

Centring Ideas of Personal Digital Context on Behaviour and Mindset: a Robust Approach to Digital Personal Archives

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ABSTRACT

The author presents ways of imaging spatial arrangements through site visit photographs and screenshots: these approaches can document more traditional contextual information related to proximity and relationships between documents. She then presents ways to model relationships as well as developing questionnaires to trace arrangements and proposes that archivists use this information in appraisal but also present it in a documentary sketch within description. Because, as Catherine Marshall's work indicates, key to the arrangement of the records and their interrelation is held by the creator's own perceptions, it is vital to take this last step to ensure robust transfer of contexts of personal meaning surrounding personal archives when they are approached by the archivist. In this way, archivists can transfer elements of the robust digital existence and relationship to technology of the creator which is currently missing from archival practice in terms of personal digital archives.

Interpretazione dei contesti digitali personali alla luce del comportamento e della mentalità: approcci e strategie

SINTESI

L'autrice presenta modi di immaginare arrangiamenti spaziali per mezzo di fotografie e schermate: questi approcci possono documentare una più tradizionale informazione contestuale relativa alla prossimità ed alle relazioni tra i documenti. Si presentano così modalità di relazioni dei modelli nonché questionari in divenire per il tracciamento di un'organizzazione e si propone che gli archivisti utilizzino queste informazioni nella valutazione ma li presentino pure in uno schizzo documentario all'interno della descrizione. Perché, come indicato nel lavoro di Catherine Marshall, la chiave per l'organizzazione e l'interrelazione dei documenti giacciono nelle personali percezioni del creatore, ed è vitale compiere questo passo finale per garantire un affidabile trasferimento di contesti del significato personale che circondano gli archivi personali quando siano approcciati dall'archivista. In questo modo, gli archivisti possono trasferire elementi della solida esistenza robusta digitale e rapporto con la tecnologia del creatore che è attualmente mancante nella pratica archivistica in termini di archivi digitali personali.

Interpretacija osebnega digitalnega konteksta v luči vedenja in mišljenja: pristopi in strategije

IZVLEČEK

Avtorica predstavlja načine upodabljanja prostorske ureditve s pomočjo fotografij in posnetkov dostopnih preko spletnih strani: ti pristopi lahko dokumentirajo bolj tradicionalno kontekstualno informacijo v povezavi z bližino in odnosi med dokumenti. V nadaljevanju nato predstavlja načine prikaza odnosov kakor tudi priprave vprašalnikov, s katerimi se sledi ureditvi gradiva ter predlaga arhivistom uporabo pridobljenih informacij pri vrednotenju, kakor tudi njihovo predstavitev znotraj popisa. Kajti, kot nakazuje delo Catherine Marshall, je ključ do ureditve dokumentov in njihove medodvisnosti v ureditvi, kot si jo je zamislil ustvarjalec. Zato je bistveno narediti ta zadnji korak, da se, ko k njihovim ureditvi pristopa arhivist, s tem zagotovi prenos konteksta osebnega pomena, ki se navezuje na zasebne arhive. Na ta način lahko arhivisti prenesajo elemente osnovnega digitalnega obstoja ter odnosa do tehnologije, kot ga je imel ustvarjalec, kar pa trenutno manjka v arhivski praksi, ko govorimo o zasebnih digitalnih arhivih.

Personal archives are the archival fonds of individual people or family groups. Archivists have recognized for some time these fonds' qualities as archives. However, theoretical literature and practical approaches that address personal archives in particular have only been emerging in recent years. This presentation is meant to address the qualities of personal archives as they are being created now, in a digital world, and how archivists might develop a robust practice to deal with them.

I have discussed before that broad strategies and methodologies developed for organizational archives are a poor fit for personal archives where the motive and the context of creation emanate from an individual him/herself¹. I have criticized archivists for not taking a close enough look at the features of personal archives in order to capture their contexts adequately. The particular circumstances of these archives' creation include minute decision-making based on the habits and predilections of a particular individual. However, there has been a steady move by archivists toward broader social contexts, macro-thinking about records and an attempt by some to align approaches to personal archives with those used for organizational records. These other approaches take us immediately out of the context of creation.

Personal archives force us to reckon with the use, attitudes and habits of their makers. If we are to understand them archivally, we must grapple with the personal context of their creation and the implications of their creation and keeping for the creator him or herself. Because these archives are embedded in individual attitudes and circumstance, they merit more investigation of context.

Theorists first approaching the digital have also tended either to emphasize large scale models for mapping or technological solutions for dumping. The focus has been until relatively recently on technical challenges focused on data integrity and safeguarding the links of a record to provenance. There have been significant developments concerning digital archives such as ingest tools and workflows, migration strategies, structuring metadata and planning pre-custodial intervention with archives' creators. This emphasis on the aspects of authenticity and trust-worthiness, though has implied that the qualitative nature of these archives and their personal contexts are secondary.

On the other hand, we have been hearing for a number of years that technology has fundamentally changed our interactions and *modus operandi* of life. Individuals have been migrating toward a more robust digital existence in ever-increasing numbers; proving every day that they live qualitatively different lives by virtue of technology. The relationships between individuals and their technologies as well as their attitudes towards documenting have been creeping into archival literature in only tangential ways of yet. This may be the traditional archival lag or inertia inherent in our profession. We have yet to focus wholeheartedly on how attitudes, habits and individual choices form the grain of digital existence and add context to personal digital archives.

Personal archives in digital form are different from organizational records in that they are dependent on their personal context for any sort of cohesion as storage and removable media make these personal information ecologies ever-more dispersed. The habits of mind outlined by Catherine Marshall, in lives involving multiple devices, decentralized creation and storage, bring with them new attitudes toward proliferation, keeping and loss. Marshall describes a sanguine attitude about potentials for loss, inability to think in scale, and ideas that dispersed storage and the Cloud will store it or maintain it over time for you (i.e. a sense of non-responsibility). The individual is the only one in such a dispersed context who has a grasp of the extent of the fonds and the fonds is bound by his/her conceptions, however inaccurate. The individual will be the one who can locate the boundary of the fonds and, similarly, because the arrangement is provisional and unclear and the fonds relies on what the individual thinks he/she is doing, this makes the individual equally the only one for whom order is apparent.

Technology is allowing personal and organizational archives to drift further apart because of the freedom of movement and customization inherent in personal technological environments. Personal contexts include use of technology and attitudes about it. The digital realm lends creators even further opportunities for choice, nuance and personalizing of workspace, apps or technologies. You can say you use a Mac Workbook like you prefer a certain pen but the implications of how you use it are both modifiable and traceable. In fact, because we are reliant on individual activities which define and map

1. See HOBBS, *The Character of Personal Archives* and *Reenvisioning the Personal*.

these fonds, the portable media age may be when the fundamental difference between personal and institutional archives achieves a full airing.

Recognition of this reliance on personal context is gradually creeping into archival projects. With reference to the Salman Rushdie Digital Archives project, Peter Hornsby a software engineer at Emory University was quoted as saying, “the imprint of the writer’s personality lies within his computer²”. Archivists and others are hinting at elements of original order in ways that evince the personality and choices of the creators of those archives. They are recognizing the technologies’ potential for detailing documenting habits of the creators, though not necessarily in a holistic way.

Digital archives present a new twist about the classic elision discussed in terms of analogue archives between the intellectual and physical components of original order and their links to archival arrangement. Unfortunately, these links had never been fully discussed in the realm of paper which only compounds our present confusion or leads to a desire to jettison the concept on the part of some. However, there are some elements of our traditional interpretations of original physical order which might still produce interesting interpretations in a life with digital technology.

In the physical world, we were inclined to see proximity and grouping together as indicating meaning. Now, where we once had a physical site of creation of archives, this was augmented by a virtual desktop environment and further complicated by the use of portable technologies that may or may not relate to other devices and technologies. The confusion about which evidence of original order takes precedence (physical or intellectual) is flipped back on itself in a virtual world. So are we talking about the juxtaposition of documents anymore? Did we ever really do that? Is there a physical or a virtual proximity? But technologies still rely predominantly on visual/spatial referencing and hierarchical access modes like file trees. So there are places where we can consider whether issues of grouping and proximity still have meaning.

On the other hand, there are moments in digital contexts when arrangement can become purely intellectual because the site of the record’s creation is completely out of sync with its creation or where the platform doesn’t matter because the creator’s devices are networked. This implies a disembodied or floating interrelationship among records.

Other confusions rear their heads: for example, the classic confusion between a file folder and an archival file is further extended, complicated or for some rendered mute by the tension between virtual folders and physical carriers. Though this may be construed as a Digital Stone Age issue, the physical storage device or the hardware might represent everything an author took with her to Paris to work on a particular literary work. In such a case, the physical carrier is probably working both like a folder and an intellectual file or sub-series and the laptop might work like a series of its own. So we still need to keep our eye on the intent to group from the creator and not just on groupings that seem apparently to be folders or series. The key is in tracing intention and use. In the reverse, as Jane Zhang’s recent thesis on original order and the digital³ mentions, “the act of filing, including the decision to file (keep), is obviously missing in the uncontrolled accumulation of email in the inbox.” i.e. intent is not in evidence which is itself a clue to its context (i.e. the creator’s behaviour, views and choices).

What might we think of as orders of personal meaning in the digital realm? I am suggesting the phrase orders of personal meaning to give us a bit more flexibility in a digital world: where practices are provisional, proliferate and change constantly and where we have to deal with non-physical attributes. “Orders of personal meaning” would emphasize the remnants of meaning which were embedded in the actions and attitudes of the creator and away from debates about concepts of origin. Because archival creators create and change their orders at will or by habit to suit their lives and their needs, these orders would be four dimensional (i.e. including time) and we should maintain a multilayered notion of these orders of personal meaning remembering that orders can overlap and may phase out without warning.

2. Mary J. LOFTUS, *The Author’s Desktop*, “Emory Magazine”, Winter 2010 http://www.emory.edu/EMORY_MAGAZINE/2010/winter/authors.html.

3. Jane ZHANG, *The Principle of Original Order: the Organization and Representation of Digital Archives* dissertation, Simmons College Graduate School of Library and Information Science, 2010 p.130.

Personal context involves the motivation for placing things together and issues of action and intention (as fraught as these concepts are after Postmodernism). Personal archives primarily stand as evidence of what someone was doing and thinking. So, really it's a simple question: what were they doing and thinking within this personal information ecology? How much of this is traceable? If we don't look for that, we get something denuded of personal context. If we don't do that, we get something more akin to data than personal archives.

Digital personal lifelogs are automatically generated data about human existence created by cameras and other devices. For example, Chen, Kelly and Jones (University of Dublin School of Computing⁴) have discussed how individuals can search images automatically generated by a webcam. Their "Personal Information Archives" uses a timeline and particular search functions to augment and trigger memories about events and they tested memory cues that were automatically extracted. This is a fascinating area where this type of information is seen in the context of biometrics, such as the intelligent insole that measures responses of the foot. It might be useful here to distinguish on this basis between digital personal archives and other things such as these automatically generated data sets, based on archival sensitivity to provenance: i.e. there was a creator carrying out activities, acting with or without intent, and enduring the pressures of life. Again, why obliterate that? We should understand why it may still continue to be useful to acquire personal archives in an age of data.

"Personal archiving is, by nature, a personal system" this is a quote from a study dealing with the hybrid office environments of scholars (CHI 2006⁵) centring on the question "why archive?" and which came up with a number of motivations for this activity playing out in the physical and the virtual office spaces. These were: to create a legacy, to keep objects of symbolic value ("tokenism"), sharing, anxiety and identity construction. These scholars cited their subjects as engaging in "value-laden archiving" and they claimed that flexibility and fine-tuning facilitate extreme use and hyper-customization that can be used to construct and project a sense of identity. All of this is prescient, in that given the date (2006), the article studied only environments with desktops, laptops and optical media (not the more customizable and transportable devices than are prevalent now).

Studies of Human Computer interaction are important for understanding possible relationships toward technology in this fast-changing landscape of possibilities. Abigail Sellen and the Socio-Digital systems team at Microsoft study everyday behaviour in order to design better systems. Sellen, Odom, Harper and Thereska recently published a paper reflecting on how materiality and practices toward possessions are affected by storage of these possessions in the Cloud⁶. Again, some of the same values studied by earlier personal information management studies make a showing: "Like physical possessions, virtual ones too play an important role in how people assert their identity, realize their aspirations and interconnect with the lives of others. It is no wonder, then, that as users of contemporary technology increasingly engage with their digital stuff, seeking to place it in secure storage, sharing it with others, and sometimes wanting to know 'who has it' or 'where it has gone', that they end up worrying about rather profound issues". The emphasis of Odom and colleagues' research is to inform building of a better, more responsive Cloud. We can use these generalizable principles in terms of heightened consciousness of those possibilities. The archivist should use this type of research for intelligence gathering about potential attitudes and concerns of creators and on a very practical level the archivist would aim to be situation-specific and trace particular behaviours of the individual creator.

Erika Farr at Emory University used the term "digital biostructure" to designate the hardware and software environment that the creator interacts with in life and the environment which sustains the digital life⁷. Emulation has been used by Emory to represent interior provenance and the look and feel of documents within a workspace taking the way the creator saw the environment at a given time as a base point. The Salman Rushdie digital archives project emulation is a highly focussed presentation of the Mac Performa 5400 computer as the creator saw and used it in the mid-1990's. This approach joins together the facets of the original platform with provision for reference service.

4. Yi CHEN - Liadh - KELLY - Gareth J.F. JONES, *SenseCam 2010 Proceedings*, <http://doras.dcu.ie/16340/1/SenseCam2010-cheny.pdf>.

5. Joseph KAYE et al., *To Have and To Hold: Exploring the Personal Archive*, In *CHI 2006 Proceedings Personal Information Management April. 22-27, 2006, Montreal, Quebec, Canada*.

6. William ODOM - Abigail SELLEN - Richard HARPER - Eno THERESKA, *Lost in Translation: Understanding the Possession of Digital Things in the Cloud*, In *ACM SIGCHI Conference on Human Factors in Computing Systems*, ACM, 5 May 2012.

7. *The Author's Desktop*.

In terms of *modus operandi* of document creation, one of the most useful veins of inquiry at the moment is in Digital Humanities scholarship particularly dealing with the concepts around digital materiality: the ability for a digital object/platform to be meaningful for its digital format or use as a tool as much as for its content. Archivists' should be attuned to this possibility for meaning associated with materiality. Paul Leonardi, a professor of communication studies presents two definitions for "material" which are helpful: first, materiality is seen as "the use of tools and their affordances" (i.e. abilities to affect, or facilitate action on the part of an individual) 2) the second definition employs the term "technology-in-practice", that is that when used, an artifact becomes different things to different people (e.g. a chair can be used to sit on or act as a ladder)⁸.

The NEH project on born digital literary material⁹ focused on hybrid archives and on literary creators and, although their findings deal only with what they refer to as "creative content originators" (i.e. artists), some of this certainly has a broader application. In reference to digital parameters that constrain or facilitate composition, the White Paper from the NEH project (2009¹⁰) says, "we would gloss this as a curatorial sensitivity toward the uniqueness of individual instances of both hardware and data objects, coupled with an awareness of how the affordances of particular systems, environments and technologies can all impact the creative process. For example, knowing how much of a document would be visible on a screen at one time... ..can be critical to understanding aspects of an author's composition process". (21). The NEH group emphasize not only capturing the digital, then, but also the implications of choices and use of software, hardware and carriers. This situates machines as artifacts themselves in a holistic vision of their use. The NEH participants interviewed creators to understand habits of composition and opportunities for intervention that the creator has into creative space. In another article, Catherine Stoller and Thomas Kiehne outline the functionality and limitations of working with the StorySpace software used by author Michael Joyce in his hypertext literary work¹¹. Literary authors and writers stand at one end of the spectrum in terms of the weight of their artistic intention within the archives but there are ways in which personal archives creators are all, knowingly or unknowingly, affected by the affordances of the tools before them. This curatorial sensitivity the NEH reports outline is key in approaching a particular individual for a robust sense of their archives.

We can look further at the crossroads of archives and the constraints affordances of technology. Digital Humanist Matthew Kirschenbaum in his *Mechanisms: New Media and the Forensic Imagination*¹² suggests the concept of system opacity: that most people don't see the cogs turning in their computers "creating" as he calls it, "an open-ended symbiotic exchange between computation and representation." He says, "many of the plain truths about the fundamental nature of electronic writing [remain] apparently unknown at a simple factual level, or else overlooked, or their significance obscured." While Kirschenbaum uses this concept to discuss computers in new media literature, from an archivist's perspective this type of opacity would play a central role in a creator's understanding (or limits of understanding) of his/her platform and use of technology. Computer literacy is not the only thing at play here, then, but an imagined understanding of the technology which the creator acts upon.

Right now, most archivists still seem to be acquiring and processing acquisitions off of removable media or hard-drives. Jane Zhang's 2010 thesis focused on original order and its relevance to digital archives. She emphasizes that archivists will not have time to do processing beyond the series level and that records will be automatically mapped in an original order and stay that way¹³. This is a digital parallel to leaving paper records in original physical order in the boxes as received. The forensic recovery projects I am familiar with have emphasized the issues of processing and preservation: with the disk image as a starting point. A disk image is a random storage of bits of information: from with a

8. Paul M LEONARDI, *Digital materiality? How Artifacts Without Matter, Matter*, "First Monday", 15(2010), No. 6-7. <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/view/3036/2567>.

9. (which involved Emory University, the Harry Ransom Centre, and the University of Maryland).

10. Matthew G. KIRSCHENBAUM et al., *Approaches to Managing & Collecting Born-Digital Literary Materials for Scholarly Use*, White Paper to the NEH Office of Digital Humanities Start-Up Grant, May 2009. <http://drum.lib.umd.edu/bitstream/1903/9787/1/Born-Digital%20White%20Paper.pdf>.

11. Catherine STOLLAR - Kiehne THOMAS, *Guarding the Guards*.

12. Matthew KIRSCHENBAUM, *Mechanisms: New Media and the Forensic Imagination*, Cambridge Mass. 2008, p. 62?

13. Jane ZHANG, *The Principle of Original Order: the Organization and Representation of Digital Archives* dissertation, Simmons College Graduate School of Library and Information Science, 2010, p.88-89. 104, 162, 167.

logical list of files and file formats with metadata is created and it is from this list that files are then selected and put into series in a way that seems to mimic some traditional approaches to disordered paper records with some help from file directory structures and naming conventions. This approach seems to be dealing with only the physical order/disorder counterpart and not with the conceptual elements of order as the creator saw them within archival arrangement.

To my view, there needs to be a bridge between the confirmation of data integrity and trustworthiness and file format identification on the one hand (a model that centres on the technology) and these individual personal contexts centralizing how it was used and envisioned by the creator on the other. Basically forensics centralizes systems, not people even in situations where the archivist has a heightened sensitivity to the personal digital biosphere and if it is not our intention or within our budgets to do emulation all the time, we have an even greater need to capture these contexts in some way. Even though emulation takes the creator's perception of the workspace as the underpinning of the emulated environment the hope is that this is tacitly transmitted to the researcher by their experience of the workspace. Perhaps this too falls short if, instead we can provide an articulation from the donor about use of platforms and devices.

The sense of the whole resides with the individual. We recognize that this whole, based on Catherine Marshall's research is a blurry whole with assumed or forgotten boundaries. But this appears to be an extension of the normal facets of human memory and provisional storage of documents such as was seen in the analogue world. This is a question of proliferation, not a qualitative difference--if we look at the paper and hybrid offices studied by earlier PIM studies. As with so much else within the stream of constant information, we have to give up on ideas of complete control or totalization. There is (and probably never was) a totalizable fonds, perhaps with some parts of it we need to rely simply on the map to getting there and the creator's say so about what they have and what it means. Archival appraisal, however, is a one-shot deal in terms of the "what does this mean to you" question. Context will disappear if the archivist fails to ask the right questions. With reference to qualitative issues, we can't rely on harvesting metadata to get to them. We have to do them in a semantic way and then we can represent them in terms of visualization or narrative form. The question of personal contexts is not perhaps fully or immediately "solvable" by archivists. It takes a leap or gesture of understanding on our part and questions "what might have personal meaning."

What I hope we have in the short-term future is a well-defined and accepted practice of gathering and disseminating information about these particular contexts. There are rich ways to combine images of physical workspaces with virtual workspaces; to add maps or modelling of relationships between technologies and how these relationships change through time (which could be interactive or multi-faceted depending on the depth of understanding of the relationship of these platforms); we can also easily adopt a practice of outlining the habits and attitudes toward with technology in a documentary or technological sketch which would be included in archival appraisal and later transferred to archival description. There are also other practices that the archivist has access to now but could make better use of: for example detailing arrangement issues from either physical or virtual environments and about the interaction between these two environments in an arrangement note.

Some of our old approaches would become new again by addressing contemporary realities. Such complex and individualized settings for archives are asking archivists for a nuanced understanding of digital personal archives and require them to go forward with an approach to appraisal and arrangement and description of personal archives that takes these into account.

These methods, then for detailing contexts of personal meaning would deal with issues of proximity (which we earlier would have associated with physical order in the analogue world). The archivist would combine photographs of physical sites of creation with screenshots and file directory structures to document these multiple sites of creation reliant on spatial notions. Sites of creation like this are important for an idea of how the creator viewed the documents together and for issues of proximity which lead on to interpretations of priority as well as interpreting how documents were used together. This would get at both intentional filing/organizing and inconsistency or lack of attention to placement.

There is the broader issue of how original order in digital workspaces relates to a persons living space and location, of course, as well. Does it make a difference that author P. K. Page kept her moni-

tor on her writing desk, and on her right was a large plate glass window facing her garden, behind her was her art table (Page was also a visual artist). There is also the question of these platforms through time: whether or not this individual belongs to a certain generation vis-a-vis technology: for example, digital natives vs. ninety-two-year-old poet recent technology adopters. In addition, there is the issue of how the creator adapts to technology (unless we are going to take it as a given that they generally: 1) adapt; 2) get more and more comfortable; and 3) phase things out for various reasons. One might want to know when these phases occurred at the very least.

One could seek to model these relationships to technology in terms of a timeline of technology adoption. One can also map the type of file sharing there is back and forth between different devices. One can also model the types of traffic, messaging going back and forth between people: this is not qualitative unless we look at frequency and think of it as an indicator of closer connection with someone. Elijah Meeks (Digital Humanities Specialist at Stanford) describes this mapping thus: “the maps are “conceptual representations” of [the creator’s] Creeley’s social network demonstrating quantity and frequency of Creeley’s e-mail correspondence, not importance or quality, with blue circles on the maps representing people who were part of Creeley’s extensive e-mail network, and pink strands representing their e-mails, effectively webbing person and Creeley into a unique topology of personal and professional, intimate and formal correspondence”. Meeks suggests elsewhere that this is to give a conceptual overview of the archives, getting at what I have termed the *grain or the texture* of those archives.

Other steps in documenting personal contexts of creation are more aligned with the intellectual aspects of what we have traditionally called original order. Patterns, habits, predilections and dailiness: can be gleaned automatically but we cannot automatically ingest a creator’s perception of them. Scholar at Simmons College, Jane Zhang in her discussion of original order’s two facets calls this the “logical order” of the records. However I think in light of what Catherine Marshall has outlined, one might be better off calling it *the imagined* order of records considering creators’ reliance on what they think is there and where they expect it to be, rather than what is actually there and where. Catherine Marshall tells us too that people are often imprecise and go on assumptions about what they have done with their technology. This tells me that we should be modeling or representing the perception of what technologies are used for. Of course qualitative things are very hard to model. I can model more reliance on one technology or more “preference” for one technology”. But not the qualitative aspects: “I like using my iMac to edit my photographs because of the larger screen and it has a newer version of X for photo editing” or, “I prefer to use my laptop, not just when I’m on the road because it allows me to hide out in the local library and avoid the noise at home.” In these cases you need the traditional, old fashioned metadata commonly referred to as “asking the donor.”

Archivists could use an appraisal questionnaire that includes some of these qualitative aspects. Such a questionnaire could use similar questions to those asked by the personal information management articles: Why archive? What are the motives behind the archives: legacy, tokenism, information sharing? Why create? Why create in that format or in digital form? What are the priorities for you in terms of what is precious? What you would regret losing?

Other questions arise from the issues of materiality discussed within the Digital Humanities settings: Does the functionality of the software or hardware affect/inform your process? Do you attribute the hardware constraints that you like, dislike or don’t value? Are there particular media you are more comfortable with in terms of interface allowing you more freedom to communicate or create? Portability of media is itself a qualitative element: ‘I prefer to use my laptop because I can move to a better lighted workspace or a clearer room: more room to think.’ This last example should indicate that we are ever showing this slippage back-and-forth between media and physical life in time.

In order to capture the mindset in terms of technology we could question:

How has your relationship to a specific technology changed over the years?

What documents inform the creation of what other documents? How are these used together, in tandem: in what we might call intellectual proximity? Are you a spatial thinker: do you rely on spatial notions for where to locate your objects in a filing system? Or are you conceptual and rely on rigid filing system? Do you know where your stuff is? There should also be questions about the digital life: Do you make use of certain technologies in specific situations, places or times and not others?

We would not be capturing the complete technical evolution of creators but just picking up the threads at a certain point in time. But this is an extension of the essential archival paradox of archival intervention at a point in time. The digital give us more complexity and layers of orders of personal meaning but the fundamental relationships that creator create are similar. In future, when most created knowledge objects are digital, this tracing and the attempt to understand will be of increased importance.

I would caution us that when it comes to the practical application of donor questionnaires, we should be looking to be as open as possible. Sarah Kim uses her questionnaire as a starting point for her interviews and she includes questions about how the creator feels or what he/she likes the most about digital technology. It is possible that the creator is creating and keeping documents within a particular notion of his/her public face as is suggested by the concept of impression management, but it is equally possible that a donor may have ironic or unconscious notions that overturn such a conception. I guess that's what it means to be a practitioner doing an archival appraisal, you can deviate from the script. You begin with the creator's perception of what he/she is doing, however flawed or incomplete, and delve into their behaviour.

There are larger questions of linking the relationship with technology and hardware back to relationships and activities within life: for example, according to archivists at Emory University Salman Rushdie was highly organized in his virtual realm he was explicit in file naming and structure, for example. He used daily calendars, virtual sticky notes, email correspondence, and he also spilled soda on one of his computers: indicating perhaps that his digital organization was coupled with a harried physical life in his migrant existence (under fatwa) or with disorganized personal habits.

The answers to these questions could be use within archival appraisal: to suggest the value of the records and also the value of preserving particular contexts. Lastly, the answers gleaned from these questionnaires or interviews could be used in archival description. Archival descriptive practice should, I think, be extended in the direction of a sketch of relationships to documentation and technology on the part of the donor. If the donor shares opinions, perceptions of technology or his/her use of technology it is vital to capture these and make them known to researchers.

What might a documentary and technological sketch look like? A sketch could incorporate the donor's own articulations of the problems/choices in order to balance out the opaque and polished, standardized archival description. This could take the form of oral history interview, video or supplied text; incorporating the creator's own language or *verbatim* comments.

These answers are subject to human memory, of course. As always there are lingering questions: what could be implicit in a creator's understanding/choices that we don't capture and what could be the meaning of orders that we don't understand. Yet these are other abiding difficulties for archivists within the analogue or hybrid world already. I tend to believe that these choices, limits or incomplete understandings should be flagged by the archivists as part of responsible practice and that these are the limits of what we can do.

These examples are suggestive of the links that need to be made in order to pass on a robust understanding of personal digital archives to the researcher. The archivist's primary question should always be what evidence of context could there be and what questions should I be asking, links should I be making to account for these? These are some of my attempts to infuse a sense of the digital life into description, to join issues of qualities of digital existences and choices about life to acquisition.

We have to embrace the un-totalizable, un-curated and ad hoc nature of personal digital archives which will not allow a single linear narrative. The archivist can try to provide the kind of informal guidance emanating from the creator's own perceptions of his/her practices. I would suggest that we focus on self-articulation, choices, intention, preferences and what the archivist can do to make these visible. It is only then that we will approximate description of context to align with an understanding of digital lives and augment processes and workflows archivists have already developed or are developing to ingest and process digital archives within secure preservation practices.

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SUMMARY

There have been significant developments concerning digital archives focusing on technical challenges such as ingest tools and workflows, migration strategies, structuring metadata and pre-custodial intervention with archives' creators. There has been a tendency to treat issues of personal digital archives as smaller, less complex versions of problems inherent to organizational records. At the same time, individuals have been migrating toward a more robust digital existence in ever-increasing numbers; proving every day that they live qualitatively different lives by virtue of technology. The relationships between individuals and their technologies as well as

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their attitudes towards documenting have been creeping into archival literature in tangential ways. We have yet to focus wholeheartedly on how attitudes, habits and individual choices form the grain of digital existence and add context to personal digital archives. The author investigates the concept of original order for personal archives in the digital realm. She looks at a number of concepts from Human Computer Interaction and Digital Humanities useful to archivists as well as discussing relevant ideas from archival literature relating to digital personal archives acquisition and processing in order to develop a useful strategy for archivists to use when acquiring and describing digital personal archives. These strategies involve modelling and imaging orders of personal meaning as well as semantic approaches to capturing what the creator of those archives took to be the order and context of those archives when they were created and stored. This approach can be a useful adjunct to existing forensic approaches to capturing and processing digital archives which focus on technical constraints and requirements.

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