

## Can Art Solve Synesthesia's Ineffability?

**SURG** | Arts, Humanities, and Performance (AHP) | Tags: Creative Output, Survey

*This cover page is meant to focus your reading of the sample proposal, summarizing important aspects of proposal writing that the author did well or could have improved. **Review the following sections before reading the sample.** The proposal is also annotated throughout to highlight key elements of the proposal's structure and content.*



Proposal Strengths	Areas for Improvement
The background section draws from relevant fields and is structured as a compelling argument for why the particular project should be done.	While a survey method is mentioned, how the survey results would be analyzed was not described explicitly.
The background draws on related creative works as relevant background.	Some of the proposal uses language like "hope to...". We suggest using stronger language such as "I will..." or "I aim to..."
The methods and specifically, the creative process, are justified in terms of how they help to answer the research question/address the gap in knowledge.	
Since the research question concerns audience perception, there are explicit methods dedicated to answering this aspect of the research question.	
The preparation section of the proposal highlights relevant past experience and focuses on the specific skills the researcher has based on those experiences	



Other Key Features to Take Note Of
In a project with an intended creative output, it is important to make sure the creative output is framed as a way to answer your research question/address your research aims. Much like any methodology, you must explicitly tell a reader how the steps you are taking, regardless of the intended product, addresses the research question/aims. A creative project must also outline the creative process the artist intends to use, while justifying why these are the appropriate steps to take.

Synesthesia is a neurological condition in which people experience two sense perceptions from one stimulus (e.g. hearing color, tasting words, tasting color, etc.). However, researchers still struggle to understand the boundaries of synesthesia as a condition, and synesthetes sometimes suffer because of the lack of research available and the relative obscurity surrounding their experiences. I hope to do a creative project that will seek to answer if synesthesia can be communicated to non-synesthetes in order to raise awareness and support for people living with this condition.

"I hope to" is weak language. Replace with "aim to" or "seek to"

Clear research/project statement occurs in 1<sup>st</sup> paragraph

Research on synesthesia comes from two primary fields: neuropsychology and art history. Neuropsychology has been able to quantify that synesthesia runs in families (Asher & Carmichael), and is based in cross-modal perception that can be proven with an fMRI scan (Johnson et al.). Neuropsychology is still struggling to: parse synesthesia out from common metaphors in language (Marks); quantify whether or not synesthetic responses are fixed within a single person or change over time and, in either case, why (Lovelace); determine whether or not synesthesia falls into the category of a spectrum and can therefore be encountered on some level within every member of the populace (Marks 4); and what the patterns of synesthesia are across all synesthetes, regardless of variations in individual experience (Simner). Both neuropsychology and art history have also noticed that synesthetes are disproportionately more likely to go into artistic professions (Ward et al. 128). Artists have claimed to be synesthetic for centuries, and include the likes of Kandinsky, Nabokov, Duke Ellington, and Arthur Rimbaud (Williams). Additionally, art historians like Dr. Greta Berman and Dr. Hugo Heyrman have done fascinating research examining the work of famous artists and trying to determine if they were synesthetic (Berman & Steen; Heyrman).

Background draws on work from other relevant fields with clear logic flow

Identifies gap in knowledge

As incredible and fascinating as this condition is, it poses a unique challenge for those who live with it. While public awareness of synesthesia has grown in recent years, it still remains on the periphery of public notice. When a study was done in the UK in 2007, "only 5% of teachers and 29% of learning support educators had heard the term 'synesthesia,' and only 14% of learning support educators could provide an accurate definition," (Simner & Hubbard 76). Many synesthetes are rejected in childhood for trying to openly discuss what they experience and can grow up alone and afraid, questioning their sanity ("Spotlight on Science"; Simner & Hubbard 76; Day "Some Dem." 18). From 1999 to 2005, Dr. Sean Day, a well-known synesthetic researcher, received frantic emails from synesthetes in Chile, Peru, and Italy who each separately sought out doctors for more information about their conditions and, in each case, were nearly institutionalized (19). Richard Cytowic, a leading neuropsychologist on synesthesia, wrote that for over three decades he'd received letters "from individuals realizing for the first time that others like them exist[ed]. One cannot minimize their astonishment and enthusiasm...nor their relief at being believed, having usually endured a lifetime of being told that they were "making it up." Many say, 'You saved my life',' ("Synesthesia...Twentieth Century" 399).

Justifies why gap in knowledge should be filled

Background draws on work from other relevant fields with clear logic flow

The experiences of synesthetes mirrors, in some regards, the experiences of people with mental illness. For example, Dr. Day writes that "synesthetes have been sent to 'specialists' who sometimes misdiagnose them as schizophrenic," (18). In comparison, "the National Depressive and Manic-Depressive Association (DMDA) [estimates that] 69% of patients with bipolar disorder are misdiagnosed initially and more than one-third remained misdiagnosed for 10 years or more," (Singh & Rajput). A 2010 study has shown that increased medical credibility due to neurological research attributed to more support for helpful services but negatively impacted community acceptance (Pescosolido et. al). This indicates that backing from the neurological community aids in diverting resources for those who need it, but it doesn't aid in reducing stigma. However, a 2012 study found that "both education and contact had positive effects on reducing stigma for adults and adolescents [with regards to mental illness]" (Corrigan et. al). It is the combination of neurological credibility, education, and contact that impacts the way a community regards a mental condition and diverts appropriate resources to it.

"Synesthesia is often described as being "ineffable," in that it is difficult to describe in words to a non-synesthete," (Day "Synesthesia" 919; Cytowic & Eaglemann; Seaburg). If something is difficult to describe, then it is difficult to educate others about. This is where a creative visual project is uniquely and favorably positioned to succeed. Artists like Bryan Lewis Saunders and Brian Pollett have done artwork about their experiences on various drugs in an effort to help people understand the effects that different chemicals have on the brain (Page; Pollett). This project will help non-synesthetic audiences understand what exactly it is that synesthetes experience while simultaneously touching the lives of synesthetes who are struggling with fears over their neurological state.

I'm in contact with Alec S, a Northwestern student, who has audio-visual synesthesia. Hearing a word or watching someone speak causes him to see colors. I plan to do two or three Skype sessions with Alec in the first week of summer. I'll ask him about how his synesthesia affected his childhood and currently affects his life. I'll ask him if he's aware of any patterns to his synesthesia. I'll ask him if he ever sees colored words without sound to verify if his synesthesia is more connected to sound or language. Then, I'll identify a word that is either special to him, or is one of the one-hundred most commonly used words in the English language. My goal is to paint words that carry personal attachment for both him and the non-synesthetic audience my work will be aimed towards. Ultimately, it will make my paintings more effective. After identifying a word, I'll go one letter at a time, asking Alec about what color the letter is, whether or not the color bleeds out of the letter shape, and his perception of the density and texture of the letter, since that will affect how I paint it. At that point, if I'm unsure about how to approach what I'm trying to paint, I will consult Art Professor Judy Ledgerwood. I expect to do roughly five paintings, typical of what a Northwestern 'Intro to Painting' course demands of its students in a quarter. It equates to roughly one painting every week and a half. I already possess preliminary sketches of what Alec experiences, leftover from the first time I met him (See Charts 1-3). Each chart displays a different stage of my artistic process. Chart one shows how I will quantify and sketch out my paintings. Chart two displays some of the experimentation with color and direction I've done in trying to nail down exactly what he sees. Chart three is a prototype of a potential painting. At the end of the third and sixth week, I'll gather a small group of people who are unfamiliar with my project and do a small showing. I'll present an artistic statement about the goal of my project to orient the audience and then I'll give a short survey (see Appendix D) and assess my work's effectiveness from the audience's response. From there I can adjust either by adding sound, perhaps digitally, to my project, or figuring out what is missing visually and adjusting my future paintings accordingly. If additional time allows, I will seek out other synesthetes to continue to develop this work.

As a theatre student, I'm already comfortable and familiar with what creating art demands and how to communicate effectively with an audience. I was the costume designer for four ten-minute plays as part of a senior showcase. I also won a costume design contest held by the Tony award-winning McCarter Theatre Center in high school. My costume designs for the contest, which was held in honor of their production of Fences, prepared me for this project because it means that I know how to do research about people and how to figure out the best way to represent their experiences through inanimate objects. Last quarter, I also took an 'Intro to Painting' course here at Northwestern, where I acquired all my materials, learned how to work with oil paints, stretch a canvas, and work with resin. I'll be using those skills at every stage of my research project. Furthermore, this project will be an opportunity for me to hone my artistic skills and build my artistic portfolio. If this project is successful, I can apply to present it at the American Synesthesia Association's Annual Conference, so that this work can be seen in the community that specializes in synesthesia research. This work would help make synesthesia more accessible to a wider audience and aid in shedding light on a research topic that has only seen a surge in interest in the past half century, and which still struggles to get national recognition.

Justifies why gap in knowledge should be filled / specific research aims

Justifies method/creative work with background on similar works

Pattern of describing a step of methodology then explaining why the step is taken and connecting back to research aim

Justifies methodology

Describes the artistic process, quantifies where possible

No metrics of analysis are mentioned for the survey methodology

Researcher goes beyond listing preparation, but instead connects previous experience explicitly to aspects of the project

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## **Appendix A: A Sampling of Synesthesia in Popular Culture and Art**

[<https://www.buzzfeed.com/kater11/do-you-have-synesthesia?utm\\_term=.bvNBjpe2M2#.gdKEVQ4LYL>](https://www.buzzfeed.com/kater11/do-you-have-synesthesia?utm_term=.bvNBjpe2M2#.gdKEVQ4LYL)

[<https://www.buzzfeed.com/emmayeomans/heres-what-its-like-to-have-time-space-synaesthesia?utm\\_term=.vulyQ5kL6L#.ph5oYMORqR>](https://www.buzzfeed.com/emmayeomans/heres-what-its-like-to-have-time-space-synaesthesia?utm_term=.vulyQ5kL6L#.ph5oYMORqR)

*A Mango Shaped Space* by Wendy Mass

*Assorted Works* by Wassily Kandinsky

*Vowels* by Arthur Rimbaud

## **Appendix B: Sample Interview Questions (Alec S - Chromesthesia (Audio-Visual Synesthesia))**

Childhood Experiences:

- Do you remember the first time you realized you had synesthesia?
- When/How did you find the name for what you experience?
- How do other people react when you tell them you have synesthesia? Were you ever teased?
- If you could get rid of your synesthesia, would you choose to?
- Have you ever felt ashamed that you were synesthetic?
- What was the learning curve like for your family? Is anyone else in your family synesthetic?
- How did your synesthesia affect the way you interacted with other children growing up?

Current Life:

- What do you see when you watch TV? Is color coming from the actors' mouths or from the speakers?
- Do you feel there's something invasive about having a synesthetic response in relation to another person?
- You've mentioned before that you sometimes feel weird about seeing other people's voices as colors. Can you tell me more about that?
- Do you know of any patterns to the colors you see?
- Do you have a word/name that's your favorite because of its colors? What does it look like?
- What are some of the weirdest words you've ever seen? What do they look like? Why are they odd to you? Is it because of their sound? Is their color unusual?
- Is your synesthesia more dependent on sound or on written words?
- Does your synesthesia affect you when you read books?
- You've told me that you play piano, what colors are your musical scale?

## **Appendix C: Sample Questions for Translating Alec S's Synesthesia into Art (with Sample Drafts (Charts 1-3))**

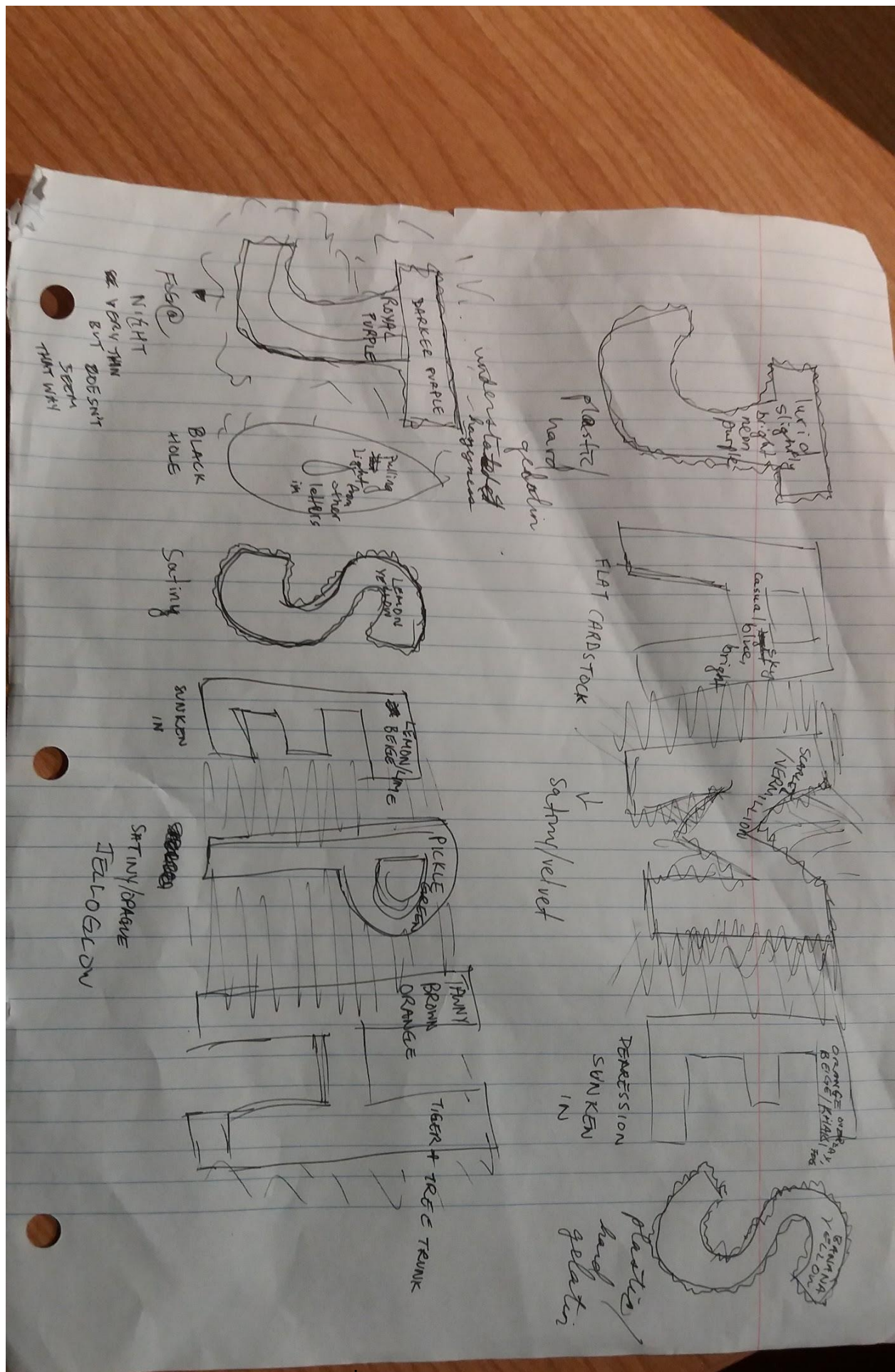
- Identify a word that Alec has special attachment to or which is within the Top 100 most commonly used words in the English language.
- Go one letter at a time.
- Identify the shape, color, and density of the letter according to the following:

- Does this letter sit above or below the letters around it? Does it fade behind another letter?
- Does this letter softly emanate outwards beyond its shape, or does it have a very clear, rigidly defined shape?
- You've mentioned before that letters can remind you of everything from mist to jello with regards to their density and how they fit with the letters around them, what is the texture of this particular letter?
- Is this letter bleeding into the letters around it? If so, how far outwards does this letter bleed? Is it overwhelming the rest of the word? Is it only bleeding into the letter next to it?
- What color is this letter? Is the color akin to \_\_\_\_? Or is it closer to \_\_\_\_?

### **Chart 1**

Next page. Preliminary sketch without color of two names, James and Joseph. They have notes on the letters about color, texture, and where the letters bleed. The names for the next three charts were arbitrary choices when I first met Alec and made these sketches, and won't be the words used for the actual project.



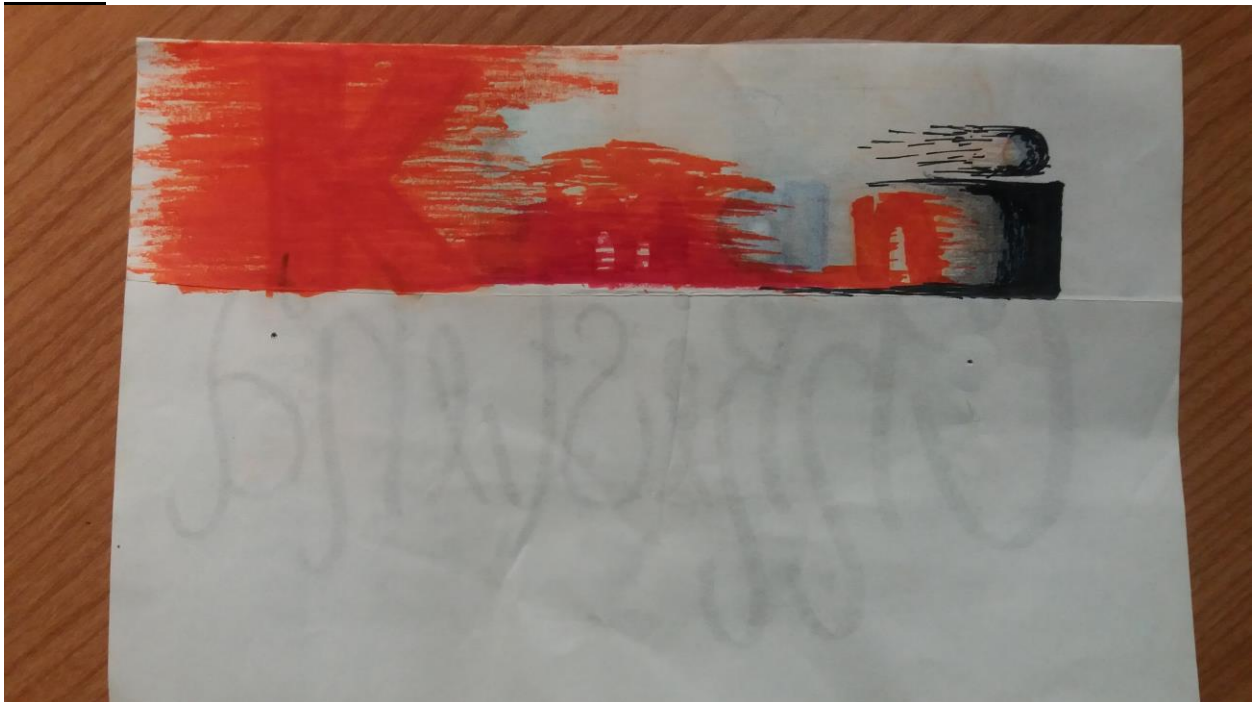


**Chart 2**



Preliminary sketches with marker, exploring the color of what Alec sees and the directionality of the colors.

**Chart 3**



A prototype of what Alec sees when he hears the name Kimani. Done with markers and colored pencils on printer paper. 2"x 8.5"

## **Appendix D: Sample Survey Questions for the Week 3 Showing**

Before the Artistic Statement Is Given:

- Have you ever heard of synesthesia before?
- If you have, where? Do you think you could explain what synesthesia is to someone else? How would you describe it?
- If you haven't, what do you think synesthesia is?
- How many people, out of a hundred, do you think have synesthesia?
- If you already know what synesthesia is, do you have it? If you do, would you be interested in being contacted after this event? If so, please put down a way you can be reached.

After the Artistic Statement is Given:

- Now that the showing is over, do you think you could explain what synesthesia is to another person?
- Do you think you have, or know someone who has, synesthesia of some kind?
- Would you say that these paintings helped you understand this form of synesthesia as if you experienced this condition yourself?
- Do you have any thoughts about what might have helped you understand synesthesia better than what today's showing did for you?

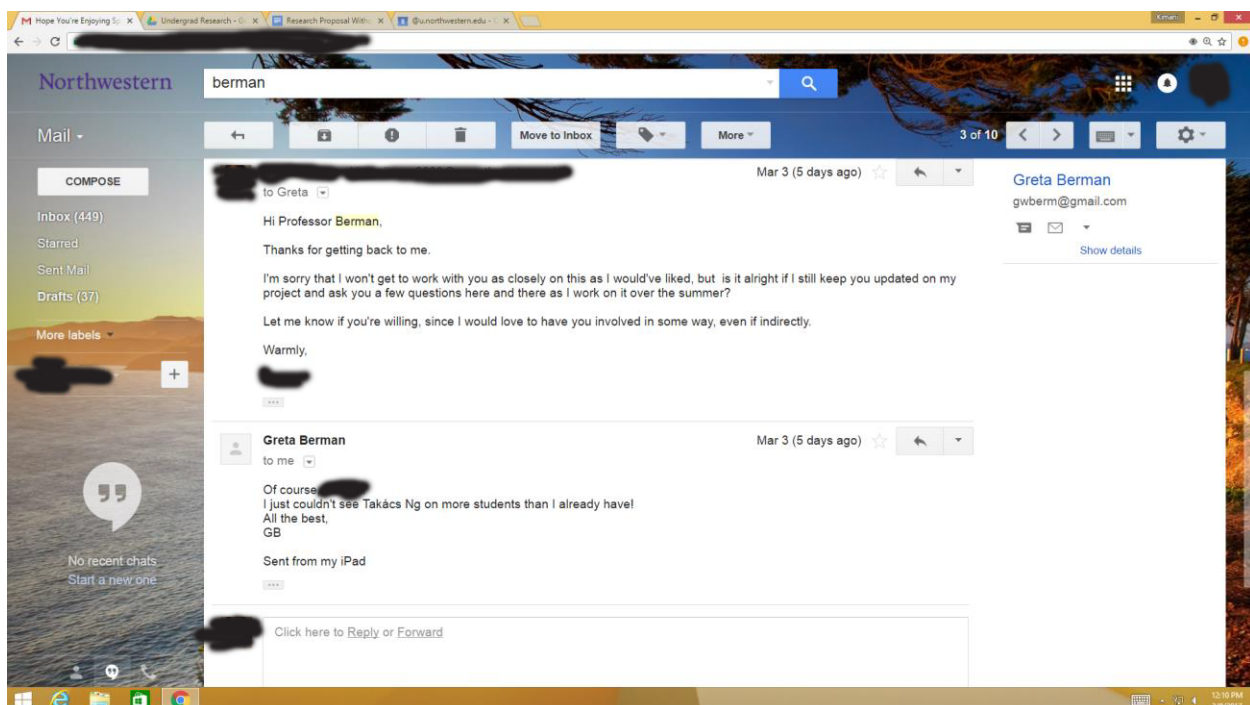
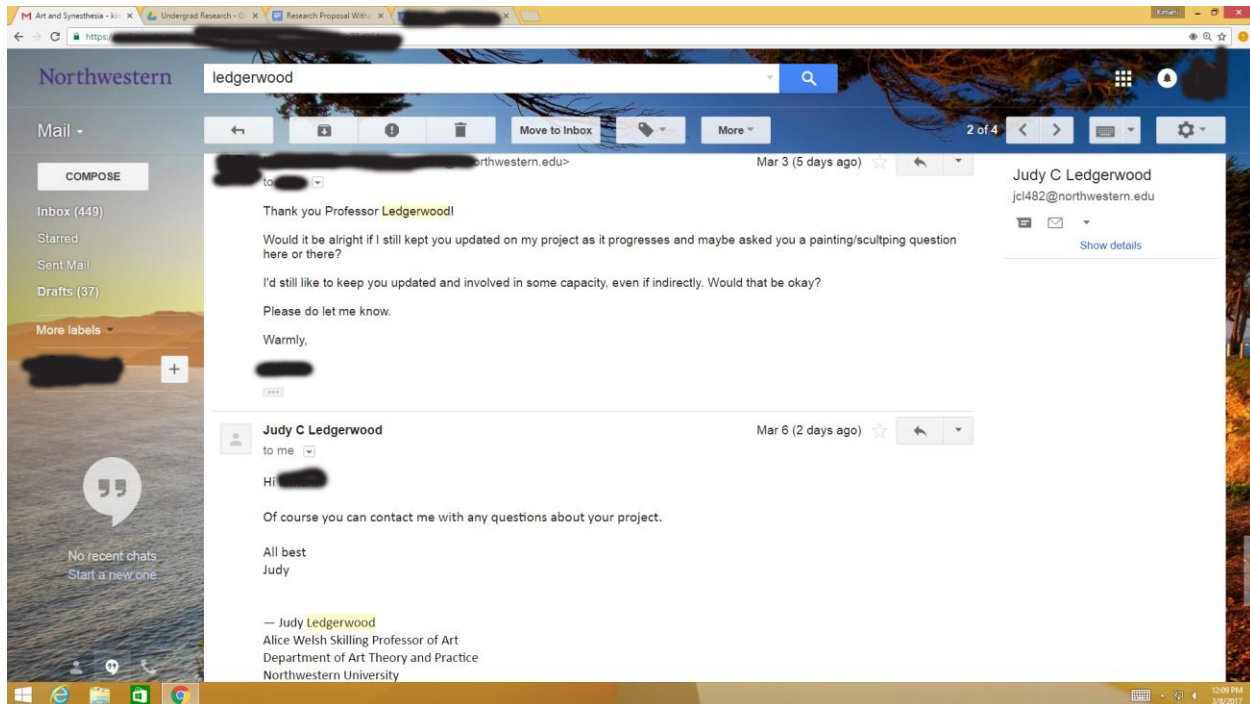
## **Appendix D.a.: For the Week 6 Showing**

Questions that will be added to the 'After' Section:

- Did you attend the last showing?
- If so, what do you think was more effective about these pieces than the last ones when it comes to how they communicated synesthesia?
- Do you feel there is still something missing about these artworks when it comes to communicating synesthesia?
- If you are a parent and you found out your child had synesthesia, do you think you would feel concerned at all? If so, would this showing make you more or less concerned, and why?



## Appendix E: Judy Ledgerwood's and Greta Berman's Agreement Take Questions Over the Summer



## Appendix F: Alec S's Consent

