

Today I'm going to introduce two projects that combine mapping with a temporal element for very different purposes but ultimately similar effects.



The first is "Summer of Darkness," an iOS app about the summer of 1816, when *Frankenstein* was written.

This app was created for the 200th anniversary of the Year Without Summer, when Percy Shelley, Mary Godwin (later Mary Shelley), her stepsister Claire Clairmont, Lord Byron, and his physician John Polidori spent the summer just outside of Geneva. Shelley wrote *Mont Blanc*. Byron worked on *Childe Harold* and the *Prisoner of Chillon* among other works. And of course there was the famous night when Byron challenged his companions to a ghost story writing competition, and Mary Shelley wrote *Frankenstein*.

The goal of the app was to give a lay audience a sense of that summer using as much real material as possible, and the content comprises original letters, journal entries, literary texts, and weather data.



Now for a quick tour of the app. The map is from that time period.

The red to blue gradient on the left is a timeline that can be tapped to reveal the dates that the app spans, so it's possible to jump to different parts of the timeline.

The figures on the map show where content was written on each date, so as the writers travel, you see their progress — for example as Byron and Polidori approach Geneva from Germany or when Byron and Shelley tour the lake.



This was called The Year Without Summer because a massive volcanic eruption changed global weather patterns, so weather was meticulously documented in 1816. Each day's temperature range and total rainfall are listed at the bottom left, and in the background of the app, weather animations play that are generated from the data.



The app has two modes: a book mode where you can simply scroll through and read all of the content and a notifications mode where content is unlocked on the date (and the time when possible) that it occurred. A push notification gives a brief overview of the new material. This is the temporal aspect I'd like to focus on.



Notifications take place in real-time, so this app actually takes four months to experience. Some days have no notifications. Others have several.

## Rue Richelieu, Paris ~ May 6, 1816

## The journey begins. Claire writes to Byron from Paris.

So far am I on my Journey–Now will you believe? And where have you been? Every day I ask myself this question & wonder whether amidst all the novelties you behold you ever once think of me. But no I do not expect it; I have no doubt you think my affection all a pretence? Or that you are handsome & my passions excited; first I have no passions; I had ten times rather be your male friend than your mistress. And as to the fickleness or falsehood of my attachment is it likely I should travel merely for the pleasure of seeing you, eight hundred miles.

I have been extremely unhappy: You bade me not come without protection... Shelley's chancery suit was decided against him: he had therefore nothing to detain him & yielded to my pressing solicitations; you will I suppose wish to see Mary who talks, & looks at you with admiration; you will I dare say fall in love with her; she is very handsome & very amiable & you will no doubt be blest in your attachment; nothing can afford me such pleasure as to see you happy in any of your attachments. If it should be so I will redouble my attentions to please her; I will do every thing she tells me whether it be good or bad for I would not stand low in the affections of the person so beyond blest as to be beloved by you.

I should have written to you before but I feared: you so hate letters & I had nothing to tell you but that I

Clicking through the notification leads you to original text, so this is a letter Claire wrote to Byron while en route to Geneva, which is where the app begins. Notifications also lead to journal entries and literary texts.



The reader or user experiences events in a real way. For example, on May 25, 1816 at around 9pm, Byron checked into the Hotel Sécheron in Geneva. We know this from Polidori's journal. So you get a notification, and you click through....



You see that a piece of content has been unlocked.



And you can read the brief journal entry. Byron is so tired that he wrote in the hotel register that he's 100 years old. Now let's say you put your phone down. 15 minutes later it buzzes...



Claire has already written a note to Byron.



Not only that, but we see that she has already read his entry in the hotel register because she references it and teases him about his old age.



15 minutes later your phone buzzes again, and this time you see the innkeeper has requested that Byron correct his age.



We know that there was a half hour window between Byron's arrival and the innkeeper's request that he correct his age in the hotel register. We also know that Claire referenced his entry in her note. We know how she felt. But by getting three notifications within half an hour, we can really feel how much Claire was anticipating Byron's arrival — the notifications give a sense of urgency.

- We develop an understanding of the process of literary creation, especially as we follow Byron and Shelley during their tour of Lake Geneva.
- We experience how quickly Byron writes *The Prisoner of Chillon* after visiting the Château de Chillon as opposed to how he adds a few stanzas at a time to *Childe Harold*. We see how the places he and Shelley encounter inspire new work.
- We also link weather patterns and their writing. For example Byron and Shelley get stuck in Ouchy because of heavy rain, which gives Byron time to reflect on his visit to the Château de Chillon and to start writing about it. The weather also prompted the ghost story writing competition.

While that example is a bit theatrical, the temporal dimension deepens the way we understand the process of literary creation, especially as we follow Byron and Shelley during their tour of Lake Geneva.

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- We experience how quickly Byron writes *The Prisoner of Chillon* after visiting the Château de Chillon as opposed to how he adds a few stanzas at a time to *Childe Harold*. We see how the places he and Shelley encounter inspire new work such as Shelley's *Mont Blanc*.

- We also link weather patterns and their writing. For example at one point during their lake tour Byron and Shelley are stuck in the town of Ouchy because of heavy rain. This gives Byron time to reflect on his visit to the Château de Chillon and to start writing about it. The weather also prompted the ghost story writing competition.



Finally, the user develops a sense of ambient awareness (peripheral social awareness) from living with the story for several months. The notifications are mixed in with regular app notifications, so these writers and the bits of life that are shared end up feeling like social media encounters with acquaintances. They become part of the users' daily lives, and users get a sense of the rhythms and patterns of writers who lived 200 years ago.



Now I'm going to switch gears and introduce the second project. "Mapping Bishop" is a web-based map of poet Elizabeth Bishop's correspondence, travel, and drafts from the early 1950s, and it is under active development.

- This is part of a study on place and poetics. Bishop is a poet who grew up in Nova Scotia and Boston and then went to Brazil and stayed there for 15 years. I'm studying that transition and changes to her poetics.

- Mapping Bishop is a research tool for organizing material from many different sources and interrogating it.

Mapping Bishop	SANTO
Data available: June 1951 - December 1952	
June 1951 - December 1952 06/21/1951 12/28/1952 (67)	VILA VELHA-
03/21/1952	
Coordinate PRETO- -22.96393, -43.172479	Livras•
Doc Type	Juiz de Fora • Campos dos Coytacazes
P From Elizabeth Bishop	RIO DE
To Robert Lowell	JANEIRO Volta Redonda* Petrópol
Place Written Rua Antonio Vieira 5, Leme, Rio de Janeiro, Brazil	RIO DE JANEIRO.
Place Described  Brazil	
Place Sent SÃO PAULO* Nicolaas Witsenkade 17, Amsterdam, Netherlands	
Source Santos Sa	
Text "I started out intending to go all over the continent but I seem to have become a Brazilian home-body, and I get just as excited now over a jeep trip to buy kerosene in the next village as I did in November at the thought of my trip around the Horn. I wasn't even particularly interested in Brazil to start with, but it was my freighter's first stop."	
"I went to visit for two weeks and have stayed four months."	18 Leaflet   Map tiles by Carto, under CC BY 3.0. D

- Bishop's work is still under copyright, so I have to work within those bounds. The metadata is public, but my qualitative notes and any extracts of her text are password-protected.

- Again I'm mapping literary creation texts in space and on a timeline.



- Like Summer of Darkness, this map also has a playback mechanism, but this one speeds up the action, which foregrounds periods of movement vs. stasis.

- This is a video of the six months before Bishop moved to Brazil, and we can feel how unsettled she was. In her correspondence, she expresses that she feels stuck and unsure of what to do next, and her physical movement reveals the same restless uncertainty.

- We know that once she got to Brazil, she seemed to suddenly start to write prose - specifically short stories about her childhood in Nova Scotia.

- There are theories about how physical distance made it possible for her to finally write about her childhood or how the rhythms of Brazilian village life were similar to those in Canada and unlocked old memories. Bishop herself notes that "It is funny to come to Brazil to experience total recall about Nova Scotia – geography must be more mysterious than we realize, even" – and all of these theories may be true.

- But by searching for certain keywords and phrases and playing them back, we can follow the development of some of these ideas through both space and time.

- For example, she had an idea for a nonfiction prose piece about Nova Scotia in the months before she traveled to Brazil, and that piece, along with certain poetic ideas about the horizon, followed her until she arrived in Brazil and were incorporated into her new work there - ideas from a trip to Nova Scotia appear in poems about Brazil, and the seeds of the short stories about her childhood were planted months before.



- Let's contrast that video to her time in Brazil. Here, she is fairly still, writing letters and working.

- The contrast highlights that in addition to Brazil being a beautiful and challenging new place for Bishop, she was also deeply affected by the time and stability she found there - she could finally work through the ideas that had been following her for months.

In both cases, adding playback creates an experiential dimension that gives both scholar and reader a richer way of understanding and interpreting the literary creation process.

In the first example, our reading time is slowed down to "real" time and set to a map to show both the incremental and the intensive periods of creation as they intersect with place and weather.

In the second, time is compressed to highlight stasis vs. movement, which gives us another perspective into how an image or insight lives with a writer before it appears in a manuscript.

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## Notes

- Dr. Andrew Sempere of Place Lab Ltd. built the Summer of Darkness and Mapping Bishop apps.
- The weather data is from: Auchmann, Renate & Brönnimann, S & Breda, L & Bühler, M & Spadin, R & Stickler, Alexander. (2012). "Extreme climate, not extreme weather: The summer of 1816 in Geneva, Switzerland." Climate of the Past. 8. 325-335. 10.5194/ cp-8-325-2012.
- The ambient awareness description is from: Thompson, Clive. (2008). Brave New World of Digital Intimacy. The New York Times.