a combination of these two processes.

This is not only a technical development in digital media distribution, but also a natural further development of the ubiquity of social networks and their increasing relevance as curated sources of news and other media content. Facebook's news feed is an example of aggregation, where the principle of choice is that the content is curated by one's network of Facebook friends.

For media companies, Flipboard is a new distribution platform. Flipboard started out, as was mentioned earlier, as 'a social magazine', providing a way to experience the material shared on social media networks in a beautiful layout. Flipboard quickly drew a lot of attention. The company partnered with traditional media outlets like The Economist, New Yorker, The Guardian, BBC and many others to provide a Flipboard-experience of their content. It was not only the layout which drew the interest of the media companies. They saw it as important to have their brand and their content in this new platform. Flipboard also curates featured content into various feeds. Flipboard Inc was valued in April 2011 at US\$ 200 million.⁵¹

9.2 The Post-Flipboard media ecology

Flipboard is the leader of the new generation of aggregation services. Its competitors include Pulse, paper.li, Editions, News.me, Ongo, News 360, Taptu, Float, Trove, and the most interesting one Zite. Google has also entered the competition with its application Currents, which at the time of writing is available only in the US.

These applications form together what I call the Post-Flipboard media ecology. It concerns a fundamental restructuring of the processes of distribution and consumption of media content according to the principle of personalisation.

One of the phrases used often in discussions about the present and future of media is 'unbundling the bundle'. In the case of newspapers this means that the newspaper is first seen as a bundle, combining a variety of content into a single product. Unbundling the product means that the content is broken into separate segments. What follows after this operation varies. In the case of RSS feeds and aggregators the particular segment of content is delivered into a collection featuring for example content of the same type from different unbundled bundles.

⁵¹ <http://paidcontent.org/article/419-flipboard-raises-50-million-round-200-million-valuation/>

In the Post-Flipboard media ecology rebundling by means of an automated layout-algorithm becomes the core service. The million dollar question – quite literally – for the media industry right now is whether this ecology is a passing phase which will never break out of the early adopter niche or whether it is the beginning of a completely new form of media distribution and consumption.

Looking at the success of the new aggregators, Peter Yared at Venturebeat made the observation that these applications walk a middle way between two seemingly opposite developments – socialization and ipadification.⁵²

Yared uses the term iPadification to refer to the fact that ‘the iPad has driven a new take on the content site – a streamlined, sexy version.’ iPad and other new tablet devices, since they do not operate only with apps but also have browsers, exert pressure on web site design. The iPad presents a visually coherent and stylish experience. The device seems to inherently call for a more stripped down and laid back layout. iPadification entails that websites are designed and built with the qualities of tablet devices in mind. Practically this means moving more and more to building websites using HTML5 code.

The other end of the axis, socialization, means that ‘an increasing amount of traffic to news sites now comes from social links.’ The web is social. We share links in social networks. Our experience of the web is increasingly socially curated and individually tailored. This is significant especially since the first generation of iPad magazines and newspapers were cut off from the rest of the web, as was discussed in Chapter 6. Yared’s conclusion is:

‘Ultimately, iPadification and socialization aren’t conflicting: well-designed newsreaders driven by social links seem poised to offer the best of both worlds.’

The iOS designer Matt Gemmell finds the Flipboard app attractive because of two reasons, presentation and organisation.⁵³ I think he is making essentially the same point as Peter Yared did. Presentation refers to the same trend as iPadification, and socialization is organisation by recommendation.

9.3 Personalisation of news – History of a failure

The promise of personalised media might not sound very appealing, as the track record of personalisation in media is far from good. All the recent attempts to build a

⁵² <http://venturebeat.com/2011/01/29/ipadification-of-the-web/>

⁵³ Private interview.

personalised news media product have failed miserably. I will look at two of them, Time Inc's Mine and the German publication Niiu to argue how the Post-Flipboard media marks a radical shift away from these previous failures. Mine and Niiu both had as their kernel the same correct observation – digital publishing has made it possible to provide readers with a selection of news, stories or sections of a single or several print products, thus sidestepping the restrictions created by the processes of editing and printing. Like every similar project attempted in the past they both failed because they were still tied up to a print product.

Time Inc. released Mine in 2009. It was a 10 week experimental free print magazine that ran for five issues. First issue was shipped early April 2009 and then every two weeks. The reader was given a choice of five magazines from the Time Warner/American Express Co. portfolio, such as Time, Sports Illustrated, Food & Wine, Real Simple, Money, In Style, Golf, and Travel + Leisure among others. Altogether the reader had 56 different possible combinations to choose from. The Time editors combined material from the chosen five magazines into a single product which was then printed and sent to the reader.⁵⁴

The experiment was a failure and discontinued after the trial run. The main problem of Mine was that the whole concept was very much 'push', not 'demand'. The user's choice is too limited and paradoxically at the same time too heterogeneous. This results in a publication with an internal logic the reader can not relate to. As one reader of the magazine wrote, quoting Mine's advertising:

'Instead of my "ideal magazine", one "designed especially for me by me", it comes off more like a manila folder a casual acquaintance stuffed with a bunch of random articles that they thought I might like, cut out from random magazines they found laying around at their doctor's office.'⁵⁵

Niiu was a German daily newspaper which mixed news and stories of the reader's choice from seventeen German and international newspapers and 500 websites. Included were such papers as Bild, Berliner Morgenpost, New York Times and Washington Times. The reader was able to customize a 24 page daily paper online. If the selection was done before 2 pm she received it in print the next day. The choice was limited to pages and sections, not individual stories.⁵⁶

The first issue of Niiu was published on November 16, 2009. The paper was discontinued after just over a year. The problem was again tied to the print format and the lack of

⁵⁴ <http://www.fastcompany.com/blog/ariel-schwartz/sustainability/time-incs-mine-magazine-paper-saving-printed-rss-feed>

⁵⁵ <http://loudpoet.com/2009/04/14/time-incs-mine-fumbles-kickoff/#more-2306>

⁵⁶ http://www.businessweek.com/globalbiz/content/oct2009/gb20091020_812530.htm

an automatic system of selection. It is too much to ask for the reader to go through the trouble of actually choosing the newspapers and websites to build a paper of her own choice.

9.4 The Holy Grail for News

Regardless of a history of failures, the idea of a personalised media remains. I believe the concept is something everyone in the media business can intuitively appreciate, at least if it is worded in the way that Justin Ferrell from The Washington Post did:

‘The Holy Grail for news is for people to be able to get exactly what they want in an intuitive way whenever and where-ever they want it.’

The industry is closer to this than ever before, because of tablet devices. Flipboard was a revelation in showing what can be done if personalised publishing is unshackled from its print roots. When the publishing process is completely digital, true personalisation becomes a reality. After experiencing the post-Flipboard media ecology in action, many are ready to echo designer Pedro Monteiro’s sentiment: ‘On a digital device, I should be able to let the device know what my interests are.’

The post-Flipboard media ecology is exactly the sphere of digital publishing and distribution which takes us closer to this Holy Grail than the media business has ever been. Flipboard, although it now supports a smartphone application as well, is primarily a tablet application. Pedro Monteiro says that from his personal experience with tablet devices and from observing others use them, he believes that touch is the main reason why the iPad is becoming a personal device. A personal relationship, created by the touch interface, has the effect that personalisation is much more natural on tablet devices.

‘When you interact with content by touch, it is almost like it is yours. There is an intimacy about it. For designers, this means you should make it really personal.’

Justin Ferrell of The Washington Post agrees: ‘I think it’s true that people want to personalise this device.’ Ferrell takes the example of a service called Hunch. You sign in with your Facebook or Twitter profile, answer a list of questions about your likes and dislikes, and based on those, Hunch can recommend to you products or services you might like. ‘However we are able incorporate that into news delivery is a big part of our future’, Ferrell says.

According to a Pew Research Center's Project For Excellence in Journalism study, half of iPad users share their device within the household. It is still early days in terms of tablet penetration and this figure might change when it becomes more commonplace for households to have more than one tablet device.⁵⁷ The aggregator Zite, which we will look at in more detail next, has taken note of the sharing of tablets and introduced a function to include multiple profiles in the app.⁵⁸

9.5 Zite – Beyond Flipboard

The most interesting new development in the Post-Flipboard media ecology is Zite. It was selected by Apple as the best news application of 2011. The following is paraphrased from an interview with Ali Davar, the founder and Executive Director of Zite.

The innovation of Zite is that unlike other news aggregators, it is fundamentally not an RSS feed reader. It is a search engine, like Google. Whereas Flipboard deals with one feed – either RSS or social media – at a time, Zite blends together various sources from the web, based on an algorithm which calculates signals that come from outside the service.

Zite was built on an earlier project, a search engine called Worio, which began development at the University of British Columbia six years ago. The team built a web crawler which moves according to the link economy of the web, following links from one page to another. It not only looks for pages but also looks at signals such as tweeting of pages and tagging of content. If it finds that some pages get a lot of these signals, it then initiates searches for these pages more rapidly and frequently.

On top of the web crawler, Zite's in-app personalisation process operates on three levels. First, Zite observes the user's behavior on the app. It looks at the things the user clicks on, how much time is spent on them and what is not clicked. Secondly, the user can thumb up or down content, which gives the system a boost in learning about the user's preferences. Thirdly, complementing this self-learning process is the possibility to make explicit choices of what type of content the user is interested in – the user can choose topics that she wants to read articles about.

Ali Davar, founder and Executive Director of Zite, explains the philosophy of Zite:

'If I go to the homepage of the New York Times, it tells me the news the way the New York Times sees it. That may be an important thing for me to know. Some people will always want to go to those brands' interpretations of the world. But that is very different from the value proposition of Zite, which is 'give me interesting pieces of content – not just news – that people are tweeting, tagging, commenting and pertain to my interests'.

⁵⁷ http://journalism.org/analysis_report/tablet

⁵⁸ <http://paidcontent.org/article/419-new-feature-from-zite-wonders-how-many-people-share-tablets/>

Zite was originally designed to be a web product. It was never actually released for the web, though, but directly to tablets. Ali Davar sees that as tablet devices will become our access points to the web, the principle of search will become less important.

’The tablet will become a new focal point for our gateway to the web, and in so far that it does the paradigm for how to acquire information on the tablet will not be search. That bodes well for companies like ours that are not query based but are aggregators.’

Davar goes so far as to say that RSS-feeds have failed at large.

’RSS should probably be abandoned. News aggregators are tools for information professionals, – they never crossed over to the mainstream.’

The problem with the majority of news readers is that you have to subscribe to your sources of information first. This is too complicated a process for the mainstream user.

’You shouldn’t have to tell an automatic system what you want to look at. The whole point of it is that it should learn that from you. With RSS you either get an undifferentiated list or you end up oscillating between the sources, which is as bad as the web itself.’

9.6 Problems with the Post-Flipboard media ecology – the publishers

From the perspective of a service like Zite, the whole traditional digital media landscape begins to look flawed. Ali Davar explains:

’What is broken about this ecosystem is the siloing of information. Sites are silos subscribing to sites. The users give up and pick one or two sites and say they don’t care for the rest that’s out there. And that is the worst for everybody. Zite offers a lot of niche publications, who will finally be able to get in front of their audience. Right person sees the right piece of content. The web doesn’t enable it, search doesn’t and the RSS paradigm doesn’t enable it very effectively.’

Many in the media business were immediately aware of the dual edged nature of the Post-Flipboard media ecology. Frédéric Filloux of Monday Note was one of the first to point out that while these personalised readers ‘undoubtedly gestate the news publishing

industry's future'⁵⁹ there were serious issues on the business side of things. According to Filloux:

'Flipboard is THE product any big media company or, better, any group of media companies should have invented'. Since they didn't 'every media company should be afraid of Flipboard'.⁶⁰

The biggest problems with the Post-Flipboard media ecology involve money. The new aggregators do not yet have a clear business model, although first steps in that direction have been taken. Since the summer of 2011, Flipboard has introduced ads to some of the content streams through deals with for example the publisher Condé Nast. The second concern is that the new aggregators take the content provided by publishers and serve it to the user in a visually streamlined layout which stripped the articles of advertisements. Zite especially in the beginning worried the publishers. Soon after its launch, Zite received a cease and desist order letter from a group of publishers, such as The Washington Post, Time, Getty Images and AP.⁶¹

'We are complying with what the publishers want', Ali Davar said in reply. Originally, if a publisher had the no archive -metatag on their pages, Zite would show the page in 'web view', which meant that only a short preview was viewable in the app and if the user wanted to read the whole article, it had to be read on the original website. If any publisher contacted them and asked for this, Zite then transferred their content to web view. Davar Says:

'Our angle is not to disrupt the business of journalism, – it is actually help to improve it. One of the ways you can do it is to provide a better user experience. Eventually we need to find a business model together with publishers.'

Co-operation is possible, as publishers are interested in aggregation and personalisation.. Zite was acquired by CNN. The company plans to use Zite's underlying technology in its other products as well. Publishers are also very aware of the potential problems. Justin Ferrell of The Washington Post voices the concerns publishers have over these new kinds of aggregation services:

'The diminishing authority of brands like ours is disconcerting in a way, because you want people to get news from sources they can trust.'

59 <http://www.mondaynote.com/2011/03/13/rss-lenins-rope/>

60 <http://www.mondaynote.com/2011/04/17/flipboard-threat-and-opportunity/>

61 <http://paidcontent.org/article/419-media-companies-send-cess-desist-over-zite-app/>

Ferrell sees a possibility in publishers becoming aggregators in their turn: 'It is our responsibility to aggregate sources we know we can trust. Mainstream media is moving in that direction.' This is the strategic direction CNN took with its acquisition of Zite.

Many of the newspaper representatives I interviewed felt that personalisation is not what their audience is looking for in their branded application.

'I think we would like to do more personalisation,' Ferrell says. The Washington Post app does not have real possibilities for personalisation, merely a possibility to save searches.

'But is that what people are looking for when they come to The Washington Post? If they come to see what we say about the events of the day, then maybe personalisation is not so important. But if we create something else where The Washington Post is one source, then people might be able to choose.'

Jon Hill of The Times echoes the sentiment and says he feels that personalisation is not what the readers of The Times want.

'We feel quite strongly that this is the agenda of The Times. This is an edited product, edited by us for you. We don't want people to pick and choose and customise their own front page for example.'

Certain amount of choice Hill does feel can be possible in the future, though.

'But this being the agenda of The Times doesn't mean you couldn't in the future for example follow a certain journalist or certain stories.'

In the Financial Times app, there is some room for light personalisation. The user can choose a regional front page, move the section pages and put them into any order she likes. 'We're looking at suggestive technology, but at the moment it's fairly limited,' Bede McCarthy of the FT says.

The iOS designer Matt Gemmell does not believe that the new aggregators will break into the mainstream. He argues that most people do not wish to have the kind of choice that Flipboard for example offers.

'A lot of people don't necessarily like that amount of customisation, choosing feeds and such. They want to buy this particular paper and read the sports first.'

Gemmell believes there is a danger that people in the industry think the technology sector of the audience is larger than it actually is.

‘Flipboard is a fantastic app for its target market but its target market is by no means the market for digital newspapers and magazines.’

Aggregators do point to the future of media, but it remains to be seen if they will take us there or turn out to be stand posts on our way to something different.

Summary of the conclusions – A Vision for the Future

Tablet devices are our best bet on a digital future for newspapers at the moment. In Chapter 1 I quoted the media economist Robert G. Picard saying that the future of newspapers is without doubt digital. The only question that remains is what form this digital future will take. Right now the tablet device is the most likely interface to supplant print from the highest throne of newspaper distribution methods. As the designer Pedro Monteiro said of tablet publishing, ‘this is the last opportunity to make money out of digital.’

In the Introduction I argued that if tablet devices become ‘post-pc-devices’, as Apple has branded its iPad, and replace laptop and desktop computers for the non-professional middle class audience, the potential for tablet penetration to explode massively in the next few years could definitely become a reality. I went on to argue that the key question is how well these devices fit to the non-professional user’s habits of writing.

The unique combination of features tablet devices provide is most elegantly captured by the Zite founder Ali Davar’s threefold division into content viewability, mobility and interactivity. This is a new way to consume media and the key issue is how to make use of this new type of interface. With the introduction of this device, newspaper organisations and the whole field of publishing and media must embrace User Interface as their most vital field of research and development.

In my research into the newspaper applications included in my study – The Financial Times, The Times, The Washington Post and Helsingin Sanomat – and the interviews I carried out with representatives of these companies, it became apparent that design and especially User Interface considerations were primarily dictated by concerns exterior to these disciplines. These concerns divided into three groups: economic, brand related, or work process oriented. All of the four newspapers had built their tablet applications based either on the design premises of their print product or website.

Looking at the three categories of concerns, firstly, the decision between choosing print or online as the design basis was strongly influenced by the payment model for existing digital and print products. Secondly, brand was actively perceived as limiting innovation. Jon Hill, Design editor for The Times, went as far as to say that:

‘If I didn’t have the Times legacy, I would make the app completely different – ditch most of the writing, use interactive graphics, video and images. Make the whole thing data and graphics driven.’

Finally, the existing work organisation structures within the companies exerted pressure on the design of tablet applications. To begin with, there has not been enough expertise in print companies to design for tablet devices. A lot of the key work is being outsourced. Applications are built using minimum work resources, 'piggybacking' existing production lines, as Bede McCarthy of the FT phrased it.

These restrictions limited the wish, expressed by each and everyone of the people I interviewed, to create truly interactive rich media which makes use of tablet devices' unique capabilities. Reading between the lines, everyone seemed to say their work was at least to some extent a compromise, a work in progress, only the first of many or a simple starting point on which to build more sophisticated products.

Among the newspapers studied, The Times was an exception as it has made the most extensive use of interactive media.

Based on my observations I put together a list of suggestions for newspaper companies as they begin to move their products onto tablet devices. The first and obvious suggestion is that they should do so as tablets provide the best interface we have in our hands now in 2012. I already made the point about the central importance of original interface design. The interface can, and should, become a part of the brand. As we learn about digital interfaces we can build applications that are their own breed of creature, not a version of print or a website, but ones that naturally support and make use of rich media when necessary. And we will know more about how to make the UI and design simple, clear, intuitive and consistent. Mobility and social media communication are fundamental to the structure of the digital media landscape which today's apps are a part of.

And above all, the great unbundling of news products means that there should not be only one application for one newspaper, but several. What is needed first is a lean news driven real-time updated and truly mobile application. The second stream of development should involve newspapers putting resources into designing 'arthouse' special editions with rich media. This is vitally important for purposes of better understanding what these devices are, how to build UI and design for tablets and to give tablet users the wow-effect they want from their new devices.

The perfect media application – a personal vision of the future

To finish this paper, I want to present my vision of the perfect media application for tablet devices.

In Chapter 9 the question was left open whether Flipboard will ever break into the mainstream by finally cracking the Holy Grail of news – delivering a frictionless experience of real time personalisation. Putting a question mark on Flipboard's future doesn't change the fact that Flipboard is already a game changer. To point out the shift this single application has created, I have coined the expression Post-Flipboard media ecology to describe the field of personalised aggregation applications we are witnessing now.

For the future, I see two streams of development in terms of personalisation. First, if the personalisation of Flipboard, driven by the user's active choices, is too technical for the mainstream, the future of the Post-Flipboard media ecology could very well depend on the success of services and applications like Zite. Zite does the majority of its functions automatically, without the user having to actually do very much.

The second option involves publishers developing personalised selections of their product portfolio. I cited two examples from the print industry to show why the disastrous track record of personalised media is due to the limitations of print, not the principle of personalisation. With the introduction of tablet devices a truly personalised digital media experience is possible. I believe newspapers and all other media companies should seriously look at how they could give their users at least the option to use their products in a more personalised manner. This is the smorgasbord approach of designing an app, referred to in Chapter 8. On tablet devices text, images, video and interactive material can all be consumed equally easily. Against the argument I made earlier – one paper, many apps – I also present an alternative, push the envelope further and say – one app, but not just one paper.

I asked Petteri Putkiranta, Vice President of Digital Services at Helsingin Sanomat, whether he sees this approach as a viable model for media conglomerates with a wide spectrum of media content to offer. He replied:

‘This is a no-brainer. The whole business will turn into channel package business. But it will take a long time.’

Digital media delivery on a tablet platform can turn into a multichannel business, a convergence not of devices, but of content. Especially large media conglomerates can build applications with a wide spectrum of content. This requires that the company silo structure is made thoroughly porous on many levels. Newspapers that are part of media companies with different types of content to offer should work towards creating a subscription service in which the user can access all the different types of media available from the various parts of the company, with a monthly flat rate price.

Here personalisation becomes a different level of choice than in Zite. Instead of delivering only articles involving subject matters that the reader has read before, the user now makes a choice of at least three or up to ten different content categories from which she will receive new content. This removes the risk of loss of serendipity, often used as an argument against personalisation, in other words the fact that if I choose my news, I will never read anything that will surprise me. But if personalisation is limited to types and sources of content, serendipity will still occur.

The app should have an intuitive User Interface on which the user can with just a few touches choose from the spectrum of choice offered by the company and create the kind of app experience she herself wants. The app could use a very simple but

powerful automatic layout algorithm. The user would have an easy interface of content icons to tap and to prioritise. She could choose sports, economics and a general news section, movie trailers, technology related magazine features, domestic detective novels and newspaper comic strips – for example. Each would receive a place based on the algorithm and the simple order of tapping on the content indicators. Reshuffling would be equally easy. The user could also be asked if she wanted to turn on a breaking news override service, which would feed any important breaking news story, no matter what subject matter, into the app.

I believe the potential is real, combining newspaper and magazine content, literature both fiction and non-fiction, video, audio and interactive.

Whether either of these two possibilities will become the mainstream of personalisation, it is tablet devices that will be the wave leading this sea change.

Bibliography

- Jussi Ahlroth, *Reasons for the iPad's success – abandoning the restrictive paper and pen metaphor*, <http://ipadresearch.wordpress.com/2011/04/18/reasons-for-the-ipads-success-%E2%80%93-abandoning-the-restrictive-paper-and-pen-metaphor/>
- Jussi Ahlroth, *Why Apple succeeded in the tablet market and Microsoft failed*, <http://ipadresearch.wordpress.com/2011/06/14/why-apple-succeeded-in-the-tablet-market-and-microsoft-failed/>
- Robert Andrews, *FT Still Negotiating With Apple On iPad Subscriptions*, <http://paidcontent.co.uk/article/419-ft-still-negotiating-with-apple-on-ipad-subscriptions/>
- Robert Andrews, *FT's Paid Digital Subs Up 71 Percent In A Year*, <http://paidcontent.co.uk/article/419-fts-paid-digital-subs-up-71-percent-in-a-year/>
- Robert Andrews, *Updated: Apple's Subs Rules Could Suck \$1 Million From Financial Times*, <http://paidcontent.co.uk/article/419-apples-subs-rules-would-suck-1-million-from-financial-times/>
- Robert Andrews, *Economist Claims Over A Million Monthly Mobile Readers*, <http://paidcontent.org/article/419-economist-ceo-sees-tablets-unleashing-leanback-2.0/>
- Joshua Benton, *Takeaways for journalists from today's Apple announcement: Better reporting tools and an ebook boom*, <http://www.niemanlab.org/2011/03/takeaways-for-journalists-from-todays-apple-announcement-better-reporting-tools-and-an-ebook-boom/>
- Boston Consulting Group, *Global Awareness of Tablets and E-Readers Is Rising Fast, According to a New Study by The Boston Consulting Group*, <http://www.bcg.com/media/PressReleaseDetails.aspx?id=tcM:12-72963>
- Monica Bulger, *Literacy of touch*, <http://monicabulger.com/2010/04/literacy-of-touch/>
- Monica Bulger, *Managing Distraction: Reading in the Age of the App*, monicabulger.com/201005/managing-distraction-reading-in-the-age-of-the-app/
- Pete Cashmore, *iPad magazines: Don't believe the hype*, <http://edition.cnn.com/2010/TECH/social.media/06/24/ipad.hype.cashmore/index.html>
- Eric Etheridge, *Murdoch's Google Gambit*, <http://opinionator.blogs.nytimes.com/2009/11/10/murdochs-google-gambit/>
- Roger Fidler, *RJI-DPA Tablet Research Project*, www.rjionline.org/digital-publishing/dpa/stories/research-projects/ipad-news-survey
- Roger Fidler, *RJI-DPA Spring 2011 iPad survey results*, <http://www.rjionline.org/news/rji-dpa-spring-2011-ipad-survey-results>
- Frédéric Filloux, *RSS Lenin's Rope*, <http://www.mondaynote.com/2011/03/13/rss-lenins-rope/>
- Frédéric Filloux, *Flipboard: Threat and Opportunity*, <http://www.mondaynote.com/2011/04/17/flipboard-threat-and-opportunity/>
- Guy LeCharles Gonzalez, *Time, Inc's 'mine' fumbles kickoff*, <http://loudpoet.com/2009/04/14/time-incs-mine-fumbles-kickoff/#more-2306>
- Sara Hampsel, *Design Strategies for a Networked World*, <http://www.sarahsampsel.com/blog>

Arik Hesseldahl, *Apple's Magic Touch Screen*, http://www.businessweek.com/technology/content/mar2007/tc20070314_109157.htm

Walter Isaacson, *Steve Jobs*, Simon & Schuster, 2011

Bobbie Johnson, *Murdoch could block Google searches entirely*, <http://www.guardian.co.uk/media/2009/nov/09/murdoch-google>

David Kaplan, *Condé Nast Study Concludes iPad Is Not A Mobile Device (At Least Not Now)*, <http://paidcontent.org/article/419-conde-nast-study-concludes-ipad-is-not-a-mobile-device-at-least-not-now/>

David Kaplan, *Flipboard Raises \$50 Million Round At A \$200 Million Valuation*, <http://paidcontent.org/article/419-flipboard-raises-50-million-round-200-million-valuation/>

Damon Kiesow, *Early iPad app downloads dominated by media offerings*, www.poynter.org/latest-news/media-lab/mobile-media/101816/early-ipad-app-downloads-dominated-by-media-offerings

Damon Kiesow, *USC Annenberg class learning to report with iPad*, <http://www.poynter.org/latest-news/media-lab/mobile-media/106091/usc-annenberg-class-learning-to-report-with-ipad-2/>

Knowledge Networks, *Study demonstrates iPad early adopters prefer free content*, http://www.knowledgenetworks.com/news/releases/2011/011711_hpu-ipad.html

Tom Krazit, *Amazon dances around Kindle sales numbers (again), but Kindle Fire was hot*, <http://paidcontent.org/article/419-amazon-dances-around-kindle-sales-numbers-again-but-kindle-fire-was-hot/>

Tom Krazit, *New Feature From Zite Wonders How Many People Share Tablets*, <http://paidcontent.org/article/419-new-feature-from-zite-wonders-how-many-people-share-tablets/>

Edmund Lee, *iPad Users Prefer Advertising to Pay Model for Content*, <http://adage.com/article/digital/ipad-users-prefer-advertising-pay-model-content/148247/>

Matt McGee, *Google to Murdoch: Go Ahead & Block Us*, <http://searchengineland.com/google-to-murdoch-go-ahead-block-us-29442>

Amy Mitchell et al, *How people use tablets and what it means for the future of news*, www.journalism.org/analysis_report/tablet

Jon Mitchell, *New Yorker iPad App Hits 100,000 Readers, Begins to Define a Genre*, http://www.readriteweb.com/archives/new_yorker_ipad_app_hits_100000_readers_begins_to.php

Joe Mullin, AP, Wapo, *Other Big Media Companies Send Cease & Desist Over Zite App*, <http://paidcontent.org/article/419-media-companies-send-cess-desist-over-zite-app/>

Nic Newman, *Mainstream media and the distribution of news in the age of social discovery*, <http://reutersinstitute.politics.ox.ac.uk/index.php?id=240#c1073>

Nielsen Company, *Connected devices: Does the iPad change everything?*, http://blog.nielsen.com/nielsenwire/online_mobile/connected-devices-does-the-ipad-change-everything

Nielsen Norman Group, *Usability of iPad Apps and Websites*, <http://www.nngroup.com/reports/mobile/ipad/>

Josh Ong, *Apple awarded several key multi-touch patents*, http://www.appleinsider.com/articles/10/10/14/apple_awarded_several_key_multi_touch_patents.html

Robert G. Picard, *Business Realities of Tablets and E-Readers*, <http://www.editorandpublisher.com/Features/Article/Business-Realities-of-Tablets-and-E-Readers>

David Pogue, *Looking at the iPad From Two Angles*, <http://www.nytimes.com/2010/04/01/technology/personaltech/01pogue.html?pagewanted=all>

Dan Sabbagh, *Times and Sunday Times hit 79,000 digital subscribers*, <http://www.guardian.co.uk/media/2011/mar/29/the-times-digital-subscribers>

Roy Schestowitz, *Should We Organise an Apple Boycott?*, <http://techrights.org/2011/12/26/boycott-apple-debated/>

Ariel Schwartz, *Time Inc's Mine Magazine is a Printed RSS Feed*, <http://www.fastcompany.com/blog/ariel-schwartz/sustainability/time-incs-mine-magazine-paper-saving-printed-rss-feed>

Christopher Walton, *Custom Newspapers from German Startup*, http://www.businessweek.com/globalbiz/content/oct2009/gb20091020_812530.htm

WAN-IFRA, *World Press Trends 2010*, WAN-IFRA, Zenith Optimedia 2010

Wikipedia, *List of newspapers in the United States by circulation*, http://en.wikipedia.org/wiki/List_of_newspapers_in_the_United_States_by_circulation.

Peter Yared, *The iPadification of the Web*, <http://venturebeat.com/2011/01/29/ipadification-of-the-web/>