Tags (metadata)

# My Concept

I want to explore the notion of tags and the act of tagging in the field of metadata. Metadata is “data about data” or information about data. And tags are a form of metadata that was first popularized with the emergence of Web 2.0. Tags are an important feature that makes browsing and searching easier by creating keywords or terms and assign them to a piece of information or object. This has the effect of classifying, categorizing and organizing content and information which can be a plausible in many fields.

Tagging systems are usually divided into two kinds: Taxonomy and Folksonomy. Taxonomy is a hierarchical tagging system where tags are created by authorized group specified by the owner of the content. Folksonomy is a more social tagging system where users apply public tags to online items. In some cases, the folksonomy practice is called collaborative tagging, social classification, social indexing or social tagging.

The use of the word “tag” in software dates back to the late 1970s and early 1980s. In this period the Unix text editor Emacs offered a software program called “Tags” that could automatically build a table of cross-references. Emacs could use the “tags table” to jump between function calls and the functions’ definitions. In this case the use of the word “tag” in software only refers to a word index and not metadata tags.

Later on, the online databases and early websites used keyword tags as a way for publishers to help users find content. In the beginning of the World Wide Web, the tags were used by web designers to tell web search engines what the web page was about, but these tags were only visible in the source code and not modifiable by users.

In 2003, the social bookmarking website “Delicious” provided a way for its users to add “tags” to their bookmarks in order for the users to find them later. Not many years later, the photo sharing website Flickr provided its users to add their own text tags to their pictures which constructed a flexible and easy network of metadata that made the pictures highly searchable. The influence of Delicious and the success of Flickr have helped popularizing the concept, and now tagging is implemented in many other social software websites like YouTube, Twitter, Tumblr and many more.

But the act of tagging is actually something we’ve done long before the existence of computers. Just look at how books in libraries are sorted and organized by their author name, genre or language. Another example of analogous tags could be museum object tagging in form of labels describing the exhibition’s name, origin, data and so on. In fact, tagging is a feature that roots deep in our human nature. Tagging is method very similar to how the human brain works – a method of networked associations. We all have the ability to recognize, separate and categorize objects or other people. Our minds are a huge self-organizing database system. We put people in different boxes labeled “family”, “friends”, “colleagues”, and sometimes more specific boxes maybe associated with a memory or more detailed relation like “the guy who borrowed my car once”, or “my boyfriend’s uncle whom I’ve never met”. When tagging, we put labels onto different items, so we can later use single terms or combinations of terms to search for these items. And by doing this we can organize information in several different ways and in several different places at once.

Even in the field of biology we talk about DNA strings as information biology. These strings contain “data” about our body which translates into proteins and cells in order to become our physical body. In other words, the foundation of life is built on the same idea of metadata. This mirrors our inner desire to create machines that are as human-like as possible, but also more intelligent than we are:

"Programmers bring bodily meaning to their work by applying models of human perception, and by trying to account for the ways that other social bodies are drawn into the process of meaning production." (Geoff Cox, 2013, s. 26)

But this means that the human flaws are often displayed in the technologies we make. Humans are lazy, self-ignorant, dishonest and stupid. We don’t always follow instructions; sometimes we can’t spell and punctuate properly; we lie to each other; and we often aren’t the best judges of our own information. These facts rises the suspicion of metadata and raise question of whether tagging will work as a way of organizing the whole Web. It also questions in what degree we should implement these human judgmental systems in the machines we make, and how we should be more aware of the usage of metadata (hence all the fuss about privacy issues).

# Problems I want to adress and why

**What is metadata and what are tags?**

**What are the advantages and disadvantages of the tagging system?**

These questions are important to answer since they give the reader a common understanding of the topic at hand. And they introduce to some of the existing problems with tags which are elaborated in the following questions and more detailed subquestions.

**What consequences does tags have on information technology?**

* Metacrap and spam-tags: Is there an abuse of tags?
  + Is there a lack of control? Is it possible to have self-organizing systems that can follow the dynamics and face-moving pace of information flow?
* Pace-layering: Tags are perfect in the fast-moving stream of information. But do they create true stability or false stability?
* Does it contribute to the field of machine learning? What may be the concerns in this?
  + Is it okay to introduce the human annotators' labeling and judgement skills to the machine?
  + Should machines have semantics? Why do we desire it to be subjective?

**What consequences does tags have on us and the digital culture?**

* ­­Can metadata be used to increase our self-reflection? (also concerns about external monitoring)
  + Hidden metrics: (Benjamin Grosser,” What Do Metrics Want? How Quantification Prescribes Social Interaction on Facebook,”)
* Universal meta-knowledge vs. Individual meta-knowledge?
* Metadata and privacy issues? (Something about the ongoing case about Cambridge Analytica)

These questions are my immediate thoughts and reflections on the topic, they open up for discussions and critiques and sees the topic in a wider context.

# Sources and how they might help in answering questions

Gene Smith, “Tagging: people-powered metadata for the social web”

* This book would probably be my main source to answer the simpler questions of what tagging and metadata is, and how it affects technology and society.

Benjamin Grosser, “What Do Metrics Want? How Quantification Prescribes Social Interaction on Facebook”

* I will parallel the discussion with this texts from our curriculum since it speaks a bit about hidden metrics.

Cory Doctorow, “Metacrap: Putting the torch to seven straw-men of the meta-utopia”

* This article will help shine a light on the problem of bad tags and how our human flaws are exposed unto technology.

Rodney H. Jones & Christoph A. Hafner, “Understanding Digital Literacies”

* This book has a chapter about networks and organization which might explain the organizational attribute of the tagging system and open up discussions about digital literacy.

# My next steps

Read the above texts and find some more texts, maybe narrow the number of questions and narrow the field of discussion. Write down my immediate thoughts about the topic and research possible new ways to attack the discussions – especially consider to dig deeper into the case of Cambridge Analytica’s use of data.