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# Social Identity Theory and Computer-Supported Cooperative Work

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## Introduction

Social identity is defined as the “part of the individual’s self-concept which derives from their knowledge of their membership of a social group (or groups) together with the value and emotional significance attached to that membership” [9]. Social identity theory argues that, in certain cases, an individual’s identity, values, and behavioral tendencies can be superseded by the norms of a social group in which they claim membership, leading to behaviors that are perceived to be typical of the group but not necessarily the individual.

This theoretical framework explains behaviors of groups in a way that is more than simply the sum of individual members’ behaviors. It encourages us to think more about the ways in which both extreme and commonplace behaviors might be the product of exposure to and identification with the values of one or multiple social groups. CSCW research has much to offer to social identity theory, from new contexts for evaluating theory to a variety of conceptual frameworks that can inform the development of new theory within the social identity framework.

In this paper, we will explore some of the traditional

domains of social identity theory, discuss some of the newer extensions of social identity theory, and talk both about how a deeper understanding of social identity theory can benefit CSCW research and how, in return, CSCW can contribute new insights and directions for extending social identity theory.

### **Foundations of Social Identity Theory**

Social identity theory emerged from a larger body of research on stereotypes and prejudice to focus on how group memberships and the individual, influence their self-concept, and direct their behavior [3, 9]. At its core, social identity theory was a departure from the individual-level analyses that had previously dominated psychological research in favor of an approach focused on social groups as a driving force in human behavior. Social identity theory argues that group membership supplants individual identity in certain scenarios, and that it becomes a source of self-esteem. As such, group members tend to focus on both ingroup strengths and perceived outgroup flaws, which may lead to prejudice and discrimination. Several themes are foundational in social identity research, including power dynamics [10], attribution of behavior (i.e., patterns in explaining group behaviors or outcomes) [2], and social and self-categorization.

Self-categorization theory is a more recent addition and complement to social identity theory that develops the idea of group prototypes [11]. These prototypes form both as a result of self evaluation within the individual, creating a depersonalized self-concept and shifting behavior to match group norms, and in individuals' assessments of others. Core to self-categorization theory is the *metaccontrast principle*, which states a group forms when the differences within a collection of people are smaller than the differences between that collection of people and

other people [12]. Hogg and Terry [3] give this theory credit for explaining the emergence of normative behavior, stereotyping, ethnocentrism, positive ingroup attitudes and cohesion, cooperation and altruism, emotional contagion and empathy, collective behavior, shared norms, and mutual influence (123).

### **Recent Developments**

More recent additions to social identity theory explore group dynamics in more depth. For example, Hogg [4] develops a social identity theory of leadership. He critiques traditional theories of leadership that emphasize individuals' personal attributes (e.g., charisma) as predictive of their leadership role in a group, and instead argues that members who are most prototypical of group norms become leaders. Members embodying prototypical norms are more liked, and therefore other group members are more likely to comply with their requests. Hogg argues that this type of influence creates a power imbalance, and that group members attempt to rationalize this power imbalance by referring to the individual characteristics of the leader, such as their perceived wisdom or skill rather than their prototypicality.

Building on both social identity theory and self-categorization theory, the "black sheep effect" describes intragroup conflict surrounding norm violations. Marques, Yzerbyt, and Leyens [5] find that hostility toward ingroup members who deviate from the ingroup's prototypical norms is significantly greater than hostility toward outgroup members who exhibit the same behaviors, leading them to term these ingroup members "black sheep." This result has been replicated in a variety of contexts.

Another recent contribution of social identity theory

explores the concept of deindividuation in group behavior. Working forward from Le Bon's classical theories of mob behavior to more modern theories of deindividuation (e.g. Zimbardo, Milgram), the Social Identity Model of Deindividuation Effects explores what happens when individual identity is dominated by social identity in mobs or crowds [7]. This model contests the notion that large, deindividuated groups inherently behave in antinormative or antisocial ways, instead arguing that these circumstances simply encourage individuals within the groups to behave in ways that are more prototypical of group norms, which can be variably positive or negative.

### **Social Identity Theory and CSCW**

There are a variety of behaviors in social computing that could be explained by social identity and self-categorization theory. The increasing polarization of opinions and resulting extreme behaviors in and between groups online is a topical example. Much has been written recently in American news media about the emergence of the "alt-right" and the related growth of "fake news" online. Per Marques, Yzerbyt, and Leyens [5], the gradual radicalization of groups online (which certainly are not limited to American "alt-right" groups) ought to be characterized by continuous attacks on the more moderate members of a group, which should be markedly more hostile than their attacks on outgroup members, and a corresponding shift further from moderate perspectives. This fits existing narratives coming from the far-right, which suggest that liberals eat their own by attacking more centrist liberals (see e.g. <http://www.nationalreview.com/article/428854/liberals-attacking-liberals>). The idea of gradual radicalization through attacks on moderates, if found to be accurate, could inform more nuanced treatments of radical behaviors online.

While deindividuation effects have been explored in some depth in laboratory environments [7], it remains to be seen whether there is something particularly "special" or "different" about deindividuation effects online [8]. Why are examples of extreme behavior seemingly much more common online than offline? One possible explanation for such a difference might be that, as online spaces more frequently allow for anonymity via the masking of personal identifiers, in online settings the membership of many large groups can only be assumed in some abstract way, leading individuals to speak and respond in some sense to an abstraction rather than a collection of individuals.

Social computing research has much to gain from drawing more from social identity and self-categorization theories, but it also has much to give back. Social identity researchers in traditional social psychology programs have at least briefly explored Computer-Mediated Communication [6], but relatively little work in online contexts overall has been used to develop social identity theory. For example, work on context collapse could be used to explain what happens when many identities are primed simultaneously. Do Facebook users shift rapidly between identities as they scroll down their newsfeed? Is a meta-identity developed as some sort of aggregation of particularly strong aspects of different simultaneously primed identities?

Similarly, an examination of transitions across platforms can inform an understanding what happens when primacy of different social identities shifts. We know from work on games that priming of certain aspects of identity can have effects well beyond when a stimulus disappears [1]. What happens when a person shifts from playing World of Warcraft to posting on Facebook? Do their subsequent posts reflect in some small way the identity that they had

embodied in the game?

CSCW work also has the potential to help explain schisms within groups. While a relatively simplistic explanation could be derived from the *metaccontrast principle*, online contexts offer a way to develop a much more nuanced understanding. Forums on reddit and groups on Facebook provide easy access to records of group debates and disagreements, and from this evidence it should be possible to study how exactly groups break apart.

Perhaps the most important lesson to be learned from social identity theory is the importance of considering the unit of analysis of any given study in social computing. Many CSCW studies focus on individuals or on individuals within (or as representative of) groups. In some cases, it might be worthwhile to make groups as a whole the units of analysis. For example, can generalizations about group norms or behaviors be made from interviews of individuals? How might the resulting findings change if group members were interviewed together? At minimum, the differential impact of these two approaches could be considered in more depth in studies of social behaviors.

## Conclusion

Social identity theory provides a strong reminder that there is an important distinction between the behavior of an aggregation of individuals and the behavior of social groups. Both social identity research and social computing research stand to benefit significantly from a dialogue that considers directions for development of the theory and questions regarding methodologies and perspectives.

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