

## MAPPING KEY CONCEPTS IN CULTURAL ANTHROPOLOGY

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**Abstract.** In this paper we describe our experiences while exploring alternative approaches to explain social theory in an undergraduate course in Social and Cultural Anthropology. We started out with a keyword-mapping exercise. CmapTools was then used to introduce the idea of concept mapping. This approach was complemented by a Web/Wiki based Hyperglossary application to define keywords that were connected through hyperlinks. We reflect on the role of key concept mapping for the achievement of the specific learning goals of the course and on its usefulness in Cultural Anthropology in general.

### 1 Introduction

This project began with the simple question: How can we help students better learn social theory?

“Theory in Social and Cultural Anthropology” is a regularly taught undergraduate course at Stanford. The course reviews major figures and key thinkers in social theory. As an introductory course one of its pedagogical aims is to introduce students to the life as an academic. This means we like to engage them in scholarly debates, to help them understand the logic of argumentation and make them see theory as a fundamental toolkit for their work as anthropologists. A scholarly debate is an interactive process, where multiple viewpoints are considered and contested. However, it is very typical that initially students tend to look at the instructor as the authority to explain major theoretical concepts. It was one of our main objectives to engage students and make them participate in the debate as experts.

Inspired by Raymond Williams’ notion of “keywords” (Williams 1976) we began with the idea that social theory can be thought of in relationship to key concepts that help to create social reality. Keywords help generate a sense of the historical context of key thinkers, their intellectual network, genealogies, and heritage. Key concepts become then critical elements of an academic’s toolkit. Research in social theory happens through the continuous discussion of terms in a scholarly debate that includes multiple points of view. Along the lines of a notion of divergent thinking key concepts are contested based on different definitions, interpretations, and views on the readings. There is no absolute, true answer, but students are encouraged to think through a problem from multiple perspectives and evaluate the analytic framework using the key concepts in play. This is what marks the learning process.

We were drawn to the idea of concept mapping for two reasons: 1) The process of graphically mapping out and negotiating keywords in their relationships to each other seemed an intuitive alternative to a more traditional, merely textual approach, and 2) since we were envisioning the creation of concept maps as a collaborative endeavor, we felt that such a tool could be applied to facilitate a peer-to-peer discourse, thus de-emphasizing the instructor as expert.

### 2 The Course

The course offers an introduction to social theory through an engagement with three intimately related arenas: the social, the cultural, and the global -- distinguished here only for heuristic purposes. It is now common practice to establish a classical moment of social theorizing, a moment when Marx, Durkheim, and Weber are viewed as founding analysts of the modern social condition. Yet, it is useful to consider the context in which these figures emerged as important theorists. Indeed their invention as fathers is more recent than we may think. The course engages the ideas of these thinkers while situating them in wide-ranging debates that extend their thoughts in a number of ways. How does social theory intersect with contemporary issues? The answer can be approached two ways: (i) taking the theory and mapping it onto the issues as stake and (ii) analyzing the issues for implicit assumptions.

#### 2.1 Learning Goals

Objective of the class is to make sure that students acquire a knowledge of social theorists that serves as a basis for their training as cultural and social anthropologists. Students need to understand the interaction between the

idea of the social, cultural and the relation of subjects' location, gender, class, and ethnicity position. Of concern as well is how "social theory" can be applied for contemporary social issues. Integral is the role of the analyst in the making of theory.

In order to achieve this objective students engage the thoughts of social theorists critically and raise questions about method and underlying assumptions of an argument. This provides an opportunity for them to appreciate the strengths and limits of the arguments presented within the context of a certain theory.

Students are required to write a research paper that is the culmination of their preparation in how to design a research problem, how to find evidence and how to make an argument. An example is the analysis, reinterpretation and critique of a newspaper article, assuming a theorist's perspective. To that end the theory as well as the theorist as a historical figure must be put in a contemporary context. One way of doing this is through the elaboration of keywords and their definitions.

## 2.2 Challenges

This course is an undergraduate seminar for anthropology majors. Most students come in with little prior knowledge of theory in the social sciences and believe that the instructor will provide the "correct" answers to the questions. Oftentimes the content is difficult to grasp, and thoughts are not very accessible. It is not immediately obvious for students why they should bother reading the heavy works of old theorists. While the task of writing up definitions of keywords has always been part of the teaching in that class it also has been challenging for the students to see the relevance of that task and to make the connections to the bigger context and content of the course.

In keeping with the notion of education for empowerment our intention was to find alternative ways of approaching a theory laden course that would allow students to represent key concepts differently in a way that would motivate students to deal with the material actively and collaboratively.

## 3 Our Approach

### 3.1 Mapping keywords: the whiteboard

Our approach builds on an experience in a prior class we taught about Cultural Studies. As an introductory exercise we provided students with a list of keywords and the assignment to map those out on a whiteboard. This assignment was done collaboratively in groups of three and four. It was purposefully done at the beginning of the course under the assumption that students would not have much background on the keywords. We aimed to help them to approach the topic by generating questions, by provoking them to provide their reasoning behind the respective definitions and use the various map representations to generate a discussion around different views of the new research field.



Figure 1: Student generated collaborative map of keywords on Culture

Fig. 1 provides one example of a map developed by one of the student groups that comes close to a concept map centered around two core terms, culture and language. Other maps involved the use of two whiteboards on

top of each other to create a layered, quasi 3-dimensional representation or the introduction of images (tree) as metaphorical visualization.

### 3.2 Defining keywords: the Collaborative Hyperglossary

Based on this experience we parted initially from the idea of having students collaboratively edit and discuss different definitions of keywords. For that reason we started out searching for a Web based collaborative editing environment, which led to using a Wiki application (Twiki™ - A Web Based Collaboration Platform from <http://twiki.org>), very much alike Wikipedia ([http://en.wikipedia.org/wiki/Main\\_Page](http://en.wikipedia.org/wiki/Main_Page)), an online collaborative dictionary. The interface provides an easy way to publish simple webpages that can be interlinked, and the underlying philosophy of Wikis as an open environment allows anyone to edit and comment on any pages.

We adapted the tool to our specific needs, and designed it as a collaborative online hyperglossary. The "Hyper-Glossary of Cultural Terms" (Fig.2) allows users to simply edit and upload definitions and comments on key terms. Each key term is described on a different Web page. Multiple hyperlinks between can connect between the different pages, thus creating a hyperlinked network of related terms.

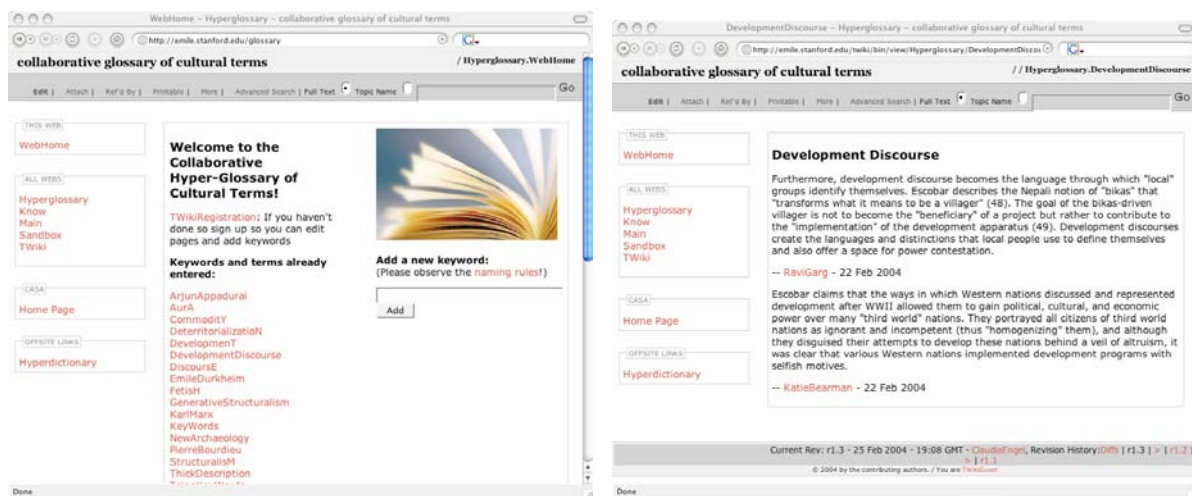


Figure 2: Collaborative Hyperglossary (front page and example of keyword definition)

The glossary can evolve and grow continuously over time around keywords and their contested definitions. We meant to have the students experience that there was not one correct definition and to motivate them to be responsible and create strategies on how to do their own research on the topics. A collective list of key terms that would allow students to appreciate ways certain terms is used to frame arguments and debates. We did not suggest any key concepts nor provide a list, but encouraged students to determine on their own which key concepts they would select based on their reading of the course material.

Because of time constraints and availability the hyperglossary could only be introduced later during the course. This tool was used mostly by students and less by the instructor. Even though we were concerned that there would be too much of a learning curve to understand the technology and rules of how to create pages and hyperlinks it was quickly adopted by students. Most of the activity in the hyperglossary happened outside the class.

In addition to the hyperglossary we considered a different application that would allow to map key concepts more visibly in a two-dimensional space and visualize relations graphically. Therefore we chose CmapTools (from IHMC CmapTools Knowledge Modeling Kit. <http://cmap.ihmc.us/>).

### 3.3 Representing theory: Cmap

Cmap was first introduced through the instructor and used by her to present a summary and a context for readings for particular seminar sessions. Mapped out were relationships between key thinkers, their historical context and influences, as well as connections to other readings (see Fig.3). The Cmap was uploaded to the IHMC server, where we set up a folder with restricted access. Hardcopies were printed and taken to class.

Students usually annotated those individually and took notes during the introduction of the readings and discussion.

After a few sessions students started adapting their way of working with the readings to a similar practice. Each session had designated discussants to prepare and guide the conversation of the assigned readings. Interestingly it was the idea of mapping out key concepts that was appealing, not the use of the CmapTools per se. Students typically provided an introduction and prepared a list of questions to get the conversation going. Later they started using the blackboard to write down key terms they themselves found relevant. The whole class would then contribute to the keywords and elaborate connections between the terms. The use of the CmapTools software in that whole process was only marginal.

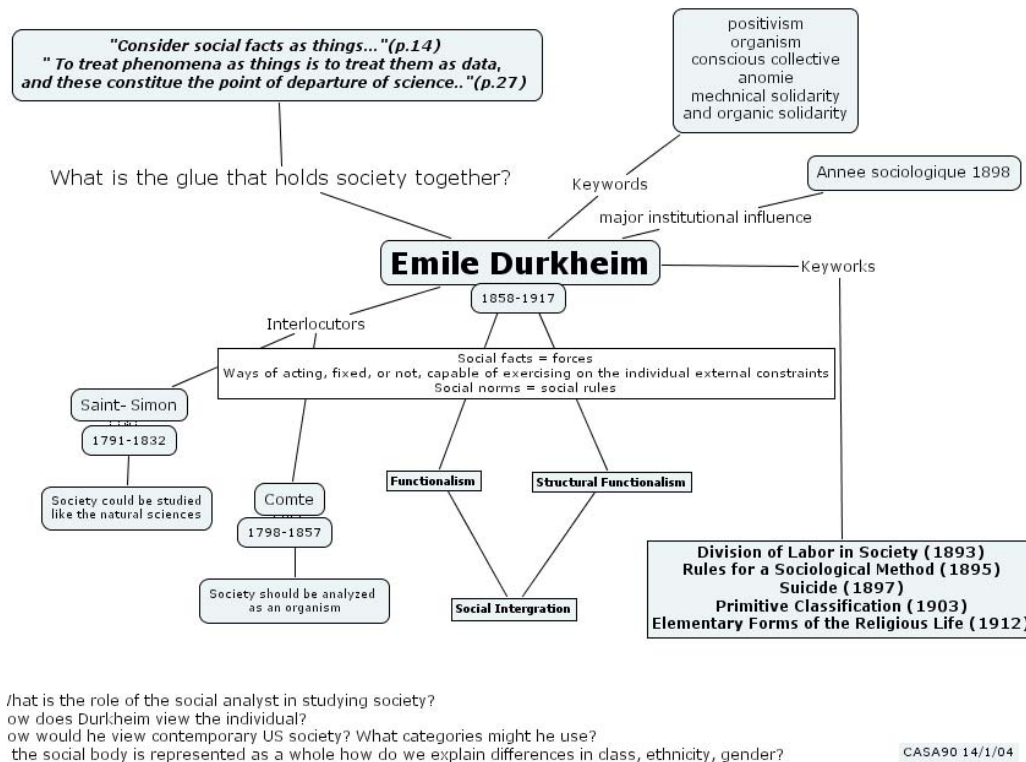


Figure 3: Concept Map: Introduction to readings from Emile Durkheim

## 4 Reflections

### 4.1 Comparison of the tools

Table 1 summarizes the differences that deemed relevant for our experience in the use of the two tools.

As the table shows, both tools are distinctly different in a number of characteristics. It was part of our experimental approach to try to use both instruments complementary and thus be able to take advantage of the strengths of both of them. While there are disadvantages to use two different systems, and while apparently the visual potential of Cmap was very appealing to the students and instructor we also felt that Cmap alone would not provide all the features we were looking for. For example, we wanted to promote interaction for the whole group outside of the classroom, and for some students installing the software did present a hurdle.

More elaborate versions of a combined approach of representing knowledge in an interconnected way, both visually and textually exist. One example is the Visual Thesaurus, where terms are connected in a 3-dimensional representation through different line types with different meanings, where proximity plays a role and a textual representation is included as well (<http://www.visualthesaurus.com/online/index.html>).

Cmap	Hyperglossary
<ul style="list-style-type: none"> <li>• Graphical/visual</li> <li>• Potentially hierarchical structure</li> <li>• More focus on relationships</li> <li>• Links are visible lines</li> <li>• Client needs to be installed, PC only</li> <li>• Offline use possible</li> <li>• Collaboration happened face to face (in class)</li> </ul>	<ul style="list-style-type: none"> <li>• Textual/hypertextual</li> <li>• Non hierarchical structure</li> <li>• More focus on definitions</li> <li>• Links are (virtual) hyperlinks</li> <li>• Access through web browser, any OS</li> <li>• Can be accessed online only</li> <li>• Interaction with the tool remotely, outside class</li> </ul>

Table 1: Comparison Cmap vs. Hyperglossary

#### 4.2 Value of key concept mapping for the course

Reading and writing as typically individual activities and in-class discussion as potentially interactive are the traditional techniques used in cultural theory courses. With key concept mapping as a technique to approach the complexity of social theory we deliberately chose an approach radically different from conventional teaching practices in our department.

Cmap allowed for a genuinely different way of re-presenting and interacting with the textual material, while the Hyperglossary, even though built around the notion of keywords and potentially more collaborative, still might come closer to a conventional approach of writing. Inspired by the instructor using Cmap representations for her introductory comments, key concept mapping was picked up quickly by the students as an appealing alternative that highly motivated the group to interact with the assigned texts.

We also believe that the technique of starting out with a collection of keywords in a more informal way, almost similar to a brainstorming session, helped support certain leaning styles and most likely include more students in the class activities. We observed two very silent students who were coaxed out of silence by the technique. Maybe keyword mapping created a less formal and threatening atmosphere. Students could just throw out ideas - "I think X is an interesting word" or "The author uses the expression X and I don't know what it means", which then would become subject of the group debate.

In addition, and somewhat independent from the actual tool, we think that the collaborative aspect had quite an impact on students' perception of the class. The key concept mapping activities turned into an ongoing generative process. All participants were building something together with the potential to even re-use the material in subsequent courses.

Taking all this together and comparing it with earlier versions of the class this one allowed us to watch students transform from passive consumers to active participants in the achievement of their educational goals. In various conversations following the class students stated that they now see keyword mapping as a useful tool to help them approach certain theoretical domains and approach difficult reading material. Other instructors at the department became interested and Cmap was subsequently been used in a graduate Archaeology class on materiality.

#### 4.3 Use of concept maps for understanding cultural anthropology

Concept mapping originated from the natural sciences (Novak 1998) and has been used exhaustively in planning, engineering, and assessment. Fewer applications from the social sciences are known, for example psychology (Jacobs-Lawson and Hershey 2002) or sociology (Trepagnier 2002). However, concept mapping can be of high potential value for theoretical domains where relations between concepts are often abstract and there can potentially be multiple connections (Trepagnier 2002, p.108). Specifically for the domain of cultural anthropology Raymond Williams' idea about keywords, resonates quite well with the notion of "mapping" of key concepts. He was trained as a literary scholar.

In fact, an important component of our approach is the relationship between concepts and words. Murphy (2002) in a recent comprehensive review of the research around concepts dedicates an entire chapter to “Word meaning” where he tries to argue for a specific relation between the process of making meaning of words in the context of concepts. For him “Words gain their significance by being connected to concepts” (Murphy 2002, p. 385). This, we believe, comes close to our perception of keywords and how we try to have students make meaning at the intersection of linguistics, discourse, and concepts - concepts understood as a collective term that brings together a number of ideas of a new field, still largely unknown to them.

Parting from the notion of “good scholarship” we may ask what it involves. Oftentimes, making an argument is important piece of it, something we are not sure key concept mapping alone can provide. Collaborative tools for computer-supported visualization of arguments (Kirschner et al 2003) might be an alternative to consider.

While generating a list of key concepts is relatively easy, a more difficult task during concept map construction is to find the “linking phrase” that appropriately expresses the relationship between two concepts to form a meaningful proposition. Concept maps are graphs that are comprised of concepts (defined by Novak 1998 as perceived regularities in objects and events). Social research in the 20th century can be broken down into several categories that are interrelated, contemporary, and that influence each other, like “kinship” networks, genealogies, schools, key concepts, and key players. Concepts and debates in social theory might be more controversial and complex than a concept map may convey. While under certain conditions it may be useful to simplify, on other occasions it may be detrimental, because too many implicit assumptions have to be made which can distort the representation.

Again, we ask: what does that mean for social theory? In addition to having possible multiple ways of mapping, oftentimes relations between key terms have meanings like ‘context’, ‘situated’, ‘influenced by’, ‘awareness’, all of those relatively unspecific connections, and it is not clear if it is it always possible to qualify connections. Is it useful to ‘force’ students to think about qualifying the connections between concepts? Here a different tool like the hyperglossary may have its advantages as connections don’t have to be specified.

While it is clear that the concept maps produced in our class do not necessarily involve a hierarchical structure our approach is coherent with the underlying learning theory that learning takes place by the assimilation of new concepts and propositions into existing concept propositional frameworks held by the learner, and thus promotes meaningful learning (Ausubel 1963). However, for reasons of consistency it might be more appropriate to apply the term “topic maps” rather than concept maps.

The project presented here was meant to be an experimental pilot study to explore tools and innovative approaches that would allow us to apply the notion of keywords and key concepts and work with theoretical texts and contents in a non-conventional way. We don’t have any direct evidence about how our intervention influenced the learning process other than seeing students motivated, more engaged and seeing them use the technique not only in other classes, but also for their own research projects. As usual in these cases, we have generated more questions than answers. However, we are intrigued by their potential for alternative approaches to academic scholarship.

## 5 References

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