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The Aleph Bet: Debating Metaphors for Information, Data Handling and the Right to be Forgotten

Chris Prince, Micheal Vonn and Lex Gill*

Abstract

Court rulings in the European Union (EU) have now established that individuals may seek erasure of personal information posted online. Typically, this involves de-indexing a website from search results, and in some instances the removal of content from primary sources sites. This has, in turn, led to debate around both the logistics and the unintended consequences of removing information online, and subsequent discussions have grappled with a range of images and metaphors to map that new legal reality. This essay surveys that debate, the imagery it employs, and the various logics associated with these metaphors.

A. IGNITING DEBATE: THE GONZA´LEZ CASES

Several years ago, in a case flowing from a data protection complaint lodged against Google Spain, the European Court of Justice in Brussels sided with an individual who had sought to have certain internet search results about him removed.1 He was a businessman trying to secure investment, and believed that details about a foreclosure eight years beforehand was hurting his livelihood, to the extent that these details figured prominently in Google’s results page for anyone who typed in his name.2 The specific relief he obtained through the court decision was an order for Google Spain to de-index particular news stories from search results for his given name on their regional top-level domain(es).

That case, the precedent it set, and the thousands of subsequent requests from EU citizens which followed, set off a debate in privacy law, information policy and data protection circles that continues today about what has come to be called the “right to be forgotten”.3 The policy rationale is that dated

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1 “Google Spain SL v. Agencia Española de Proteccio n de Datos” (2014) 128:2 Harv L Rev 735, online: <http://harvardlawreview.org/2014/12/google-spain-sl-v-agencia-espanola-de-proteccion-de-datos/ >

information, which no longer reflects the reality of an individual’s circumstances, ought not to be preserved (or highlighted) where it is prejudicial to the individual and no countervailing public policy reason exists for its preservation.4 For some, the right to be forgotten (RTBF) evokes a kind of ahistorical revisionism, a rewrite of the past, as individuals seek to conceal embarrassing details, faults or wrongs they’ve been forced to publicly account for.5 It is also important to state at the outset that search result de-indexation as a legal remedy is not always bound to a privacy breach or “right to be forgotten” claim. Indeed, opponents of a right to be forgotten often stress risks to a “right to know” if individuals seek to control information dispersed online, hinting darkly at possible abuse by governments, companies or criminals.

Yet, as with all issues related to digital privacy, there is also an opposing view. Recognition of a justiciable right to control inaccurate (or superfluous, irrelevant, or out-of-date) personal information represents an opportunity for a second chance and restores some of the practical obscurity which has traditionally been a significant privacy protection. In the EU context, it also reflects a core commitment to “informational self-determination”, a foundational concept in EU data protection law stretching back over three decades.6 The RTBF represents a legal counterbalance to the distortionary effects of contemporary search algorithms, which — at least in some cases — tend to privilege salacious, fantastical and damning “content” over factual

3 It should be noted that each jurisdiction seems to translate and interpret the term slightly differently — the French refer to a right to obscurity, the Spanish to oblivion, the Germans to objection. As a legal concept and commercial obligation, it has its roots in basic privacy principles established by the OECD and other data standards setting bodies decades earlier. These principles (embedded now in many countries’ privacy laws) set out a positive right for individuals to ensure that information collected and retained about them by organizations was accurate and current; see OECD, “Data quality”, Guidelines on the Protection of Privacy and Transborder Flows of Personal Data (2013), online: <http://www.oecd.org/sti/ieconomy/oecdguidelinesontheprotectionofprivacyandtransborderflowsofpersontaldata.htm#part2 >.

4 Just as we extend pardons to criminals, or obscure the identity of youth offenders, there is the generally accepted notion that organizations should allow individuals at some point to “move on” from past experiences and records of these infractions. As reasonable as this may sound, however, it is surprisingly controversial when that same principle and right is applied to commercial operators, for a number of reasons. See Steven C. Bennett, “The ‘Right to Be Forgotten’: Reconciling EU and US Perspectives” (2012) 30 BJIL 161, online: <http://scholarship.law.berkeley.edu/bjil/vol30/iss1/4 >.

5 All manner of shadowy figures spring to mind who might exploit this avenue to obscure or erase public awareness of past actions; this recalls Brin’s observation that when issues of privacy and accountability arise, we always want privacy for ourselves and transparency for everyone else. See David Brin, The Transparent Society: Will Technology Force Us to Choose between Privacy and Freedom? (New York: Perseus Press, 1998).

6 On Informationelle Selbstbestimmung, or informational self-determination, see Michael L. Rustad and Sanna Kulevska, “Reconceptualising the Right to be Forgotten to Enable Trans-Atlantic Data Flow” (2015) 28:2 Harv JL & Tech 356 at 356-60.
accuracy. As Bruce Schneier has noted, “although privacy is definitely a technology problem, it’s even more of a people problem. The greatest challenges to privacy are fear and convenience . . . and until we get our ‘needs’ under control, we’re not going to have much privacy.”

B. DRAWING LESSONS: HOW ARE ARGUMENTS OVER RTBF FRAMED?

There are now entire books devoted to the implications and implementations of this new digital right and other online freedoms. Unpacking these legal developments is not the focus of this essay. Rather, we are more interested in the symbolism, imagery and associations in which various parties have invested. This may seem an esoteric concern, but we assert that the specific analogies, images and evocations used to explain the Internet, describe information flows and highlight human rights carry very real resonance. The metaphors we choose to describe technology have profound legal, political, and economic ramifications. This paper is particularly concerned with the metaphors used to contest or undermine the “right to be forgotten”.

In courts, legislatures, conferences and boardrooms, metaphors matter a great deal. For example, in pushing for greater transparency, digital rights groups, open data activists and access to information advocates understandably highlight gaps in knowledge. This is called the “memory loss” argument, which often arises from important information rights work, but also echoes our current immersion in a globalized political economy. Within the ubiquitous logic and rhetoric of transparency, the absence of information is readily understood as an attempt at concealment (physical, informational, emotional) and so is immediately suspect.

A second thread of opposition to the RTBF concept is based on efficacy, namely, opposition to the purportedly unnecessary compliance burden for information providers (in particular, Google or Microsoft) as they manually vet requests and amend local data indices accordingly. Critics of the RTBF are

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9 Overlooking that European privacy laws have their earliest antecedents in anti-libel law precisely for this purpose. Either way, they favor maximizing disclosure and records being published by default over individuals’ reputational history; see Jones, CTRL + Z, ibid, at 30.

quick to point out that the primary local sources of the information (e.g. news sites, blogs, archived court decisions, etc.) are left untouched in cases of search engine de-indexing. This line of reasoning could be called the “costly placebo” argument, which the more industry-oriented experts are fond of highlighting.

Finally — and this is the question we aim here to unpack — there is a third line of argumentation based neither on the narrative of transparency nor on an axis of cost and efficacy. Instead, the analysis focuses upon order and simplicity, and picks up on a particular thread of Google’s stated mission: to organize “the world’s information”.12 Actors working in opposition to any form of information removal (including, but not limited to RTBF measures) often liken the company’s search engine to a library catalogue, and from that imagery proceed to oppose a range of legal take-down options said to be comparable to removing “cards from a card catalogue” or “pulling books from the shelves”. Since the 2014 González decision, Google has cultivated dozens of such editorials and expert opinions echoing this premise.13 We know, because we Googled it.

C. COMPARING RIGHTS: AN ANALOGY FOR DIGITAL RECALL

This “library argument” has given critics of the EU court decision a narrative tool to evoke a collective and understandable aversion to both censorship and information loss. These are real risks, quite rightly seen as offensive to freedom of thought, shared heritage and collective identity. Beyond its success in evoking grim associations however, it is worth asking how well this analogy stands up in practice. Does all digital content make up a shared library, with Google as its de facto card catalogue? Is the right to be forgotten really akin

11 Most of the firms affected by the ruling are well-financed and exceptionally technically adept (i.e. removing links between data points is within their grasp); developing a process in response to individual requests seems feasible. However, much of the technical community appears to question the essential effectiveness of any remedy based upon information severance.

12 Google, “About the Company”, online: <https://www.google.com/about/company/>.

to censorship, to pulling cards from that catalogue or books off a shelf? And, ultimately, are these simplifications useful (socially, politically, legally) or do they obfuscate more than they provisionally reveal?

As an initial set up, it makes some sense to begin with Google. Organizing the world’s information remains their most famous corporate ambition. Though now technically a subsidiary of Alphabet (and having in some sense “evolved” beyond such a singular focus), global data capture plainly remains part of their vision, culture, and business model.14 Firms like Microsoft and Google appear poised to achieve this vision eventually, having built upon the investments and technological developments flowing from three decades of advancement in computational power, digital storage, mass digitization and global data networking.15

A specific example of the scale of digital collation helps illustrate that last point: a few years ago it was widely discussed that the world’s largest collection of photography had become Facebook, which publicly acknowledged at the time storing roughly 100 petabytes of digital imagery on its servers with 240 billion photographs.16 Users from around the world uploaded that data over the past decade, while the firm has invested significantly in facial recognition, web analytics and artificial intelligence so as to automate and index this massive archive. Yet few would conflate this dataset with a global library of photographs; the company would be extremely unlikely to risk making the entire repository publicly searchable or open to browse.

14 It is also worth noting this universal mission has had antecedents: in the history of information design figures like Paul Otlet, H.G. Wells and Vannevar Bush all believed global knowledge could be structured and made accessible to all. Each of those earlier figures envisaged, began to build, or rendered operational technologies that sought to categorize, index and cross-reference fragmentary units of knowledge, information and data. See Alex Wright, Cataloging the World: Paul Otlet and the Birth of the Information Age (Oxford: Oxford University Press, 2014); H. G. Wells, World Brain (London: Methuen & Co., 1938); Vannevar Bush, “As We May Think”, The Atlantic (July 1945), online: <http://www.theatlantic.com/magazine/archive/1945/07/as-we-may-think/303881/>.

15 Or have they? Can the world’s information in its entirety be organized? What would such global information control look like? To return to the library metaphor, can all written culture and history ever be fully digitized, much less stored, much less comprehensively indexed and be made available? These questions are not quite as epistemological or abstract as they would have previously appeared — and clearly the system design choices of global data firms have a direct bearing on how the internet functions as a knowledge resource, communications service, or shared archive. Their indexing protocols, technical standards, search algorithms, and retention practices all form part of the answer to how information is searched, retrieved and shared globally.

D. EVOKING LOSS: ANALOGIES FOR DELETION

If it is conceded that these companies are not acting as libraries per se, their proponents might then say that we ought to forget arguments about Alphabet and all its data-holdings; the RTBF threatens the veracity and viability of the traditional basic search function, which operates like a library’s card index and is used by millions of people every minute of every day to locate information. Here a personal right of the data-subject is posited against public access to information about the data subject.17

Evoking card catalogues, while folksy, is misleading on two main grounds. First, as any long-time user of Google will be aware, the search engine long ago ceased to be a monolithic, centralized one search/one result experience — far from it. In fact, Google’s search results are both highly contextual and highly customized. There is no longer a “default” Google. Even if you turn customization features off, results are always regionalized by language and location through IP address analysis. To be clear, users of Google Search are not sharing the same card catalogue when we do most online or mobile searches, least so when we have an account with the provider in question. What we are provided is a highly tailored set of filtered results, according to past site visits, search history, reading habits and other variables.18

The other important shortfall of the card catalogue metaphor involves the way in which details and links of indexed web content are accessed via its search services. The catalogue analogy is premised on a reader envisaging some massive, centralized registry in Mountain View. A special, multi-hued building where all the results, all the searches, all the links are kept safe and up to date. Anyone who has observed the history of online search will recognize that mental model as a dated and misleading artefact. Google outgrew it long ago, and now operates tens of thousands of servers worldwide, housed in 40 major data centres.19

17 As noted above, a wide contingent of experts seem to advance this claim, even though it seems to us inaccurate - both in how online searching actually works, and how the EU ruling has been implemented to date.
18 Search pages and lists of hits are adjusted by geographic location (country and city), ranked by language, and when activated, sorted by individual user profile and use history. While this can be miraculously efficient, especially for topic-specific research over time, it should completely dispel the “universality of search” or “objectivity of results” assumptions made in critiques of RTBF. As users, we are already being nudged to recall certain things and forget others every time we search. That is consciously designed into the system of personalized online services across nearly every platform. Again, such a fine-tuned and targeted set of results, served up at the individualized level, departs almost entirely from the fixed library card system that many commentators seem to evoke. See Google, “Personalized Search for Everyone” (December 2009), online: <https://googleblog.blogspot.ca/2009/12/personalized-search-for-everyone.html>; Eli Pariser, The Filter Bubble: What the Internet is Hiding from You (New York: Penguin Books, 2011).
19 Their indexing and results efforts are massively distributed; which in the context of the RTBF debate means there is no unified catalogue or index — but rather dozens of
E. ON COMPILING ACCURATE COMPARISONS

If we reject as false the analogy applied recently in criticisms of the EU Right to be Forgotten (laden with references to lost libraries, pilfered catalogues, book burning and the like), it is reasonable to suggest another analogy as Canadian courts, legislators and regulators cast about for precedents. If the library is an inapt image, what better fits the nature of the technology and better accounts for the actual values at stake? One useful place to begin is to inquire into the purposes of mapping the old rules onto the new tech. Whose interests are served? Is encryption like a lock on a door, or can it be the door itself? Is it like a safe inside one’s house, or perhaps solely the combination?

Does it even make sense to try to map the rights and responsibilities of digitally mediated life into a spatial metaphor (like a certain type of building)? Or would that only serve up a rough equivalency, transposing old values and rules? As many critics have noted, the dichotomy between “online” and “offline” has been rendered fairly feeble in terms of rights protection; clinging to notions of buildings and maps are cultural hang ups we may need to exchange for a more sophisticated calculus of value(s).

This comparison problem was identified by Jennifer Nedelsky decades ago, which is that privacy has traditionally been conceptualized in spatial terms or in connection with physical property (at least in the common law tradition).20 Bodily integrity is recognized as the first and most protected spatial zone, with concentric rings such as the home, and the property the home sits on eventually fanning out into the “public”. Digitally mediated life renders that common law, spatial grasp of privacy (i.e. the home as castle image) almost nonsensical. It was always a tradition-bound ideal for personal sanctity, as opposed to a cognitive model of privacy or universal norm.

F. ALTERNATIVE MODELS — INFORMATION MARKETS, DATA EXTRACTION, MEMORY REGULATION

Plainly, requests to delink old information from EU citizens are an administrative burden for regional operations and add to legal compliance costs. Yet as a practical matter of data processing the “RTBF effect” seems to...

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have little impact. Neither Google’s wider offerings in the EU or services elsewhere have been curtailed.\textsuperscript{21} They still offer their full range of tools and applications in the EU market. Compared to other types of compliance (e.g. copyright takedowns) or government requests for private data (e.g. lawful access), the firm appears to have set out some quite straight-forward factors when it considers results removal requests, and should be commended for implementing these in a clear, transparent fashion.\textsuperscript{22}

In 2017, Google — in terms of services provided, data collected, additional analysis brought to bear, markets reached, etc. — has evolved well beyond evocation of the dimly remembered card catalogue of the local library. The card catalogue analogy also fails in terms of granularity. A card catalogue was never able to point you to an obscure reference to a private individual who is not the subject of or important to the subject of the book or article in question. The route through which you gain access to information in a library is via entry points of subject, author, or theme. Libraries do not provide a “service” which allows you to query discreet local personalities, and certainly a card catalogue was never meant to provide such a function.

Besides entirely misconstruing the scale and sensitivity of information involved, it is also plainly an anachronistic evocation (and one that a shrinking number of readers will even connect with). Would any credible pundit today evoke IBM’s past business and refer to one of its data centers as a warehouse of electronic typewriters? Would a logistics expert liken the global operations of McDonald’s to “a string of corner delis” simply on the basis of having a solid burger in common with their local diner? Yet IT experts, IP lawyers and digital media observers make off-side library analogies with alarming regularity (and almost eerie harmony) in describing search tools.

Not only is the scope and intensity of the enterprise completely miscast, but the much broader meaning and influence of the larger commercial entity vanishes. As familiar as the image evoked may be, it occludes as much as it reveals. Thinking about what online services firms like Microsoft, Apple, Amazon or Google actually provide (in addition to the social functions they increasingly perform) we would argue that any of the following alternatives would be more apt.

We have some firms positioning their products as a coach or guide (e.g. Apple as Concierge, given integration of ratings and maps); we have others developing tools to act as virtual tutors or oracles (e.g. Google as Advisor, given its assistant tools and AI / Nest products); others are diversifying apps that take

\textsuperscript{21} Note, for example, in the period since the EU ruling, the company’s stock valuation rose from approx. $500 US to $700 US per common share. Reuters, online: <http://www.reuters.com/finance/stocks/chart?symboll=GOOGL.O>.

\textsuperscript{22} Google, “Common material factors involved in a decision not to delist a page” (November 2015), online: <https://static.googleusercontent.com/media/www.google.com/en/\textasciitilde transparency\textasciitilde report\textasciitilde removals\textasciitilde europe\textasciitilde privacy\textasciitilde faq\textasciitilde Google\textunderscore EU\textunderscore privacy\textunderscore data\_nov2015.pdf>. 
on a merchant / marketer / publicist function (e.g. Amazon as Bazaar, given its video, content and sales integration).

Other platforms seek to disrupt traditional players in the economics of information by offering individuals specialized collector / compiler / translator capabilities (e.g. Facebook as Broker, providing macro level business intelligence, trend spotting and visualization). Finally, new features in previous systems now give users the ability to become their own broadcaster / educator / curator (e.g. Microsoft as Instructor, given writing tools, media filter and re-distribution network).

Each of the analogies above — X as Guide, Y as Agent, Z as Market — we believe to be more precise than likening a search function to a card catalogue, or a search engine company to a library. While the library metaphor may be comfortably familiar to courts and legislators, it is precisely its ease which misleads. While it is true that you can find content on a given subject, like you could through a library’s card catalogue, the card catalogue analogy never bore out when the subject matter was mostly private citizens (which is what’s at issue in the RTBF). And as reflects the online sphere as a whole, other images, premised on an exchange of values, make far more sense.

G. INTEGRATING IDEAS OF MEMORY REGULATION

No matter which precedent or metaphor holds, one reality to acknowledge (for better or worse) is that US legal, judicial and regulatory models generally are still very much built to facilitate circulation of online commerce as opposed to regulating flows of personal information or prejudging novel products. Data regulation outside the EU (with the APEC bloc as another clear example) favours exchange, value creation, innovation and market-based approaches over rights impact analysis, protection of reputation or informational self-determination (as the Germans cast the issue).23 To a large extent, Canada and the UK seem to split the difference.

A second observation would be to note that firms such as Alphabet and Facebook, growing as they have out of the US, have much more effective influence on the thinking in regulatory circles and legal deliberations in North America. Whether that is a permanent feature, or subject to market correction, only time will tell. The past woes of Apple, Nortel and RIM show that setbacks can be merely sessional or ultimately terminal. But surely we may note from the early dot-com era that with many aggressive players (think WorldCom, Global Crossing or Tyco) it takes only a few offside decisions to dispel years of public trust and regulatory negotiation.

23 That culture variance will shock no one who has followed debates about digital rights or EU-US data transfers, then switched cognitive channels to hear Silicon Valley reps talk up Big Data. The recent collapse of the Safe Harbour arrangement, EU demands for a US Courts Redress Act, and the European Parliament studies on mass surveillance, all underscore the gaps between a commerce-centered debate and one focussed on rights and recourse.
The third remark to be made is that public opinion polling clearly indicates that a great many people are deeply concerned about what information is made available about them on the internet, very often without their knowledge or express consent.\(^\text{24}\) Individuals are now forced into the position of actively defending their reputations from inaccurate postings or seeking removal of offensive personal attacks in “comments” sections. Canada is by no means immune to these developments and the EU model of examining RTBF claims may yet develop into a significant proposal to protect the privacy rights of ordinary citizens.

Yet, at the same time, neither American nor Canadian consumers as a whole seem terribly exercised about the issue to date. While online services in North America do not appear to enjoy a great store of consumer trust\(^\text{25}\), users also seem not to see great harms lurking in retention periods that are too long or information-sharing practices that are too loose. Outside a vocal privacy constituency in the US and an active human rights community in Canada, a “right to be forgotten” seems to be a murky concept for many web enthusiasts. A good many people might well ask: why would anyone ever \textit{want} to be forgotten?

\section*{H. POSTSCRIPT — MISCASTING THE LIBRARY AND FORGETTING}

Two final thoughts, one on libraries, the other on the function of forgetting and how we might conceive of each in an online age. Libraries as specific sites have a special place in our collective conception of culture. We hold them with a reverence and respect that might also be afforded places of worship. These are complex associations, as with any institution, and are part memory, part myth, part hope.\(^\text{26}\)

But, once again, that zone of solitude and quiet plainly dissolves any meaningful comparison between the Internet and a library, because online


\(^{26}\) But certainly an aspect of the library’s appeal in our thinking about its place in society is the solace they seem to offer. They are among the few recognized locales left in our culture where one can experience quiet in an environment absent of commerce, be left to think and work at one’s own pace, do so anonymously, and do so without cost. There are very few sites left like this in many communities and this is plainly something to be guarded.
advertising, e-commerce, auction sites and social network platforms have for years dominated the internet experience. Perhaps if the RTBF debate was unfolding two decades ago, in the early Web era, the analogy might hold. Now it is dated, and worse, misleading.

And as to the function of forgetfulness, for not keeping everything forever, for placing some rational limit on what information is retained, our greatest poet and philosopher upon the library-as-ideal covered this ground chillingly. In Borges’ *The Library of Babel* (1941) we are confronted with the image and hubris of keeping information for its own sake, in perpetuity, where he imagined a mythic and endless archive, floor after floor, wing after wing, filled endlessly with books capturing every possible iteration and arrangement of every word and letter. It was complete, to be sure — in the story its administrators and librarians cannot find its beginning or end — but this arbitrary completeness is what also renders its collection inhuman, incomprehensible, and ultimately, useless.27

In this regard, whether it is called a “need to forget” or an ethic of erasure, organizations and institutions are not very different from people. They cannot retain and remember *everything* — not if they wish to stay in a meaningful sense human. And just like people, what they ultimately choose to forget, to let go, tells you far more about their humanity than anything they ever claim to know.

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27 This was meant to be a parable obviously about the limits of understanding and knowledge — but there is also a lesson of humility there for any organization or institution based on the acquisition and ordering of information. That one cannot proceed blindly at the act of collection to the detriment or indifference of human concerns — because what precisely becomes the end of such an endeavour? Whose interests are served and furthered, when individuals plead for assistance, pardon, forgiveness in a way, only to be coldly rebuffed? What good is advanced? This has not, of course, kept it far from the imaginations of virtual librarians, and the story itself has spawned its own imagined model online: See Library of Babel, online: <https://libraryofbabel.info/>; see also Kate Bernheimer and Andrew Bernheimer, “Fairy Tale Architecture: The Library of Babel,” *Places Journal* (December 2013), online: <https://placesjournal.org/article/fairy-tale-architecture-the-library-of-babel>; Alison Flood, “Virtual Library of Babel makes Borges’s infinite store of books a reality — almost” *The Guardian* (4 May 2015), online: <https://www.theguardian.com/books/2015/may/04/virtual-library-of-babel-makes-borges-infinite-store-of-books-a-reality-almost>.