Thesis Portfolio

Social Networks and Archival Context OpenRefine Plugin
(Technical Report)

Lurkers in Online Communities
(STS Research Paper)

An Undergraduate Thesis

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Table of Contents

SocioTechnical Synthesis

A majority (approximately 90%) of users do not participate in online communities, partly due to the lack of usability and sociability of the user interface. Therefore, it is necessary to investigate and analyze methods to improve features of user interfaces of online communities that will encourage increased, more meaningful participation from its users. The study of Human-Computer Interaction (HCI) helps bridge the disconnect between the technology designed by software developers and its users. If software developers create a user interface that has low usability and sociability, it may discourage user participation instead of encouraging it. Habermas' theory of communicative action will be used to measure the success of an online community through the meaningfulness of posts while Preece's framework for usability and sociability will be used to analyze methods to improve user interface design. Information from interviews and surveys paired with an analysis of existing data will be used to support both frameworks. I plan to interview subject matter experts in online communities, create and utilize a survey that gauges the effectiveness of certain features on Piazza, and use data from Piazza to investigate the lifecycle of an online community through metrics such as the quality and frequency of posts from specific users. I expect to find supporting data of larger proportions of lurking in the earlier stages of the lifecycle of an online community, with lurking levels reaching a steady state when norms are established in an online community. Variables such as the size of the online community and how effective features of the user interface are will also influence overall levels of lurking in an online community. Analyzing lurking in online communities through an STS lens is necessary, as it forces software developers to consider how the user will interact with the features of the user interface and with other users of the online community. If a generalized trend of levels of lurking can be realized from this research, this information can be

used by developers to create and modify features for specific phases of the lifecycle of an online community that more effectively discourage lurking.