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Understanding Participation and Opportunities for Design from an Online Postcard Sending Community

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ABSTRACT

The advent of Internet communication has seen much personal correspondence move from paper-based into digital form. But while the Internet is often associated with the decline in paper-based communication, it also provides opportunities to exchange traditional ephemera in new, exciting ways. We present here an analysis of *Postcrossing*, an online system that facilitates the sending of non-digital postcards among random strangers. Via a survey study of Postcrossing users, we elicit six key factors that contribute to the Postcrossing experience. We consider how these elements might be carried over into other digital communication technologies.

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H.5.m. Information Interfaces and Presentation (e.g. HCI): Miscellaneous

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Design; Human Factors.

INTRODUCTION
Digital communication tools offer people unparalleled opportunities to connect, share, and establish relationships with others. Yet the ease with which we can transmit messages across the globe has come at a cost: the appearance and form of digital correspondence is often generic, with the exchange of traditional, more tangible forms of media seemingly on the wane. But while electronic systems have quietly supplanted many kinds of traditional media, paper-based communication has gained in status and is now valued more than ever before [2]. In line with this, recent work has explored how digital technologies can benefit from combining elements of digital and physical correspondence, e.g. [1].

In this paper we focus on an online system, *Postcrossing*[1], that speaks directly to these themes. The purpose of Postcrossing is to facilitate the sending of non-digital postcards

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[1]http://www.postcrossing.com/

around the world. Users, known as *postcrossers*, create a profile on the free web-based service and request addresses of other postcrossers, chosen pseudo-randomly by the system. For each address, the sender selects a postcard, writes a unique ID (e.g. US-1000) on the card, and then mails it. Upon arrival, the recipient uses the ID to register the card with Postcrossing and has the opportunity to express his or her gratitude in an automated "Hurray" message, delivered to the sender by email. The sender then becomes eligible to receive postcards from other postcrossers around the world. Postcrossing thus formalises the card sending process in an intriguing and hitherto unseen way: rather than direct exchanges of cards between users, Postcrossing sees one-way postcard 'crossings' between strangers who only ever interact once. Given that postcards are typically sent between friends and family [2], Postcrossing seems odd - why would anyone want to send postcards to random strangers? Our aim here is to broadly understand what it is beyond the simple act of sending a postcard that motivates ongoing participation in the Postcrossing community.

Postcrossing also presents a unique opportunity to explore tangible note sharing *in situ*. At the time of writing, there are over 300,000 registered postcrossers in 205 countries [4]. Over 11 million postcards have been sent since the site's inception in 2005, with the number of postcards in transit exceeding 300,000 [4]. Postcrossers thus collectively send and receive thousands of hand-written, tangible postcards on a daily basis. Our intuition is that understanding the intertwined digital and physical aspects of Postcrossing might lead to insights for future digital communication systems.

In order to investigate Postcrossing in more detail, we conducted a survey study of Postcrossing users with the aim of understanding the factors that contribute to users' ongoing involvement in Postcrossing. This paper describes the six factors that were made salient through the analysis of our survey data, and we consider what the implications of these factors might be for other communication technologies.

SURVEY STUDY
We designed an 18 question survey containing a series of demographic and open-ended questions regarding respondents' Postcrossing experiences. The survey was disseminated online to postcrossers via Twitter, Facebook and the official Postcrossing forum. The survey was made available for a period of two weeks, after which point the data were collected and analysed. We received a total of 164 responses from users in 41 different countries. 56% of respondents were European, 21.4% North American, 14% Asian, 4.3% South American,

and 4.3% Australasian. We did not receive any responses from African countries, likely due to the low penetration of Postcrossing in Africa [4].

Our survey requested demographic information about age, gender, and usage. Of our 164 respondents, 140 were female, 22 were male, and 2 opted not to specify. The gender imbalance in our sample is reflective of the Postcrossing community, where female users heavily outnumber males [4]. Respondents' ages ranged from 15 – 64, (M = 30.7, Mdn = 28). Respondents had been involved with the Postcrossing community for as little as 1 month to over 6 years (M = 18 months, Mdn = 11). The number of postcards sent ranged from 1 – 2998 (M = 190, Mdn = 76) with numbers received highly similar at 0 – 2958 (M = 184, Mdn = 70). As indicators of usage, these figures demonstrate that our sample is varied and is not restricted to the perspective of new or long-term Postcrossing users. While the medians indicate that our sample does contain a greater percentage of short-term users, we consider our sample representative enough to generalise our findings to the wider Postcrossing community.

We included nine open-ended questions related to the Postcrossing experience. Due to space constraints and our desire to understand participation in Postcrossing, our focus in this paper is on responses to the following four questions:

- Why do you use Postcrossing?

- What is it that you most enjoy about exchanging postcards via Postcrossing?

- What methods, if any, do you use to personalise the cards you send?

- Is there anything that causes you to prefer some postcards over others?

The information reported here was elicited from an analysis of aggregated responses to these questions. When interpreting responses we adopted an approach of open coding, such that themes were allowed to emerge through multiple, independent readings of the data. The following subsections outline the six key factors made visible through our reading of the data. It is not our aim here to suggest that any factor is more important than the next; instead, we present these factors on an equal standing and describe how each contributes to the Postcrossing experience alongside illustrative quotations. Our discussion section then reflects on our findings and considers the implication of the factors for design discourse and communication technologies.

RESULTS

Connecting

Postcrossers see postcards as a means to connect with places, people and cultures around the world: *"Because I always loved to receive postcards from different places and because I also love to meet new people."* [Respondent 1], *"The experience of communicating/writing to a person from another part of the planet is interesting and exciting for me."* [R. 23], *"To make friends all over the world, discover other cultures, and because I love postcards"* [R. 21].

Respondents also saw postcards as akin to travel, offering a snapshot of another culture without the burden of financial cost: *"I want to see places from all over the world... that I might not get a chance to travel to myself."* [R. 15], *'I love traveling but don't have the money for it, so this is a nice way to get a feel for other cultures."* [R. 54].

Postcrossing users also testified that the relative ease of writing postcards offers an experience similar to penpalling, but without the significant investment necessary to maintain an ongoing connection: *"I used to write letters to several penpals, but I was always lazy to respond quickly... Postcrossing is a wonderful alternative, because I can exchange short notes with different people."* [R. 30].

Enjoyment

Respondents enjoyed sending and receiving postcards for a variety of reasons: because of the addition to a collection of postcards, because of stamps and other idiosyncrasies of the postcards, or because of the message itself: *"I collect postcards, enjoy the stamps, and feel snail-mail is more personal. Any idiot... can send 1 e-mail to thousands of people with one click."* [R. 12], *"The usually beautiful and colourful stamps make a postcard so precious and special"* [R.5], *"I prefer postcards with long messages over such that have almost nothing written on them simply because I love to read those messages and because to me they are just as important as the picture side."* [R.1].

With regard to sending, Postcrossers garnered pleasure from pleasing others, particularly in knowing that a sent postcard was cherished by its recipient: *"When I then see (in the registration message) that the receiver liked it, I'm happy"* [R.5], *"I enjoy when people tell me they loved the postcard I sent them because I like to make people smile."* [R.94].

Personalisation

The personalisation of cards is a significant part of the Postcrossing experience. When selecting cards, users grasp the opportunity to match each card to the recipient's profile: *"I try to find the right card for the person I'm sending the card to, I try to guess what kind of person they are - would they rather hear some facts about my home town or about me, have they given hints as what they would like to read, do we have something in common I could write about, do I maybe have a stamp that I think the person would like"* [R.9]. Cards tailored to a recipient's interests, in terms of both the image and message, were often preferred: *"I love it when I see that someone wanted to make me happy and has chosen a card especially for me and not just picked anything."* [R.154].

Beyond the content of a card, users valued the hand-written nature of the medium: *"On the postcard, I can see the handwriting of a person, this alone makes it more personal than a typed e-mail."* [R.5]. Many participants talked about how exercising their personalisation practices was central to the experience: *"I always use handwriting, not printed texts. Sometimes I put stickers on the postcards or some little drawing, if I think the receiver might like it. And a couple of times I have sent self-made cards using used stamps, color papers and collages."* [R.98]. This effort was appreciated

upon receipt of postcards: *"Someone took the time to choose a card for me (bought it in the first place!), thought about something nice to write me, wrote it by hand, bought a stamp and mailed it - in comparison to just open a new message window - type - send."* [R.7].

Nostalgia
Respondents considered the Postcrossing experience as nostalgic, harking back to a bygone era: *"Because it [Postcrossing] is a way to get back to "old" way of communications like postcards"* [R. 82]. Users also expressed a desire to escape digital correspondence and return communication to the real world: *"I like to receive real card in these electronic times"* [R.65]. *"I don't write emails anymore. It is about posting, about keeping snail mail/letters going. It is nice to receive something that isn't a bill in the post."* [R.58].

Tangibility
The physical nature of postcards was important to our respondents in three ways. The first was the ability to actually hold the postcard and experience the feel of the message: *"you're actually holding something in your hands instead of staring at a message written on the computer on your screen."* [R.1]. *"It's a physical artifact from another person, selected physically by that person, written on by that person, and sent through the post by that person. An email is made of mere electrons and can just as easily be sent by a robot."* [R. 41]. The second was the fact that a physical object can be kept, collected, displayed and re-lived in a way that a digital object cannot: *"You get a physical object which you can then keep and look at. I think email pictures would get forgotten in cyberspace and never seen again"* [R.78].

The final aspect of tangibility was that the postcard has physically travelled around the globe to the recipient. The experience of travel, together with evidence of a postcard's journey, somehow augments the message: *"I like to receive real mail, cards that I can actually touch instead of only staring at the computer screen. I also think that having really travelled between different countries gives the cards a bit of personality too."* [R.42]. *I enjoy the medium - the tactile cards... the wear and tear from travelling* [R.11]. Some respondents fantasised about each postcard's journey to their mailbox: *" I am constantly amazed that a piece of paper can travel from around the world to me and I like to imagine the postcards traveling to their destination"* [R.23].

Anticipation & Surprise
Several aspects of Postcrossing are unpredictable, leading to the affective outcomes of anticipation and surprise. In Postcrossing, these outcomes are most often positive. For example, when a user requests an address, the address is drawn from a large pool of possible recipients. Therefore, users cannot predict where or to whom they will be sending a card before drawing an address. This pseudo-random process often leads to surprise: *"I like how random it is. You never know who you will send your postcard to."* [R.23]. *"I like the surprise of not knowing to whom I will send"* [R.4]. The impossibility of knowing when a sent postcard will be registered also builds anticipation, which is then fulfilled

upon the receipt of the "Hurray" email: *"[I enjoy] the thrill of seeing something in my mailbox, as well as the 'Hurray, your postcard arrived' email."* [R. 46].

Anticipation and surprise can also result from the time users must spend waiting to receive cards from other postcrossers. It is the inability to predict *when* these events will occur that creates anticipation and adds an element of serendipity to the mix: *"The best part is going to your mailbox and never knowing what you're gonna get."* [R.67]. *"My favourite part is the surprise and the excitement of going to my mailbox and seeing what is waiting for me there, maybe a new country or a curious postcard"* [R.98] Users' inability to know from *where* their next card will come also creates excitement: *"I most enjoy the element of surprise, where is the next card going to come from?"* [R.71].

DISCUSSION
Our aim for this paper was to broadly understand what it is about Postcrossing that goes beyond the straightforward act of mailing a postcard. Our survey results indicate that postcrossers are not simply sending cards in order to receive them back. Instead, they frequently use postcards to connect with other people and cultures; as a means of self-expression; and as a surrogate for other high-cost correspondence like pen-palling. Users derive gratification from the ritualised process of sending and receiving paper-based mail, and from the recognition that others like themselves also revel in this process. In addition, elements of Postcrossing, such as the nostalgic method of connecting through snail mail, the look and feel of handwriting, the evidence of a postcard's journey, and the myriad opportunities for personalisation, all contribute to the experience in ways that are frequently difficult to obtain through electronic communication technologies.

Where other work has speculated that digitisation might result in the end of postcards [2], our work demonstrates that postcard sending is alive and well, and that electronic media need not *replace* tangible correspondence; instead, the two can be usefully combined to facilitate the exchange of time-honoured media in new ways. In the case of Postcrossing, it is the ability of the digital system to 'randomly' connect users that breathes fresh life into the practice of sending postcards. And although Postcrossing is seen primarily as an outlet for the exchange of paper-based correspondence, it is not the case that postcrossers are in some way 'anti-technology'. Instead, the juxtaposition of complementary digital and non-digital elements allows users to enjoy positive experiential outcomes that would likely not occur otherwise.

One interesting aspect of Postcrossing is the way in which the digital components of the system alter basic tenets about reciprocal exchange. In the context of written communication, one might ordinarily hope that an initial investment of effort will be reciprocated further down the line – Mauss [5] argues that gift-giving is never altruistic and is always assumed to include an implicit demand for reciprocity. In Postcrossing, however, users do not directly exchange cards, meaning that the quality of a particular card bears no impact on the card that is later received from elsewhere. This raises the question of why postcrossers invest significant effort in their postcards.

While our survey points to the intrinsic value in postcard creation, with enjoyment in the process often enough to warrant significant effort, we can also offer several more nuanced insights. First, we note that although there is no direct exchange of postcards, there *is* an exchange between users – this occurs with the receipt of the "Hurrah" email. Since postcrossers were often gratified by the positive content of this mail, the desire to experience positive reciprocity likely encourages effort investment. Second, postcrossers often expressed a preference for cards matched to their own tastes. Therefore, by investing effort in tailoring each card to its recipient, postcrossers may implicitly hope that others will do the same for them in return. In other words, if everyone engages in taste matching, then everyone receives better cards, meaning everyone is better off. These considerations speak to other aggregate, community level effects driving participation that warrant deeper investigation in future work.

In terms of design opportunities, we feel that other technologies could benefit by incorporating some of the elements we have identified in Postcrossing. For example, respondents enjoyed using postcards because they are tangible and allow personalisation. While the idea that digital systems might leverage these concepts is not new (e.g. [1], [7]), both remain difficult to obtain through existing digital tools. Future systems might address this gap by allowing users to personalise correspondence with digital handwriting or other idiosyncratic elements of paper-based communication. And although personalisation often corresponds with a resultant increase in effort, we saw in our survey that postcrossers frequently appreciate the effort invested by a sender. Other work has made similar observations; for example, Riche et al. [6] found that users valued the effort required in formulating messages through hard-to-use interfaces. In our view, exploration of the inherent tension between personalisation, effort and value presents an important avenue for future research.

The concepts of randomness, anticipation and surprise might also be a fruitful area for future work. Postcrossing emphasises the positive effects of randomness in design (cf. [3]), but also provokes new questions pertaining to the *awareness* and *expectancy* of random events; that is, knowing that something is going to happen without being able to know exactly *when* it will occur. In Postcrossing, users know that a message is due because, for every card a user sends, they can expect to receive at least one back from elsewhere. Yet while users are generally aware that they are due to receive something, and can expect cards to arrive at some point, it is not possible for them to predict exactly *when* these events will occur – arrival is serendipitous and comes as a surprise occurrence. Designers might harness this idea by integrating unpredictability into communication systems, which could then induce feelings of anticipation and greater enjoyment around the sending and receiving of messages. Introducing delay into electronic exchanges would also slow the pace of conversation, encourage reflection, and bring digital tools closer in style to traditional handwritten media [8].

Finally, several aspects of Postcrossing run parallel to recent discourse in design research and practice. For example, the fact that tangible postcards are now luxury transforms them from ephemera into meaningful objects that can be kept, displayed and relived, with value that goes beyond pure aesthetic appearance and functionality [9]. Responses concerning nostalgia also speak to a wider desire to bypass modern tools and reconnect with snail mail, falling into line with recent discourse concerning pace of life and the potential for 'slow' tools based on models of inefficiency [8].

While our survey does provide insights into the factors that motivate Postcrossing, and highlights how digital interventions can augment the process of sending physical media, we acknowledge that our study represents only a preliminary exploration of the Postcrossing phenomenon. Our aim here was to broadly understand the important factors that contribute to the experience, as self-reported by Postcrossing users, and to consider how those factors might serve as signposts for design. Future work might explore which of these factors is most important to postcrossers, and could examine other aspects of the Postcrossing community, e.g., cultural differences in postcard sharing, or whether there is something peculiar about postcards that explains the gender disparity in the Postcrossing user base [4].

CONCLUSION

We have presented a survey study of Postcrossing, an online system that facilitates the 'crossing' of postcards among strangers around the world. We described six factors that contribute to the Postcrossing experience, and our analysis highlights how Postcrossing combines digital and physical elements to create novel experiences and outcomes. We hope that our work motivates designers to consider how future communication tools might harness the power of digitisation while still retaining the treasured appeal of past technologies.

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