Using Social Networks for Multicultural Creative Collaboration

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ABSTRACT
Social networks can facilitate creative dialogue between participants whose geographical, cultural and social circumstances normally does not allow for such exchanges. In this paper, we present a case study of a collaborative process in which 19 participants from around the world created the multimedia, multi-language poem, “Our Digital Tapestry”, on the Facebook social network. We identify and discuss the affordances of this platform with respect to support for play, control, diversity, inclusion of hypertext and multimedia, communication and relationship exploration. We also identify several restrictions of the medium that affected the project.

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Collaboration; social networks; poetry; creativity; empathy; Facebook

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Collaboration, social networks, poetry, creativity, empathy, Facebook

INTRODUCTION
Social networking sites have reached unprecedented heights in recent years. Such public interactive systems (where “system” is understood as a constellation of multiple artifacts) provide arenas of experience to which the trichotomy of user, spectator, and system can be brought to bear as a tool of analysis [4]. Facebook, the most prominent of the social network sites, is the second most visited website on the Internet and currently has more than “300 million users, making it the fourth largest ‘nation’ on the planet by population” [1, 11]. Membership in these networks provides the user with many possibilities for social engagement. Maintaining an active membership can increase both social capital [8] and sources of technical support and knowledge [27].

Participation in these networks also blurs one’s roles: that of the user of an interactive system and that of the performer. The distinction of the latter role from the former, recently discussed Reeves et al. [22], centers on the results of one’s manipulations (i.e., actions carried out by the user) achieving the stance of being effects (i.e., becoming results that are observable by others).

Previous research has identified many characteristics of social networks that can support creative collaboration. These networks provide members with control over content and timing, ease of communication over a wide geographical area and the possibility of engaging with a diverse group of people with minimal cost, effort and risk [24, 27]. Furthermore, many social networks support sharing of various media such as images, video and audio, making collaboration on multimedia projects possible. Recently, novel uses of social networks have emerged that capitalize on these characteristics to create information networks at times of crisis [23].

In this work, we use the multimedia poetry project, “Our Digital Tapestry”, as a case study to investigate the effects of these factors on the Facebook social network website. This collaborative and participatory poem was mediated by the Facebook social network website; we will discuss its affordances as they pertain to the creative output. A key motivation behind this work was to examine the possibility of engaging people from different cultures and background in a common creative project. We wanted to find out to what extent the affordances of the social network, access to an international audience and an open forum, allowed non-professional poets to transcend cultural and language barriers and engage in a meaningful conversation? Furthermore, how the medium affected the interaction and what were the main factors that stood out as having an important influence? In this work, we focus on the characteristics of the social network as a medium and content creation tool and leave the literary analysis of the poem to a future study.

Prior research has established the value of insights gained by the artist-researcher in revealing the emotional,
psychological and intellectual aspects of the impact of the use of digital tools on artistic practice [26]; in this study the primary author assumed this role in the project. By collaborating with fellow artists and engaging in the creative process firsthand, it is possible to reveal issues that are difficult to detect using other inquiry techniques [15]. In addition to using empathy, we use autoethnography to examine and understand the factors that were encountered in the creative process by the artist-researcher [7]. This method involves reporting from a personal perspective including reporting one’s personal experiences and observations. In prior research, autoethnography is shown as an effective method for understanding the affordances of using weblogs for the development of research ideas [7].

BACKGROUND
Collaborative and Participatory Poetry
The history of the tradition of collaborative poetry goes back to ancient times. *Renga* is an ancient form of Japanese collaborative poetry in which participants take turns composing and reciting poems in response to each other [16]. In modern times, many artists from Surrealists such as André Breton, Paul Éluard and René Char with their collection *Ralentir Travaux* to Beat Generation poets Jack Kerouac, Allen Ginsberg and Neal Cassidy with their collective poem *Pull my Daisy* have composed collaborative poems. Various methods to facilitate collaboration have been developed. In the Surrealist’s *exquisite corpse* method each participant reads only the last written line and adds one line to the developing poem before passing it on to the next person. Charles Henry Ford, an American poet, developed chain poetry in the 1940s, in which the developing poem is mailed to a participant who adds one line to it before mailing it to the next person [6]. These examples demonstrate the process of the poem; that during its construction or co-construction, it is “alive” in a manner that ceases to be once the poem is completed. This is not to say that poems, once completed are fossilized --- clearly this cannot be true since the reader is an active constructor of meaning. However, the collaborative poem, as a poem-in-creation, has a strong element of *performativity* that is integral to its form and materiality.

The advent of digital media has affected literature greatly. Some critics go as far to state “all literature in the twenty-first century is computational,” in the sense that “almost all print books are digital files before they become books” [13]. The possibility of using computer’s flexibility in arranging various media such as text, video and audio has motivated many poets to explore the expressive potential of participatory multimedia poetry. For example, in his work *The Exquisite Mechanisms of Shivers*, poet and artist Bill Seaman combines text, audio and video into an installation that engages visitors and enables them to collaborate with the artist to create different manifestations of the work [28].

Historically, in different cultures around the world, the form and content of literary works have been affected by the introduction of new media. For example, Persian poetry, a long standing tradition, was greatly affected by the introduction of newspapers and literary magazines which inspired a new generation of poets to challenge and revise traditional poetic forms and start a modern poetry movement [17]. The use of social networks as a tool to create poems and other creative content in a new way is a recent example of this phenomenon.

Using Social Networks for Collaboration and Creative Endeavour
Recent increases in Internet bandwidth and network performance have made sharing large multimedia files easy and accessible. Additionally, new authoring tools make the creation of multimedia content by amateur users easier than ever before [2]. Many recent collaborative projects use digital technology to create content. In “Mopie”, participants used cell phones equipped with video cameras and GPS units to capture footage while exploring a city; the footage was then uploaded to a central database and used in a virtual city walking application [14]. “Ototonari” is a pervasive game, implemented using ad-hoc mobile networks, in which participants create music by walking around in a field and interacting with each other [25].

Previous research has identified many characteristics of social networks that can support distributed creative collaboration. By transcending geographical and social boundaries, these networks provide members with the opportunity to socially engage with a diverse group of people with minimal cost and risk. While being involved in a social network creates more possibilities for accessing technical and emotional support, it does not directly impose requirements on the level of involvement for each member and provides them with flexibility in the content and timing of their engagement with other members. Furthermore, the lack of social status cues fosters relationships that transcend offline social barriers [27]. In the current project, we found that many of these characteristics directly affect collaboration on these networks.

Social networks have been used to facilitate collaboration in the business environment [3]. The researchers suggest that sharing personal information with colleagues as well as creating a personal profile with updated information by each member create a sense of intimacy and trust that facilitates better collaboration.

Smith [24] has observed that many artist groups use Facebook to share information about art projects and events and as a place to meet other artists with common interest. While professional artists use this space mainly to provide promotional information about their art, amateur artists are more open to actual artistic collaboration using the medium.

Bardzell [2] has discussed how the interface of an authoring tool and content generation platform can affect the format
and ultimately content of a creative piece. In particular, the collaboration was mediated by Facebook, so the process was subject to the structuring mechanisms of that particular site. For instance, contributions from the poets were made under the mantle of a “comment” on the status of the first author and all contributions were made in terms of such units. The contributions were not editable once posted and were highly sequentialized, where the vertical spatial layout corresponds to a timeline. These characteristics affected the content of the work, by making it resembling a poetic dialogue.

**OUR DIGITAL TAPESTRY**

In this work, 19 participating poets from 5 cities collaborated on a multimedia poem, “Our Digital Tapestry”, entirely written using existing Facebook utilities [10]. The poem was written over 4 weeks in two languages, English and Farsi, and included hyperlinks to videos and images. The participants contributed from various geographical locations (Guelph, Ottawa, Tehran, Toronto and Victoria, BC).

The poem along with information about the collaborating poets is online [20]. Each week an original short poem was posted on the researcher’s Facebook profile and for the duration of the week, collaborators participated by adding their own poetry or posting links to online multimedia on the page. Thus, the researcher was involved in the project not only as an initiator and collaborator but also as the main social link between all the participants. The participants were all members of the social network of the researcher and their collaboration was solicited through a Facebook message prior to the start of the project.

Figure 1 shows a section of “Our Digital Tapestry”. Each contribution is marked by a timestamp as well as a thumbnail of the profile picture of the contributor. As can be seen, two languages were used to write this section of the poem: English and Farsi. The contributions in Farsi made use of two writing systems: the Farsi script and “Pinglish”, which is a folk Romanized Persian alphabet (e.g., Farsi written using English letters). In the following sections we examine the characteristics of the social network and their effect on the collaboration.

**Transcending Boundaries**

A characteristic of social networks that is of particular importance for collaboration is their support for overcoming geographical and cultural boundaries [27]. The effects of this on the current project are striking. Not only were participants from 5 different cities across the world, they were also from diverse cultural backgrounds and used different languages to express themselves. The social network supported diversity by not imposing restrictions on the location of its members and by supporting international languages. Figure 1 shows an excerpt from the poem with components written in different languages.
It’s always fascinating to deal w a song thats stuck on replay.

One participant used a special sequence of characters to delimit parts of his contribution:

Good to hear from that ocean blue :: is her journey of shade really true?

The importance of support for play in creative collaboration is stressed in previous work [26]. One constraint that in my experience hindered this support was that the format of the status field only supported sequential commenting and it was not possible for authors to select a location other than the last entry in the poem to place their contribution. In my experience, I would have liked to respond to multiple authors and their specific contributions but the system was not flexible enough to allow this.

**Control over Content**

Social networks can also support member’s control over the content and timing of their contribution [27]. In this project, the participants were able to contribute as many times as they wanted and could also delete their work at any time if desired. A few of the participants, including the author, used this control to provide their contribution in short pieces. In my case, it facilitated a more spontaneous creative flow where I was not afraid to post a contribution and add to it or modify it later. However, a shortcoming of the social network was that authors could not edit previously created content in place and had to remove and replace them at the end of the poem.

The participants also had control over the level of their involvement: they could contribute whole sections to the poem, include a quotation, or just vote for the poem by “liking” it. On Facebook, “liking” refers to selecting an option to note that a member likes posted content. The contributions ranged from whole paragraphs to very short sentences.

In previous work, the role of the leader in online creative collaboration is examined [18, 21]. In the absence of formal rules, we defined a moderating role for the leader before the start of the project. Thus, we informed the contributors, at the outset of the project, that the primary researcher reserves the right to modify or delete parts of the contributions. While this right was never exercised in this specific project, it provided a safety mechanism against offensive or inappropriate content. Assuming the role of the “benevolent dictator” is a recognized practice in online content creation platforms [21].

As the primary researcher and project leader and following the autoethnographic process, I made several observations related to prior findings about leadership in online content-creation platforms [18]. One of the themes identified as important is the reputation and experience of the leader. My artistic activities during the past years, including conducting solo and group poetry readings, composing and performing in several musical groups as well as making available various poetry translations was known and respected within the community. During private conversations four of the contributors expressed confidence in my leadership and subsequent presentation of the work. I also contributed to the poem regularly which strengthened another important theme in leadership, namely that of dedication and communication. In accordance to what was reported previously, the theme of planning and structure was not as important a factor as it would have been in the case of an open-source software development project [18]. In fact, I decided to keep the format open to invite more contributions. This is, of course, a choice specific to this project in which the priority was to make available a space for poetic self-expression to new poets rather than strive for structured quality poetry. Additionally, as an artist I felt imposing too much structure or planning I would unnecessarily challenge the artistic authority of the contributors.

**Figure 2a. “Our Digital Tapestry” excerpt. Currently, multimedia are included as hyperlinks.**

The social network supported embedding hyperlinks in contributions which made referencing other material on the Internet possible. For example, links could point the reader to a book or encyclopedia entry. This also made including multimedia content possible, thus extending the expressive power of the medium. For example, when the poem’s topic revolved around the subject of human unity and sharing experiences, one participant included a link to an offsite video on neuroscience. There were also links to original images that became part of the poem (Figure 2a). As a poet, I find mixing words and images expressive and often do it during poetry readings and embed them in other poetry...
projects so I found this support for the inclusion of hypertext and multimedia important for creative collaboration. That two other participants also used this feature to link images and video to the poem shows the importance of this feature.

Figure 2b. An alternative design sketch where in-place multimedia links are allowed

A shortcoming of the medium was that in-place image or video embedding was not supported. As can be seen in Figure 2a, in its current form the user has to navigate away from the poem by clicking on the hyperlink to see the multimedia content. This affects the appearance of the poem and is disruptive. Thus, a design, for example similar to the one suggested in Figure 2b, is desirable.

Communicating with Contributors

As can be seen from Figure 1, each time a participant added a contribution to the poem, their name and a thumbnail of their profile picture, directly linked to the profile page, was placed next to their entry. This provided ready access to updated personal and contact information for each participant and supported communication between collaborators. In previous research, it is emphasized that having access to information about a collaborator creates a sense of intimacy and trust that can facilitate the creative process [3].

From the audience’s point of view, this ability to readily access personal information about an author directly from a text demonstrates how using hypertext can enrich a reading experience. This supports new ways of reading in which personal information about the creator of a work can mingle with the actual creative output. Furthermore, the thumbnail images are automatically updated each time a user changes their profile picture and this adds a “live” quality to the work: while the text remains static, the author lives and changes over time and this change is reflected in the work by updated profile pictures. The profile picture is an image representation of a member. While typically this picture is of the member, it is not uncommon for members to choose symbolic pictures that they feel somehow represent them. Thus, placing this picture next to an author’s contribution links a self-representation of their identity on the network to their contribution. This quality was, of course, lost once the poem was taken off Facebook and archived in another online space once the project was finished.

This way of attributing a contribution to a participant also supports the important issue of authorship. As shown in previous work, supporting for authorship is one of the important challenges of platforms that allow collaborative work [5]. In our case, the issue is dealt with by the platform’s automatic attribution of each piece of collaboration to its author.

Other Aspects

While many of the participants did not know their fellow poets, they knew that they shared at least one social dimension with them, i.e. familiarity with the researcher. This was stressed because the poem was “published” on the researcher’s profile page. This familiarity can create trust and empathy that are important factors in facilitating creative collaboration [26]. Furthermore, it was possible for the participants to explore their relationship with another participant by visiting their profile page and viewing information such as common friends and common interests. The support for exploring relationships is an important part of social networks and can enrich the experience.

During the project, we observed that the poem often took the form of a dialogue between different participating poets. This resembled, in form, the messages regularly sent in Facebook via the “status” field. The main difference was in the language used. By consciously engaging in a poetry project, the users were expressing themselves in a poetic form on a public space. Since the researcher was also the initiator and a collaborating poet in the project, many of the submitted poems were written in response to his original posts. Previous research has shown that Facebook users rate activities that have public performance aspects as the most memorable experiences [12]. In this project, collaborator’s input was made public as soon as it was posted by a contributor. Thus, collaboration was performative and by posting a poem each participant shared his or her work not only with fellow collaborators but also with visitors to the researcher’s profile. In my case, I was greatly motivated by the prospect of presenting my poem to an audience. After each submission I anticipated responses and felt inspired by the number of people responding to and reading my contributions. This public nature of the contribution affects
how users experience their interaction with the system; they do so with the knowledge that they are (potentially) putting on a performance for spectators. Not only are they being-a-performer-for-others, but also being-aware-that-one-is-being-a-performer-for-others [4]. The communication by and to contributors has a necessary element of self-awareness of its own public nature. Similar to how the contributors tailored their own representative thumbnail images; engaged in a process of identity creation, so were their contributions tailored. In this regard, the social network supported the *performativ* e aspects of the collaboration and made presenting the art immediately to an audience possible. While this aspect of the collaboration can be beneficial for engaging and motivating some participants to make contributions, it might cause concerns of privacy and authorship for some artists.

**CONCLUSION AND FUTURE WORK**

In this work, we have used an empathic method to identify and examine the characteristics of social networks that support creative collaboration. These factors are *play, control, diversity, inclusion of hypertext and multimedia, communication and exploring relationships*. We also identified support for the *performativ* e aspect of the collaboration as a factor that should be taken into account by designers of collaborative projects. We have examined these factors in relation to a collaborative poem, “Our Digital Tapestry”, written on the Facebook social network.

In future, we plan to revise and rewrite several “remixed” versions of the poem and explore strategies to deal with issues of authorship and presentation. Another future project involves conducting a live collaborative session in which the poem is displayed on a screen while authors, either in the same room or remotely, log on to the social network and contribute to the poem. This will allow an observation of interactions occurring offline in the shared physical space as well as possible technical issues such as synchronization.

**REFERENCES**
