



Andrea Rosenbusch

Partner of Zeix AG
Zurich, Switzerland

Shaping Spaces

From Archivist to Information Architect

Digitising Finding Aids

I started out as an archivist. As a history student, I found a part-time job writing descriptions of the records of the district attorney and attributing keywords to them. Most of the records concerned petty crimes or car accidents in the 1950s. The photos of the accidents contained contemporary street views otherwise seldom found, and the records of suicides were both gruesome and fascinating.

What made the job interesting was that at the time the archives had just started digitising their finding aids. During my studies at university, library catalogues had gone from card indexes to stand-alone digital catalogues. When I was writing my thesis in the mid-1990s, the latest achievement was remote access to other library catalogues. The complicated and lengthy procedure of logging into external databases was explained on slips of paper taped to the table next to the terminals. Tedious as this may sound today, it was far easier than cycling furiously up and down the hills of Zurich and trying to leaf through the index cards of as many libraries as possible during their restrictive opening hours.

The excitement of this new age and the goal of greatly enhancing access to unique records made my work at the archives meaningful. Moreover, I quickly learned that without the work of arrangement and description, the records in the archives were worthless. The example of a colleague of mine who returned from a cable car company with four huge sacks of paper might demonstrate this. Nobody knew what was in those sacks, and no-one cared to take the time to sort the papers out. In this form, the contents of the sack were downright useless. I'm not sure if anyone ever had the courage to ditch them, or if they are still sitting in

some abandoned corner. But dealing with large bodies of potentially messy records and trying to fit them in the context of their origin is an important part of what archivists actually do and they have developed sophisticated methods for it. Standardisation, however, is not their strong point. Therefore, when we began digitising, the challenge was to convert all the finding aids, which were as heterogeneous as the materials they listed, into forms that could be aggregated at a higher level.

Thinking About Users

It was this new possibility of aggregation of data that sparked my interest in users. During an internship at the National Archives of Australia in 2000, I was assigned the task of carrying out a study on how seamless access to archival descriptive data might be realised over the internet. The Australians had already made a fair amount of data available online and as a foreigner I realised how helpless I felt trying to make sense of the results of my queries to the Australian archives. Furthermore, I noticed that the questions the Australian users posed via e-mail could seldom be answered by conducting a database query. Aggregated or not, archival data are not as detailed as users expect them to be and it needs much experience, or the help of an experienced reference archivist, to find the relevant information.

On returning to Switzerland, I started looking for adequate forms to present archival information online. Up to that point, the archives had only created categories of users, rather than categorizing the questions they had asked. However, these categories, e.g. professional researchers, hobby historians or journalists, did not prove to be particularly helpful for designing web access to the 40,000 shelf metres of records. I thus started out by gathering empirical information and

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analysing several hundred written inquiries to the archives.¹ From this study, I learnt two things in particular:

1. The expression of the users' expectations, in their own words, did not match the way the archives categorised their holdings.
2. The archives lacked a concept of the process, the research process in this case, that users go through.

First Steps as an Information Architect

I guess these insights sort of marked my birth as an information architect, even though I did not realise this until years later. But explaining to others what I was doing did not become any easier. Most people do not know the difference between libraries and archives, let alone imagine what people working in those institutions do. As an archivist, the easiest way out was to let them believe I was a bookish person and they would mostly stop asking. But when I started doing the work of an information architect, even my colleagues at the archives were not able to understand what I was doing. Today, I usually mumble something about "internet business", which intimidates most people enough (a woman in IT!) to shut them up. If they insist, I readily admit I have no idea of programming and they usually end up exclaiming that what I am doing is "a far cry from history!"

As an information architect, I later learned that the lack of knowledge about users and their expectations was in no way specific to archives. Or, to put it more precisely, it would be unfair to accuse archivists who deal directly with users of having a lack of expertise and empathy. But conducting a dialogue with individuals, eliciting their needs and knowledge, does not translate easily to the web. On the web, users are usually

1. The study was based on the idea of Wendy M. Duff and Catherine A. Johnson, *A Virtual Expression of Need: An Analysis of E-mail Reference Questions*, in: *The American Archivist*, Vol. 64, Spring/Summer 2001, pp. 46-60.

expected to take care of themselves. That sets the bar high, for users as well as for information architects. I jumped in at the deep end and came up with the idea of a “virtual orientation room” for the archives.

What is Information Architecture About?

The Metaphor of Architecture

I had picked up the metaphor of the “virtual reference room” from Kim Veltman at the summer university in Maastricht in 2001 and transferred it to the archives. My idea at the time was to create functionally different spaces for different stages of the research process at the archives.

The spaces were to be connected by “doors” in order to account for the iterative process that research represents. The spaces were on the one hand designated for clustering the different types of finding aids and on the other hand to give the researchers room to conduct their work and store the results. I used the image of the (then still operative) Round Room of the British Library. Recently, I discovered a convincing modern equivalent, the Amsterdam Public Library (Openbare Bibliotheek). The enormous library creates different types of space, cosy corners for reading, ready access to catalogues and other resources close to the shelves, closed rooms for study or discussion, ample space for kids and some breathtaking views of the city.

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Having something similar in mind, I was fond of my idea of the spatial metaphor. All I had known, so far, in the digital space had been lists and tree structures. The consultants I worked with at the time, amongst others, from Zeix, the company I would be joining later, argued it would not work on the web. Just take a look at the screenshot below to see a few of the problems:



<http://www.post.ch/post-startseite/vps-virtueller-postschalter.htm>

1. This post office is completely empty. Both customers and clerks are absent, a sign that it must be closed.
2. The spatial arrangement does not help users to find their way around, and neither the look of the counters nor their location in space make it clear what they are for. The benefit of icons is, as usual, questionable.
3. The metaphor of the post office has its limits. What is the e-mail icon doing there? Services provided at a real-world post office do not necessarily match those offered online.

Information Space

In the real world, spatial arrangement does not always increase orientation either. The reason for spatial arrangement is its necessity. Counters and clerks need room and they have to be arranged somehow. The skill of good architects is to use space to create atmosphere. However, creating atmosphere in the virtual world works differently: by

having valuable content, attractive functions, simple and intuitive use and good design. And orientation, in the rather straightforward case of the post office, is best created by clear categories with simple labels.

My approach to the virtual orientation room, however, did have its parallels with “physical” architecture. Its aim was to create different forms of access for different needs, whether it was for users at the very beginning of their research, like foreigners having to identify which Swiss archive might have some material in the first place, or regulars who quickly wanted to check on some details. Catering to the different needs of users as well as different levels of previous knowledge is crucial for all information architecture. Whether novices or frequent users, they should feel comfortable in the process and be confident that they know what they are doing at all times. No matter what data we work with or what may be the requirements of the information suppliers (our clients); while they account for the material we build our concepts with, we must always step in the users’ shoes to design access. This is, in a nutshell, what I believe information architecture is all about.

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Real Users

Still, creating access in the virtual world is different from the same task in the physical one. The metaphor of physical architecture works well for the principle of creating access, but I believe it reaches its limits in the way it is achieved. Physical space has its borders, whilst information space thrives on its complexity. More often than not, your user does not know what she or he is looking for. It is not like looking for a certain classroom in a school, or the ladies’ room in the theatre, or the aisle with toothpaste in a supermarket. Looking for information is a complex process and has a lot to do with decision making, something that many humans have trouble with. There are many theories about

information gathering I find very useful but will not go into here.² In my everyday job, I want to find out about problem solving in the concrete case. Does my mock-up of a recipe database help people find what they want to cook? What are their criteria? Do they make their choice based on a mouth-watering photo, the ingredients they might or might not have available, the time needed to fix the meal, or something else? How do people go about booking a flight? Do they actually book online or just gather information? Do they book immediately, compare other platforms, switch to their favourite airline, or first talk the options over with their partner?

This part of the job is, for me, one of the most enjoyable ones: dealing with real people and their everyday needs, troubles and ideas. While conducting usability tests for our company, I have observed teenagers looking for their future profession, traders speculating in shares in the most varied ways imaginable, senior citizens playing games on their mobile phones; I have watched and interviewed patient, unmotivated, intelligent, conceited, witty, insecure, funny and unintentionally funny people, and many more.

Collaborating on Information Architecture

The Need for Co-operation

No matter what kind of people we are working with, we want to create a seamless experience in the virtual world as well as across the boundary to the “real” world. It takes a lot of study and knowledge and attention to detail, taking into account both the general and the specific structure and the “interior design” as well. Sloppy information

2. E.g. Marcia Bates, *The Design of Browsing and Berrypicking Techniques for the Online Search Interface*, in: *Online Review* 13, October 1989, pp. 407-424, <http://www.gseis.ucla.edu/faculty/bates/berrypicking.html>; the “Polar Bear Book”: Louis Rosenfeld and Peter Morville, *Information Architecture for the World Wide Web*, 3rd (revised) edition, Sebastopol 2006; James Kalbach, *Designing Web Navigation. Optimizing the User Experience*, Sebastopol 2007.

architecture results in unfinished structures, stairs leading nowhere, buildings without bathrooms or windows and a cold, impersonal and barren feel, like the virtual post office pictured above. In all but the smallest projects, however, information architects hand over the elaboration of details and the implementation in general to others. I mentioned earlier that my fellow archivists had trouble translating their knowledge and processes into the users' language and that they were not the only ones. It also holds true for many of the people who continue our work. They are experts at what they do, programming, graphical design, copywriting, etc., but it is our trade, not theirs, to advocate users' needs. We have to work together to achieve optimal results, but this is often easier said than done.

Obstacles

We often work on projects where the content of the website is created by a large number of copywriters (i.e. content authors) who almost always have little time and often little motivation for this additional job. In particular, they do not take the time to understand the ideas of the new information architecture, even though we take great pains to carefully document them. The same holds true for the programmers. We find programmers adding "search tips" to our lovingly elaborated and user-tested search; instructions we know will confuse rather than help users. We see copywriters creating new containers in the content management system that have exactly the same function as containers already available in our design. More often, however, copywriters make much too little use of means of structuring their content and of guiding their users through the process of focusing on a particular subject.

It is often a frustrating experience and it is easy to put the blame on others. But because we are the people who care about getting the user experience right, and because our clients are always in a hurry to meet deadlines, make money, prevent losing money and make us rush, even if they don't have the time to review our work, I believe it is our job to

develop better means of communicating to others the things that we consider important.

Creating a Common Cause

Recently there has been a lot of talk about “content strategy”, a discipline I believe will help us go in the right direction in content creation or copywriting.³ Some articles accuse information architects of neglecting the “interior design” of the sites they have designed. I’m sorry to say I can understand this accusation. Many web or graphic designers do not take the content of a web site into account when creating the structure of the site. However good copywriting and good information architecture complement each other in creating a great user experience. Therefore, we have started to integrate more findings of content strategy into our documentation and we are anxious to find out if this will improve results. However, this is still a one-way form of communication. Our meticulousness should show that we care, but the people who read our documentation might also find it annoying.

So should we treat the people who “build” what we have “designed” the same way we treat users? Should we try to make them happy instead of giving them instructions or imposing rules? My answer is yes and no. We should make them happy, but not by giving them the choice of whether they want to implement our concepts or not. It is our expertise and it is our responsibility that what we design will work in the end, and that users will achieve their goals and feel confident on their journey. Our clients are convinced of our skills; after all, that is what they are paying us for. The people in charge of implementing our concepts, however, do not necessarily appreciate our work. Treating them as we do our users is probably not the right answer. They are part of

3. E.g. Rachel Lovinger, Content Strategy: The Philosophy of Data, in Boxes and Arrows, March 26, 2007, <http://www.boxesandarrows.com/view/content-strategy-the>; Kristina Halvorson, The Discipline of Content Strategy, in: A List Apart No. 274, December 16, 2008, <http://www.alistapart.com/articles/thedisciplineofcontentstrategy>.

the team and should feel that way. If we want fruitful co-operation, we must convince programmers, designers and copywriters that we are not merely there to cut their budgets. Our concepts and documentation do not interfere with their work, they are the foundation that allows them to concentrate on their own areas of expertise. I believe that as a company and as a profession, we are still at the beginning of this process of mutual understanding, of creating a common cause, and I don't claim it will be easy.

Speaking of a common cause—in my opinion, the worst thing we can do at the moment is to put obstacles in our own path. At the Euro IA 2008 in Amsterdam (the European Information Architecture Summit), several participants asked me if I was a UX or an IA, a user experience designer or information architecture specialist. I was flabbergasted. I had never considered the difference as being important. At our company, we work as a team and combine different skills and views. As long as people outside our circles don't even know we exist, let alone understand what we do, we definitely should not get lost in petty quarrels about the definition of our profession. We should concentrate on raising awareness that user experience matters and that there are specialists around who can create information architectures that are convincing for all parties involved.

About the Author

Andrea Rosenbusch is a partner in Zeix AG, Agency for User-Centered Design in Zurich, Switzerland. She specializes in the information architecture of complex websites and applications, particularly in the fields of e-government and transportation. Before joining Zeix, she studied history, economics and linguistics at the University of Zurich and worked in the field of access to digital data at the Swiss Federal Archives for several years. Out of the office, she is usually on the move—physically or in the virtual realms of the web or fiction.

Web: <http://www.zeix.com/unternehmen/ueber-uns/team/andrea-rosenbusch.php>