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### **Social Tagging and Commenting: Theoretical Perspectives**

Ina-Maria Jansson and Isto Huvila

#### Introduction

For some, commenting and tagging may seem as an appealing approach to open archival collections for public participation and engagement. Others see them merely as affordable tools to impress funders and taxpayers, legitimizing the institutional existence of archives, without seeing much value in content or interest in the consequences of inviting users to participate. Similarly, there are many factors that motivate people to tag and comment online. Although individuals can tag items for their own sake, without spending thought on whether the tags are of use for others or merely for their personal use (for example books in LibraryThing<sup>1</sup> or images on Flickr,<sup>2</sup> it is an activity that cannot be separated from social exchange and community building.

However, irrespective of the approach to tags and comments, i.e. social annotation versus private notetaking, it is apparent that there are different reasons for inviting an audience to annotate, and, respectively, a plethora of views on the usefulness, implications of social annotation, and what is attainable by inviting users to tag or comment, similarly to that there is a large number of reasons why people tag, comment, how they see the usefulness of their actions, and what effect tagging and commenting has both for individuals and archives. This chapter raises the question of how to conceptualise tags and comments and the phenomenon of commenting and tagging in the context of archives. A push towards this direction is done by highlighting an assortment of theoretical perspectives with potential relevance in trying to understand what social annotation means for participatory archives.

Before turning our attention to the understanding of how tags and comments are functioning, we commence by exploring their variants and how they can be understood in different ways.

### What are Tags and Comments?

Especially from the perspective of archival description, tags and comments have many similarities. However, as Gursoy et al. note, "[u]ser-generated tags are not quite like subject

<sup>&</sup>lt;sup>1</sup> Melodie J. Fox and Austin Reece, "Deconstructed Hospitality," *Knowledge Organization* 40, no. 4 (2013): 260-265.

<sup>&</sup>lt;sup>2</sup> Emma Angus, David Stuart, and Mike Thelwall, "Flickr's Potential as an Academic Image Resource: An Exploratory Study," *Journal of Librarianship and Information Science* 42, no. 4 (2010): 268–278.

categories and not quite like archival descriptive metadata."<sup>3</sup> Comparisons of formal metadata and tags have shown considerable differences.<sup>4</sup> They are terms, but in comparison to subject terms, they are heterogeneous and stemming from different forms of knowledge and end up with a structure that is more rhizomatic than Aristotelian.<sup>5</sup> Comments do not have similarly apparent counterparts in traditional archival description. Paraphrasing Hansson, they stem from a different knowledge forms to those of more traditional discourse on and with archival records.<sup>6</sup> They can be seen as a complement to archival descriptions, but their premises of functioning as such are not the same as with formal descriptions.<sup>7</sup>

As a whole, a key to understanding tags and comments is to understand the social: that individual tags and comments are created and used for different purposes, and that different types of items, the long tail of near-unique inputs and the popular 'powertags' or comments represent two very different sides of the same phenomenon.<sup>8</sup> Both tags and comments are closely linked to the communities that produce them, and in comparison to formal subject descriptions, individual commentators and taggers are freer to use them as they like. At the same time, however, in spite of the degrees of freedom users have in assigning and using tags and comments, they are by no means arbitrary. They both are implicitly and explicitly regulated by the affordances and constraints posed by the technical features of information systems, organisational and community norms, and practices much like Francke's comments on reviewing.<sup>9</sup> Similarly to how Henttonen conceptualises archival records, comments and tags also can be seen as speech acts, within other, only partially overlapping discourses and social contexts than the records they are referring to.<sup>10</sup> In lieu of these contexts, Fox suggests that communities of practices can provide a useful lens to understand the social origins of tags.<sup>11</sup> The same approach can be undoubtedly useful also in understanding comments. On a broader contextual level, referring to Barsalou, Veres links

<sup>&</sup>lt;sup>3</sup> Ayse Gursoy, Karen Wickett, and Melanie Feinberg, "Understanding Tag Functions in a Moderated, User-Generated Metadata Ecosystem," *Journal of Documentation* 74, no. 3 (2018): 490-508.

<sup>&</sup>lt;sup>4</sup> Melissa Adler, "Transcending Library Catalogs: A Comparative Study of Controlled Terms in Library of Congress Subject Headings and User-Generated Tags in LibraryThing for Transgender Books," *Journal of Web Librarianship* 3, no. 4 (2009): 309–331; Hemalata Iyer and Lucy Bungo, "An Examination of Semantic Relationships between Professionally Assigned Metadata and User-Generated Tags for Popular Literature in Complementary and Alternative Medicine," *Information Research* 16, no. 3 (2011), http://informationr.net/ir/16-3/paper482.html.

<sup>&</sup>lt;sup>5</sup> Joacim Hansson, "The Materiality of Knowledge Organization: Epistemology, Metaphors and Society," *Knowledge Organization* 40, no. 6 (2013): 384–391; Lyn Robinson and Mike McGuire, "The Rhizome and the Tree: Changing Metaphors for Information Organisation," *Journal of Documentation* 66 (2010): 604–613. <sup>6</sup> Hansson, "The Materiality of Knowledge Organization."

 <sup>&</sup>lt;sup>7</sup> Magia Krause and Elizabeth Yakel, "Interaction in Virtual Archives: The Polar Bear Expedition Digital Collections Next Generation Finding Aid," American Archivist 70, no. 2 (September 2007): 282–314.
<sup>8</sup> Christopher Bruhn and Sue Yeon Syn, "Pragmatic Thought as a Philosophical Foundation for Collaborative

Tagging and the Semantic Web," *Journal of Documentation* 74, no. 3 (2018): 575-587; Isabella Peters and Wolfgang G. Stock, "Power Tags in Information Retrieval," *Library Hi Tech* 28, no. 1 (2010): 81–93. <sup>9</sup> Helena Francke, "Dimensions of Credibility: Review as a Documentary Practice," in *iConference 2014* 

Proceedings, ed. Maxi Kindling and Elke Greifeneder (Champaign, Illinois: iSchool Conference, 2014): 1051– 1055.

<sup>&</sup>lt;sup>10</sup> Pekka Henttonen, "Records, Rules and Speech Acts: Archival Principles and Preservation of Speech Acts," (PhD Thesis, University of Tampere, 2007).

<sup>&</sup>lt;sup>11</sup> Melodie J. Fox, "Communities of Practice, Gender and Social Tagging," *Advances in Knowledge Organisation* 12 (2012), 352–358.

tags to the world model of an individual, an instantiation entailing "specific knowledge and beliefs about the current state of the world."<sup>12</sup>

It is far too simplistic to assume that tags or comments are descriptions of an item in an archival collection or representations of feelings or opinions even if there is no doubt that they can describe, represent and be many things.<sup>13</sup> There have been attempts to create typologies of different types of tags based on their referents (e.g., event, location, or emotion related tags), types of references (implicit/explicit), functions (e.g., as ratings, content descriptors, categories),<sup>14</sup> how they support subject indexing<sup>15</sup> and archival description at specific repositories, and how they are used by taggers and others.<sup>16</sup> In addition to trying to understand individual tags, researchers have shown that clusters of tags can reference identifiable categories, and thus it can be suggested that, at least in some cases, these clusters become 'things' of their own.<sup>17</sup> The problem with clustering is that often, only a part of the identifiable topics (e.g., named places, people, general topics).

This contrasts with the openness of tagging, which according to Fox and Reece,<sup>18</sup> can limit the capability of tags to represent and create otherness, and consequently can lead to a decrease in tagging performance<sup>19</sup> and, extending the argument to comments, commenting systems. Proponents of self-normalisation have proposed the opposite and theorised that folksonomies would self-regulate over time.<sup>20</sup> The problem with the proposition is that the evidence from formalised subject description and inter-indexer studies, of course only partly

<sup>&</sup>lt;sup>12</sup> Lawrence W. Barsalou, "Deriving Categories to Achieve Goals," In *The Psychology of Learning and Motivation: Advances in Research and Theory*, ed. G. Bower (San Diego: Academic Press, 1991): 1–64; Csaba Veres, "The Language of Folksonomies: What Tags Reveal About User Classification," in *Natural Language Processing and Information Systems* (Springer, Berlin: LNCS, 2006), 3999:58–69.

<sup>&</sup>lt;sup>13</sup> Angus et al., "Flickr's Potential"; Shihn-Yuarn Chen, Yu-Ying Teng, and Hao-Ren Ke, "Social Tagging in Digital Archives." Digital Libraries: Universal and Ubiquitous Access to Information (2008), 414–415, https://doi.org/10.1007/978-3-540-89533-6\_61.

<sup>&</sup>lt;sup>14</sup> Gursoy et al., "Understanding Tag Functions"; Aroals and Ladron-de Guevar, "Uses of Explicit and Implicit Tags"; Elise Conradi, "To\_be\_classified: A Facet Analysis of a Folksonomy," *Journal of Information Architecture* 2, no. 2 (2010): 5–23.

<sup>&</sup>lt;sup>15</sup> Hak-Lae Kim, Stefan Decker, and John G. Breslin, "Representing and Sharing Folksonomies with Semantics," *Journal of Information Science* 36, no. 1 (2010): 57–72.

<sup>&</sup>lt;sup>16</sup> Luanne Freund and Richard Butterworth, "Tagging for Use: An Analysis of Use-Centred Resource Description," in *Proceedings of the Second International Symposium on Information Interaction in Context, IIiX* '08 (New York: ACM, 2008), 6-12.

<sup>&</sup>lt;sup>17</sup> Gunho Chae, Jaram Park, Juyong Park, Woon Seung Yeo, and Chungkon Shi, "Linking and Clustering Artworks Using Social Tags: Revitalizing Crowd-Sourced Information on Cultural Collections," *JASIST* 67, no. 4 (2015): 885–899; Isto Huvila, and Kristin Johannesson, "Critical about the Clustering of Tags: An Intersectional Perspective on Folksonomies," in *Information Science and Social Media: Proceedings of the International Conference Information Science and Social Media ISSOME 2011, August 24-26, Åbo/Turku, Finland* (Åbo: Åbo Akademi University, 2011):99-106; Leyla Garcia-Castro, Martin Hepp, and Alexander Garcia, "Tags4Tags: Using Tagging to Consolidate Tags," in *Database and Expert Systems Applications*, eds. Sourav Bhowmick, Josef Küng, and Roland Wagner (Berlin, Heidelberg: Springer, 2009), 5690: 619–28, Lecture Notes in Computer Science.

<sup>&</sup>lt;sup>18</sup> Fox and Reece, "Deconstructed Hospitality," 260–265.

<sup>&</sup>lt;sup>19</sup> E.H. Chi and T. Mytkowicz, "Understanding the Efficiency of Social Tagging Systems Using Information Theory," in *Proceedings of the Nineteenth ACM Conference on Hypertext and Hypermedia* (New York: ACM, 2008), 81-88.

<sup>&</sup>lt;sup>20</sup> Jennifer Trant, "Studying Social Tagging and Folksonomy: A Review and Framework," *Journal of Digital Information* 10, no. 1 (2009), http://hdl.handle.net/10150/105375.

relevant for tagging and commenting, suggest the opposite.<sup>21</sup> The paradox of both tags and comments are that their rhizomatic nature means that at an aggregate level, when tags and comments are not used by a single individual or a single static close-knit community, they risk being simultaneously too generic and too specific over time.

As a whole, it seems that the nature of tags and comments alike is less a question of what they are and how they compare to earlier categories of metadata or related items than what is their function in a specific context. In comparison to traditional archival information, they are much more subjective not only in their content but also as categories of data. Their proper understanding requires a focus on a specific participatory archive and specific take on participation and careful consideration of their functions for their creators and users, and a consideration of the meaning and implications of the practices of tagging and commenting.<sup>22</sup> In this context, as Mai suggests, an essential prerequisite of the usefulness of tags and recommendations is trust, which can be obtained only through transparency and openness in the services featuring these functions: what tags and comments are meant to be in this context, how they should be (and are) written and used. <sup>23</sup>

### Economical, Social and Political Aspects of Tags and Comments

We made a brief remark of the inherently social dimension of user-created tags and annotations already in the introduction. Similarly, to how tagging and annotation have implications to archival institutions, the social relationships and structures that are an inherent part of the (literally) social annotation spill over to (and from) the life of the participants far beyond a single participatory archive.<sup>24</sup> Therefore, to understand social behaviours of online participants it becomes necessary to understand the consequences of implementing tags and comments in the participatory archive.

The following elaborates from several, already established theoretical perspectives how tagging and commenting can be framed from three different angles with a focus on the outcomes of these activities, and on who reaps the benefits of each perspective. Whether tags and comments are framed as products of work, cultural goods, or instruments of power, they can be scrutinised from economic, cultural, or political approaches. Underpinned by different conceptions of the role of individual participants and participant communities, they lead to dissimilar assumptions of how tags and comments can be expected to influence archives and record-keeping. However, it is important to remember that even though the perspectives may appear very different, they are not isolated tracks carrying a holistic explanation of social annotations as a phenomenon, but rather paralleling and complementing each other.

#### Economic context

<sup>&</sup>lt;sup>21</sup> Alan Vaughan Hughes and Pauline Rafferty, "Inter-Indexer Consistency in Graphic Materials Indexing at the National Library of Wales," *Journal of Documentation* 67, no. 1 (2011): 9–32; Geoffrey C. Bowker and Susan Leigh Star, *Sorting Things out: Classification and Its Consequences* (Cambridge, MA: MIT Press, 2000).

<sup>&</sup>lt;sup>22</sup> Isto Huvila, "Participatory Archive: Towards Decentralised Curation, Radical User Orientation and Broader Contextualisation of Records Management," *Archival Science* 8, no. 1 (2008): 15–36.

<sup>&</sup>lt;sup>23</sup> Jens-Erik Mai, "Trusting Tags, Terms, and Recommendations," *Information Research* 15, no. 3 (2010), http://informationr.net/ir/15-3/colis7/colis705.html.

<sup>&</sup>lt;sup>24</sup> Renee Barnes, Uncovering Online Commenting Culture (Cham: Palgrave Macmillan, 2018).

From an economic perspective, tags and comments, like any other products, are dependent on the achievements of the workforce that create them. Instead of letting paid employees make a product, the task can be outsourced to volunteers. The ontological premise of a simple economic framing of social annotation is to conceptualise participants as producers or workers, archivists as directors of the production, and annotations as products. From an economic perspective, the potential of the participatory process lies in how it can be linked to a business model for the realisation of economic value.<sup>25</sup> The literature has referred to Marxist and neo-classical theory as a basis of problematising the economics of participation, exposing risks of human exploitation and putting focus on ethical considerations.<sup>26</sup> For example, Hansson and colleagues used Marx's theory of alienation to identify levels of detachment in worker-, consumer-, and product relations depending on the individual participants' awareness of other participants.<sup>27</sup>

Even if archives are often public and non-profit organisations and operate from different economic premises than commercial enterprises, it does not mean that their relationship with the public could not be as exploitative as it is with business organisations when they invite the public to create, complement or correct catalogue data without any economic compensation. At the same time, it means that the economic dimensions of social annotation need to be taken seriously. The exploitative nature of tagging and commenting is, however, dependent on the assumption that the work would have been done in the absence of volunteers by professionals on their paid work time and that volunteers' contributions are comparable to those of employees'. In practice, archives may have difficulty designing projects that efficiently exploit a volunteer workforce while simultaneously keeping up the status of archival institutions as an expert organisation and provider of controlled data. Partly, it is difficult to ensure that the information in crowdsourced tags, and especially comments, would live up to the same expectations of reliability and dependability placed on professionally curated data. Also, even if their explicit quality would be more or less the same, the different origins and epistemological assumptions underpinning crowdsourced and expert-produced data make it difficult, if not impossible, to replace one with the other for exploitation proper. In comparison to comments, tags can be easier to control, for example by letting participants select tags from an already established classification system, thus making them, perhaps, a more easily exploitable resource.<sup>28</sup>

# Social context and formation of cultural capital

In comparison to the economic framing of social annotation, a cultural perspective focuses on the intangible outcomes of the efforts. From the participant perspective, a central driver of engaging in commenting and tagging is to what degree they are perceived as personally and

<sup>&</sup>lt;sup>25</sup> Jeff Howe, "Crowdsourcing: A Definition," 2006, accessed September 22, 2018 http://www.crowdsourcing.com/cs/2006/06/crowdsourcing\_a.html.

<sup>&</sup>lt;sup>26</sup> Aleksejs Busarovs, "Ethical Aspects of Crowdsourcing, or Is It a Modern Form of Exploitation," *International Journal of Economics & Business Administration (IJEBA)* 1, no. 1 (2013): 3–14.

<sup>&</sup>lt;sup>27</sup> Joacim Hansson, "The Materiality of Knowledge Organization: Epistemology, Metaphors and Society," *Knowledge Organization* 40, no. 6 (2013): 384–391.

<sup>&</sup>lt;sup>28</sup> Koraljka Golub, Marianne Lykke, and Douglas Tudhope, "Enhancing Social Tagging with Automated Keywords from the Dewey Decimal Classification," *Journal of Documentation* 70, no. 5 (September 2, 2014): 801–28.

collectively meaningful activities. Participation is, from this vantage point, driven by its capability to contribute to the creation of cultural capital.<sup>29</sup> Building on Bourdieu's theory that knowledge and familiarity with a cultural context relevant for the contributor's own habitus is a reliable resource that may be transferred into other forms of capital (Moore, 2014), the voluntary effort put into tags and comments appears not as economic production but as production of cultural value.<sup>30</sup> This theoretical standpoint conceptualises public comments and tags as objects created by participants to leverage on the objectified form of cultural capital. By creating comments and tags, a participant can gain a sense of increasing their institutionalised cultural capital as a well-known and valued member of the user community. Framing social tagging and commenting as a process of creating cultural capital can help to understand participant motivation and engagement, connecting participation and interaction with archives as actions of identity and self-making.<sup>31</sup> From this angle, building on Bourdieu's concept of *field* of cultural production, the communities of participants are intermediaries that interpret and make sense of collections.<sup>32</sup> In contrast to the economic perspectives to participation, this emphasises the importance of communities as drivers of tagging and commenting for appreciation. It has been suggested that engaging users in socalled open collaboration where they can see and reflect on each other's contributions can be a more efficient model for engaging participation (de Vreede et al., 2013) than a blind collaboration with a faceless institution.<sup>33</sup> By allowing comment fields to work as an arena for community building, where individual participants can interact and work together, it creates an extra incitement for engagement.

As a whole, the social perspective underlines the possibility to see social annotation as a process of community formation among participating individuals that provides them with a context for nurturing their mutual interests and learning from each other. Comment fields turn to an arena for collaboration, discussion, co-creation, and co-learning, and consequently, sites for producing cultural capital. From the perspectives, commenting and tagging turn archives as facilitators of societal discussion and life-long learning, as well as sites for producing and negotiating individuals' identity and purpose of life.

# Political and representational context

Apart from conceptualising social tagging and commenting as economic or cultural production for the benefit of an exploiting institution, or personal or common good, they can also be seen as manifestations of the diversity of viewpoints that offer alternatives to authoritative interpretations provided by archival institutions. The political dimension of archives is here evident as social tagging and commenting becomes potential instruments of increased multivocality and diversity, equal representation, and harmonisers of current bias in

<sup>&</sup>lt;sup>29</sup> Lala Hajibayova and Kiersten F. Latham, "Exploring Museum Crowdsourcing Projects Through Bourdieu's Lens," Knowledge Organization 44, no. 7 (2017): 506-514.

<sup>&</sup>lt;sup>30</sup> Moore, Robert, "Capital" in *Pierre Bourdieu: Key Concepts* (Durham:Acumen, 2014). <sup>31</sup> Trevor Owens, "Digital Culture Heritage and the Crowd," *Curator* 56, no. 1 (2013): 121–30.

<sup>&</sup>lt;sup>32</sup> Hajibayova and Latham, "Exploring Museum Crowdsourcing Projects."

<sup>&</sup>lt;sup>33</sup> Triparna de Vreede, Cuong Nguyen, Gert-Jan de Vreede, Imed Boughzala, Onook Oh, and Roni Reiter-Palmon, "A Theoretical Model of User Engagement in Crowdsourcing," in Collaboration and Technology: Proceedings of the 19th Collaboration Researchers' International Working Group Conference (CRIWG 2013), October 30-November 1, Wellington, New Zealand (Berlin Heidelberg: Springer, 2013):94-109.

collections and catalogues. The power of archivists and institutions have earlier been discussed in terms of how archival descriptions and finding aids construct a discourse, which risks to reflect an institutionalised power disharmony in the society and downplaying minorities and alternative groups, and their perspectives.<sup>34</sup> From a Foucauldian perspective, viewing the information in an archive as a collection of discourses, tags and comments appear as a way for participants to introduce their own idea of relevant topics, labels, remarks, and questions into the archival discourse. Anderson and Allen both saw "narrative tools", and user-created tags as important elements for their vision of a networked, non-hierarchical archival commons where professionals, as well as the public, could make contributions.<sup>35</sup> In case of social annotation, this happens in an institutionally dominated information environment of collection items, metadata, or classification systems. Institutional dominance or an understanding of classification systems as biased by the views of their creators is one of the fundamental premises of being able to expose explicit and implicit power structures in social tagging and commenting.<sup>36</sup>

In contrast to framing participants as a workforce, they are rather seen as co-workers, invited to tag and comment as equals. Their domain knowledge is seen as a complement to professional expertise and used as an argument to justify the use of folksonomies in the classification of archival goods.<sup>37</sup> This may be the only manageable way to acquire niched expert knowledge on specific objects, local geographical knowledge, or for instance, correct translation of search terms – as an average archivist has only exceptionally the chance to specialise in multiple topics in parallel to maintaining a broad upper-level understanding of the collections.<sup>38</sup> "Amateur" contextualization and meaning-making of collection objects is of central value from this perspective. The fact that different generations have a tendency to regard the items in the collections from different perspectives can be reflected in a 'participatory catalogue' that becomes a "living historical document," a constellation of continually updating and situating documents and collection items 'taking place' in current society and culture.<sup>39</sup>

#### Changing practices and knowledge organization in archives

No matter what theoretical perspective is applied, the information content comments and tags deliver to an archive inevitably needs to be structured in some way. Here, it is important to be aware of and recognize what tags and comments are and how they might be used for different

<sup>&</sup>lt;sup>34</sup> Joan M. Schwartz and Terry Cook, "Archives, Records, and Power: The Making of Modern Memory," *Archival Science* 2, no. 2 (2002): 1–19; Elizabeth Yakel, "Balancing Archival Authority with Encouraging Authentic Voices to Engage with Records," in *A Different Kind of Web: New Connections between Archives and Our Users* (Chicago: Society of American Archivists, 2011).

<sup>&</sup>lt;sup>35</sup> Scott Anderson and Robert Allen, "Envisioning the Archival Commons," *American Archivist* 72, no. 2 (2009): 383–400.

<sup>&</sup>lt;sup>36</sup> Michelle Light and Tom Hyry, "Colophons and Annotations: New Directions for the Finding Aid," *American Archivist* 65, no. 2 (2002): 216–230; Melanie Feinberg, "From Hidden Bias to Responsible Bias: An Approach to Information Systems Based on Haraway's Situated Knowledges," *Information Research* 12, no. 4 (2007).

<sup>&</sup>lt;sup>37</sup> Julia Amber Bullard, "Classification Design: Understanding the Decisions between Theory and Consequence," (PhD diss., University of Texas at Austin, 2018).

<sup>&</sup>lt;sup>38</sup> Corinne Jörgensen, Besiki Stvilia, and Shuheng Wu, "Assessing the Relationships among Tag Syntax, Semantics, and Perceived Usefulness," *JASIST* 65, no. 4 (2014): 836–49.

<sup>&</sup>lt;sup>39</sup> Susan Cairns, "Mutualizing Museum Knowledge: Folksonomies and the Changing Shape of Expertise," *Curator: The Museum Journal* 56, no. 1 (2013): 116.

purposes, as the organization of the information they convey may strengthen as well as mitigate their purpose.

Arranging something according to a specific system always entails exclusion or limitation of categories; thus, defining everything and everyone that is not included in the system as others.<sup>40</sup> Especially the representational/power approach to tags and comments that portrays them as tools to include "others," has taken on this idea and sees user participation as a way to overcome the boundary between those represented within existing systems and those outside of them. However, initiators of participation must be prepared for the consequences of inviting activity and information sharing as it may well start a more complicated process of managing and organizing the material than expected. Concerning organization of the tags, even minimal editing or merging of tags can have an impact on the conditions regulating the inclusion of the other, in the form of minority-, controversial-, or subcultural perspectives visible in the tags.<sup>41</sup>

Knowledge organization practices thus need to be considered in the planning of preservation of participatory created material. To have transformational meaning beyond temporary socializing with the public, social annotations need to be included in the archival information infrastructure and to be connected to archival material similar to other metadata. This demands for new professional practices in the management of archival data, as well as in the design and functionality of information systems designed for social annotation. Srinivasan and colleagues note that description processes in cultural heritage institutions have to be adjusted to be better prepared for the inclusion of non-expert created metadata in museum catalogues.<sup>42</sup> This also applies to archives, where especially contextual data on user-generated metadata, including provenance, would be much needed to increase the epistemological and ontological comparability of traditional process and organisation oriented archival metadata and social annotations.

Capturing additional categories of metadata such as geotags or metadata fields for memorial and associative annotations could further enhance collections and their usefulness for both contemporary and future stakeholders. However, especially personal annotations like memorial and associative tags and comments, are difficult to accommodate within the ideals of universal classification standards and "objective" facts. However, these types of unruly annotations can provide context, highlight interests and meanings that are relevant for a broader audience beyond a small circle of specific users. Especially in the case of free-text user comments, an increased sensitivity to the subjective nature of this kind of memorial information would be much needed in archival information and KO systems.

# **Discussion and Conclusions**

It is apparent that social annotations are many things at the same time as their inherent qualities are in the eyes of their beholders. The perspective to tags and comments and on the

<sup>&</sup>lt;sup>40</sup> Bowker and Star, *Sorting Things Out*; Hope A. Olson, *The Power to Name: Locating the Limits of Subject Representation in Libraries*, (Dordrecht: Kluwer Academic Publishers, 2002).

<sup>&</sup>lt;sup>41</sup> Fox and Reece, "Deconstructed Hospitality."

<sup>&</sup>lt;sup>42</sup> Ramesh Srinivasan, Robin Boast, Jonathan Furner, and Katherine M. Becvar, "Digital Museums and Diverse Cultural Knowledges: Moving Past the Traditional Catalog," *The Information Society* 25, no. 4 (2009): 265–78.

activities of tagging and commenting, and consequently, how tags and comments are read and managed by archival institutions make them different things not only for their authors, archivists and readers at present but also provide a frame of how they can be useful in the future. The economic, cultural and social perspectives to social annotations all emphasize the fact that they are always embedded in a (literally) social context. The social of tags, comments, tagging and commenting can oscillate between perceiving the participants as a *workforce* to support institutional aims and seeing them as actors that are *challenging and negotiating* institutional frameworks. At the same time, social annotation can be put on a scale on the basis of its transformational effect on the archive, picturing participants as being *users*, engaging with the collections for the sake of self-development (as in the formation of cultural capital and identity) or *contributors and co-creators* of the archive, or something in between. Where individual participants can be placed on these imagined scales is undoubtedly a question of blurred zones rather than definite coordinates that evinces the diversity of the contexts and conditions of (the phenomenon of) social annotation and the annotations (proper).

Probably the best practical advice for practising archivists that can be drawn from any theoretical inquiry into the underpinnings of social annotation is to acknowledge the fundamentally elusive and ambiguous nature of social annotation(s), its (and their) underpinnings and repercussions, and to be as transparent and honest as possible about why tags and comments are collected and how they will be managed later on. At the same time, it is important to acknowledge that different taggers and commentators are likely to have mutually different and multiple agendas, and whatever the outspoken aim of inviting people to engage is, participation has multiple economic, social and cultural premises and consequences.

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