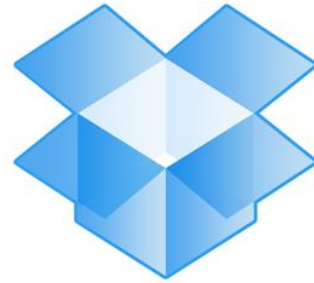


Where do you keep your photos?

flickr



Dropbox



bebo

 **EVERNOTE**

Personal Information Management in a Networked World

- Understand some of the problems relating to the management of 'digital belongings'
- Understand how these are shifting in an online, socially networked world
- Understand approaches to dealing with these problems:
 - A centralised place
 - New metaphors
 - New actions

CHERISHED POSSESSIONS

Cherished physical things

- Studies of cherished physical materials have revealed a rich array of archiving practices
- Kirk and Sellen (2010) have argued that the archiving of cherished objects entails their being ‘enmeshed in the material fabric of the home’:
 - Displayed, e.g. photos
 - Used, e.g. a grandmother’s ladle
 - Stored, e.g. the family china
- Values:
 - Defining the self, connecting with the past, fulfilling duty, forgetting

Cherished digital things

- Digital things, in contrast, easily become buried in computer systems
- Marshall et al (2006) – five strategies for archiving
 - Using system backups as archives
 - Moving files wholesale from older to newer computers
 - Using email attachments as ad hoc storage
 - Retaining old computers as a means of saving the files on them
 - Replicating specific valuable files on removable media such as USB sticks

Challenges

- These strategies are inconsistently implemented and bound up with four challenges (Marshall et al, 2006):
 - The rapid accumulation of digital belongings is formidable
 - Digital belongings are distributed on a variety of storage media, both on-and off-line
 - Curation is difficult, as files become linked to specific applications, are minimally labelled, and may exist in outdated but opaque formats
 - Support for search is not enough, as people look for things they no longer have and have things they no longer remember

Implications

- Argue for a service design approach to personal archiving:
 - A **centralized** repository containing both digital objects and indices to objects held elsewhere
 - Provide a sense of **place**
 - Focus on **valued** artefacts, inferred through replication, creative effort, labour (e.g. hours spent making), emotional impact (e.g. sharing)
 - Use-based **preservation** (e.g. PDF might be more appropriate for records)

Place and 'possession'

- Odom et al (2012) – storing content in the cloud also opens up other, more subtle, issues
 - “at least then I **know where they are**”
 - “it’s at the mercy of someone else” – **having access when you want**
 - Being **accountable** for care and protection “I know my computer could die, but at least it would be on me” ... “I’m more in command of their destiny”
 - **Being able to give access** or rights to others “if someone gets the photos .. I don’t know if you can ever really get it back”
 - **Being able to relinquish** possession “who deletes the deleted?”

Design considerations

- At the same time, the cloud and social network sites can create **new value**
 - “they get comments from my friends and family, and those acknowledgements and stories become part of them”
 - Facebook photos with comments are displayed on bedroom walls or pasted into scrapbooks (Odom et al, 2011)
- Support knowing what you have through a **single ‘place’** where your stuff can be found
 - May support a sense of ‘possession’, whilst also retaining social metadata, such as comments, tags, and likes, which otherwise are lost

Ownership and control might be reinforced by representing content as a virtual, single store

Does it make sense to bring dispersed online personal resources back together as an archive?

A CENTRALISED PLACE?

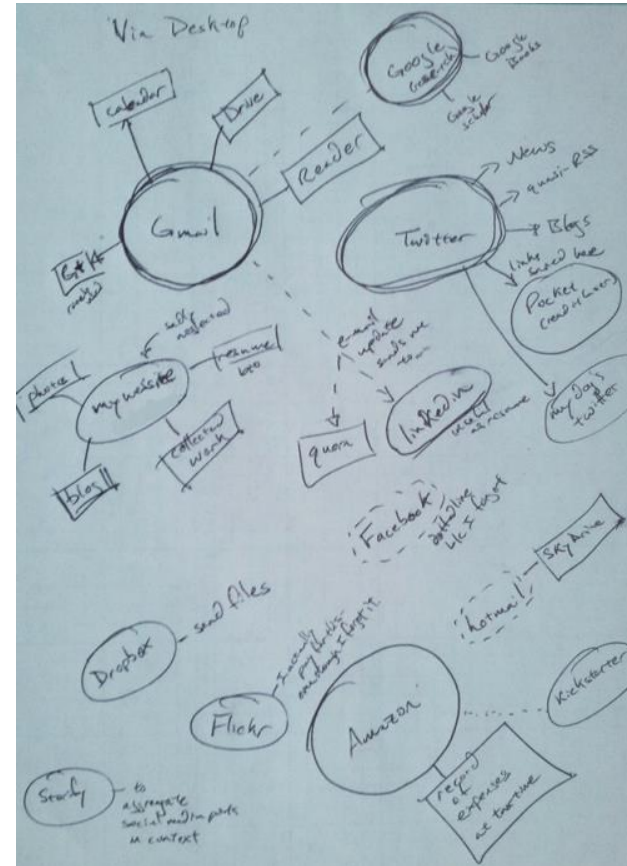
The Web as a Personal Archive

Lindley et al. (2013)

- Interviews with 14 individuals, who were asked:
 - to give researchers a tour of personally meaningful online content
 - to search for themselves on the web to uncover extra content that they might not be aware of or had forgotten about
 - to respond to a series of sketches, which demonstrate potential ways in which this content might be viewed together, managed, and crafted
- 8 in the UK and 6 in the USA, people who we expected to have a substantial online presence, alongside users of widely-adopted social networking services such as Facebook

Interviews

- What do I own?
- What would I like to keep?
- What is dispensable?
- What happens to content outside of one's immediate control?
- Is user-generated content special, compared to e.g. curated content?
- What happens to obsolete profiles?

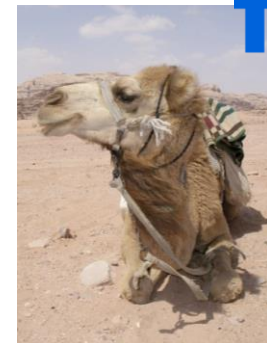


Five types of content

- Three recurring themes we observed in the data:
 - The user's curatorial intent: Is the collection shaped and controlled intentionally, or does it accumulate through use?
 - The digital original's disposition: Is the digital original local or online, and is it fully under the user's control or not?
 - The collection's dynamic nature: Does the collection change additively or are changes necessarily destructive?

1. High value collections

- We assumed that an archive might be a 'place' for high-value content, but these 'places' already exist online
- However, they (or the work to produce them) are not backed up and can be lost



flickr

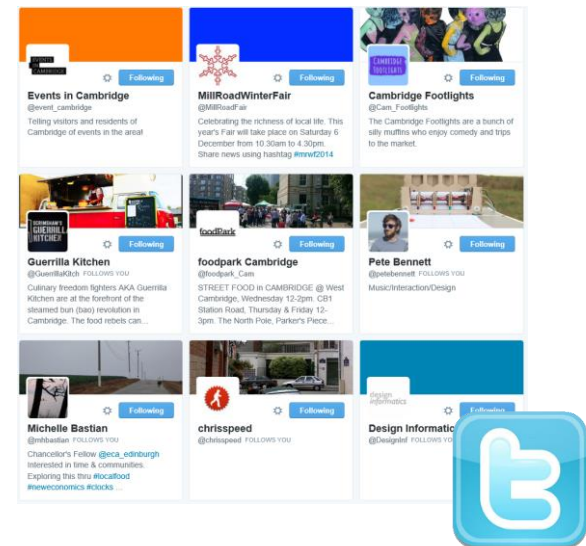
2. Collections that are curated online

- Hosted online and largely comprise other-generated content
- Not backed up and entwined with the site
- Likely to be forgotten as active use falls off



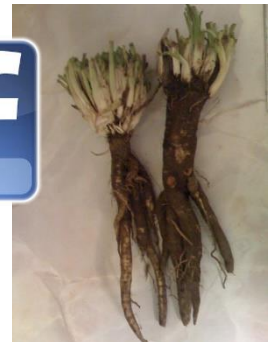
3. Collections that emerge through use

- How can you back up a social graph? How can it be made meaningful over time and outside of the site where it was based?



4. Content for consumption in the moment

- Not seen as meaningful records or artefacts, even for photos and videos
- Would you be upset if you lost your Facebook account? Could you really go to your friends and family to get that content back?



5. Dynamic content: profiles and personal pages

- Changes are destructive, as there is no way to undo edits
- Change is commonplace, as without it the user runs the risk of presenting an obsolete or outdated face to online communities
- A personalised Way Back Machine?



Things related to me



Richard checked in at UCL Dept. Of Anthropology.



I liked the simplicity of this, showing the flow of air over a



RT | Not sure what's going on at Heathrow at the moment.



Summary report for thursday's meeting



Richard Banks will be here from 11am presenting so...



New Favorite: From line to hyperreality— From Perry...



Nicholas Felton's father. "I'm a big fan of Nicholas Felt...



Shannon's Tea Party



Shannon's Tea Party



Shannon's Tea Party



Shannon's Tea Party



Shannon's Tea Party



House plans. Things to buy... meeting



One Letter in politics. I started a group on Flickr in...



Just got out of The Hunger Games and wonder what eve...



I've just started Skyrim and I'm stuck on the first...



Run. 3.2 miles. 8.57/min.



New Favorite: The multirealities of Hoon Moon on...



Steps of St. Peter's Basilica



Brick Lane Food #5



Maddie singing Ba Be Black Sheep



...and on the page Richard Banks



The Civil Wars Boston, MA



RT. Free Universal Construction Kit 00

By sharing status

with Friends

Public

Private

Richard checked in at UCL Dept. Of Anthropology.



I liked the simplicity of this, showing the flow of air over a building - a weathervane wall.



RT | Not sure what's going on at Heathrow at the moment. Big backups due to rain?



Richard Banks will be here from 11am presenting some recent work.



Nicholas Felton's father. "I'm a big fan of Nicholas Felton's personal annual report (the Feltron Report), which..."



23rd July 2011



22nd July 2011



House plans. Things to buy...



One Letter in politics. I started a group on Flickr in 2005 called One Letter which is a place where p...



Just got out of The Hunger Games and wonder what everyone thought?



21st July 2011

I've just started Skyrim and I'm stuck on the first dungeon I hit. Constant death!



New Favorite: The multirealities of Hoon Moon on Domus.



20th July 2011



...and on the page



RT. Free Universal Construction Kit: 80

Shannon's Tea Party Photo Album



Shannon decided that for her 40th she wanted a party with a difference. Inspired by reading "Alice in Wonderland" to Maddie, and in British connection with tea, she started scouring the charity shops for strange hats and mismatched cups and saucers...



Tea cups ready

Shannon & Richard







Shannon, Maddie and Richard with hats



Mum, Dexter and Sarah.



-  @blackCat: "We had such a good time at your party @ShannonB."
-  JohnH: "That was some lovely tea!"
-  MonaL: "I just wish I could have kept my cool hat. :-("
-  MonaL, TimR and 12 other people like this.



A single archive cannot represent the different facets of self

- Distribution is meaningful – relates to different online identities and is intended for different audiences
- Ava described her use of Pinterest as *“completely different from anything else that I do online ... I don’t even know if I would really like to engage either my friends or my professional contacts, because it is just really housewifey”*
- Use of different pseudonyms; for example, the musicians used artists’ profiles, which typically could not be connected to work-related identities
- Related to self-presentation to others, but also a reflection of how participants understood their own selves, and managed their own digital content

An archive should contain the remarkable (and remarked upon)

- Archives should only contain content about the “*key events, like you’d have some of your wedding photos and some of your baby photos*” (Jane)
- Social media may be relevant here
 - “*I already know that I played a gig here, I played a gig there, and I appear on this compilation and I appear on that compilation, so .. that’s just noise really, what I’d like to know is what someone’s said about it .. it would be good to be cross-referencing Twitter, maybe if you could delve into Facebook .. I know everything else.*” – Charlie
- But complex:
 - “*I’d like to find people saying nice things about me*” – Charlie

Crafting

- *“if there’s a gig there’ll be usually different angles on it, actually something like this per event so, yeah so here’s that gig you played in [city] on that date, here’s some photos which were taken, here’s some videos, here’s a recording of the gig, here’s what some people said, I can see that that would be quite a nice aggregation” – Charlie*
- *“if you did a specific event it would be nice to have all the detail and like what people were saying about it ... if you have the photo and then you have like, someone tweeted ‘So-And-So’s wasted – hashtag’” – Sophie*

Curation through Use

(Zhao and Lindley, 2014)

“There is the collection of absolutely everything which is on my computer, there is the collection of everything which is the best of everything on Facebook, and then there is an even smaller one [on Instagram], which is this nice grid view”

Bridging Devices and Services



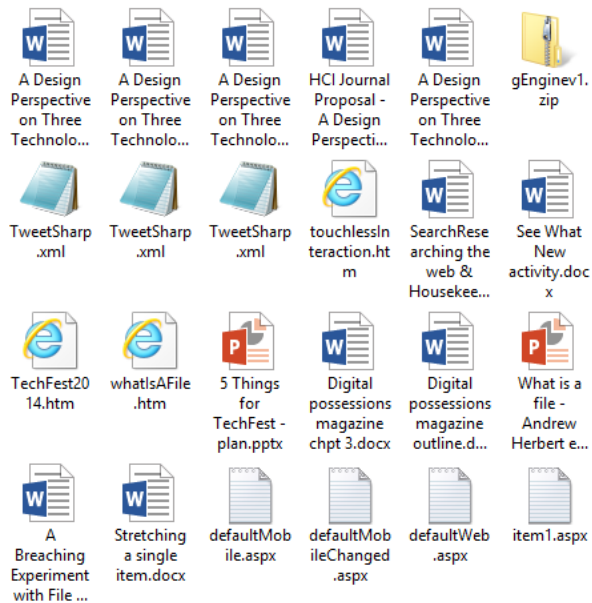
So...

- Drawing content from the Web to form an integrated archive does not offer a good solution
 - Different websites have different meanings, and are understood as being places for particular types of content
- But can draw on the work that users do when sharing online
- Next step is support different values by working across different types of storage (like in the home - Kirk & Sellen 2010)

Harper et al (2013) – What is a ‘file’ in a world of social networking, cloud storage, and OSs that hide files away?

NEW METAPHORS?

Two separate worlds



Generic objects

- The development of Xerox Star was predicated on the notion of *generic objects*
 - A file could be treated the same way throughout the OS, being manipulated through a set of *generic commands* (move, copy, delete, etc.) that were designed into the system, each performing “*the same way regardless of the type of object selected*”
 - “*They strip away extraneous application specific semantics to get at the underlying principles, and embody fundamental computer science concepts and are consequently widely applicable. This simplicity is desirable in itself...*”



Open

Save

Delete

Move

Copy



Sync

Share



Digital/Physical Photo Display

*Exploring the relationship between **physical and digital things**.*

A photo display that uses physical photos to trigger the display of digitally-related things.

A Social Explorer

Creating new ways to access and explore our online "files".

A timeline navigator for the home that shows our Facebook photos and associated metadata.



A new grammar of action?

- Simple actions like save may no longer be possible
 - E.g. Microsoft OneNote
- Existing actions like copy and delete need to be rethought
 - How can you copy a Facebook photo, complete with comments and likes?
 - *“I guess I can delete them (photos on my computer)... online, well I can try to delete something but who knows? Who deletes the deleted? Where does it go when I delete it? I don’t know but I don’t think it disappears and that way it feels like I don’t have control over it...”*
- Emergent actions such as Share and Sync are ambiguous
- Implications for ‘possession’ – being able to extend rights to others, and relinquish them

Rethinking ownership

- A sense of ownership might be underpinned by an improved grammar of action
 - To relinquish from others (e.g. withdraw)
 - To alter ownership (e.g. loan, gift, bequeath)
 - To show/share
 - To sync/backup

Summary

- Questioned some central assumptions:
- A **centralized** repository containing both digital objects and metadata or indices to objects held elsewhere
 - Different places support different values
- Instead:
 - Five types of content that have different implications
 - A possibility to build on the ‘work’ that users do when sharing to support PIM
 - A design space for new metaphors and new actions to bridge online and offline spaces

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