

POST DIGITAL PUBLISHING, HYBRID AND PROCESSUAL OBJECTS IN PRINT

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Abstract

The influence of digital on publishing has reached a preponderant level, questioning the very core of the practice. But more than speeding up a much touted “definitive transition” from traditional to fully digital publishing (still to be accomplished on mass) there are various practices which are pervading the timeless staidness of the printed page with calculated processes, transforming it into something new. This had led to the creation of “hybrids” which can be considered as new types of publications with the potential for having both physical and digital qualities, and which are helping to pave the way towards more complex transitions.

Keywords: post-digital, publishing, artist book, e-publishing, e-books, hybrid publishing

Introduction.

This paper analyses the evolution of printed publishing under the crucial influence of digital technologies. After discussing how a medium becomes digital, it examines the ‘processual’ print, in other words, the print which embeds digital technologies in the printed page. The paper then investigates contemporary artist’s books and publications made with software collecting content from the web and conceptually rendering it in print. Finally, it explores the early steps taken towards true ‘hybrids’, or printed products that incorporate content obtained through specific software strategies, products which seamlessly integrate the medium specific characteristics with the digital processes.

How a medium becomes digital (and how publishing did).

For every major medium (vinyl and CDs in music and VHS and DVD in video,

for example) we can recognize at least three stages in the transition from analogue to digital, in both production and consumption of content.

The first stage concerns the digitalization of production. It is characterized by software beginning to replace analogue and chemical or mechanical processes. These processes are first abstracted, then simulated, and then restructured to work using purely digital coordinates and means of production. They become sublimated into the new digital landscape. This started to happen with print at the end of seventies with the first experiments with computers and networks, and continued into the eighties with so-called “Desktop Publishing”, which used hardware and software to digitalize the print production (the “prepress”), a system perfected in the early nineties.

The second stage involves the establishment of standards for the digital version of a medium and the creation of purely digital products. Code becomes standardized, encapsulating content in autonomous structures, which are universally interpreted across operating systems, devices and platforms. This is a definitive evolution of the standards meant for production purposes (consider Postscript, for example) into standalone standards (here the PDF is an appropriate example, enabling digital “printed-like” products), that can be defined as a sub-medium, intended to deliver content within specific digital constraints.

The third stage is the creation of an economy around the newly created standards, including digital devices and digital stores. One of the very first attempts to do this came from Sony in 1991, who tried to market the Sony Data Discman as an “Electronic Book Player” - unfortunately using closed coding which failed to become broadly

accepted. Nowadays the mass production of devices like the Amazon Kindle, the Nook, the Kobo, and the iPad – and the flourishing of their respective online stores - has clearly accomplished this task [1]. These online stores are selling thousands of e-book titles, confirming that we have already entered this stage.

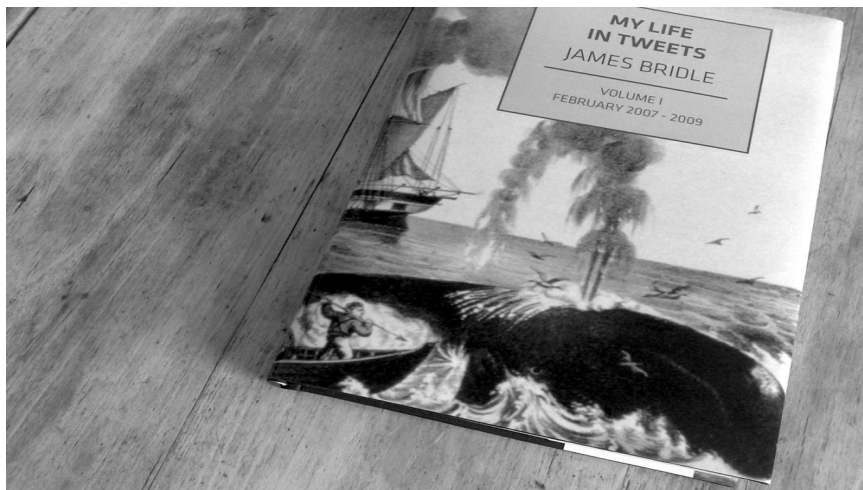
The processual print as the industry perceives it (entertainment).

Not only are digitalization processes yet to kill off traditional print, but they have also initiated a redefinition of its role in the mediascape. If print increasingly becomes a valuable or collectable commodity and digital publishing also continues to grow as expected, the two may more frequently find themselves crossing paths, with the potential for the generation of new hybrid forms.

Currently, one of the main constraints on the mass-scale development of hybrids is the publishing industry’s focus on entertainment.

Let’s take a look at what is happening specifically in the newspaper industry: on the one hand we see up-to-date printable PDF files to be carried and read while commuting back home in the evening, and on the other hand we have online news aggregators (such as Flipboard and Pulse) which gather various sources within one application with a slick unified interface and layout. These are not really hybrids of print and digital, but merely the products of ‘industrial’ customisation — the consumer product ‘choice’ of combining existing features and extras, where the actual customising is almost irrelevant.

Even worse, the industry’s best effort at coming to terms with post-digital print (print embedding some active digital qualities) is currently the QR code — those black-and-white pixelated square images which, when read with the proper mobile phone app, allow the reader access to content (usually a video or web page). This kind of technology could be used much more creatively, as a means of enriching the process of content generation. For example, since they use networks to retrieve the displayed content, printed books and magazines could include QR codes as a means of providing new updates each time they are scanned – and these updates could in turn be made printable or otherwise preservable. Digital publications might then send customised updates to personal



printers, using information from different sources closely related to the publication's content. This could potentially open up new cultural pathways and create unexpected juxtapositions [2].

Printing out the web.

Many possibilities emerge from the combination of digital and print, especially when networks (and therefore infinite supplies of content that can be reprogrammed or recontextualized at will) become involved. A number of different strategies have been employed to assemble information harvested online in an acceptable form for use in a plausible print publication.

One of the most popular of these renders large quantities of Twitter posts (usually spanning a few years) into fictitious diaries. *My Life in Tweets* by James Bridle is an early example realized in 2009 [3]. The book compiled all of the author's posts over a two-year period, forming a sort of intimate travelogue. The immediacy of tweeting is recorded in a very classic graphical layout, as if the events were annotated in a diary. Furthermore, various online services have started to sell services appealing to the vanity of Twitter micro-bloggers, for example Bookapp's Tweetbook (book-printing your tweets) or Tweetghetto (a poster version).

Another very popular "web sampling" strategy focuses on collecting amateur photographs with or without curatorial criteria. Here we have an arbitrary narrative, employing a specific aesthetic in order to create a visual unity that is universally recognizable due to the ubiqui-

tousness of online life in general, and especially the continuous and unstoppable uploading of personal pictures to Facebook.

A specific sub-genre makes use of pictures from Google Street View, reinforcing the feeling that the picture is real and has been reproduced with no retouches, while also reflecting on the accidental nature of the picture itself. Michael Wolf's book *a series of unfortunate events*, points to our very evident and irresistible fascination with "objets trouvés", a desire that can be instantly and repeatedly gratified online [4].

Finally, there's also the illusion of instant-curation of a subject, which climaxes in the realization of a printed object. Looking at seemingly endless pictures in quick succession online can completely mislead us about their real value. Once a picture is fixed in the space and time of a printed page, our judgments can often be very different. Such forms of "accidental art" obtained from a "big data" paradigm, can lead to instant artist publications such as Sean Raspet's *2GFR24SMEZZ2XMCVI5... A Novel*, which is a long sequence of insignificant captcha texts, crowd-sourced and presented as an inexplicable novel in an alien language [5].

There are traces of all the above examples in Kenneth Goldsmith's performance *Printing Out The Internet* [6]. Goldsmith invited people to print out whatever part of the web they desired and bring it to the gallery LABOR art space in Mexico City, where it was exhibited for a month (which incidentally also generated a number of

naive responses from environmentally concerned people). The work was inspired by Aaron Swartz and his brave and dangerous liberation of copyrighted scientific content from the JSTOR online archive [7].

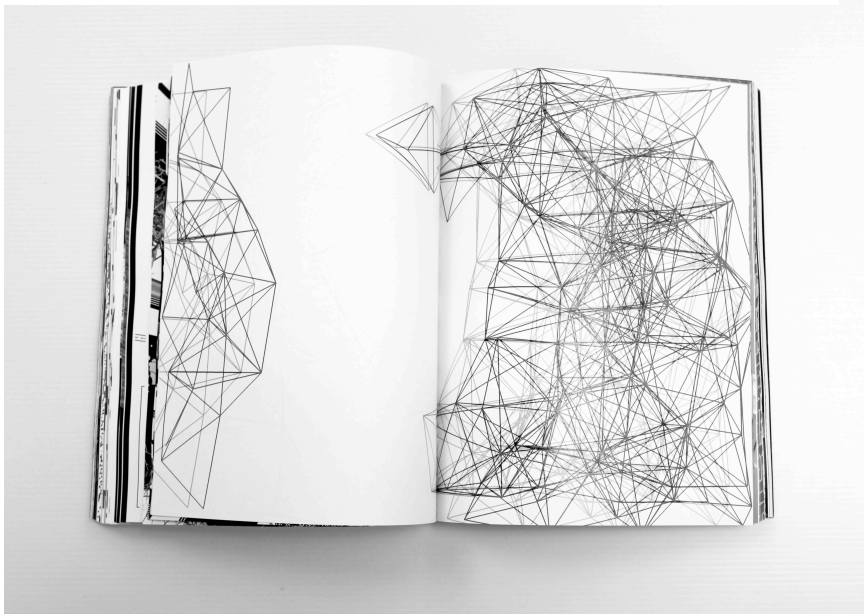
It is what artist Paul Soulellis calls "publishing performing the Internet" [8]. Having said all this, the examples mentioned above are yet to challenge the paradigm of publishing - maybe the opposite. What they are enabling is a "transduction" between two media. They take a sequential, or reductive, part of the web and mould it into traditional publishing guidelines. They tend to compensate for the feeling of being powerless over the elusive and monstrous amount of information available online (at our fingertips), which we cannot comprehensively visualize in our mind.

Print can be considered as the quintessence of the web: it is distributing a smaller quantity of information available on the web, usually in a longer and much better edited form. So the above mentioned practices sometimes indulge in something like a "miscalculation" of the web itself - the negotiation of this transduction is reducing the web to a finite printable dimension, denaturalizing it. According to Publishers Launch Conferences' cofounder Mike Shatzkin, in the next stage "publishing will become a function... not a capability reserved to an industry..." [9]

Hybrids, the calculated content is shaped and printed out.

This "functional" aspect of publishing can, at its highest level, implies the production of content that is not merely transferred from one source to another, but is instead produced through a calculated process in which content is manipulated before being delivered. A few good examples can be found in pre-web avant-garde movements and experimental literature in which content was unpredictably "generated" by software-like processes. Dada poems, for example, as described by Tristan Tzara, are based on the generation of text, arbitrarily created out of cut-up text from other works [10]. One of the members of the avant-garde literature movement Oulipo created a similar concept later: Raymond Queneau's *Cent Mille Millions de Poèmes* is a book in which each page is cut into horizontal strips that can be turned independently,

Fig. 2. Martin Fuchs, Peter Bichsel, "Written Images"



allowing the reader to assemble an almost infinite quantity of poems, with an estimated 200 million years needed to read all the possible combinations [11]. That an Oulipo member created this was no accident - the movement often played with the imaginary of a machinic generation of literature in powerful and unpredictable ways.

Contemporary experiments are moving things a bit further, exploiting the combination of hardware and software to produce printed content that also embeds results from networked processes and thus getting closer to a true form.

Martin Fuchs and Peter Bichsel's book *Written Images* is an example of the first 'baby steps' of such a hybrid post-digital print publishing strategy [12]. Though it's still a traditional book, each copy is individually computer-generated, thus disrupting the fixed 'serial' nature of print. Furthermore, the project was financed through a networked model (using Kickstarter, the very successful 'crowd-funding' platform), speculating on the enthusiasm of its future customers (and in this case, collectors). The book is a comprehensive example of post-digital print, through the combination of several elements: print as a limited-edition object; networked crowd-funding; computer-processed information; hybridisation of print and digital - all residing in a single object - a traditional book. This hybrid is still limited in several respects, however: its process is complete as soon as it is acquired by the reader; there is no further community process or networked activity involved; once purchased, it will forever remain a traditional book on a shelf.

A related experiment has been undertaken by Gregory Chatonsky with the artwork *Capture* [13]. *Capture* is a prolific rock band, generating new songs based on lyrics retrieved from the net and performing live concerts of its own generated music lasting an average of eight hours each. Furthermore the band is very active on social media, often posting new content and comments. But we are talking here about a completely invented band. Several books have been written about them, including a biography, compiled by retrieving pictures and texts from the Internet and carefully (automatically) assembling them and printing them out. These printed biographies are simultaneously ordinary and artistic books, becoming a component of a more complex artwork.

They plausibly describe a band and all its activities, while playing with the plausibility of skillful automatic assembly of content.

Another example of an early hybrid is *American Psycho* by Mimi Cabell and Jason Huff [14]. It was created by sending the entirety of Bret Easton Ellis' violent, masochistic and gratuitous novel *American Psycho* through Gmail, one page at a time. They collected the ads that appeared next to each email and used them to annotate the original text, page by page. In printing it as a perfect bound book, they erased the body of Ellis' text and left only chapter titles and constellations of their added footnotes. What remains is *American Psycho*, told through its chapter titles and annotated relational Google ads only. Luc Gross, the publisher, goes even further in predicting a more pervasive future: "Until now, books were the last advertisement-free refuge. We will see how it turns out, but one could think about inline ads, like product placements in movies etc. Those mechanisms could change literary content itself and not only their containers. So that's just one turnover."

Finally, why can't a hybrid art book be a proper catalogue of artworks? Les Liens Invisibles, an Italian collective of net artists have assembled their own, called *Unhappening, not here not now* [15]. It contains pictures and essential descriptions of 100 artworks completely invented but consistently assembled through images, generated titles and short descriptions, including years and techniques for every "artwork". Here a whole genre (the art catalogue or artist monograph) is brought into question, showing how a working machine, properly instructed, can potentially confuse a lot of what we consider "reality". The catalogue, indeed, looks and feels plausible enough, and only those who read it very carefully can have doubts about its authenticity.

Conclusions.

Categorising these publications under a single conceptual umbrella is quite difficult and even if they are not yet as dynamic as the processes they incorporate, it's not trivial to define any of them as either a 'print publication' or a 'digital publication' (or a print publication with some digital enhancements). They are the result of guided processes and are printed as a very original (if not unique) static repository, more akin to an archive of

calculated elements (produced in limited or even single copies), than to a classic book, so confirming their particular status. The dynamic nature of publishing can be less and less extensively defined in terms of the classically produced static printed page. And this computational characteristic may well lead to new types of publications, embedded at the proper level. It can help hybrid publications function as both: able to maintain their own role as publications as well as eventually being able to be the most updated static picture of a phenomenon in a single or a few copies, like a tangible limited edition. And since there is still plenty of room for exploration in developing these kind of processes, it's quite likely that computational elements will extensively produce new typologies of printed artifact, and in turn, new attitudes and publishing structures. Under those terms it will be possible for the final definitive digitalization of print to produce very original and still partially unpredictable results.

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