OTESSA PROCEEDINGS

Social Annotation for Power Negotiation

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Abstract
Social annotation and role-play are two pedagogical approaches that promote active, student-centred learning. In this paper, we report on how the two approaches were combined in a senior-level university course that aimed to reveal the multiple dimensions and complexity of policy development and decision-making for natural resource management. We begin with a review and analysis of social annotation and role-play as teaching strategies. We then describe their combined implementation in the senior-level course—including reflections from the course instructor and a student in the class—while situating our reflections within the context of an existing framework for critical social annotation. We conclude that when implemented together, and with careful preparation and clear expectations of student conduct, the complementary strengths of social annotation and role play offer unique opportunities to subvert hegemonic models of knowledge production and exchange. The addition of students' role-played annotations enabled us to redefine whose knowledge and experience are worthy of consideration by giving voice to students as authorities alongside authors of texts and by filling in gaps in the perspectives presented in texts.

Keywords: social annotation, role play, open educational practices, knowledge authority

Introduction

Social annotation leverages collaborative technologies to help students make sense of texts alongside peers. The practice involves highlighting or commenting on a document, "where interaction around the content on its margins is possible" (Bali et al., 2020, p. 2) (see Figure 1). As readers annotate, their mark-up and commentary become visible and threadable to others, allowing for layers of discussion within a PDF or web document. Social annotation is considered an open educational practice, in that it often uses open content and technologies, centres collaborative learning, and enables students to "shape the . . . knowledge commons of which they are a part" (DeRosa & Jhiangiani, 2017, para. 14).

Figure 1

Sample Annotation
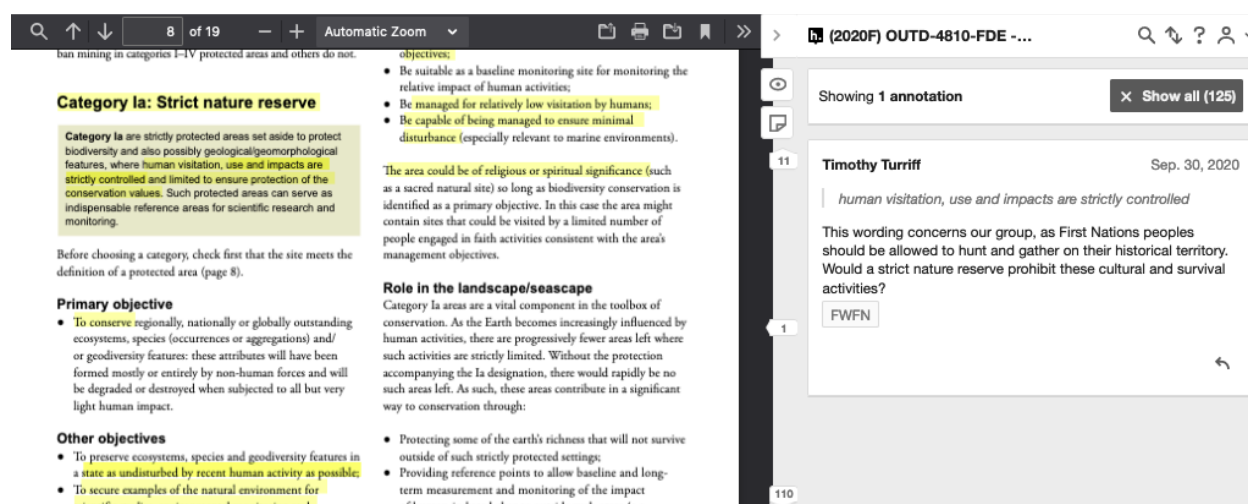
Social annotation enables students to co-construct knowledge and negotiate power structures that traditionally privilege authors and teachers over readers and students. However, some scholars question the potential for social annotation to subvert power structures around knowledge creation and authority without simultaneously reinforcing problematic power differentials (Bali et al., 2020; Brown & Croft, 2020). Brown and Croft (2020) therefore created a framework for critical social annotation that offers strategies to implement this technology in subversive, minimally harmful ways.

Role-play is a pedagogical approach that enables multiple perspectives to emerge from students who are assigned to examine a subject from a point of view other than their own (Sogunro, 2004). Although typically implemented in synchronous, in-person classroom settings, role-play can be incorporated in asynchronous, online learning environments via blogs (Adelman & Nogueras, 2013), discussion boards (Ponnusamy et al., 2009; Buckley et al., 2005), or chat rooms (Saunder, 2016). With in-depth simulations that aim to replicate complex real-world situations, role-play reveals "motivations, behavioural constraints, resources and interactions among institutional actors" that might otherwise escape consideration (Smith & Boyer, 1996, p. 690). While students are typically assigned to represent one single perspective,

diverse perspectives collectively contributed by students result in a more holistic understanding of complex issues (Westrup & Planander, 2013).

In this paper, we engage with Brown and Croft's (2020) framework while sharing how we paired social annotation and role-play—both student-centered pedagogies that empower students to contribute to their own and others' learning (O'Neill & McMahon, 2005)—to create a learning space where students challenged traditional knowledge authorities by "talking back" to texts from diverse perspectives. Addressing the dearth of literature that documents the combination of role-play with social annotation, we propose that the two practices are complementary, especially in disrupting hegemonic knowledge.

Literature Review

Existing literature envisions social annotation as a "disruptive" practice that can alter conventional power structures (Brown & Croft, 2020; Kalir & Dean, 2018). It creates a "production-consumption" role that enables readers to engage in, critique, and apply knowledge to a text, thereby challenging power structures that privilege authorship over readership (Kalir & Dean, 2018; Schacht, 2020). Per Kalir and Garcia (2021), those who annotate are themselves creating new knowledge and discourses. In educational contexts, social annotation can therefore disrupt traditional, one-way transmission and production of knowledge from author/teacher to student, enabling learners to co-construct and critique knowledge (Bali et al., 2020; Brown & Croft, 2020).

At the same time, scholars have questioned who benefits from (and who might be harmed by) social annotation's power-disrupting capabilities. Public (and unmoderated) annotation can expose authors of annotated texts to trolling, bullying, and abuse (Watters, 2017). Students may be at similar risk if annotating publicly, and students from historically marginalized populations could be subject to microaggressions and othering—even if annotating in private groups (Brown & Croft, 2020). There is also potential for social and cultural power structures to be reinforced through social annotation, which may happen if overrepresented perspectives are treated as focal points of discussion and knowledge (Bali et al., 2020; Brown & Croft, 2020).

Thoughtful implementation is therefore required for social annotation to be transformative. Brown and Croft (2020) devised a framework for critical social annotation that aims to "enable faculty to implement this technology in ways that disrupt, rather than reinforce, problematic power differentials encoded in online dialogues," and to cultivate "dynamic discussions across difference" (p. 4). We engage with Brown and Croft's framework while presenting role-play as a strategy which, when combined with social annotation, actively encourages students to share authority as contributors of diverse perspectives to a course of study. Role-play, in particular, helps diverse perspectives to emerge as students are assigned to view a scenario from a point of view they may have otherwise not considered (Westrup & Planander, 2013). As we have not found documentation of the combined use of role-play and social annotation, we share our experiences leveraging their combined potential to challenge hegemonic knowledge.

Implementation

In Fall 2020, we incorporated Hypothesis—an open-source social annotation tool—into a senior-level university course on protected areas management. The majority of the 19 students in the course knew each other well. Their cohort was under 50 students and their program involved overnight field trips, group work, discussion, and hands-on activities. Their academic

department has a code of conduct that highlights students' responsibility for their own and others' learning success and accountability for one's actions and words.

The course was delivered online with synchronous and asynchronous activities. We adopted a fictitious scenario wherein a new National Park was being proposed in the region southwest of campus. Students signed up to represent different societal groups who may be affected by the establishment of a national park (e.g., Indigenous communities, recreational users, extractive resource industries). A series of lectures delivered background information on the groups represented in the role-play simulation, including their historical relationships with protected areas.

Using Hypothesis, the class first examined an open access document describing the international classification of protected areas (Dudley, 2008). During the synchronous class period, students worked in groups to contribute annotations from the perspective of their role-play personas to the policies described in the text. Later in the course, each group of students wrote position papers from the perspective of their role-played group, outlining their concerns or reasons for supporting the proposed national park. Students annotated one another's position papers, reacting from the perspectives of their role-play personas. Students were encouraged to incorporate links and citations in their annotations to support their perspectives. The role-played groups were assigned to provoke diverse and often conflicting positions which stimulated animated, yet respectful, dialogue in the annotations. Our use of Hypothesis was intended to encourage students to reply to one another's annotations, revealing multiple layers of agreement and contention. The annotated position papers helped students prepare for a synchronous mock public consultation. Students formally presented their role-played group's position, followed by an instructor-moderated discussion to explore groups' conflicting perspectives on the proposed protected area.

Reflection

In reflecting on our pairing of role-play with social annotation we address considerations introduced in Brown and Croft's (2020) framework for critical social annotation, organized around the pedagogical concepts of: learning space, participant power, and knowledge creation. We present our findings as they relate to these concepts in the voices of Julie, the instructor, and Timothy, the student co-author of this paper. We deliberately embed and identify Timothy's contributions in italics to give emphasis to his particularly valuable perspective. As this is a preliminary paper positing the combined value of role-play and social annotation, we acknowledge that one student does not represent class consensus. Further research would engage more students in a thorough assessment of their perceived value of the learning activities.

Learning Space

Brown and Croft (2020) note that while social annotation transforms the conventional online learning space in ways that foster dynamic discussion, intentional design in crafting the space is required. They raise, for example, the potential harm to students that might result from public annotation, which we mitigated by using the Hypothesis learning management system (LMS) application. The application enables single sign-on to Hypothesis via the LMS, and automatically creates private groups so that student annotations are visible only to classmates and instructors.

In our experience, students conformed to expectations of respectful interaction. This may be owed to the relationships that students formed during their program or the program code of conduct. It may also be that having students role-play various groups encouraged them to annotate with nuance and differing perspectives, but with an added layer of safety. The roles obscured students' actual perspectives, so that contention within assigned roles could be attributed to clashes in perspectives of fictitious identities and perhaps more safely challenged than a peer's personal contributions. To ensure their perspectives were not silenced by focussing on fictitious roles, students were invited to share their personal thoughts on the scenario during the facilitated debrief.

To this point, Brown and Croft (2020) caution social annotation can reinforce othering in online dialogue. Traditional role-play exercises present a similar challenge, in which stereotypes and role exaggerations can easily misrepresent reality (Alexander & LeBaron, 2009). Emphasizing informed and sensitive representation of roles is a critical step in creating a safe learning space and preparing students for their participation. *There was a sense of freedom mixed with responsibility to represent our stakeholder group as realistically as we could.* Students were explicitly expected to responsibly represent their groups by not playing up stereotypes and by basing their roles on researched case studies of how such groups have been impacted by similar situations in real life.

Participant Power

As scholars have noted, social annotation can redistribute authority in a classroom, though Brown and Croft (2020) raise the point that social annotation may also reinforce power among students whose perspectives are overrepresented. In our experience, the asynchrony of social annotation seemed to redistribute some power; it may have helped students who require additional time or privacy to process their thoughts outside of the timeframe of synchronous discussions. Kalir et al.'s (2020) findings align with our impressions: one quarter of their students perceived that social annotation enabled them to share their ideas, with some noting that it was easier to express themselves in writing. In our case, social annotation further aided the role-play activity by providing a tangible space that ensured students' contributions—and the perspectives they represented in their roles—were not rendered invisible.

In re-distributing authority, we also found that students' positions shifted from being recipients of knowledge to having their contributions valued as part of the course content; they became creators of knowledge and discourse (Kalir & Garcia, 2021). This occurred as students generated content for consideration in the readings, but also in the ways that students' contributions were assessed: instructor feedback was not the only feedback that mattered. *I feel that I had a real opportunity to contribute to the content of the course by adding annotations to the position papers of the stakeholder groups. I felt that my annotations inspired some valuable talking points during the discussions we had. I was eager to see how the other groups were critiquing my group's position paper and used their support or criticism as somewhat of a measure of success for this assignment.* This demonstrates a critical element of student-centred learning: peer feedback is a valuable indicator of academic performance in addition, or even paramount, to instructor feedback.

Knowledge Creation

Brown and Croft (2020) recommend instructors encourage students to identify perspectives that authors fail to present. Incorporating role-play into social annotation exercises revealed perspectives that were absent from policy decisions, as students were assigned to represent

those perspectives in their roles. Layers of complexity emerged where there might otherwise be widespread agreement on an issue by the students. *I was able to focus on how the policies would directly affect the group that I was representing. To gain a more holistic perspective of the same article, I read the annotations made by other student groups. This helped me gain a multidimensional understanding of how the same policies could affect different groups in a variety of ways. It also allowed me to consider why the passage was significant to another reader when I may not have found it noteworthy in my own role.* This demonstrates "collective understanding" (Westrup & Planander, 2013, p. 207) resulting from the synthesis of multiple perspectives put forth by the students in their assigned roles: perspectives that were not included by the authors of the original document. Annotation is an effective vehicle through which to enable student interaction with these diverse perspectives (Kalir et al., 2020).

Conclusion

With careful preparation and clear expectations of student conduct, the combination of social annotation and role-play created a learning space that allowed students to explore controversy in a safe and respectful manner. Social annotation provided a means to upset power dynamics by allowing students to "talk back" to the texts examined in the course; students' annotations were seen as worthy of consideration and had a prominent place alongside authors' words. The annotation process also enables students who are less dominant in synchronous discussions to have their perspectives seen when they may otherwise have been silenced in a traditional, synchronous role-play environment. Adding role-play to social annotation offered an important dimension to knowledge creation by provoking students to consider and responsibly represent perspectives of others who may be impacted by the content of a text: perspectives that they and authors may have otherwise overlooked. Together, the complementary strengths of social annotation and role-play offer opportunities to subvert hegemonic models of knowledge production and exchange.

Author's Contributions

Julie Rosenthal, the instructor of the senior-level course, contributed and wrote about the implementation of combined social annotation and role-play practices, including instructor reflections and findings on the implementation. Emily Carlisle-Johnston contributed and wrote the background sections, providing the theoretical framing for the paper. Timothy Turriff provided student reflections on the practices described in this paper, and wrote the perspectives represented in italics. All authors contributed to the editing of the final paper.

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Conflict of Interest

The authors do not declare any conflict of interest.

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