# Negotiating with Angry Mastodons: The Wikipedia Policy Environment as Genre Ecology

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### **ABSTRACT**

Groups collaborating in online spaces on complex, extended projects develop behavioral conventions and agreed-upon practices to structure and regulate their interactions and work. Collaborators on Wikipedia have developed a multi-tiered policy environment to document a set of evolving principles, processes, and rules to facilitate productive group collaboration. Previous quantitative studies have noted this hierarchical structure, but have evaluated the policy environment as a singular entity rather than investigating potential differences between the three main regulatory genres that enable it. These studies also excluded essays, the least official regulatory genre, from their analyses. We perform a comparative content analysis of all three genres (policies, guidelines, and essays) and demonstrate that they focus on different areas of community regulation. Drawing on the theory of genre ecologies we discuss the possible role of unofficial genres such as essays in articulating and regulating work practices in online, organized collaborative work.

## **Categories and Subject Descriptors**

H.5.3 [INFORMATION INTERFACES AND PRESENTATION (e.g., HCI)] Group and Organization Interfaces – Computer-supported cooperative work, Theory and models, Web-based interaction

## **General Terms**

Management, Documentation, Standardization, Theory

#### Kevwords

Computer-supported cooperative work, computer-mediated communication, sociotechnical systems, wikis

## 1. INTRODUCTION

Regulatory practices in long-term group collaborations evolve over time, rather than being fully defined and articulated up front. When work is conducted in virtual spaces through collaborative software tools such as wikis, contributors have the ability to inscribe these emerging norms and conventions into the collaborative environment itself by encoding them into shared

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information assets (e.g., pages) within the environment. These information assets are then experienced by the collaborators as regulatory documents. In open collaborative systems such regulatory documents are inspectable and reviseable by the community of users, making them flexible enough to be shaped and negotiated over by different stakeholders, yet stable enough to persist as visible and coherent articulations of community rules and practices. On Wikipedia, users have created a class of pages that address a wide range of regulatory topics that are important to their work [5]: from official rules for article creation and user behavior to technical how-to's, editing tips, philosophical principles, best practices, and heuristics for contributing to the encyclopedia and interacting with fellow editors. In the nine years since Wikipedia's inception, these regulatory documents have come to be organized into three officially recognized categories: the policy, the guideline, and the essay. These categories are differentiated by a set of templates that reflect the purpose of each category (Figure 1).



Figure 1: The Policy, Guideline and Essay Templates

Previous studies have demonstrated the important role that these documents play as decentralized governance mechanisms [5], tools for mediating conflict and promoting coordination [6], and sites for the articulation and negotiation of community concerns [12]. Other studies have shown that in addition to serving as a public repository for Wikipedia's rules and regulations, the policy environment also serves a more active role in the regulation of content and behavior on Wikipedia. Wikipedia editors frequently create hyperlinked citations to these documents from article talk pages—the primary forums for discussion, debate and coordination on Wikipedia [2]. In talk page discussions, editors cite policy documents to lend weight to their words as they attempt to educate new users, socialize deviant participants and persuade others about the shape the article should take [12]. Policy documents are also invoked in the context of editorial "power plays" [7]-attempts to sanction or discredit other contributors, or to bolster or legitimate one's own position.

Although the templates described above seem to be intended to advise editors to take genre distinctions into account when evaluating the guidance embedded within a particular policy document—whether it be a policy, a guideline, or an essay—researchers who have investigated these documents have traditionally treated the policy environment as a single entity and not analyzed potential distinctions between the regulatory role of the different document genres [2]. In addition, these previous studies have traditionally excluded essays from their analyses and focused solely on the role of policies and guidelines in the regulation of Wikipedia content and editor behavior [2][3].

We believe that exploring the differences among the regulatory guidance provided by these three genres, and in particular the role of essays, is critical to developing a fuller understanding of how regulation is enacted on Wikipedia. Our study is also motivated by evidence on the relative rates of policy and essay creation in recent years. Several studies from 2008 have shown that while the frequency of policy citation on article talk pages has increased [2], policy creation has slowed [5]. Anecdotal evidence suggests that this trend continues: from January 2008 (when our experimental data were gathered) to March 2010 the number of Wikipedia policies has increased only slightly, from 47 to 51<sup>1</sup>. However, during that same time span the number of essays has more than doubled, from 404 to 932<sup>2</sup>. Such a dramatic increase suggests that essays may be performing a valuable regulatory role within Wikipedia, but the nature of the guidance they provide has not been explored.

In this paper we use the theory of genre ecologies to describe policies, guidelines, and essays as regulatory genres that each inhabit a unique ecological niche within Wikipedia and contribute to community regulation in distinct and complementary ways. Drawing from previous scholarship on the emergence of and interactions between document genres in traditional workplaces, we argue that both the hierarchical structure of the policy environment and characteristics of the genres themselves have emerged in response to editors' needs for handling contingencies in the interpretation and enactment of regulation in the course of their work.

# 2. GENRES AND REGULATION

Genre has proven to be a powerful analytical concept for analyzing regularity in the communicative practices of organizations [14][9][4]. In this work, genres are understood to be types of communicative actions that are recognized and enacted socially. Such types of communicative actions are realized in routine ways, often taking on similar generic structures, but it is their shared orientation to shaping beliefs and actions that make them particularly interesting in a regulatory environment. As explored in Schryer's work [10], people "participat[e] in regularized practices mediated by genres that provide them with the constraints and resources they need to improvise their activities" (30). Such genre-mediated regularized practices are thus similar to what are sometimes called conventions in studies of groupware systems. Gloria Mark [8], for example, uses conventions to refer to "rules and arrangements established in the group, common and accessible to its members, that users need to cooperate effectively" (19). In a genre analysis approach, the

conventions that are focused on are those that are instantiated in recognizable types of communicative practices. (For a related discussion, see also [1].)

Genre Ecologies. Previous research on the formation and characterization of genres that support work activities [11] has shown that new genres often emerge to fill gaps left within work systems when individual users identify contingencies in their work practice that require existing genres to be supplemented, reinterpreted, and clarified. Spinuzzi and Zachry [11] found that users of closed document systems often find it more expedient to create unofficial genres than to go through more formal channels for updating existing official ones. Sometimes these genres gain official recognition after being widely adopted, while at other times they remain in widespread use despite never achieving official recognition. In collaborative work that is complex and ongoing, then, official and unofficial genres co-exist. Official genres represent an organizationally sanctioned view of work processes and emergent, unofficial genres fill niches where the formal genres are inadequate or not well articulated to localized, context-specific needs. Together, the official and emergent genres make up a genre ecology. A genre ecology, in its totality, accounts for how work is mediated in regularized communicative practices.

In the Wikipedia workspace, we suspect that essays, which are less official, authoritative, and structured than the policy and guideline genres, are the space in the ecology where contributors have opportunity for policy innovation. The form, content, and use of essays show many similarities to policies and guidelines: they are often collaboratively created, heavily edited, and cited on article talk pages. However, unlike policies and guidelines, Wikipedia essays are not subject to a formal consensus-based adoption process and entail no consequences when violated. And although some essays do go on to become policies [7] the vast majority of them do not. Essays may also provide alternate mechanisms for regulating editor behavior and article content in situations where policies and guidelines do not provide flexible and appropriately localized guidance. If essays do in fact address a unique configuration of regulatory concerns within the ecological space, we expect that the content of the essays themselves will emphasize different areas of regulation than policies or guidelines.

## 3. METHODOLOGY

We collected our data from a January 2008 data dump of the English Wikipedia. Our population consisted of the 47 policies, 232 guidelines, and 404 essays within the *Wikipedia* namespace at the time the data were collected.

Community Investment Score. We chose to analyze all 47 Wikipedia policies but only those guidelines and essays that represent the greatest degree of community investment because previous research has shown that not all documents in the policy environment are equally used [2], and because there are substantially fewer policies than guidelines or essays. Our Community Investment (CI) score provides a way of identifying a relevant sample based on the primary ways Wikipedians interact with these documents: by authoring them and citing them on article talk pages. For every policy document, CI gives even weight to that document's value according how it ranks within its genre, according to: a) the number of unique editors who had made a contribution to the document page, b) the number of unique editors who had cited that document on an article talk

<sup>&</sup>lt;sup>1</sup> http://en.wikipedia.org/wiki/Wikipedia:List of policies

<sup>2</sup>http://en.wikipedia.org/w/index.php?title=Special:WhatLinksHere/Templ ate:Essay&namespace=4&limit=50&hidetrans=1

page, and c) the total number of citations that the document had received from article talk pages.

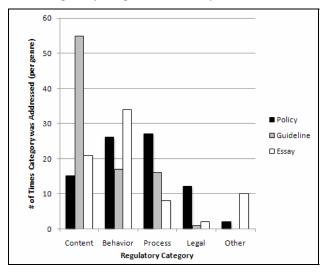
In order to facilitate direct comparison between the three genres, we collected the 47 top-scoring documents from the guideline and essay genres along with all 47 Wikipedia policies.

Content Analysis. We based our coding categories on previous codebooks [2][6] developed to classify Wikipedia policies, guidelines, and barnstars according to the categories of work and the community concerns they addressed. We adapted these categories to suit the aim and scope of our own analysis through an iterative process of policy examination, sample coding, and discussion. Our final classification scheme consists of five top-level regulatory categories (Content, Behavior, Process, Legal, and Other) and 16 sub-categories that describe fundamental areas of regulation on Wikipedia. Two coders independently coded each document in our sample according to the types of regulatory concerns it addresses and then resolved any disagreements through discussion. In this paper, we present the findings from our analysis of the top-level categories.

## 4. FINDINGS AND DISCUSSION

Our coding resulted in the identification and categorization of 246 instances where the regulatory categories were addressed in the policy documents. Many documents addressed multiple topics, with a mean of 1.74 instances per document.

Table 1: Regulatory Categories Addressed by Genre



A Chi Square Test for Independence demonstrated a significant relationship between genre of a policy document and the top-level topic category addressed by that document (p< .001). Some of the most notable differences are described below.

**Policies** tended to address Process (27 observed/17 expected) and Legal (10/4.2) issues more than expected by chance, and topics related to Content less than expected (15/29.5).

**Guidelines** primarily address article Content (50/30) and contain relatively fewer references to Behavior (17/25) than expected by chance.

**Essays** dealt with issues related to editor Behavior more than expected (30/21.5) and were less likely to address subjects

relating to Content (20/25) or Process (8/14.6). Essays also contained the majority of the total topics that were not classifiable under our coding scheme (8/3).

The differences between the proportion of regulatory concerns addressed by policies, guidelines, and essays supports our assertion that they represent distinct document genres and are intended to support different aspects of regulation on Wikipedia. In the following section we focus on the role of essays and discuss the possible reasons why this unofficial regulatory genre has emerged in response to editors' specific, localized needs.

The Role of Essays. Wikipedia editors write essays for a variety of reasons: to blow off steam, to share advice, to describe a particular instantiation or interpretation of an existing policy or to assert an ideological stance. Essays often use humor, hyperbole and anecdote to convey serious messages about proper editor behavior, high-level principles, and best practices for editing. For example the essay No Angry Mastodons, an interpretation of the Civility policy, advises users to avoid editing when stressed, stating: "The fight-or-flight tired drunk, hungry, or response developed by our pre-human ancestors may have helped them escape from angry mastodons, but it isn't constructive in an online encyclopedia."



**Figure 2:** No Angry Mastodons is a humorous essay with a serious message about proper editor behavior.

Essays as a Response to Bureaucratic Formalization. One possible reason for the expansion of the essay category involves the diminishing opportunities for editors to contribute to policy creation. As the process of policy creation becomes more formal and bureaucratic [3], individual editors' ability to directly shape the policies that govern them diminishes. Because the rate of policy creation has slowed over the last five years, and the process of adding to or amending existing policies has become more restricted [3], editors may see essays as a more accessible and desirable way to contribute to their own governance. Genre ecology research shows that such informal genres can become widely utilized organizational resources, despite never having been fully formalized or officially adopted.

**Essays as Soft Regulatory Mechanisms.** The number of essays that address editor behavior invites several interpretations of their regulatory role. In genre ecologies, users often create emergent genres to fill niches where available genres have proven insufficiently contextualized or otherwise unsuited to the work at hand. As in the case of *No Angry Mastodons*, essays sometimes address regulatory topics that are also covered by policies or

guidelines. We suggest that essays like *No Angry Mastodons* may offer editors a softer mechanism for regulating behavior in situations where citing a policy (such as the *Civility* policy) would be too heavy-handed or insufficiently specific.

Because policies and guidelines are official rules, pointing out that another editor is violating one amounts to a serious criticism. Since violating policy can lead to being blocked from editing or even banned from Wikipedia, citing a policy in response to another editor's behavior carries an implied threat. In situations where an editor wants to persuade another editor to change their behavior, citing policies or guidelines might be seen as an act of intimidation. In such cases, citing a humorous, unofficial essay might help resolve a tense situation without escalating it into a full-blown edit war.

## 5. CONCLUSION AND FUTURE WORK

This study contributes to a richer understanding of how regulation is enacted on Wikipedia by presenting the Wikipedia policy environment as an ecology of interrelated genres used to mediate the complex regulatory activities of Wikipedia users. Our initial analysis demonstrates that rather than being monolithic, the primary recognized forms of guidance within the policy environment address different topic areas, suggesting that they may also play distinct regulatory roles within Wikipedia. We also perform the first empirical analysis of the essay genre, and illustrate that the essays' topical emphasis on behavioral issues may reflect their primary use as soft regulatory mechanisms.

In order to more fully understand the distinctions between these genres, and their uses and interactions, future work will examine the social contexts in which they are cited on article talk pages. We are performing a content analysis of the regulatory behaviors implicated in the citation of essays, policies, and guidelines to determine whether they are cited under different circumstances and used for different strategic purposes.

## 6. ACKNOWLEDGMENTS

This study was funded in part by NSF grant IIS-0811210. The authors would like to thank Ivan Beschastnikh, Katie Derthick, Travis Kriplean, Tomas Sadilek and Clay Spinuzzi for their assistance.

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