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# Postulater: Slowing the Pace of Media Sharing

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**Abstract**

Personal media sharing (text, photos and video) has become a spectacle of the immediate, yet it may come at the cost of meaning and significance we attribute to our media and experiences. To explore this design space, we created a new tool, *Postulater*, for time-delayed photo and video sharing. Adopting principles of Slow Technology, Reflective Design and Communication Practices, we seek to understand how communication tools should be designed, and how they might be used, if users are able to select notions of delivery time explicitly. We imagine how such a tool, aided with the dimension of time, could bring new utility and meaning to how we share and communicate.

**Author Keywords**

Slow technology, family communications, asynchronous communication, photo-sharing

**Introduction**

Technology has increasingly provided ways for more immediate communication across time and space. As immediacy has become a main focus of personal communication, the trajectory of these tools largely favors instantaneous communication. The merger of social sharing (social media) and ubiquitous computing has allowed for instantaneous and synchronous communication at any time. Nowhere is this trend more

prevalent than in photo sharing applications. Over the last decade we have witnessed media-sharing technologies shift to immediacy with applications such as Instagram, Twitter, and Vine. While there has been much exploration in this area of research, we are interested in exploring what would happen if we brought back stronger ties to the notion of time, in relation to personal communication.

While we do still encounter asynchronous communication on a daily basis (e.g. emails), to send and receive messages across time, these interactions are largely immediate (e.g., later today, tomorrow). Some tools and features do exist that facilitate asynchronous communication over longer time periods (e.g. whenSend, time-delayed Tweets and emails), but none of these have been studied in terms of their design and usage to explore what makes them work well or how people use them. Moreover, all these features are mainly text-based, with no regard for images. Thus, we are interested in exploring how communication tools should be designed and how they might be used if users are able to select notions of delivery time explicitly. This ability, to decide when an image or video should be shared, has many implications.

Designing a tool that gives users the ability to consciously become aware, and have autonomy, of time-based dissemination can generate new ways of recording and sharing images. Can more meaningful images (photo and videos) and memories be captured and shared if we incorporate the consideration and implications of time? We imagine such a tool, aided with the dimension of time, could bring new utility and meaning to how we share and communicate.

To explore this design space, we created an online web-based system called Postulater. With Postulater, users can send media in the form of images and video clips to family or friends where they explicitly set the sending date and time. We first describe background research on slow technologies, followed by the design of our system, Postulater.

### **Related Work**

The Slow Technology movement that emerged from Hallnäs and Redström [1] aims to support experiences of reflection, mental rest, slowness and solitude. While the concept of slow technology may sound counterintuitive in the context of developing new technologies, understanding this field of research has implications for the longevity and incorporation of new technology. In addition to designing for longevity, Slow Technology also seeks to adapt practices of less consumption, and more broadly, it aims to support practices of slowness and reflection [3].

Researchers have investigated the temporal relationship we have with computational objects including how our perception and association with an object changes with time [5]. For example, the Tejp project [2] explored the use of recording short audio tags in public spaces that could be played back at a later time, like a digital time capsule for sound. In studying the temporal phenomena, the creators of Tejp posit that the “central actor in [this] communication experience is time”. Photobox [3] is a prototype that explores ways in which people can manage personal digital content as well as their digital legacy once their physical self passes away. Photobox stores digital photos inside a wooden box, and at random dates in the future, the owner’s photos are indiscriminately

The screenshot shows the Postulator web page with the following layout:

- Header:** A logo featuring a red and blue robot head next to the word "Postulator" in a large, red, sans-serif font.
- Step 1: Upload Image or Video**
  - A "Choose File" button with the text "No file chosen" next to it.
  - A text input field for "Image Caption (optional)".
  - A large empty text area for the caption.
- Step 2: Choose Recipient**
  - A text input field for "Your Full Name" with the example "e.g., Robert E Lee".
  - A text input field for "Your Email Address" with the example "e.g., Rob.e.Lee@gmail.com".
  - A text input field for "Receiver's Full Name" with the example "e.g., Ulysses S Grant".
  - A text input field for "Receiver's Email Address" with the example "e.g., Ulys.sees@hotmail.com".
- Step 3: Set Delivery Time and Date**
  - A text input field for "Date and Time of arrival:" with the example "e.g., 01-May-2029".
  - A "Submit Message" button at the bottom.

**Figure 1:** Postulator web page.

printed onto film paper to be viewed and shared. Here the individual has no control of when the photos are printed, as Photobox also aims design technology that runs in the background (i.e. out of mind).

### Prototype Design

The online application, Postulator, is comprised of one easy-to-use webpage (Figure 1). When users visit the site they are given three instructions: 1) Upload Image or Video, 2) Select Recipient, and 3) Set Delivery Date. The design approach is to make the process of sending a Postulator message as easy as possible (e.g., three simple steps, only one page, no unnecessary detail).

In the first step, users upload images or videos from their computer or mobile phone library, and are given the additional option to include a short text caption (140 characters) to annotate the image. The addition of

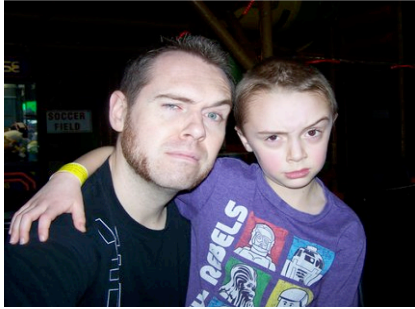
text is optional, as we wish to explore if users can or cannot rely on images or video to sufficiently capture the experience. A maximum of 140 characters is used to ensure any caption is brief, again to encourage images and video over text. Next, the user enters the name and e-mail address of their desired recipient. They also enter their e-mail address to receive the future message. Lastly, the user can select what date (day, month, and year) and time (hour and minute) they wish for the message containing the image or video to be sent to the recipient. The freedom to select specific dates and time (e.g., the exact minute) offers users the ability to select specific moments in time that may be of personal significance.

Once submitted, the message is uploaded to a server and is disseminated at the designated delivery date. At the designated delivery date the recipient receives an e-mail with a hyperlink directing the recipient to the Postulator media page. The recipient is made aware of who the message is from (name and e-mail address) and when the original message was sent. Including the date of when the message was sent can create, we believe, more nostalgia and a stronger tie to the moment it was sent. The experience we are trying to create is that the image or video (and intent of sending the message) has been "living" this entire time (e.g., "travelling slowly through cyberspace") and has finally arrived.

### Usage Scenarios

Based on our own design intuition, we imagine Postulator being used in a variety of usage scenarios.

**1. Time Delayed Greetings:** We expect that users will want to share time-delayed greetings with their family



**Users:** Ben and Chris

**Context:** Ben captures an image (above) with his son Chris on his 5th birthday, August 15<sup>th</sup>, 2014, and wants to share the image, but doesn't want it to be shared at that moment. Instead, Ben wants to share the image at a later date, when Chris is surprised.

**Use:** Ben decides to use Postulater to send the image of the two of them (which Chris has never seen), to a future date.

Later that evening, Ben uploads the image and includes a caption "Thinking of you on your birthday", and sends the message to Chris's email address with the delivery date of August 15<sup>th</sup>, 2034 – on Chris's 25<sup>th</sup> birthday.

20 years later, Chris and Ben, living in different cities at this point, both receive an email from Postulater with link to the original message. Chris clicks on the message and views the image for the first time, 20 years later.

**Figure 2:** Example Scenario.

and friends for holidays and events such as birthdays and anniversaries. This type of experience is reflected in a sample scenario in Figure 2.

**2. Reminder and Notes:** We expect that some users will want to create short-term (or long-term) reminders for themselves and friends through images or video. For example, friends may make plans (albeit tentative) to meet for coffee in two weeks. Users could send gentle reminders two weeks ahead, to each other, regarding this date.

**3. Revealing Playful Information:** We imagine some users will want to use Postulater to reveal information (i.e. images or videos) only at a particularly time. For example, users could make predictions (short or long term) about a particular event or date. In the case of a sporting event, a user could make a prediction on the outcome (by sending an image to a date after the event), without revealing their prediction.

**4. Digital Time Capsules:** We also imagine that some users will want to preserve their memory, especially with future family descendants. For example, grandparents may send time-delayed images to a grandchild long after the grandparent expects to be alive.

## Conclusion and Discussion

This paper outlines the design space and application of time-delayed image and video sharing to examine the affect that time has on creating meaning and reflection for the ways in which we communicate and share media.

In the following months, we plan to perform a user-study to explore how participants interact and use such

a communicative tool. This will involve studying if and how Postulater can be used to create additional significance for the sender or recipient of the shared media. We also plan to classify user behaviours and identify any themes or nuisances in which users record and share images or video.

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