The informative potential of bibliographic classification systems – reflections on a discussion in the French Documentation Movement

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Abstract

Purpose – In this article, the author discusses works from the French Documentation Movement in the 1940s and 1950s with regard to how it formulates bibliographic classification systems as documents. Significant writings by Suzanne Briet, Éric de Grolier and Robert Pagès are analyzed in the light of current document-theoretical concepts and discussions.

Design/methodology/approach – Conceptual analysis.

Findings – The French Documentation Movement provided a rich intellectual environment in the late 1940s and early 1950s, resulting in original works on documents and the ways these may be represented bibliographically. These works display a variety of approaches from object-oriented description to notational concept-synthesis, and definitions of classification systems as isomorph documents at the center of politically informed critique of modern society.

Originality/value – The article brings together historical and conceptual elements in the analysis which have not previously been combined in Library and Information Science literature. In the analysis, the article discusses significant contributions to classification and document theory that hitherto have eluded attention from the wider international Library and Information Science research community. Through this, the article contributes to the currently ongoing conceptual discussion on documents and documentality.

Keywords Document studies, Document theory, Classification history, French documentation, Miachael Buckland

Paper type Article

Introduction

Ever since Michael Buckland brought the ideas of the European Documentation Movement to the attention of a wider Information Science audience through a series of seminal texts in the 1990s (e.g. Buckland, 1991a, 1991b, 1997), theoretical discussions about documents and documentation processes have developed significantly. Buckland has maintained his position as a leading figure in this development, but not only that. He has also taken on a role – and still does – as translator and introducer of scholars and scholarly work not least from within the French Documentation Movement of the first half of the twentieth century. In this *Festschrift* contribution, I pay heed to this important aspect of Buckland's work by connecting some themes and scholars emerging from the French documentation environment

in the 1940 and 1950s with current theoretical discussions in document studies. By doing so, I hope to contribute to both our understanding of central theoretical concepts, but also of the development of the European documentation movement and the specific French version that proved such a fertile scholarly environment in the early stages of both Documentation and Information Studies (Ibekwe-SanJuan, 2012; Mustafa el Hadi, 2018).

One important issue that for long has been under constant debate is the relation between the individual document, or kind of document, and its context, or that which it represents or proves. For most, these discussions have been exemplified by kinds of documents which both in a collective sense and as individual examples have a, more or less, straightforward relation to that which it represents. In most cases, this relation is described in some version as a semantic–syntactic relation or a correspondence between form and content, and between document and object or process. A passport (Buckland, 2014) has a defined, instrumental usage, with international legislative conventions governing its form. This provides for a unique relation between the singular passport, the individual it represents, and his or her rights to move between countries. A wedding certificate is also formally designed to meet legislative conventions for it to function as a proof of validity for the wedding ritual, stipulating not only emotional but also culturally defined societal bonds and moral expectations between the married partners. But what if we consider a kind of document that is of a more ambiguous character, where neither semantic nor syntactic conventions guarantee a fixed relation to that which is represented by the document? How far can we go in defining this relation that indeed in itself is a defining property of what can be considered a document? In this article, I will use as an example the bibliographical classification system, a kind of document that I have previously discussed in relation to situated political and historical environments as a way of defining a context–document relation that exceeds its instrumental function as a tool for organizing collections of documents in a library, or representations of such in a bibliography (Hansson, 2021). The discussion will be guided by three main questions:

(1) How can a document-theoretical approach be of use in defining bibliographic classification systems as autonomous documents?

(2) Based on this definitional foundation, in what way does the mid-twentieth-century French Documentation Movement help us progress our understanding of bibliographic classification systems not only as autonomous but as socially significant documents?

These questions will be discussed in relation to an established document-theoretical terminology of lexicality and documentality, complemented with the idea of "informative potentials" of documents, as presented by Birger Hjørland in his book *Information Seeking and Subject Representation: An Activity-Theoretical Approach to Information Science* (Hjørland, 1997, 86).

But first, what do I mean when I consider a classification system to be a more ambiguous document than, for example, a passport? Well, to put it simply, if a passport includes properties that deviate from the international legislative conventions for passports, it is not a passport. There is no such thing as a poorly designed passport. If, on the other hand, a bibliographic classification system in one way or other lacks elements that are consistent with theoretical conventions of classification, it can still in many cases be considered a bibliographic classification system, albeit a poorly designed one. Poorly designed classification systems can still function in relation to, for instance, individual collections. We know this because they exist – abundantly.

Thus, considering bibliographic classification systems as autonomous documents has its own specific complexities, many of which relate to the problems of defining relations to their

surroundings, be them society at large, institutional belongings, warrants for subject divisions, or individual collections. With the ambition to create a connection to the works of Michael Buckland and the French Documentation Movement, I will proceed to discuss classification systems as autonomous documents with the help of two major treatises on the subject emanating from mid-1950s French documentation environment: *Théorie et Pratique des Classifications Documentaires* from 1956 by Eric de Grolier and *Problèmes de Classification Culturelle et Documentaire* from 1955 by Robert Pagès. However, before I get to these works, I need to consider some foundational terminology concerning indexicality, documentality and the informative protentional of documents.

Indexicality, documentality, and the social connection of documents

In her manifest *Qu'est-ce que la Documentation?* (1951; English translation in 2006), Suzanne Briet famously defines a document as "a proof in support of a fact" (2006, 9). A document has a fundamentally representational function in that it has value only if placed in an institutional context of representation, such as a library, a museum or a zoo. That means that the institutional setting is of crucial importance for the definition and function of documents. Buckland defines this representational function as fundamentally passive:

> Evidence, like information-as-thing, does not do anything actively. Human beings do things with it or to it. They examine it, describe it, categorize it. They understand, misunderstand, interpret, summarize, or rebut it. They may even try to fake it, alter it, hide it, or destroy it. (Buckland, 1991a, 44)

The document is thus an object against which humans act, an object which in itself does not do anything. Then, in the next sentence, however, Buckland shifts emphasis: "The essence of evidence is precisely that perception of it can lead to changes in what people believe that they know" (Buckland, 1991a, 44). If we change "evidence" for "documents" seen as proof in support of a fact, this last formulation implies a more active role of the document not only in relation to that which it represents but to its usage and wider social context as well. Briet defines this as "documentary fertility" (Briet, 2006, 10), a capability of a document to influence the way it is dealt with, and what it means – the social reach of the document. I will in time return to the concept of documentary fertility, here simply arguing that the passivity of a document in Briet and Buckland's understanding is not self-evident. There is a source of activity, or at least potential activity within the document that governs or at least has the ability to influence the social and institutional usage of it. This source that lies inside the document itself is its indexicality.

Indexicality

Even if Briet starts off her manifest with the above proof definition of a document, she continues to provide a somewhat different, more sophisticated definition which takes departure in the individual properties of that which is made to claim status as a document. The key word here is *indice*: ". . . any concrete or symbolic indexical sign, preserved or recorded towards the ends of representing, of reconstituting, or of proving a physical or intellectual phenomenon" (Briet, 2006, 10). This suggests that documents are not documents in any sense of a natural state, but instead they are always *made* or constructed as such. This is a thought that goes back to Paul Otlet, who in his *Traité de Documentation* from 1934 (Facsimile edition 2015) proposes that mostly anything can become a document if suitable properties of representation are identified. These properties cannot, however, be randomly chosen as they are implicit within the object that is transformed into a document. Briet argues that this transformation from object to document is indebted to institutional confinement in terms of descriptive conventions in, for instance, taxonomies and classifications in museums or libraries. Her most famous example is that of a free antelope transformed into a (primary)

document when captured and placed in a zoo, where it is described and categorized through the conventions of descriptive and analytical (secondary) documentation. Otlet goes beyond this and argues that basically any object can be transformed into a document, even *without* the institutional (museum or library) conventions being in all cases necessary, as documentary properties are inherent in the object already in, for example, its natural habitat, if we consider plants or animals. This takes Briet's antelope argument to lengths she seems to have a hard time accepting; the properties of free plants and animals signify their taxonomical identity, claiming documentary status by means of their very existence: "[t]he marks of all of nature, carried by the objects, serving their identification and signage" [[l]es marques de toute nature portées sur les objets et qui serves à leur identification et signalisation]" (Otlet, 2015, 44). This argumentation still occurs in various developed forms in today's Information Science discussions on alternative postcolonial and indigenous documentation and knowledge organization practices (Grenersen *et al.*, 2016; Montoya, 2022, 193–212).

In an important passage, Ronald Day emphasizes the significance of admitting indexicality as something emanating from the document as such, claiming that "documentary evidence takes place in networks of signs that encompass people and things" (Day, 2014, 9), concluding that *indice* – indexicality – should be considered as

> socio-technical devices that have technological and social logics enfolded as meaningful functions for information organization and use and they give rise to and mediate the social positioning and information and knowledge values of texts and persons as documents, information, and data. Consequently they are also signs within, and which point to the political economy of knowledge and being within which a text and its referents take place. (Day, 2014, 9)

He further concludes that "[i]*ndice* are signs that not only reference empirical and ideational entities, but signify by condensing and pointing toward actual and potential meaningful pasts, and futures, along which human beings develop understand and live" (Day, 2014, 9. Emphasis in orig.). The way in which the inherent properties of a text or an object are perceived as possible foundations for describing and categorizing thus provides the object turned into document a narrative potential that propels it out of the passive position depicted by Briet and Buckland.

Documentality

There have been several ways in which documents and documentation processes have been defined as inhibiting not only representational properties but agency in the sense that documents *do* something to the contexts and processes of which they are parts. Indeed, examples that counteract the argument of document passivity have been offered by many Information Science researchers, whether they relate to digital information and document environments (Brown and Duguid, 2017, 161–191), critique of the information conduit metaphor (Day, 2001, 59), or cognitive and emotive perceptions of documents in institutional settings (Latham, 2012). One concept in particular, documentality, has attracted attention in a way that helps summarize the very character of this agency, leading to questions about what documents *do*, rather than what they *are*. Bernd Frohmann has provided one of the most pronounced discussions on documentality as the "autonomous agency" of documents. From the perspective of Wittgensteinian understanding equating the value of language with its use and the materialist-sociological ideas of Bruno Latour, he argues for a definition of the properties of documentality as the relation between a document or documentary process and its contextual function (Frohmann, 2007, 2012). He defines documentality as an object's "documentary agency, power or force" (2012, 173), ascribing four dimensions that in various constellations influence the active properties of the document:

(1) Functionality: documentality exhibits various degrees of intensity in its execution,

(2) Historicity: documentality is historically contingent, allowing for spatial and temporal comparison,

(3) Complexity: documentality exhibits effects on, for instance, the relation between individuals and institutions, various spatial, temporal and technological arrangements, and

(4) Agency: documentality is evident in the arrangement between the document and other things.

The agency of a document is measured (although I expect Frohmann to turn against such choice of word) against its actual use in different contexts, relations and situations, fully in line with his linguistic-philosophical and sociological points of departure. Consequently, the definition of documentality lands *outside* of the document. The agency becomes what is made *of* the document, not *through* it.

Other attempts aim to let agency stem from within the document or documentation process itself, thus connecting more instrumentally to the conceptual heritage of Briet and Otlet, placing a stronger emphasis on, for instance, institutional aspects. Maurizio Ferraris approaches documentality from a different, more ontological, perspective than Frohmann's. It is possible to read the two as oppositional, but I prefer to see them as complementary as they bring value to different aspects of what we may, with Frohmann, talk of as the autonomous agency of documents. Ferraris discusses documentality from a sociologically materialist vantage point that not only sees documents but their inherent functionality, as socially and institutionally defined, and through this ascribed with meaning. The direction of agency goes from the document to its area of function, not the other way. Famous is Ferraris' axiomatic definition of a document as "the reification of social acts which, in turn, change over time and space" (2013, 250). This places documentality not outside of the document but inside it, albeit defined by the immediate relation to its function in a clearly situated social and/or institutional setting. The agency of the document, its documentality, becomes a dialectic movement between the document and its defined social or institutional role. This is a kind of middle way between Briet's representational properties and Frohmann's usage-centered understanding of the concept. Still, with such an elaborate discussion, we end up with a situation where ascribed institutional function, passive representation and power through usage converge. Such a convergence requires a direct bond between these aspects and the formal properties of the document – again, there can be no poorly designed passports.

If accepting this, have we made any progress in our understanding of documents and documentary processes, of documentality, from that which was initially attributed to it by Briet and Buckland? To try to answer this, we may attempt the analysis on a very different kind of document, one that is definitively institutionally confined, but in terms of content open, to an almost infinite extent. In order to establish a point of reference to the work of the French Documentation Movement, I will use the developed understanding of bibliographic classification [classification documentaire] as it gradually evolves in Paris, centering around Suzanne Briet and her role not only as a theoretician but as librarian and educator as well. However, before we enter this very specific context, I need to address the question of how to define classification systems as documents with autonomous agency as much of the relation between form and content, so emphasized in the passport example, is absent, or in a more constructive formulation imbued with informative potential.

The informative potential of bibliographic classification systems

As argued, it may sometimes be difficult to make an exact delineation of what is and what is not a classification system. There is no inherent, self-evident relation between content, form, and documentary or social-institutional connotation. Defining features, on a general level, of a bibliographic classification system are semantic and structural, rather than content-oriented. Opposed to the passport with its fixed relation between form, content and represented individual, or a culturally defined wedding certificate with local, regional or ethnic definitions between form, content and represented ritual/individuals (e.g. certificates from Las Vegas weddings are not legally valid in Sweden), classification systems can be, if their structural elements meet fundamental criteria, about *anything*. Necessary limitations to this openness are defined as the "aboutness" of the system (Hauser and Tennis, 2019). Aboutness counts as an established, albeit controversial, concept in classification theory – for document theory, it creates an interesting problem. Hjørland (1997, 86–91) defines a "subject" as the object of a bibliographic classification system, which deals with each classified document as carrying a unique set of informative potentials. A book on Uranium can be about mineralogy, the final disposal of nuclear waste, or the construction of missiles for nuclear warfare – and it can also, potentially, be about all these three very different topics. When constructing a classification system and defining its conceptual and taxonomical relations, one of the main problems is dealing with such informative potentials. There is a near-infinite number of subjects, and several efforts have concentrated on how to delimit the form–content relation, thus providing the classification system as such with a status of autonomous document. One way of achieving such delineation is by defining warrants for selection and definition of subjects. Beghtol (1986) defines six such warrants: literary, scientific, philosophical, pedagogical, institutional and cultural. For bibliographic classification, there is a natural institutional limit to libraries and bibliographies. This has, however, proven insufficient. Instead, of Begthol's categories, scientific warrant has proven predominant among classification scholars, and the one most relevant for the early documentation movement. It is, for instance, the relation between scholarly practice and classificatory representation that informs Suzanne Briet in her positioning of classification as "secondary documentation" as derivative from the modes of descriptions relevant to the captured antelope (Briet, 2006, 19). Considering classification systems in the realm of bibliography, this connection to scientifically described objects is however by no means the only one relevant, and this helps us in elevating classification systems from secondary to primary documentation in Briet's sense, that is, subject of descriptive analysis as autonomous documents. Beghthol (2001) acknowledges this in an elaborate analysis of the relation between classificatory structure and "meaning" as it emerges in what she defines as cultural warrant, the governing sociocultural context of the classification system. She describes a two-way relation: the classification system is a product of social and cultural norms, rules and values, but it also constitutes a singular frame within which these norms, rules and values are pronounced. Representation thus reaches beyond the purely mimetic.

Defining classification systems as parts of socially and culturally (re)producing processes informs a highly specific relation between generic structural requirements of a system, subjects as defined particulars, and institutional usage. Discussing the nature of subjects and subject descriptions, that is, the object of classification systems and the designated particular of the autonomous document, Hjørland, concludes that "[a] subject description is thus a prognosis of future potentials" (1997, 87). Here is also included a temporal aspect of the documentality, or even indexicality, of classification systems – the ability to function not only institutionally at any given moment but consistently over time. Shortly, I will return to this important formulation in a slightly different form and let it provide a bridge to the developed understanding of classification systems as documents of certain sociocultural values. As Hjørland's assumption that documents carry informative

potentials that, in the case of bibliographic classification systems, may be based on cultural rather than literary warrant, contains several similarities to discussions on indexicality and documentality, while at the same time connecting to a more open perspective on such potentials than offered by, for instance, Briet, it is important to see it as complementary. It is, however, a complementarity that is relevant and meaningful when addressing the French Documentation Movement and the discussion of classification systems as social artifacts that finds its peak in the mid-1950s. So, how does this specific theoretical discussion manifest itself in terms of a developed understanding of classification systems, both as documents and documentary practices?

The French documentation movement and the idea of classification

We often speak of the French or European Documentation Movement as if though it was one, formed around an intellectual core pointing at a paradigmatic understanding of documents and documentation. This is, as usually is the case with intellectual or institutional "movements", only partly true. Over the last two decades, as interest has increased for mid-twentieth-century European thinking on documentation and information processes also among Anglophone scholars – a development that owes a lot to the efforts of Michael Buckland – there have been numerous presentations of researchers that are, or seem, in one way or another related to each other. Research articles, encyclopedia entries and books have regularly provided biographies or biographical notes on prominent representatives such as Suzanne Briet (Maak, 2004; Buckland, 2006, 2017; Fayet-Scribe, 2009), Eric de Grolier (Palermiti, 2000; Hudon, 2020; Mustafa El Hadi, 2018) and Robert Pagès (Palermiti, 2000; Ibañez, 2016; Buckland, 2021). I will not reiterate these biographical notes and facts here, but instead focus on thoughts on classification that appear scattered through, or at the center of, the works of these scholars.

I have already emphasized the significance of the work of Suzanne Briet in the establishment of one ideological entry point for documentation in France, a position that has been widely covered and discussed in IS research. Her expanded discussion on the definition of a document in *Qu'est-ce que la Documentation?* from 1951 contains little on classification. She basically suffices to categorize classification systems as "secondary documentation" by means of "bibliographical orientation" used within the institutional settings of libraries, archives and museums, with sole value in relation to that which is described, indexed and classified (Briet, 2006, 19). That classificatory structures could be perceived autonomously as socially constructed or biased is simply not important for her. More so, classification as a cultural technique, objectively formulating the evidentiary capability of the document (a thought which complements Paul Otlet's argumentation concerning an objectively existing inherent indexicality of the object or phenomena subjected to analysis) is restricted to institutional practice rather than scholarly consideration. In the second part (of three) of her manifest, however, she becomes more detailed about the role of classification as documentary practice, but also of classification systems as documents. Discussing the arrangement of documents in document centers such as museums or libraries, she adds a new dimension by stating that systematic catalogs brought together by means of classification arrange documents according to "cultural affinity". She does not immediately expand on what she means by this, but her explanation gives the term "cultural" specific meaning, through institutional differences:

> Books are not arranged in the same way as when sold in a bookshop, exhibited in an art museum, or when consulted in a specialized library. The use that is intended for the documents, under precise circumstances, determines the type of arrangement. Practical solutions are to be preferred in every case (Briet, 2006, 24–25).

Documentation and the arrangement of collections as a cultural technique relates to tools and perspectives that are present, and used, during Briet's own time as a librarian and documentalist at Bibliothèque Nationale. She describes documentation processes as contemporary and opposed to historical or static arrangements with institutionally defined aims. Practical solutions are governing principles of systematic catalogs as secondary documentation. To underscore this pragmatic element, she goes on to sever the dependency of Otlet by stating that "[c]*oncrete* classification has to be distinguished from the classification of knowledge" (Briet, 2006, 25, emphasis in orig.), thus denouncing the value of universal classification systems such as the Dewey (DDC) or the Universal Decimal Classification (UDC) systems. This consequence of her pragmatic approach to classification, which has also been noted by Maak (2004), is important as it not only limits the informative potential of systems in their role as documentary derivatives but limits the possibility of regarding classification systems as autonomous primary documents. Where the DDC and the UDC function, in any of their editorial versions, as *apriori* documents independent of any given collection, Briet's classifications are completely dependent on, if not a given collection so on the use and function in a specific institutional environment. Perspectives could not be more different. However, Briet's position should be seen in the context of a wider discussion on classification that emerges within the *Union Française des Organismes de Documentation* (UFOD) in the late 1940s and continues into the following decade. Others are more interested in framing classification systems as a unique document type, lamenting the plethora of local classification systems that necessarily follows from Briet's pragmatism.

Synthesized classification – meta-classification or a play with warrants
Already on the first page of his *A Study of General Categories Applicable to Classification and Coding in Documentation* from 1962, Éric de Grolier addresses classificatory pragmatism in special libraries, describing it as a transition phase in the development from bibliography to documentation. Instead, he anticipates "an ultimate stage during which it was hoped that this 'anarchy' would be eliminated, and replaced, if not by a single, new, universally recognized standard, then at least by certain standardized elements from the existing systems" (De Grolier, 1962, 9–10). This idea of an aggregated classification system based on a set of general categories, which De Grolier then develops over more than 200 pages, has its roots in his earlier works (for a comprehensive bibliography of De Grolier's work, see Hudon, 2020), of which his 1956 treatise *Théorie et Pratique des Classifications de Documentation* stands out as the singular effort.

Éric de Grolier counts as one of the towering intellectuals of twentieth-century Information Science, also internationally. He was, however, firmly rooted in the French Documentation Movement both as, together with his wife Georgette de Grolier, activist for the promotion of reading in France, and a classification theorist. His work on classification originates from an affinity for the universal ambitions of Paul Otlet, one that he initially shared with Suzanne Briet. Soon, however, like her, he distanced himself from Otlet and UDC and instead developed his thinking into a particular view of classification systems as documents that, on the one hand, represent general subject structures based on scholarly agreement by means of coding, and, on the other, function through a dependency on historical predecessors. Such genealogic understanding of historical contingency was at the time of *Théorie et Pratique des Classifications de Documentation* still rarely pronounced by most theorists, with the notable exception of E. I. Samurin (1977), who in his erudite *Geschischte der bibliothekarisch-bibliographischen Klassifikation*, published in Moscow in 1955 and later in Leipzig 1964, emphasized the historical development of classification systems as progressing genealogically. De Grolier would, in some of his later writings, acknowledge such a view (De Grolier, 1982), providing for a specific kind of documentality of classification systems to which I will return shortly.

In *Théorie et Pratique des Classifications de Documentation,* de Grolier ascribes a role for classification systems that differs radically from passive representational secondary documentation, organizing individual facts, as provided by Briet. Instead, he pronounces classification systems both as autonomous documents and parts of documentary practices at the intersection of Information Science and Sociology of Science. Defining classification systems as sociological entities, he anchors them in the idea of perpetual scholarly progress, even emphasizing the specific character of various disciplines such as the humanities, acknowledging the different needs of different branches of knowledge. Lamenting the nonprogressive character [un certain retard] of French Documentation Studies in comparison to postwar US Information Science development, he formulates a communicative aspect of classification systems not only admitting the user agency relevant for system design but addressing their position in what he formulates as "the documentary cycle" [le cycle documentaire]. The position resembles the one provided by Briet but is more filled with agency. De Grolier relates his theory to linguistic models, distinguishing three levels of communication between a sender and a receiver: (1) direct (the speech act), (2) intermediation through documents (author – book – reader) and (3) intermediation through institutionally organized documentation (organisme de documentation) which is constituted by collection, synthesis [synèse] and diffusion. This third level uses bibliographical tools such as catalogs and classification systems which are defined not by the collections of documents they organize but by their document-specific logics and unique semantic–syntactic relations (De Grolier, 1956, 6). This division of communication modes also explains the relation between bibliographic classification and the classification of scholarly disciplines as de Grolier pronounces communication level (2) as the *first degree of documentation* (that is fixating thoughts and processes) and (3) as the *second degree of documentation* (organizing these fixations and making them retrievable for users). Again, this seems inspired by Briet's formulation of bibliographical tools as secondary documentation, but there is one significant difference. While Briet never goes into detail on the character of these tools, de Grolier recognizes that classification systems cannot depend only on those primary documents that are immediately categorized and classified – that is what leads to the "anarchy" of special systems. What he instead proposes is a general theory of classification that admits classification systems as unique kinds of documents. At the center of what may be described as its lexicality is the relational construction of the various included subjects, and the codification (notation) of the system. It is also interesting to note that this argumentation in part resembles Ferraris' later (2013) understanding of documents as reifications of social acts.

Based on these fundamental elements of the documentary process, de Grolier formulates three kinds of bibliographic classification systems: 1) general classification systems based on decimal structures derived from the DDC, 2) non-decimal general classification systems, often built and used nationally and 3) special classification systems. Analyzing these, de Grolier admits Otlet's UDC as the most elegant system. However, in addressing the requirements of a universal [*encyclopédique*] system that can work as a connection between scholarly formulated knowledge categories and the ability to guide users, he sees the need for development. He discusses two traditional and well-known paths of revision or adjustment [*révision ou refonte*]: division of singular subjects, that is expanding hierarchical depths, and the removal or reformulation of subjects that are deemed obsolete [*mises en désuétude*] (de Grolier, 1956, 182). This is however not enough, as it constantly places the classification system trailing taxonomical and scientific development too far behind. Instead, a new approach is formulated, and here we might need to remind ourselves that de Grolier was writing in the 1950s. Rhetorically pronouncing the question of whether it is possible to formulate a "new norm" for universal classification, he distinguishes three foundations that may help moving forward, beyond the depending on the UDC:

[O]ne should take into consideration, on the one hand, recent progress made outside the UDC in taxonomic symbolization and, on the other, the current ideas on the systematization of the sciences - at the same time on a general, universal, level and for each individual discipline (De Grolier, 1956, 187).

[*[E]lle devra tenir compte, d'une part, des progrès des recent accomplis en dehors de la C.D.U. dans le domaine de la symbolization taxologique, d'autre part, des idées actuelles sur la systematisation des connaissances - à la fois sur le plan general, encyclopédique, et pour chaque discipline particulière.*]

The third pronouncement is the historical development of concepts and relations which he traces back to the very beginning of modern French librarianship in the early seventeenth century. This emphasis is on capturing scientific systematization and formulating general concepts, all built on a historical understanding of classification systems, leading him to developed methodologies of 1) the possibility of formulating codified general concepts in his 1962 *A Study of General Categories Applicable to Classification and Coding in Documentation*, and later, 2) statistically measuring the genealogy between bibliographic classification systems leading up to an aggregated idea of classification and defining classification systems as being culturally significant (de Grolier, 1982).

De Grolier's widening of the understanding of classification systems as autonomous documents from the narrow function attributed to them by Briet provides a whole new understanding of not only processes of documentation but of the documentality of such systems as well. The relation between scientific progress, codification of classificatory relations and cultural significance comes into focus in a manner that will later be picked up by our current document studies. The work of Éric de Grolier earns him a place as, to borrow Palermiti's (2000) term, a "précurseur" in more than one sense. His work on classification systems as documents points to the problem of documentary agency and passivity that I have touched upon above and will return to soon again: "there is a kind of hysteresis effect: most classifications reflect an anterior pattern of publications; some of them, on the contrary, appear to be in advance, anticipating on future trends" (De Grolier, 1982, 33).

Parallel to de Grolier's maturing theoretical construct, and indeed partly preceding it, an alternative perspective on classification systems as documents with both documentary and cultural agency is worked out by Robert Pagès, contemporary to Briet and de Grolier in the UFOD circle, but as he eventually chose another walk of life, perhaps less discussed.

Politics and coding in cultural and documentary classification
While Éric de Grolier develops Suzanne Briet's document theory by taking it into the realm of a more international discourse on documentation processes and knowledge organization, we find a very different approach in the work of Robert Pagès. Pagès was a student of Briet's in the late 1940s, during her tenure as a teacher at UFOD. During his studies in documentation, he wrote two highly original theses, both of which eventually became published. The first of these, *Transformations documentaires et milieu culturel*, was initially published in 1948 and only recently republished in *Proceedings From the Document Academy* both in its original French version (Pagès, 2021a) and in an English translation by Michael Buckland (Pagès, 2021b). It focuses on the definition of documents and documentation processes. His second thesis, *Problèmes de classification culturelle et documentaire*, was written at about the same time, but published in a developed form by UFOD a few years later, in 1955. In this work, which still remains unavailable in English, Pagès deals with classification systems and the organization of knowledge, with particular emphasis on the problem of classification in the humanities, the social sciences and society at large.

When reading Pagès, in itself a challenging endeavor, one must keep in mind his view of society and culture which was marked by his engagement with various Trotskyist and anarchist organizations during World War II, and still while studying at UFOD a few years

later. Among these organizations was the Organisation Communiste Révolutionnaire (l'OCR), where he even used a "nom de résistant": Rodion! Buckland (2017) mentions this engagement as a kind of adolescent rave, but le Deuff (2018) ascribes a more pervasive meaning to his revolutionary commitment and points out that it was still very relevant for him also during his studies in documentation, suggesting that Pagès in 1946 sought to formulate an anarchist position colored less by idealism and more by realism. Reading Pagès' works on documentation and classification, it seems clear that his developed political understanding permeates most of his ideas and, to a certain extent, carries the bulk of his arguments.

The intellectual relation between Pagès and Briet seems to have been closer than that between de Grolier and Briet, although both men were subjects to her arguably influential educational efforts. Like Briet, Pagès also writes about the documentation process as a cultural technique. However, where Briet's understanding is limited to a narrow scholarly environment, Pagès expands the argument in two directions: one psychological and one which also includes broader social movements. The psychological dimension is seen in his definition of a document: "every object whose principal use is to be interpreted, that is to say, to serve as the psychic equivalent or reminder of other objects is a sign or symbol" (Pagès, 2021b, 6). This definition falls close to the combination of linguistic and user-centered ideas of de Grolier and is obviously related to the then current discussion within the UFOD context. The broader perspective is most visible in discussing the documentation process.

Central to Pagès' thinking is the increasing conflict between a society built on humanism, and the rationalization and bureaucratization of social processes that were hallmarks of the ever-influential fascist movements all over Europe during his youth. Pagès sees this, from his political position, as a major threat and struggles with the rationalistic character of documentation, not necessarily in the sense that it supports fascism but as a critique of civilization that ultimately builds on the classic philosophical conflict that separates lived experience from bookish knowledge (Buckland, 2018, 426). In a dramatic sequence, he states that

> At a time of mass production (factories), mass politics (parties), and mass warfare (conscription and total war) there also arose in culture the documentary industry of surrogates for experience. Modern societies no longer try to base themselves on competition ("capitalism") but on collective cohesion, which requires a general understanding of the technical and social context (Pagès, 2021b, 17).

With passages such as this and defining statements like "documentation is to culture what machinery is to industry" (2021a, 1), Pagès distances himself from his documentation colleagues and instead places himself in the ranks of contemporary critics of modernity such as Martin Heidegger, or Walter Benjamin in his 1936 essay *The Work of Art in the Age of Mechanical Reproduction* (Benjamin, 2008). Although situated by temporal conditions, I have elsewhere argued that aspects of the social critique advocated by Pagès and Benjamin still hold relevance for today's discussion on documents and documentation processes in digital environments (Hansson, 2020). So how does this explicit social critique, if at all, influence Pagès' view on classification in general and classification systems as documents in particular?

When *Problèmes de classification culturelle et documentaire* appeared in print in 1955, Pagès had already moved on to head the Laboratoire de Psychologie Sociale at Sorbonne, where in 1954 he constructed an index language, "l'analyse codée" (CODOC), to organize the holdings of the laboratory's documentation center. At the core of the CODOC was a highly advanced notational system and elaborate syntactical structure adapted to the use of punch-card technology, inspired by automatic indexing pioneer Georges Cordonnier. The CODOC system has been subject to elaborate analysis by Demailly (1992) and was also, earlier, discussed in favorable terms by de Grolier (1962, 69–75). In *Problèmes de classification culturelle et documentaire,* overall social perspectives and structural-syntactical considerations converge. Classification systems are contextualized by the entire system of

scholarly knowledge, and its immediate relation to taxonomical development is problematized by a perceived gap between the rational and the social-psychological – the humane character of life. The critique of modernity that is seen in his earlier publication is here emphasized further, defining not only the role of classification but the character of classification systems as autonomous documents. Once again, the rational paradigm in society and *culture*, understood in a broad anthropological sense, is cast as conflictual. He even goes so far as to describe culture as invasive [*envahissant*] of rigid classificatory structures. He argues, with reference to the American classification theorist Henry Evelyn Bliss, that

[t]he relation between the sciences (and of techniques) is not isolated, suggesting a salient cultural environment that it [the classification system] has the ability to describe in general. It does not only extend to the sciences and techniques, but to the totality of social activities working in the cultural terrain, and thus it is quite impossible to make a complete enumeration. Bliss claimed that the sciences are "pervasive", each one individually. That is why all cultural viewpoints have the ability to be invasive and egocentric (Pagès, 1955, 38).

[*L'interrelation des sciences (et des techniques) n'est qu'un cas particulier, suggestif d'une allure du milieu culturel qu'il faut décrire plus généralement. Il ne s'étend pas seulement aux sciences et aux techniques, mais à l'ensemble des activités sociales qui s'experiment sur le terrain culturel et dont il est bien impossible de faire une énumération complete. Bliss dit que les sciences sont "pervasive" chacune individuellement. C'est le cas de tout point de vue culturel possible d'être envahissant et égocentrique.*]

This tension between the scientific and the cultural, lived, world is of crucial importance for the understanding of the documentary character of a classification system, as it is in its ability to host also that which defies enumeration by that its informative potential appears. The structural elements that assure such transgression is the notational system, the syntactical dimension of the semantic–syntactical relation emphasized by Beghthol (2001). The notational system defines the indexicality of the system and by doing so, provides the necessary prerequisites for an autonomous agency of the system as well. However, documentality hosts not only such immediate and situational agency but historicity and functionality as well, and as de Grolier stated, temporal coherence. Even if we accept a genealogic progression between individual classification systems over time, there are few accounts that describe how this progression occurs other than through the overtaking of certain structural particulars – one example of such is the Baconian influence on the DDC through the work of William Harris (Comaromi, 1976, 21–25). Pagès takes this discussion forward by suggesting *isomorphism* as an element that helps define genealogic progression between both universal systems and special classifications in particular institutional contexts. Isomorphism is, in its most general sense, a way for an organization or organizational entity to adapt to its surrounding to gain legitimacy. There are several forms of isomorphism, and Pagés discusses the concept in a way that DiMaggio and Powell define as *coercive isomorphism* (1991, 67–69), where various forms of pervasiveness characterize the relation between organization and surrounding society or institutional context. One way of doing this is to adapt to certain governing hierarchical structures, not necessarily in a mimetic sense but in a way that creates the sought legitimacy for, here, the documentary process. In Pagès' writings, isomorphism is also a way to overcome the problems of applying categorizations related to scientific taxonomy on everyday life and culture. With regard to the classificatory practice at the Bibliothèque National (BN), he suggests that

[t]he classificatory isomorphism of the BN works in the space between metaphysics and bibliographic classification but is not necessarily limited to these two domains. It can exist also between the kinds of domains that are explicitly classified (schemes) and those that are not (areas of experience) (Pagès, 1955, 15).

[*L'isomorphisme classificatoire en BN défini entre des métaphysiques et des classifications documentaires ne se limite pas nécessairement à ces deux domaines. Il peut exister aussi entre toute espèce de domaines explicitement classes (schémas) ou non (champs d'expérience).*]

The ability to define classificatory structures and relations between them as isomorph is, however, dependent on the ability of system to define a wide range of subjects, knowledge areas and areas of cultural experience. This works as an alternative way of formulating the linguistic definition of de Grolier's first- and second-degree documentary processes. What brings them together is that the processual focus replaces the lack of defined content – the informative potential of CODOC is built upon the idea of notational or codified isomorphism. That is the only way the documentality of a classification system *can* be defined, and this, to Pagès, manifests itself explicitly in the division between the classification of complex scholarly disciplines such as his own- social psychology- and cultural expressions, political environments or personal experience. Thus, isomorphism becomes not only a conceptual but perhaps also a practical tool for classification to manage the coercive problems identified in his politically inspired critique of modernity and its "mass" movements. The aim of *Problèmes de classification culturelle et documentaire* is not explicitly to solve anything but rather to formulate observations and develop analyses built on a combination of Pagès' experiences from constructing the CODOC and his more general critique of modernity. It is apparent that he struggles with the "industrial" character of the documentation process as an isomorph adaptation to a society built on new bureaucratic ideals, something which becomes clear in his cautiously optimistic conclusion:

> Perhaps it will also become apparent that the problem of documentary and cultural classification is due to our "rational" culture and its mundane banality, which still may result in exceptionally important, albeit well disguised, results.

> [*Peut-être apparaîtra-t-il aussi que le problème de la classification documentaire et culturelle est de ce de notre culture "rationelle" ne néglige que parce que sa banalité quotidienne, qui en fait l'exceptionelle importance aboutit justement à en masquer la portée.*]

Concluding remarks

So, let us return to the initial questions that have guided this discussion. Document theory proves to be a fruitful approach in advancing our understanding of bibliographic classification in that it provides a framework for establishing certain kinds of agency to them as documents. The French Documentation movement helps to progress these insights further. Apart from an emphasis on the role of structural elements in the handling of the informative potential of classification systems as autonomous documents, the French discussion proves an interesting and constructive alternative to discourses found in contemporary anglophone research and innovation initiatives. In the years immediately following World War II, intellectual and technical advances propelled both European and American Information Science and industry into a development of progressive optimism. With the discipline still in its early forms, scholars grouped together to develop new solutions in information retrieval and knowledge organization. In the UK, we see the Classification Research Group as one such group, and in France, an intellectual cluster is formed around UFOD, developing ideas on documentation. The French Document Movement was thus part of an international development that sought to meet the requirements of a new era. However, it maintained a strong connection to institutional prerequisites, whether it was the Bibliothèque Nationale or special collections such as the documentation center of the Laboratoire de Psychologie Sociale at Sorbonne. Perhaps this institutional and document-oriented perspective is one reason why the works dealt with in this article have not been part

of a wider international consciousness until relatively recently. It is a simplified assumption, of course, but supported by the fact that Éric de Grolier, one of the here discussed scholars who earliest made an impact also outside of the French environment, left his dependency on particular institutional settings aside and instead promoted a US-inspired emphasis on user-friendliness and general categories as the basis of new indexing- and classification systems. However, in doing so, he remained firmly rooted in the French Documentation Movement which today stands out as one of the most fruitful intellectual environments of international Information Science during this time. It has not been my ambition with this article to paint a portrait of this whole movement. Instead, I have tried to connect today's conceptual debate within document studies with the theoretical and empirical efforts of a discussion about bibliographic classification systems, and by doing so not only shed light on the usefulness of contemporary document theory but also of the intellectual variety that centered around UFOD in the late 1940s Paris.

Suzanne Briet's ideas on documents came to fruition in the works of Pagès and Grolier in the form of elaborate theories of classification as a central part of the document process, but also of classification systems as autonomous documents. The two are joined in defining the notational or codified properties of the system as that which most closely resembles the idea of indexicality, that which in the document can be extracted as both representational properties and foundation for comparison between systems in a historical perspective. Notation plays the role of a kind of stabilizer; for de Grolier as an aggregate taming the anarchy of special systems, for Pagès as a bridge between the rational and the mundane in a politically infested psychosocial environment of his contemporary society. This is also the point leading back to Briet's documentation manifest *Qu'est-ce que la documentation?* From thereon, differences are greater than similarities, and the political-cultural understanding of the role of bibliographic classification on the one hand, and, on the other, the striving for general concepts as a basis for a new analytical-synthetic classification both appear as precursors of various strains of knowledge organization practice and research emerging in the decades that followed. In an important essay, Fidelia Ibekwe-SanJuan (2012) analyzes the development of IS in France and asks rhetorically if it, from an international perspective, could be perceived as "une exception Française". If the answer needs to home a fruitful intellectual environment that has the ability of formulating questions and suppositions that our research today can benefit from, then yes, the French Document Movement of the 1940 and 1950s was certainly an exception, and an exceptional one at that. That this exception has been brought into the current international discourse on document theory is in no small amount due to the introductory efforts of Michael Buckland.

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648

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