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## Speculative Collections and the Emancipatory Library

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## **Keywords**

digital libraries, Afrofuturism, temporality, speculation, agency

This is the lightly edited text of an October 2016 keynote talk, delivered at the Hazen Symposium, a Harvard University gathering on the future of academic library collecting. A video and transcript of the presentation is available at <a href="http://nowviskie.org/2016/speculative-collections/">http://nowviskie.org/2016/speculative-collections/</a>

Reproducibility. Openness. Transparency. Rationality. Interoperability. And an orientation towards interdisciplinary problem-solving. Mine is a non-exclusive list, to be sure, but you may recognise it as one accounting of the values that shape data management in the sciences and social sciences, and underlie the creation of collections, interfaces and infrastructure in so-called 'data-driven' fields. They have their problems of positivism, these values—but I will risk the ire of friends to say that, taken together, the shared values of open science represent one quality I find disappointingly, maybe even *irresponsibly* absent from digital library interface design and collections-building.

They represent a forward-looking temporal orientation. And I think we feel the absence of that orientation now, in our presentist mode of library collections-building—in which the balance has tipped in many institutions from the development of carefully curated long-term holdings towards the renting of transient digital content. While administrative imagination slowly catches up to the logic of the network

It has become the necessary project of many in the library and information science community (cited later in this talk) to demonstrate how underlying assumptions of neutrality and universality embedded in the values I list here—and therefore in our practices of selection and description, our design of search mechanisms, and even in our libraries' policies and services—are in fact decidedly *non*-neutral expressions of dominant, sometimes oppressive ideologies.

(Dempsey, 2016) and we develop collective approaches that might mitigate attendant loss (Chilton, 2016), local pressures move inexorably in, training our attention on *contemporary*, not future needs: on meeting requests—as we say—"—'just in time'. Beyond the rare book room, libraries have left the era of collecting speculatively, 'on spec.'— They are are decidedly past, that is, being able to hold an image of themselves as unstuck in time, of libraries on the long tail, libraries with a far-future reach—in which we invest in and gather materials with no immediate application or measurable value to use.

Please do not misunderstand. I do not propose that we adopt the values of open science wholesale. It will be a cold day in hell when 'reproducibility' takes hold in the liberal arts—and 'openness' itself has different valences and dangers across communities and fields. Instead, I suggest that we consider the *cumulative effect* of underlying value sets like those I have named *in terms of their temporal orientation*—the degree of forward-looking-ness and open-endedness inherent in the concepts we hold dear—and what that means for the systems we build. How might we articulate cultural heritage values that help us attend to the liberatory potential of humanistic digital libraries—and to freeing up the unrealised, multiple, creative trajectories that mostly rest too latent in them?

My argument builds on an intuition that digital humanities collections—archival and otherwise—are much more likely to be taken by their users as memorialising, conservative, limited and suggestive of a linear view of history than as problem-solving engines, branching, generative and non-teleological. *This is a design problem*. We are building our digital libraries to be received by audiences as lenses for retrospect, rather than as stages to be leapt upon by performers or co-creators of future histories. In other words, they are not the improvisational platforms they should be: spaces for projection, planning, performance and speculation. Whether we are discussing born-digital records or historical documents and artefacts that have undergone the phase-change of digitisation—once they are online, I do not want merely *special* collections anymore; I want speculative ones.

If it is true that we foster passive retrospect over active prospect in collections-building and the design of our digital libraries, it presents a serious, practical problem. This is because, if we mean to address the grand challenges of the 21st century, we have a pressing need for humanistic knowledge and patterns of work to interweave more fully with scientific understanding and practice, and for both to be opened to a vastly wider array of people who can apply their various lived experiences and intellectual perspectives—and their future- and freedom-oriented turns of mind—to the problems we share.

That said, it is not as if speculation is wholly absent from the digital library enterprise. Uncertainty is the pre-existing condition of 21st-century librarianship. We reshape our inherited ontologies, platforms and patterns of information access and control at a moment of extreme unpredictability and rapid technological, social and environmental change. We have begun to pay an overdue extinction debt, a toll for carbon use in this, our 200-year technology boom, which is being taken in the alarming disappearance of plant and animal species. We face political instabilities, which will only increase with globalisation and environmentally driven human migration. Refugee crises and famine will intensify under climate change, along with genocide, war and domestic extremism and strife. Libraries and museums grapple with the destruction of both tangible and intangible cultural heritage that attends such change.

All this suggests one line of opposition, already, to my appeal for more speculative collections. Perhaps, given such a level of disruption and shock, you are prompted to wonder—with media archaeologist Wolfgang Ernst (2016)—whether 'archival *resistance* against change is indeed a virtue':

What used to be sacred space, secluded from public insight ... is now directly wired to the communications circuit of the present. The archive loses its temporal exclusivity as a place remote from the immediate present ... With increasing mobility and acceleration, should we rather value the immobile archive for its time-resisting virtue?

However, even if we wanted our archives only to sit still and look back, we would have to prepare the digital knowledge infrastructures that surround them to operate under uncertain and fast-changing conditions. I mean this in a most straightforward and practical way. Are our collections sufficiently accessible, data-minable, documented and linked? Are they resilient, redundant, well-stewarded and robust? Are we *adequately imagining* far-future conditions as we put them together, including conditions of resource-scarcity and decline?

This is *not* the kind of pragmatic future-orientation I will reflect on here, but it is the one that has rightly consumed most of the energy and imagination my own communities, at the Digital Library Federation and National Digital Stewardship Alliance, have for their work. Instead, it is that word—*imagination*—that leads me to the conceptual and emotional issues at the heart of my talk: to design problems, to

<sup>2 &</sup>quot;Extinction debt" is a technical term in the environmental sciences as well as a transactional promise: all evidence suggests that the 6th great mass extinction of life on this planet is well underway—though uncertainties as to its impact on our own species remain. See Tilman et al.

problems of mission and affect and agency. I will return to some pragmatism at the end, but will start with ideas that are squishier.

Are we designing libraries that *activate imaginations*—both their users' imaginations and those of the expert practitioners who craft and maintain them? Are we designing libraries emancipated from what, as I will shortly demonstrate, is often experienced as an externally imposed, linear and fatalistic conception of time? Are we at least designing libraries that dare to try, despite the fundamental paradox of the Anthropocene era we live in—which asks us to hold unpredictability and planetary-scale inevitability simultaneously in mind? How can we design digital libraries that admit alternate futures, that recognise what should be their users' most fundamental freedom: to construct their own, independent philosophical infrastructure, to escape time's arrow and subvert, if they wish, the unidirectional and neoliberal temporal constructs that have so often been tools of injustice?

All these concepts stem from theory and practice in Afrofuturism and other forms of speculative art and design, from concepts of kairos and temporal modelling, from the Caribbean 'otherwise', a striving towards 'impossible archival imaginaries' and 'usable pasts', and from emancipatory research, a notion of 'archival liveness', and a feminist ethic of care: ideas and fields I will draw from—if only telegraphically, in the time allotted here—as I offer preconditions for humanistic digital libraries that might, as C. P. Snow (1959) once said of the community of scientists, *hold the future in their bones*.

In 'Rethinking research library collections', theorist-practitioner Dan Hazen (2010) discusses the 'exuberantly expressive' new modes of both authorship and authority he saw emerging in the digital age. 'Libraries', Hazen (2010) wrote, 'are on uncertain ground as they engage with this fractious, seductive, alien, and essential universe' (14). This line resonates beautifully with concepts from Afrofuturism—the fractious, seductive, alien and essential cultural and aesthetic movement that first set me on this line of inquiry.

In his introduction to *The Last Angel of History*, a brilliant 1995 documentary on Afrofuturist art and philosophy, filmmaker John Akomfrah tells two brief tales.<sup>3</sup> The first is that of legendary singer and guitarist Robert Johnson, who sells his soul to the devil at a crossroads—not in exchange for the simple

The clip I showed at the Hazen Symposium is available here: <a href="https://www.youtube.com/watch?v=iYe\_nj7xfQM">https://www.youtube.com/watch?v=iYe\_nj7xfQM</a>—also linked and discussed in an earlier, brief presentation, 'Everywhere, Every When', which treated Afrofuturism in the context of media archaeology and anti-racist approaches to digitisation and digital library design: <a href="http://nowviskie.org/2016/everywhere-every-when/">http://nowviskie.org/2016/everywhere-every-when/</a>

musical gift that is usually referenced in this story, but for what Akomfrah figures as the 'Black secret technology' of the blues. Next, he sets a 'flash-forward' scene, 'two hundred years into the future', in which 'another hoodlum, another bad-boy scavenger poet-figure' called the 'Data Thief' is given a mission and a clue. If the Data Thief can locate Johnson's crossroads and conduct an archaeological dig there, excavating and reassembling buried 'techno-fossils', he will be able to find a hidden 'code'. Once cracked, with the help of a single clue, the code will provide 'the keys to your future'. The clue? 'Mothership Connection'.

It is important to note that both the evolving music that is evoked—'the blues begat jazz, the blues begat soul'—and the fragments of the past that are to be discovered archaeologically by the Data Thief are all figured not as pop culture or 'the arts', or (as is common in collecting institutions) as 'our shared history', but as an *active technology*. In other words, cultural heritage—*this* cultural heritage (like Akomfrah's place-based emphasis: '*this* crossroads'), even when excavated in the far-off future—will never be something the initiated passively encounter (Akomfrah, 1995). Those possessed of a Black secret technology are not limited to simple playback. Every phonograph record becomes scratchadelia—vinyl for the scratch-artist, the DJ at the club (Fintoni, 2015). We are discussing playable archives, simple records that *themselves* become instruments—*a truly usable past*.4 In other words, the archive becomes the instrument. Inherent in Aftrofuturism is an orientation towards past culture as future-oriented technology: codes to crack, tools to use, and collections to transform.

Now—like Akomfrah—let us skip forward in time, before we return and 'fill in' the middle. Rasheedah Phillips, a brilliant lawyer and community organiser, is the artist and thinker behind projects called *Black Quantum Futurism* and *The Afrofuturist Affair*. She is also a science-fiction writer, frequent collaborator with musician Camae Ayewa (Moor Mother) and the author of an important entry on the word 'future' in a new edited collection of *Keywords for Radicals*, a book about 'the contested vocabulary of late-capitalist struggle' (Phillips, 2016). Recently, Phillips offered a workshop at the Philadelphia storefront that has become her group's experimental 'Community Futures Lab'. This place blends grassroots, activist community archiving with science-fiction imaginings towards the design of alternate futures (Kim, 2016). It specifically works to document and resist forces of gentrification and displacement in North Philadelphia to create counter-imaginings:

<sup>&</sup>lt;sup>4</sup> I draw this idea from music critic Kodwo Eshun's *More Brilliant than the Sun*, the book that blew my tiny mind—soon to be reprinted by Verso Books; highly recommended.

Join us as we consider what technologies are practically and readily available to us to help shift/adjust/manipulate/augment/enhance our experiences of space—time at will. *Black Quantum Futurism* is exploring and developing temporal technologies that are more beneficial to marginalized peoples' survival in a 'high-tech' world currently dominated by oppressive, fatalistic, linear time constructs. (Community Futures Lab flyer, 2016)

You will not find a clearer statement of a problem and a need. Penn scholar Deborah Thomas (2016) reinforces the necessity for temporal reconception articulated in a recent article in Anthropological Theory, called 'Time and the otherwise: Plantations, garrisons, and being human in the Caribbean'. Thomas (2016) catalogues ways in which 'blackness is foundational to modern temporality', and how what she calls 'moments of exceptional violence' in the Black Atlantic (past and present, emergent from cyclical patterns of violence) make more legible those subjective experiences of time that can challenge dominant narratives of causality. This explains why, as she points out, Caribbean philosophers have long been drawn to insights about nonlinearity and temporal entanglement from theoretical quantum physics. An 'erasure of foundational violences', Thomas writes, 'becomes the tool through which inequalities are reproduced and *made to seem inevitable* in the contemporary period'. This is 'generated, in large part, through a constant insistence upon the supremacy of a concept of time rooted in linearity, progressive teleology, and a tendency toward perpetual improvement'. Yet it is an ideology that is not 'seamless' or easy to maintain in the face of trauma, and which, particularly in the 'prophetic redemptive tradition ... [of] radical black politics in Jamaica and the Americas ... opens the possibility of unforeseeable and unpredictable futures'. Thomas concludes by asking: 'How do we mobilize a transformed apprehension of temporality ... toward the project of repair?'.

In other words, what would we change if we *took people at their word* when they tell us there is something wrong with the temporal dimension of this world of records and histories we have designed for them: That we need to work against the implicit sense our Enlightenment interfaces provide? That the situation of the present is the only possible conclusion of the accumulated evidentiary data of the past?

Maybe the best way for the digital library community, in particular, to help break the sense of fatalism, inevitability and disaffection from the historical archive that dominant narratives can provoke is to take seriously the Afrofuturist notion, drawn from Kodwo Eshun (1998) and John Akomfrah, of cultural heritage not as *content to be received* but as *technology to be used*. How might we position digital collections and digital scholarly projects more plainly, not as statements about what was, but as toolsets and resources for *what could be?* 

A lot has been said about Afrofuturism. I think I first heard [the word] in John Akomfrah's documentary *The Last Angel of History* ... I watched it and I thought, 'What does it mean to me?' I went to a lecture by Kodwo Eshun ... [who] was talking about Afrofuturism as ... poeticising the past. That you recontextualise it, and mould it in a way that gives you a power over history. I like that sentiment. It's essentially this Sun Ra philosophy that I'm really into: the fact that communities that have agency [are] able to form their own philosophical structures.

—British Jazz saxophonist Shabaka Hutchings (cited in Smith, 2016)

Communities that have agency are able to form their own philosophical structures. This idea should galvanise digital cultural heritage work today. Groups our institutions have relegated to 'subaltern' positions must be able—not simply to access their own content in archival and library systems, and not merely to control access to it (as radical as that idea may be in some circles)—but to set the very terms for the infrastructure itself, actively configuring classification systems, search-and-discovery interfaces, and visualisation tools in our shared digital libraries to express independent theories of the world: the world as it is for them, and the world as it should be.

For examples of work in this direction, I look to content-management tools focused on indigenous intellectual property, like Mukurtu, or to open-ended, multi-vocal, spatial and geotemporal platforms, like HistoryPin, or the emerging Mbira system from Michigan State. Its seeds can be found deep within the theory and rationale for the geotemporal interpretive tool, Neatline, at the University of Virginia Scholars' Lab. Notably, these projects are led by anthropologists, archaeologists and narratologists—not primarily by archivists or librarians.

So, where are digital library developers in all this? Our broader community of practitioners is, in some sense, *midstream* in its shift from over-reliance on vendor-provided interface and content-management 'solutions' to a willingness to invest in open-source, community-built platforms and to foster a more complex set of interrelations among developers and their partners and publics. I view this shift as the necessary precursor to what I am really arguing for: the placement of *intellectual and material support* behind design experimentation to help us better understand, and ultimately increase, community agency in our digital libraries.

You must own your own infrastructure before you can even *think* about using it to express the vital presence or historical lack of agency embedded in your archives—and before you can take one step toward affording agency to the people whose belongings have become your 'collections.' You must own your own infrastructure before you can give it away—before you can open avenues to communities that

wish to use *their own* digitised and born-digital materials to craft alternative futures and autonomous philosophies of the world.

Afrofuturism, as an artistic and aesthetic practice, dates to the mid-20th century, with much deeper roots in 19th-century Black speculative fiction, including the work of W. E. B. Du Bois and Martin Delaney. One of its driving questions was distilled in the mid-1990s, in an essay by cyber-culture critic Mark Dery (1994): 'Black to the future'. The question is, 'Can a community whose past has been deliberately rubbed out, and whose energies have subsequently been consumed by the search for legible traces of its history, imagine possible futures?'. Dery addressed this by interviewing pioneering science-fiction authors and intellectuals (Tricia Rose, Samuel R. Delaney, and Greg Tate), who reflected on a literary landscape in which writers like Octavia Butler loomed large. However, they also spoke to the elaborate performances of Afrofuturism's early *musical* practitioners—performers like George Clinton, whose glowing flying saucer descended from concert-hall rafters to the significant tune of 'Swing Low, Sweet Chariot'.5

Further, they talked about the famous Sun Ra and his jazz Arkestra. (Again, a ship, an ark.) Ra's performance conceit—hardly ever dropped—was that he had returned to Earth from an abduction to Saturn, reborn as what Kodwo Eshun (1998) calls an 'African-American alien musician'. Sun Ra was a saviour figure, on a mission to teleport his people, physically, through the medium of jazz vibrations—and not just spatially but temporally—to an 'altered destiny', the alternate timeline they would find on a new and better world (Ra, 1974; Zuberi, 2015).

There have been Afrofuturist strains in hip-hop and techno and R & B. Traces of it are visible in mainstream artists (even Michael Jackson or Prince)—but I particularly recommend the work of 'electric lady' Janelle Monáe, who leads androids to freedom, and that of a little-known, now defunct Detroit-based techno group called Drexicya (Eshun, 2011; Pulliam-Moore, 2016). This group's sub-aquatic revisionist history about a futuristic Black Atlantis—its backstory—begins in horror, with 'disruptive' pregnant mothers in labour in the Middle Passage: mothers who, thrown overboard, drowned; babies who mutated, breathed water and lived. Even in its exuberance—as it imagines alternate destinies and divergent timelines, turns slave ships into motherships and alienation into salvation—Afrofuturism never loses sight of its origin in trauma and loss. Most especially, it never forgets its archival *aporia*: gaps and

<sup>&</sup>lt;sup>5</sup> That's your "mothership connection," by the way; the P-Funk Mothership is now on view at the new Smithsonian Museum of African-American History and Culture.

uncertainties that open possibility even as they hurt. *Can* a community whose past has been rubbed out, imagine alternate futures?

This brings me to the 'impossible archival imaginary', a term from a recent article by Anne Gilliland and Michelle Caswell (2016). The concept builds on earlier work in which Caswell (2014) offered grassroots archives as sites where global, diasporic groups, brought together by shared elements of identity and as independently as possible from institutional control, could undertake what she called 'the messy business of contesting, renegotiating, and redefining collective memory of the past'. Her focus in that first piece was on *actual* archives.

Conversely, the 'impossible archival imaginary' centres in on the 'absent or unattainable archive'—records that do not exist. This may be because they have gone missing, been destroyed or spirited away, or because they were never real in the first place, no matter how much we wish they were. 'Imagined records' exert a powerful influence over communities and help define both reality and possibility in an affective landscape of shared imagination, offering important 'counterbalances and sometimes resistance to dominant legal, bureaucratic, historical and forensic notions of evidence that so often fall short in explaining the capacity of records and archives' to move us. Gilliland and Caswell (2016) want to counter 'dominant strands of archival theory and practice [that] maintain an un-reflexive preoccupation with the actual, the instantiated, the accessible and the deployable—that is, with records that have ... evidentiary capacity' (55). Instead, they show how 'differing imagined trajectories of the future' can emerge from records both present in and absent from the past.

To offer one among their many provocative examples, consider how documentation works in the petition formulated by the grieving parents of Michael Brown after Ferguson, a petition that police officers be fitted with body cameras. This implies 'a new category of imagined record', Gilliland and Caswell write, 'the record that need-not-be-created because its very possibility prevents the brutality of its creation'. The what-if of absent documentation—in this instance, the 'nonexistent imagined record of Brown's murder' that *might* have been captured, had a camera been in place, creates an alternate universe, a temporal paradox, a speculative timeline. It has 'an envisioned aspirational trajectory ... to bring about a more just future'.

Gilliland and Caswell's (2016) basic case is 'that archival theory and practice can no longer afford to ignore ... phenomena of the imagination' and that 'complicating the link between record and event ... opens up archival thinking to non-dominant and pluralist epistemologies'. It is an argument akin to one

made by another pair of archivists more than a dozen years before—Wendy Duff and Verne Harris, who advocated for the development of new standards in a 2002 article on deconstruction, narrative, futurism and archival description: 'Stories and names'. 'Our dream', they wrote, 'is of a descriptive standard which is liberatory rather than oppressive, one which works as a touchstone for creativity rather than as a straightjacket. What would the attributes of such a standard be?' (284).

For Duff and Harris (2002), a liberatory descriptive standard:

Would not position archives and records within the numbing strictures of record keeping ... which posit 'the record' as cocooned in a time-bound layering of meaning, and reduce description to the work of capturing and polishing the cocoon. (284)

'In contrast', they write:

A liberatory standard would... posit the record as always in the process of being made, the record opening out of the future. Such a standard would not seek to affirm the keeping of something already made. It would seek to affirm... open-ended making and re-making. (284)

There is currently a small amount of digital library interface experimentation around these concepts. It is of extremely high quality—but there is simply not enough! In the interest of time, I will merely state that I particularly admire projects by my Australian colleagues Tim Sherratt (2015), who has long worked against the grain of existing digital cultural heritage platforms, and Mitchell Whitelaw (2015), who both creates and theorises 'generous interfaces'. Whitelaw is among several authors of a relevant new piece by Tom Schofield et al. in *Digital Humanities Quarterly*, on the concept of 'archival liveness'. Schofield and his co-authors (2015) outline attempts to bring open, broadly participatory, and temporally aware design and visualisation to archival collections—not as something enabled by or resulting from expert metadata creation, but rather happening synchronously with processing by archivists and cataloguers, and in community with end users.

I rush to an end. Grappling—in terms of selection, arrangement, description and delivery—with the imaginary, with process, with time as situated kairos rather than impersonal chronos (Nicholson), with users as co-creators: all these things would bring us closer to having digital libraries and archives that permit speculation and maybe not only *demonstrate* but help to *realise* greater community agency in the context of shared cultural heritage. If it must be the library world's collective argument now, that research institutions can no longer afford to purchase and house *truly* far-future-oriented collections, collections full of content no-one is asking for at present—I would like to suggest that imaginary archives likely come cheap and do not take up much space.

Could digital libraries emancipated from time's arrow, geared towards community imagination and control, and looking forward rather than back become *systemic* instruments of liberty? We know from emancipatory research theory (the best of which I have found in nursing and disability studies) that people make *themselves* free; scholars and technologists do not do that. So, how can we set our digital libraries up for community-driven transformation into the 'independent philosophical [infra]structures', that Afrofuturist thinkers cite as a mark of freedom? In pragmatic terms, what about the trust and the technology?

Search itself (despite acknowledged problems of 'ungenerosity') is a technical paradigm that seemingly works against the hegemony of the pre-fab, linear timeline interface or the time-ordered browse—if only our search engines' settings could be opened to end users in ways that are less about filtering shared, least-common—denominator results and more about crafting wholly new avenues for discovery. A popular open-source, public-access catalogue (or OPAC) system, Project Blacklight, was designed with this in mind—intended (at least its early days when I was involved) to allow even non-technical librarians and user communities to tweak relevance ranking and control fields that should and should not be indexed—effectively, opening up the black box of search. That is one possible arc of inquiry.

However, work by Safiya Noble (2018), Frank Pasquale (2015), and Bess Sadler and Chris Bourg (2015)—among others—demonstrates how sharply inflected and downright biased deeply underlying search algorithms can be. Even if a project like Blacklight could be taken forward in its most open, community-configurable direction, there remain boxes within our black boxes, like nesting dolls. Lest I paint too rosy a picture of the future for open, malleable, community-based infrastructure in general, you only have to view an experiment like 'Tay' to understand how difficult this work will be. Tay was the Microsoft chat-bot who was released to train herself in conversational understanding through open interaction on Twitter, and who—based on what people taught her to say—went from dumb sweetness to full-blown violent white supremacy in less than 24 hours (Bright, 2016). They had to take her down.

Noble (2016), in an important new paper called 'A future for intersectional black feminist technology studies', urges LIS scholars to support counter-narratives and the creation of better tools through continued, rigorous, multivalent analysis of our underlying infrastructure—to help the cause by maintaining 'feminist pressure on the development of technologies, in the context of material consequences that diminish any liberatory possibility'. Her advice is to concentrate especially on intersectional analysis in technology: areas where overlapping oppressions throw power differentials into sharp relief. As an area ripe for just that kind of Noble analysis, I highlight technologies of digital

surveillance—how watchful analytics permeate all our systems and pose a huge challenge to developing and maintaining the kind of community trust that is a baseline requirement to working, as overwhelmingly white institutions like libraries, in partnership with (or service and productive subordination to) minoritised groups.

I hope you have a sense, from the theorists, artists and practitioners cited, that the issues raised are worth consideration and an approach from multiple angles. To approach the problem of temporal orientation in our digital cultural heritage interfaces in a humanistic—not to say humane—way, we need archival theory and practice, literary and historical scholarship, the intersectional analysis of built systems. We need community-based activism and the arts; we need experiments in visualisation and imaginative representation, including *the picturing of absence and wishes*. We also need more basic theorising—coupled with concrete design experimentation—of what liberty, agency and temporal orientation can mean in complex digital library systems.

Finally, I think we need to begin to articulate a shared list, similar to the non-exclusive set of 'open science' values outlined at the beginning of the chapter, along with touchstone concepts for working in *speculative collections*—ideas we can hold on to, to keep ourselves focused and honest and capable of collaboration across institutional and disciplinary and town-gown lines. How would we start such a list of values for future-oriented, humanistic digital libraries? I will suggest just a few: I value subjectivity, permeability, possibility, agency, hope and respect.

To conclude, I want to return to the question anthropologist Thomas (2016) let linger at the end of her essay—a question that, in our context, presumes a level of success for this enterprise. 'How', she asks, 'do we mobilize a transformed apprehension of temporality toward the project of repair?' (194). Thomas is discussing repair in the social and cultural sense: repair as healing and reparation. It is difficult for me to consider this question without also thinking of library and digital knowledge infrastructure: systems we may need to correct, patch and maintain (in Steve Jackson's [2014] sense), and content that we want to migrate and preserve. I cannot answer her question, yet. However, I know that repair itself is not a backward-looking activity, even if that is what is suggested by everything in our Western technology cultures of the new, of planned obsolescence and continual innovation.

An argument for future-oriented, humanistic digital libraries is not an argument against maintenance and repair, or appreciating the past and honouring and protecting what our archives house today. Instead, it is a suggestion that we might use the active technologies of our digitised cultural heritage better: to

transform our shared and disparate 'apprehensions of temporality' in a way that links prospects for the future with an ethic of care for the past—and for the people who will always live in the spaces in-between.

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