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Making-to-be: Documents, Facta, and Material-Discursive Agency

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The field of document studies has a congenital and potentially terminal case of dualism that has separated materiality and meaning. I believe there is a cure.¹

The Pendulum of Materiality and Meaning

What makes the two aspects of materiality and meaning so difficult to reconcile in document theory?

The *meaning* of a document seems unrelated to its *materiality*. For instance, the term ‘birth certificate’ (see fig. 1) can mean a specific paper document, a certified paper copy of that document, a certified digital image of either of these paper documents, or even a non-paper document that exists in a database. We use the term *birth certificate* to indiscriminately refer to all or any of these material situations at once. This tendency to indiscriminately reference documents causes problems for document theory by occluding a thorny theoretical problem.

The theoretical challenges caused by this phenomenon of naïve, indiscriminate reference are further compounded by a kind of subtlety stemming from its pervasiveness. When asked what a birth certificate *is*, for instance, almost everyone will think of a paper document: a singular, unproblematic, physical object without inherent interest. Simultaneously, fig. 1 can evoke the non-ambiguity of this association, even though it’s an *image* of a birth certificate. Not even, actually: this is an *image* provided by the Texas Department of State Health Services as an *example* of a Texas long-form birth certificate, rather than an image of an *instance* of one that could be seen as a surrogate. Yet, outside a few corners of the academic literature, “fig. 1 is a birth certificate” is a statement taken to be unproblematically true.

One approach to mitigating this discrepancy is that the idea that documentality is relational: documents are those things *used as evidence*. M. K. Buckland’s “Information as thing” (1991) influentially extended Briet’s relational account of documents, thereby relieving document studies of some major problems it had taken on. As recently reviewed by Day (2023), this widely influential neo-documentalist move, broadly, “stresses the functional processing of identity and agential power by information systems.” (Day, 2023, p. 8)

A dissatisfying consequence of accounting for phenomena of human sociality with documents is that it’s difficult to retain any significant role for individual agency.

¹The deliberately provocative tone of this sentence and what follows is intended to be generative rather than elide the many important scholars working on precisely this problem. I elide alternative, complementary, or even consonant attempts at deriving a cure to this malady to focus upon enunciating a research program. Many would agree that, regardless of their effectiveness, other treatments or potential cures for documental dualism are insufficiently adopted. I thus view all efforts at addressing this problem, including the present contribution, as inherently aligned. I am grateful to an anonymous reviewer for prompting these pseudo-prefatory remarks to clarify the spirit of what follows.

STATE OF TEXAS
DEPARTMENT OF STATE HEALTH SERVICES
VITAL STATISTICS

TEXAS DEPARTMENT OF STATE HEALTH SERVICES - VITAL STATISTICS
DEC 19, 2021
STATE OF TEXAS
CERTIFICATE OF BIRTH
BIRTH NUMBER

1. Child's Name: Stephanie Schaefer
2. Sex: MALE
3. Date of Birth (mm/dd/yyyy): 11/02/2021
4. Place of Birth - County: BEXAR
5. City or Town (do not include zip code, year printed on it): SAN ANTONIO
6. Time of Birth: 01:38 PM
7. Date of Birth (mm/dd/yyyy): 11/02/2021
8. Hospital: NORTH CENTRAL BAPTIST HOSPITAL
9. Name of Doctor or Birthing Center: MEGHAN CONTRERAS
10. Address: 620 MADISON OAK DRIVE SAN ANTONIO, TEXAS 78228
11. Signature and Title: MEGHAN CONTRERAS, State Registrar

12. Mother's Name Prior to First Marriage: STEPHANIE SCHAEFER
13. Date of Birth (mm/dd/yyyy): 11/02/2021
14. State: TEXAS
15. City, Town or Location: SAN ANTONIO
16. Street Address or Rural Location: 620 MADISON OAK DRIVE
17. Date of Birth (mm/dd/yyyy): 11/02/2021
18. Signature of State Registrar: [Signature]

THIS IS A TRUE AND CORRECT COPY OF THE RECORD AS REGISTERED IN THE STATE OF TEXAS. ISSUED UNDER THE AUTHORITY OF SECTION 191.051, HEALTH AND SAFETY CODE.

ISSUED: DEC 29 2021

WARNING: THIS DOCUMENT HAS A DARK BLUE BORDER AND A COLORED BACKGROUND.

ANY ALTERATION OR ERASURE VIOLATES THIS CERTIFICATE.

Figure 1. The Texas long form birth certificate. Material? Meaningful? Agential? Agential?

Or, at least, additional theoretical work is required to do so.² As salutary as it has been for reclaiming *things* as information, analyzing documents in terms of how they “become evident” (as Day reads Frohman Day, 2023, p. 9) renders their materiality as what Star (1990) might call a *residual*.³ It’s included, but only in the negative space of analysis of documentality.

A potential response to *this* problem has been to foreground the materiality of documents. Even if *meaning is use*,⁴ the material characteristics of documents can be shown to shape the possibilities of use, potentially offering an account of each. Notwithstanding many sophisticated approaches (e.g. Dourish, 2017; Thomer & Wickett, 2020), unimaginative (and occasionally atheoretic) interpretations of the

²An adjacent intellectual tradition that has wrestled with this problem is media studies, which broadly traces its lineage to Marshall McLuhan (e.g. McLuhan, 1964. See Guins, 2014, for a 50-year retrospective from a visual studies perspective). There may be relevant progress to survey from these efforts, which I’ve not done here. Regardless, McLuhan’s intellectual lineage has occluded the materiality of one or both of the medium and the message for large portions of its history (notwithstanding the relatively recent material turn; see Coole & Frost, 2010).

³Gorichanaz and Latham also foreground becoming in their *document phenomenology*. This is discussed further below.

⁴I’m referring here to the commonplace often attributed to Wittgenstein rather than the other, too-seldom considered insights surrounding this oft-pulled phrase from his *Philosophical Investigations* (1953).

materialist project in especially *digital* documents have been used to condone a focus on of *users* and *usability*. This suspiciously convenient outcome for human-computer interaction researchers and usability professionals has occurred over and despite the objections of proponents of material approaches to the digital (Ackerman, 2000; Dourish, 2006; Khovanskaya et al., 2017).⁵ New materialist perspectives on documents and information systems emphasize that they can “push back” on the putative meaning-makers in ways that only a material perspective can reveal. The more extreme versions may claim that human meaning is only an epiphenomenon over a nonhuman material substrate. If materiality is subtly controlling meaning, and human meaning itself is suspect, it seems that the solution of discarding anthropocentrism makes humanism impossible.

In sum, there’s a difficult problem connecting the meaning and materiality of documents. Looking at documents in light of their evidentiary qualities foregrounds meaning at the cost of a specific role for materiality. This decenters the world from the study of documents. Foregrounding materiality decenters the human. While contesting anthropocentrism is a laudable goal critical to many projects of social, ethical, and ecological import (see D. J. Haraway, 2018), doing so without providing reason for needing a concept of meaning leaves document studies rather adrift.

Documents and Agency

The pendulum swings I have portrayed as reconfiguring rather than escaping the problem of document dualism are nonetheless major intellectual contributions towards the problem’s cure. The more sophisticated accounts of *meaning from use* and *meaning-shaping matter* can be simultaneously read as accounts of human and nonhuman agency. Recent work has shown agency-centered inquiry successfully applied in a range of distinct sociotechnical sites (Alirezabeigi et al., 2020; Barrett & Orlikowski, 2021; Jarrahi & Nelson, 2018; Marent & Henwood, 2023; Østerlund et al., 2020; Vosselman & De Loo, 2023; see Niemimaa, 2016, for a helpful overview).⁶

⁵A similar interpretive move is often performed on Wilson’s (1968) concept of *exploitative power*. This is of course no slight to Wilson, whose oft-overlooked *Second Hand Knowledge: An Inquiry into Cognitive Authority* (1983) remains a seminal epistemological study of memory institutions.

⁶Many of these studies are inspired by practice studies, especially Orlikowski’s *sociomaterial* approach (Orlikowski, 2007; Orlikowski & Scott, 2015). Inspired by Barad (2003, 2007), Latour (2007), and Suchman (2007) (among others), these approaches see the social and material as inseparable and thus adopt a methodological principle of seeking the occluded material aspects of social entities and the social practices that continually reproduce the material. This approach is fascinating and is particularly suited to social science of communication, technology, and science in organizations and groups. While this analogous breaking of a comparably persistent dichotomy is related to my project, sociomateriality is not obviously suited to direct application to document studies (or, at least, such a project is at least as much work as I undertake to outline here). I thus exclude it from the present scope.

An agency-based unification of pragmatist and materialist document studies demands a philosophical standpoint centered upon agency, the potential for action,⁷ and upon acts, the realization of agency. The standpoint that provides this is *performative*.⁸ A performative analysis attends to the accomplishment of meaning through action, not (necessarily) the act's theatricality. This approach can be traced to the work of Austin (1962) and has influenced, variously, the work of Barad (2003), Butler (1988), Drucker (2013), and Searle (1976). I have adopted a performative approach to the study of truth, facts, and information in prior work (Hauser, 2023); here I consider *agency*. Agency is the capability or potential for action in general; here I will use it to refer to the capability or potential to take performative action.

Agentic and Agentical Relations

At the outset I introduced a distinction between two concepts for describing agency that will underpin this analysis. The first, *agentic*, refers to the possession or use of agency. An agentic conception of the reader of a document refers to the reader's possession of agency in that interaction. The second concept, *agentical*, refers to the property of providing agency. An agentical conception of the reader of a document refers to the reader's provision of agency to some other agent. The recipient of agency is not specified by this concept: different agentical conceptions of the reader could, for instance, identify the author, owner, or publisher of a document (or all of these) as recipients of agency through the reader.⁹ Finally, I use the term *agential* as a more general description of these or any other configuration of agency.¹⁰

Agentic and agentical agencies are entangled: especially as the complexity of relations increases, the *agent* tends towards a combination of the actor possessing agency and the actor providing agency. The agency of writing, for instance, requires

⁷Barad highlight *becoming* as the core of agency. Action is, I believe, a more widely legible starting point that allows me to not have to introduce and argue for Barad's conception of becoming while preserving a path towards it in future work.

⁸I'll not evaluate other candidates such as actor-network theory here. Nor will I defend the claim that performative analysis is superior to these alternatives. My purpose will be served if I can accomplish the more modest task of demonstrating that it is *suitable* and *sufficient*.

⁹Drucker's treatment of *enunciation*, originally developed in an examination of the tabular spreadsheet (2017), is a promising approach to the effects of agentical documents upon the experience and identity of their human agents, which I don't consider here. See also Chun (2013) on the neoliberal user implied by graphical user interfaces.

¹⁰In addition to the benefits of a term referring to either/both agentical and agentic agencies, reserving agential as a broader category helps avoid confusion with Barad's philosophy of *agential realism* (2007). Barad inspires this approach, especially the conception of entanglement I invoke below, but does not use these terms in this way. This usage is mildly imprecise with respect to the (generally) non-academic concepts of *agentive technology* and *agentive design*, which view technology as an actor instead of a tool, which seems the lesser of available evils.

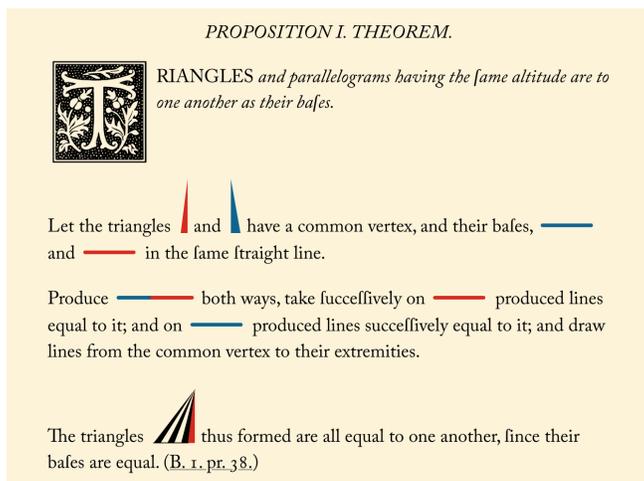


Figure 2. A selection of Proposition I from Book VI of Euclid's elements. This image is a screenshot from "A reproduction of Oliver Byrne's celebrated work from 1847 plus interactive diagrams, cross references, and posters designed by Nicholas Rougeux" (Rougeux, 2023).

an agentic writer and an agential medium for composition. The layered agencies that enable the agency of *writing a book chapter* or *writing a preface* highlight what I'm describing as entanglement even more clearly.

I will argue that documents can be agential, which is widely presumed, and agentic, which is a less familiar claim (one not clearly supported by the examples above).

Performative Materiality: Giving Data, Taking Capta

With a performative analysis data, the given is given *by* some agent. By whom is data given?

Drucker's *performative materiality* (2013, 2017) highlights that humanistic or interpretive approaches to data must be cognizant of the agency of meaning-making. She advances the term *capta* (Drucker, 2011) to memorialize this insight: data, the given, must for the interpretive scholar always become *capta*, the taken. To do any less would be to foreclose upon the reflexivity of method and the humanistic inquiry it has enabled.

Drucker (2013) outlines how performative materiality can scaffold a humanistic intervention in the field of Human-Computer Interaction (HCI), opening space for the interpretation she shows to be foreclosed by the efficiency HCI inherited from engineering.¹¹

¹¹HCI's heritage is also intertwined with that of psychology, particularly psychometrics, in a context of military application of academic techniques and employment of scientists.

The attention to action and agency that Drucker advocates in the humanities is the kernel of a cure for dualism about meaning and materiality in document studies. I endorse Drucker's project and seek to expand it beyond the humanities into science studies and the full scope of documental practices. The occlusion of the agency of taking data as *capta* can be traced to mathematical analysis of empirical data, wherein the 'any given value' of mathematical proof became *the given*. Drucker's argument is that the occlusion of agency is not appropriate to humanistic interpretation. I'd like to expand that argument: nor is occlusion of agency a mathematical requirement or a scientific inevitability. Stated most strongly, this expansion could fully invert the standard picture, revealing agency as core to scientific and mathematical inquiry.

Long before Haraway's modest witness (1996) began to bear enlightened witness, mathematicians were forcefully speaking worlds into existence. Euclid's *Elements* (fig. 2) are filled with acts of creation. For instance, this theorem on triangles is a performative creation: a mathematical action accomplished through language:

PROPOSITION 1. THEOREM.

Triangles and parallelograms having the same altitude are to one another as their bases

It is surrounded and sustained by others: declarative definitions above and that most subtle of mathematical speech acts, *Let*, below (see fig. 2). In Rougeux's (2023) painstakingly-rendered interactive online version of a celebrated 1847 edition of Euclid's *Elements*, new digital agencies emerge: sliders, animations, draggable shapes. The interactive elements, constructed of HTML rather than by rule and compass, that dot the digital version are no *more* interactive than those in any of the multifarious *Elements* of Euclid published through the centuries. Why are we tempted to say so? Why are digital versions colloquially called *interactive* versions? Perhaps, with web browsers ready to hand and rule and compass in short supply, most of us lack the tools to accomplish the agency offered by physical books.¹²

Revealing agency is a powerful tool for document studies. The study of documents has rightly inherited from library science an accountability to the full range of intellectual inquiry. It can likewise hold all fields (including mathematics) accountable for the performance of meaning and the production of agencies they thereby accomplish.

¹²Barad's concept of *intra-action*, denying ontological primacy to agents and objects prior to their relation, offers a clarifying interpretation: a codex containing a version of Euclid's *Elements* is not seen to be interactive because we're unable to accomplish the intra-active relation that would make it recognizable as such.

Limitations and Lacunae

There are, certainly, other promising approaches to unitary accounts of meaning and materiality in documents. Some, like Drucker's performative materialism, are discussed directly above. Others were mentioned in footnotes, and still others were not mentioned. Each of these lacunae are a limitation of this contribution; might a cure exist amongst them?

In lieu of a full answer to this question, I'd like to highlight Gorichanaz and Latham's (2016) *document phenomenology*, in particular, as worthy of deeper consideration than I have given it here.¹³ I use this as an apology of the independent development of diverse approaches to dissolving document theory's indurated dichotomies. Through this example, I seek to demonstrate that unconnected or even seemingly incommensurate approaches to this topic nonetheless redound to mutual benefit.

Gorichanaz and Latham present a method of *holistic analysis* of documents wherein "a document manifests in an encounter between an object and a person" (2016, p. 1129). To do this, they adopt a phenomenological approach drawn primarily from Heidegger's *Being and Time*, augmented for their aims by the work of theorists including Bates (2005), M. Buckland (2014), Carter (2016), and Frohmann (2004). Gorichanaz and Latham identify four types of information (intrinsic, extrinsic, abtrinsic, and adtrinsic) and show how each contributes to a holistic account of documental meaning. They employ a tripartite analysis of "frames" of documental becoming: the document, its parts, and the system(s) in which it is experienced.

There are tantalizing connections between Gorichanaz and Latham's (2016) *documental becoming* and Barad's material-discursive, posthuman, and performative account of becoming as agency. These are, broadly, relationality and a focus on meaning-making as an active process. Like other investigations centered upon the human experience of documents (Carter, 2016; Trace, 2016, 2017), Gorichanaz and Latham's *document phenomenology* employs a relational conception of meaning. This is a fruitful overlap, extending a broader trend towards relational ontology in information studies (Cooren, 2018; Hauser, 2023; Letiche et al., 2022; Santos, 2015). Future investigations of the overlap between experience of documents and sociotechnical performativity is likely to yield important insights, but significant challenges to doing so are apparent. Some are understandable scoping choices: Gorichanaz and Latham indicate that the *meaning-making agent* key to documental meaning-making need not be a person but stop short of accounting for other kinds of agents. Further, it's not clear whether *objects* are possible agents within this framework, as an agential realist approach would suggest. More pervasively, the terminological innovation in this paper draws helpful and well-chosen lines that are

¹³I thank an anonymous reviewer for emphasizing this and inspiring the comments in this section.

not immediately commensurate with a focus upon agency.

These apparent incommensurabilities are likely reconcilable with sustained effort. Gorichanaz and Latham emphasize that their terms *doc* and *doceme* are not mutually exclusive, and the terminological clarity they enable is an important contribution. But, like Marcia Bates's Information 1 (material/energetic pattern) and Information 2 (pattern given meaning) (Bates, 2005), to which Gorichanaz and Latham index *doc* and *doceme*, respectively, neither distinctions nor the clarity they bring can repair the dichotomies they help describe. The concepts of materiality and discursivity that I've used throughout don't accomplish this reconciliation either, of course. Barad's conceptual apparatus for undoing dichotomy, memorialized in the term *material-discursivity*, approaches this head-on. This contribution outlines ways in which this powerful but highly abstract philosophical approach can be applied to document. I contend that *doc/doceme*, Information 1/2, information/document, or other terminological distinctions between materiality and meaning are compatible conceptualizations of dichotomies to be overcome. They may, however, specify drastically different starting points and demand different means of progress. Regardless, any path oriented towards unitary conceptions of documents can be rightfully seen as convergent, even when the modes or directions of progress diverge.

More importantly, the apparent terminological incommensurabilities are the most promising prospects that might motivate such an undertaking: an account of how (Barad's) agency and performance can be mapped to intrinsic, extrinsic, abtrinsic, and adtrinsic information during meaning-making, for instance, could accomplish a unification of disparate theoretical approaches that far exceed document studies.

Comparative studies of phenomenological and performative approaches are thus a promising area of future study with the potential to weave together several disparate, delicate, and too-often neglected (Gorichanaz, 2017) threads of document theory. Tighter interconnection amongst theoretical approaches with aligned motivations would strengthen the answers to core theoretical challenges that document studies can offer the many other fields that inevitably encounter them in the normal course of inquiry.

Material-Discursive Agency and Documents

I used the agencies of *factmaking* and *truthmaking* in prior work (Hauser, 2023) to explain the phenomenon of *system-dependent truth*: when things are true in relation to an information system. This work can be extended to the study of documents, which in turn suggests productive extensions to the performative account of agency I used to explain system-dependent truth.

NFTs and Documental Making

Non-fungible Tokens (NFTs) have emerged as a provocative thought-experiment in document theory. NFTs are blockchains that mathematically establish digital ownership of some asset, without possession of it.¹⁴ Are they documents? Are they material? Are they processual? What do they mean?

NFTs are both computationally enacted and socially enacted. This might seem to utilize a dichotomy of the technical and social, but their computational and social (particularly economic) enactments can (and must) each be considered as sociotechnical processes. What this distinction of enactments gets us, though, is a clearer picture of NFTs' constitutive agencies.

Human agency accomplishes the computational agency that constitutes NFTs. The computational properties of NFTs are nonetheless material: however encoded, the configuration of digital data that NFTs and other blockchain-based technologies specify for their blocks is a manifold-yet determinate material pattern.

This pattern, however, is only a part of the whole that is the NFTs' meaning. NFTs' relevant properties are their uniqueness and their agential affordances: they can be created, identified, and transferred (sociotechnically in each case: human, code, and computational machinery in close concert).

NFTs, as manifold artifact-process, don't make humans, but can make humans possess agency. The possession of a NFT's key bestows the agency of transfer to its possessor. This agency is a constituent part of other properties, such as ownership, that also depend upon other agencies and can be multiply realized. In other words, a thief who steals a NFT's key is not the NFT's owner, legally, but is its owner pragmatically, in the sense that the owner is the person with the ability to sell something.

The sketch of chained agency here suggests that giving and taking are complexly intertwined in this case. Upon a deeper analysis, we may also discover that conceptions of new agencies are required to appropriately describe and understand the nature of computationally enacted documental artifacts like NFTs. In any case, the centrality of processes, human and otherwise, demands a performative approach to any such endeavor.

Facta, the Made-to-be

The conclusion of this short contribution is that future inquiry in this direction should consider how the agencies, of giving, taking, and making might connect

¹⁴See Grimmelmann (2019) for a philosophical starting point on the broader documental category of blockchain-based documents. Grimmelmann argues that the fundamental ambiguity of so-called "smart contracts" with respect to the world outside a given blockchain has not been thoroughly considered in their design and use.

document theory with explanations of system-dependent truth.

If data is the given-to-be and *capta* is the taken-to-be, these can be seen as two instances of a kind. I call that kind *facta*, the made-to-be. This term serves as a common genus for data and *capta*, admitting them both as theoretical terms and emphasizing their commonalities alongside their differences. Like its children, *facta* is the result of performative agency: data, the given-to-be, is accomplished by the agency of giving-as; *capta*, the taken-to-be, is accomplished by the agency of taking as; *facta*, made-to-be, is accomplished by the agency of making-to-be. The terms *data-facta* and *capta-facta* express the sibling relationship of each and *facta* as their common genus. These hyphenate terms have the merit of preserving the ability to unambiguously refer to prior uses of their terminological components, including Drucker's sense of *capta* (Drucker, 2011) and, within the performative theory of system-dependent truth (Hauser, 2023), situate agencies of *taking as* and *giving as* as specific kinds of the broader agency of *making as*.

Documents are made, by this account, when they are situated as Buckand-Briet evidence: when they are taken as evidentiary. Archives and publication regimes are infrastructures of documental making. But what of meaning? Can meaning be made? In the terms suggested here, is meaning *facta*?

A more thorough argument will take time and study, of course. But I believe there is ample evidence to suggest that a performative account of meaning-making of and through documents is feasible. Indeed, others have begun to explore this: Hennig (2014), for instance, broaches the issue that documents are treated as *authorities* in some cases. This question, left open, suggests a change from an agential (evidence) to agentic (testimony) document agency. Are the agencies of giving and taking, so central to the analysis of system-dependent truth (Hauser, 2023), together sufficient for accomplishing material-discursive meaning in/of documents or will extension of these concepts or even a new conception of agency be required?

If documents and meaning are each made, ignorance of this commonality is the etiology of document theory's (potentially) terminal dualism. A recognition and utilization of the agential dynamics surrounding documents and the meaning made around them could not only cure document theory's dualism but also lead the field towards a more deeply integrated understanding of document acts (Furner, 2019; Smith, 2014).

To preview the questions this inquiry will enable us to address, I conclude with a provocation: if meaning and documents can be made, can they also make? Can they *do*? They are agential; can they also be agentic?

I've offered what I've called making-to-be as candidate term for the complex forms documental agency can assume. The term made-to-be resolves the Latin *facta* into its transitive form (making) but the intransitive (doing) is well within its scope as well. This latter sense of do inherently performative: "To perform, execute, achieve,

carry out, effect, bring to pass.” (Simpson, 2013, “do, v.”: I.4.a.).¹⁵ This fruitful polysemy achieves a productive superposition of agency as potential action and Barad’s (2007) becoming, the core universal agency of agential realism.

The potential significance of such a project for document studies is large. Data in the colloquial sense, which Furner has argued *contains* documents, rather than the other way around (Furner, 2016), could be accounted for similarly. I’ve positioned Drucker’s *capta* as data’s sibling, indicating that the unified account of both that she was disinterested to pursue would nonetheless be a possible, perhaps a necessary, consequence of the material-discursive account of documents a performative approach could yield. Performative materiality (Drucker, 2013) could thereby enrich Barad’s agential realism, yielding a performative material-discursivity suitable for humanistic document studies and feminist science studies alike.

As we come to understand the agential character of documental agency, a material-discursive making-to-be, we will possess an effective treatment for document studies’ congenital and chronic dualism. As the clarity of treatment sets in, I expect a complementary insight to become attainable: that documental agency simultaneously has an agentic character. This documental becoming, if it can be effectively formulated, will be an even more effective treatment for dualism about matter and meaning. With any luck, it may constitute a cure.

References

- Ackerman, M. S. (2000). The intellectual challenge of CSCW: The gap between social requirements and technical feasibility. *Human–Computer Interaction*, 15(2-3), 179–203.
- Alirezabeigi, S., Masschelein, J., & Decuyper, M. (2020). Investigating digital doings through breakdowns: A sociomaterial ethnography of a bring your own device school. *Learning, media and technology*, 45(2), 193–207.
- Austin, J. L. (1962). *How to do things with words: The William James Lectures delivered at Harvard University in 1955* (J. O. Urmson & M. Sbisà, Eds.). Clarendon Press.
- Barad, K. (2003). Posthumanist performativity: Toward an understanding of how matter comes to matter. *Signs: Journal of Women in Culture and Society*, 28(3), 801–831.
- Barad, K. (2007). *Meeting the universe halfway: Quantum physics and the entanglement of matter and meaning*. Duke University Press.
- Barrett, M., & Orlikowski, W. J. (2021). Scale matters: Doing practice-based studies of contemporary digital phenomena. *MIS Quarterly*, 45(1), 467–472.

¹⁵For other intransitive senses of “do”, see (2013, “do, v.”: I.8.a) and, near and dear to my heart, II.iii.33.c.i.

- Bates, M. J. (2005). Information and knowledge : An evolutionary framework for information science. *Information Research*, 10(4), 1–24.
- Buckland, M. (2014). Documentality beyond documents. *The Monist*, 97(2), 179–186.
- Buckland, M. K. (1991). Information as thing. *Journal of the American Society for Information Science*, 42(5), 351–360.
- Butler, J. (1988). Performative acts and gender constitution: An essay in phenomenology and feminist theory. *Theatre Journal*, 40(4), 519–531.
- Carter, D. (2016). Infrastructure and the experience of documents. *Journal of Documentation*, 72(1), 65–80.
- Chun, W. H. K. (2013). *Programmed visions: Software and memory*. MIT Press.
- Coole, D., & Frost, S. (2010). *New materialisms: Ontology, agency, and politics*. Duke University Press.
- Cooren, F. (2018). Materializing communication: Making the case for a relational ontology. *The Journal of communication*, 68(2), 278–288.
- Day, R. E. (2023). Documentation to documentality in the works of michael buckland. *The Journal of Documentation*, ahead-of-print(ahead-of-print).
- Dourish, P. (2006). Implications for design. *Proceedings of the SIGCHI Conference on Human Factors in Computing Systems*, 541–550.
- Dourish, P. (2017). *The stuff of bits*. MIT Press.
- Drucker, J. (2011). Humanities approaches to graphical display. *Digital Humanities Quarterly*, 5(1).
- Drucker, J. (2013). Performative materiality and theoretical approaches to interface. *Digital Humanities Quarterly*, 7(1), 1–43.
- Drucker, J. (2017). Information visualization and/as enunciation. *Journal of Documentation*, 73(5), 903–916.
- Frohmann, B. (2004). Documentation redux: Prolegomenon to (another) philosophy of information. *Library Trends*, 52(3), 387–407.
- Furner, J. (2016). “data”: The data. In M. Kelly & J. Bielby (Eds.), *Information cultures in the digital age* (pp. 287–306). Springer Fachmedien Wiesbaden.
- Furner, J. (2019). The ontology of documents, revisited. *Proceedings from the Document Academy*, 6(1), 1.
- Gorichanaz, T. (2017). Minting the obverse: Library and information studies as a One-Sided coin. *Journal of Critical Library and Information Studies*, 1(1), 23.
- Gorichanaz, T., & Latham, K. F. (2016). Document phenomenology: A framework for holistic analysis. *Journal of Documentation*, 72(6), 1114–1133.
- Grimmelmann, J. (2019). All smart contracts are ambiguous. *Journal of Law & Innovation*, 2(1), 1–22.

- Guins, R. (2014). The present went this-a-way: Marshall McLuhan's *Understanding Media: The Extensions of Man @ 50*. *Journal of visual culture*, 13(1), 3–12.
- Haraway, D. (1996). Modest witness: Feminist diffractions in science studies. In P. Galison & D. J. Stump (Eds.), *The disunity of science: Boundaries, contexts, and power* (pp. 428–442). Stanford University Press.
- Haraway, D. J. (2018). *Modest_Witness@Second_Millennium. FemaleMan_Meets_OncoMouse: Feminism and technoscience* (second edition). Routledge.
- Hauser, E. (2023). Facts in the machine: Systems of record and the performance of sociotechnical truth. *Journal of the Association for Information Science and Technology*.
- Hennig, B. (2014). Documents: Fillers of informational gaps. *The Monist*, 97(2), 246–255.
- Jarrahi, M. H., & Nelson, S. B. (2018). Agency, sociomateriality, and configuration work. *The Information Society*, 34(4), 244–260.
- Khovanskaya, V., Sengers, P., Mazmanian, M., & Darrah, C. (2017). Reworking the gaps between design and ethnography. *Proceedings of the 2017 CHI Conference on Human Factors in Computing Systems*, 5373–5385.
- Latour, B. (2007). *Reassembling the social: An introduction to Actor-Network-Theory*. OUP Oxford.
- Letiche, H., De Loo, I., Lowe, A., & Yates, D. (2022). Meeting the research(er) and the researched halfway. *Critical Perspectives on Accounting*, 102452.
- Marent, B., & Henwood, F. (2023). Digital health: A sociomaterial approach. *Sociology of health & illness*, 45(1), 37–53.
- McLuhan, M. (1964). *Understanding media the extensions of man*. The New American Library.
- Niemimaa, M. (2016). Sociomateriality and information systems research: Quantum radicals and cartesian conservatives. *SIGMIS Database*, 47(4), 45–59.
- Orlikowski, W. J. (2007). Sociomaterial practices: Exploring technology at work. *Organization Studies*, 28(9), 1435–1448.
- Orlikowski, W. J., & Scott, S. V. (2015). Exploring material-discursive practices. *The journal of management studies*, 52(5), 697–705.
- Østerlund, C., Crowston, K., & Jackson, C. (2020). Building an apparatus: Refractive, reflective, and diffractive readings of trace data. *Journal of the Association for Information Systems*, 21(1), 10.
- Rougeux, N. (2023). Byrne's euclid: The first six books of the elements of euclid with coloured diagrams and symbols [Accessed: 2023-10-14].
- Santos, G. C. (2015). Ontological emergence: How is that possible? towards a new relational ontology. *Foundations of science*, 20(4), 429–446.
- Searle, J. R. (1976). A classification of illocutionary acts. *Language In Society*, 5(1), 1–23.

- Simpson, J. (Ed.). (2013). *Oxford english dictionary* (Third Edition). Oxford University Press.
- Smith, B. (2014). Document acts. In A. Konzelmann Ziv & H. B. Schmid (Eds.), *Institutions, emotions, and group agents: Contributions to social ontology* (pp. 19–31). Springer Netherlands.
- Star, S. L. (1990). Power, technology and the phenomenology of conventions: On being allergic to onions. *The Sociological review*, 38(1_suppl), 26–56.
- Suchman, L. (2007). *Human-Machine reconfigurations: Plans and situated actions* (2nd Editio). Cambridge University Press.
- Thomer, A. K., & Wickett, K. M. (2020). Relational data paradigms: What do we learn by taking the materiality of databases seriously? *Big Data & Society*, 7(1), 1–16.
- Trace, C. B. (2016). Ethnomethodology: Foundational insights on the nature and meaning of documents in everyday life. *Journal of Documentation*, 72(1), 47–64.
- Trace, C. B. (2017). Phenomenology, experience, and the essence of documents as objects. *Proceedings of the Conference on Conceptions of Library and Information Science*.
- Vosselman, E., & De Loo, I. (2023). Sociomateriality and the metaphysics of accounting information systems: Revisiting agential realism. *International Journal of Accounting Information Systems*, 49, 100609.
- Wilson, P. (1968). *Two kinds of power: An essay on bibliographic control*. University of California Press.
- Wilson, P. (1983). *Second hand knowledge: An inquiry into cognitive authority*. Greenwood Press.
- Wittgenstein, L. (1953). *Philosophical investigations*. MacMillan.