Georgia State University

ScholarWorks @ Georgia State University

English Theses

Department of English

Summer 8-10-2021

Livestreaming Vico: Imagination and the Ecology of Literacy in Online Gaming

Dylan Maroney

Follow this and additional works at: https://scholarworks.gsu.edu/english_theses

Recommended Citation

Maroney, Dylan, "Livestreaming Vico: Imagination and the Ecology of Literacy in Online Gaming." Thesis, Georgia State University, 2021.

https://scholarworks.gsu.edu/english_theses/263

This Thesis is brought to you for free and open access by the Department of English at ScholarWorks @ Georgia State University. It has been accepted for inclusion in English Theses by an authorized administrator of ScholarWorks @ Georgia State University. For more information, please contact scholarworks@gsu.edu.

Livestreaming Vico: Imagination and the Ecology of Literacy in Online Gaming
by
Dylan Maroney
Under the Direction of Michael Harker, PhD
A Thesis Submitted in Partial Fulfillment of the Requirements for the Degree of

Master of Arts
in the College of Arts and Sciences
Georgia State University
2021

ABSTRACT

The following research thesis seeks to understand the connection between Giambattista Vico's conception of imagination and literacy in online spaces. This research delves into how users of the video game based live streaming platform Twitch.tv utilize imagination in written communication primarily through pictographs commonly referred to as emotes, and how broadcasters and moderators on the platform act as literacy sponsors for these unique language practices on the platform.

INDEX WORDS: Gimabattista Vico, Imagination, Literacy, Literacy Sponsorship, Emoticon

T	Livestreaming '	T 7.	T	1 / 1	T 1	CT.	•	\sim 1.	\sim	•
	1Wactragming	V/100	Imagination	and tha	HCOLOGY	Of Litara	777 110	(Inlina	1 -01	ทาทก
-1	Jivesucanning	vico.	magmanon	and the	ECOIOS V	OI LITERA	~ V III	CHILLIC	CJai	шиг

Livestreaming Vico: Imagination and the Ecology of Literacy in Online Gaming					
by					
Dylan Maroney					
Committee Chair:	Michael Harker				
Committee Chair.	Whender Hurker				
Committee:	Mary Hocks				
	George Pullman				
Electronic Version Approved:					
Office of Graduate Services					
College of Arts and Sciences					
Georgia State University					
August 2021					

DEDICATION

I would like to dedicate this work to my parents, professors, friends, and peers who have pushed me to realize my potential as a student and scholar. Without their support I doubt I would have made it this far, nor would I have been able to push myself out of my comfort zone to complete a project such as this.

ACKNOWLEDGEMENTS

I can't begin to fully express the thanks that is due to Dr. Michael Harker, Dr. Mary Hocks, and Dr. George Pullman. To my director, Dr. Michael Harker, Thank you for believing in my abilities as a writer and researcher whilst pushing me to accept that improvement is a part of the process of being a student – and being the catalyst for such fruitful improvements. To Dr. Mary Hocks, thank you for offering me hard truths during the revision process and pushing me to consider new ways of writing. And to Dr. George Pullman, thank you for validating my research goals and reading through my rambling emails in the beginning stages of this project, it was more helpful than you may know.

Beyond those that have helped me with this project, I'd like to thank the opportunities presented to me by the Director and Assistant Directors of The Writing Studio of the 2019-2020 (Dr. Mary Hocks, Jessica Rose, and Stephanie Graves) and 2020-2021 (Dr. Elizabeth Lopez, Nicole Turner, and Brittny Byrom) academic years. Thank you for the support you've offered in my growth as a tutor and in my writing center based research. Additionally, I'd like to acknowledge and extend my thanks to Dr. Ashley Holmes, Dr. Lynée Gaillet, Dr. Baotong Gu, Dr. Tanya Caldwell, and Dr. Randy Malamud for their roles in expanding my horizons as a student of English and as a budding scholar in the field of English studies.

Lastly, to the numerous peers and friends that I have met over the course of this M.A. journey, thank you. I can't wait to see the next steps on my journey, always keeping in mind the personal and professional impact that GSU and the wonderful people here have had on me.

TABLE OF CONTENTS

A	CKNOW	LEDGEMENTSV
1	INT	FRODUCTION1
2	СН	APTER ONE: CHARACTERIZING LITERACY 5
3	СН	APTER TWO: THE TWITCH PLATFORM, A RHETORICAL
	CO	NSTRUCTION 12
	3.1	The Computer and Cultural Layers of Twitch15
	3.2 N	Numerical Representations of Twitch Emoji19
	3.3 N	Modularity20
	3.4 A	Automating Communication22
	3.5	Culturally Transcoding Emoji23
4	СН	APTER FOUR: VICO, AND WHAT HIS IDEAS OF IMAGINATION HAVE
	ТО	DO WITH LITERACY AND NEW MEDIA24
5	СН	APTER FIVE: LITERACY AND IMAGINATION ON TWITCH29
	5.1 N	Nmplol Case Study30
	5.1.1	Emote Substitution for Written Communication31
	5.1.2	Literacy Event in Action34
	5.1.3	Literacy Sponsorship35
	5.1.4	Translating Imagination to Literacy
	5.1.5	Connecting nmplol to Literacy and Imagination41

5	5.2 S	odapoppin Case Study	42
	5.2.1	Permeability of New Media Cultures	43
	5.2.2	Determining Cultural Meaning and Rhetorical Purpose	45
	5.2.3	Imagining Purpose of New Communication Tools	46
	5.2.4	Connecting Sodapoppin's Community, Literacy, and Imagination	48
6	CON	NCLUSION	50
AP	PENDIC	CES	55
A	Appendi	x A: nmplol Case Study Clips	55
A	Appendi	x B: Sodapoppin Case Study Clips	55
WC	ORKS C	ITED	56

1 INTRODUCTION

In contemporary research regarding the historical period of the Enlightenment, Giambattista Vico, while becoming more common in recent years, is still in the process of being reclaimed by modern scholars to explain sociocultural phenomenon (Levine on the differences between the Ancients and the Moderns in 1991, Tateo on psychological imagination in 2015 and experiencing in 2017, Zittoun in 2015 on sociocultural imagination, and then Granatella on universal imagination in 2015). Of these phenomena, one such avenue that has had little attention is that of literacy and how literacy might be viewed in light of how Vico characterized the role of imagination and memory in public life. As such, conducting research to understand the role that imagination and memory play is pertinent to continuing this reclamation. This connection between literacy and imagination is easy to see in western cultural myths we can all remember, like Romeo and Juliet wherein we continue to use their love as an imaginative metaphor for our own lives - though this has morphed into more modern memories where men and women on social media are looking for their Pam or Jim from the hit TV show The Office. This understanding of how various social imaginations are formed and enacted through literacy and rhetorical practices has great importance.

As seen in the previous example, literacy, the common definition being the ability to read and write, has a pertinent role in how we construct and communicate through our imagination. Recent research into literacy by David Barton, Mary Hamilton, Katie Clinton, Deborah Brandt, and Brian Street offers a language to engage critically with what these literacies look like, how they are formed, who contributes to the acquisition and engagement in these literacies, and how we might differentiate literacy across contexts. The common literacy definition functions for the literature-based metaphor of a Romeo looking for his Juliet but fails to communicate how a TV

show results in a shift in cultural imagination. However, we can look to recent research in literacy as a means to make sense of how our imagination changes and enables a reconsideration of how we engage our literacies. Barton, Hamilton, Clinton, Brandt, and Street offer these insights by showing how we engage with our environment to access new literacies, who has a role in promoting those literacies (such as a loved one sharing their favorite television show with us), how that literacy is reflected in a community, and then how that manifests in our communication practices. From these researchers, I pull together threads of their ideas to form a foundation from which literacy practices can be broadly understood, stemming from Barton's metaphor of the ecology of literacy, Brandt's identification of the presence of literacy sponsors who benefit in some way from the acquisition of literacy by others, Street's definitions of literacy practice, Barton and Hamilton's insinuation that literacy is highly contextual, Brandt and Clinton's rebuttal that contexts are not limited by local circumstances, and Barton and Lee's shift of these ideas toward digital spaces. The shift of these ideas toward digital spaces is the inroad for imagination to take a prime role in the development and continual expansion of literacy, which will only continue as technology becomes more advanced.

This continual advancement is resulting in technology being integrated into our lives at a greatly accelerated pace. Daniel Keller makes note of this in Chasing Literacy, wherein "literacy is tied to education, business, social, and technological contexts that value speed and increasingly enable and promote faster ways of reading and writing" (Keller 4, emphasis mine). Keller's indication here is that as the contexts of literacy accelerate, we must consider the ways that they graft onto our current conception of daily life. One such context being the technology we engage with and how the modes of communication in such spaces begins to value speed rather than specific communication. This acceleration becomes more apparent when considering the

communication behaviors and tendencies of people who utilize technology to communicate with others. Of these new technologies, a key example of how they have altered literacy and rhetoric in digital spaces is clear: the advent of video streaming platforms that offer live-streamed content that is viewed with a group of people. These communities and relationships follow a dynamic similar to those of people that identify with each other under a shared interest such as a tv show, celebrity, or sports team. Although, in many of these livestreaming communities, people come to identify with the broadcaster, the various communication tools at their disposal, and the activities or hobbies they engage in. These "live streams" offer users of the host platform to discuss topics ranging from what's happening on the livestream, politics, just chat about random topics, or about the streamer's life as well as the lives of the users. Interestingly, these interactions are also characterized by their offering of anonymity through screen names while also providing a space for the formation of relationships and communities that are built on common literacy and rhetorical practices. These digital spaces accelerate their communication through users all "speaking" at once through text, and also, more commonly through condensing communication to pictographs that are commonly referred to as emotes or emoji. This usage of emoji, emoticons, or emotes as a means for communication is oftentimes the most common progenitor of a literacy event where the original sender of the message must consider the context of their message, embedded meaning, and then how other users might decipher that meaning for themselves.

To best understand this, I look to current and past rhetoric scholars for ideas of how imagination is integrated into this phenomenon. Interestingly, the field of rhetoric offers insights into how these digital spaces allow for the cultural emphasis and consistency in communication tools that are necessary for identification of literacy, and further exemplifies the role that imagination then has in the formation of meaning around potential variances in communication

that arise from finite symbols. Lev Manovich's characterization of new media offers a framework to analyze how these new communication tools in technology are reliant not only on technology, but also the culture in which it's utilized. Furthermore, Manovich's research and identifications of new media allow for the affordances of such media to be understood more fully. These affordances, and potential constraints, as Kress has described them, refer to the "distinct potentials and limitations for representation of the various modes" of communication (Kress 12). It is in these potentials where literacy, and subsequently imagination, becomes necessary. Participants in communication at the time may be made aware of the potentials by another participant or individual that has a stake in each participant's ability to acquire the literacy that will aid them, as Clinton and Hamilton define them as sponsors of literacy. Then, each participant must utilize that literacy in a manner that allows them to communicate their ideas with these newfound tools and literacy. Which begs the question, what faculty is a prerequisite to engage with these tools and literacies?

To answer this question, we must step back to not-so-contemporary ideas to fully understand what this ability may be, or even make sense of the type of literacy being employed to comprehensively read the aforementioned symbols, or to use them in such a way as to effectively communicate an intended message. Most notably, in this case, is the faculty of imagination that allows for people to make connections through language – metaphor, symbols, and myths that are common to community and culture. While imagination as a term rears its head in many of the works already mentioned and in various other texts on the subject of rhetoric and literacy, Vico's older conception of imagination is noticeably absent – indicating a need for analyzing how a sociocultural and psychological imagination is a necessary dimension of analysis for literacy, especially in digital spaces.

The goal of this project, then, will be to examine how Twitch.tv, a video livestreaming platform that enables live communication between broadcasters and users; provides affordances and constraints that impact literacy practices; how communities formed on the platform are centered around literacy sponsorship, common symbols/metaphors, and a culture of imagination; and the implications these new literacies have communication in these spaces. By establishing and following a framework that takes these things into account, I will report on the findings from two case studies that follow two Twitch.tv broadcasters, how they and their communities engage in literacy through Vico's imagination. By understanding how imagination plays a role in literacy, and the resulting implications, conclusions can be made about how literacy in digital spaces necessitates imagination from both the writer and their audience.

2 CHAPTER ONE: CHARACTERIZING LITERACY

In David Barton's *Literacy: an Introduction to the Ecology of Written Language* he posits that, "We use language to imagine what the world is like and what it might be like" (17)¹, offering us a broad frame with which we might understand how literacy operates in relation to our lived experiences. While imagination may be the foundation of literate communication, Barton contests that language is at the center of the shared construction (Barton 16). As such, literacy events are integral to what we consider to be everyday life, influenced by communities and specific times (Barton 3). Barton further identifies that literacy is a complex phenomenon that is encompassed by interdisciplinary research regarding: development, culture, written and spoken language, social understandings, and recent technologies among others (Barton 5). Thus,

¹ It's worth noting here that this usage of imagination is referring more to how we interact with the world around us rather than the sociocultural imagination (that we use for metaphor for example) that Vico refers to. Further research into these differences and their importance to our understanding of literacy's relation to imagination would be necessary to come to a more fruitful understanding of what Barton may be insinuating here.

while the widely accepted definition of literacy may be the ability to read and write (Barton 15), this definition of literacy does not capture the broad insinuation that literacy practices may deviate from traditional oral/written language (Barton 19-22). To escape assigning a specific definition to literacy, Barton utilizes metaphors to show that literacy is ecological, that literacy practices and literacy events are a result of humans interacting with their environment and each other (Barton 29), and that like any acceptable social behavior, literacy is a practice that needs to be learned through sponsor relationships to gain understanding of literacy activities (Barton 40-41).

Considering the implication that literacy is ecological and dependent on the sponsorship of existing community members, sponsorship becomes a primary method in which literacies are acquired in the ecosystem. As Deborah Brandt notes in her essay, "Sponsors of Literacy," literacy sponsors are, "any agents, local or distant, concrete or abstract, who enable, support, teach, model, as well as recruit, regulate, suppress, or withhold literacy – and gain advantage by it in some way" (Brandt 166). Brandt's key insinuation is that the literacy sponsor gains advantage through the enabling or withholding of literacy in other members of the community. This becomes clearer as, "sponsors deliver the ideological freight that must be borne for access to what they have" (Brandt 168). Thus, the ideology behind the sponsorship may indicate the intentions of the sponsor, or in some cases the intentions of the sponsored for attaining a literacy that is being offered to them (Brandt 168; Barton and Hamilton 11). Although, sponsors act not only as purveyors of literacy, but also as the ideological gatekeepers by which they hold control over access to literacies based on various factors such as race, caste, performance, etc. (Brandt 169-170); the manner in which literacy standards are established in a society (Brandt 173); but then it is the role and responsibility of the sponsored individual to utilize that literacy in an

innovative way, potentially overcoming divisive factors or the society that the literacies are borne from (Brandt 179).

This utilization of literacy, these literacy practices, have been defined by Brian Street as being rooted in ideology – we often address literacy as reading and writing, but it's further rooted in knowledge, identity, and being (Street 417-418). The example that he then offers is that of teacher and student, "in which teachers or facilitators and their students interact is already a social practice that affects the nature of the literacy being learned and the ideas about literacy held by the participants, especially the new learners and their position in relations and power" (Street 418). To simplify this, I will continue to look at literacy practices as the appropriate usage of language/language substitutes as a means of communication between two or more people – not to be construed with rhetorical practices wherein the focus would be on persuasion. My focus on the usage of language and symbols then, in much of the later analysis, will be contingent on how these literacy practices come about in a community in relation to the interactions between teachers and learners, and the power dynamics present in that ecosystem. From this understanding of literacy and literacy sponsorship, it seems clear why David Barton and Mary Hamilton note that, "Literacy does not just reside in people's heads as a set of skills to be learned, and it does not just reside on paper, captured as texts to be analyzed. Like all human activity, literacy is essentially social, and it is located in the interaction between people" (Barton and Hamilton 3). This expansion of what is normally seen as a literacy event – generally the interaction between two people or a moment requiring reading or writing – is necessary as we transition into the digital space. The acceleration of technology and literacy as mentioned earlier requires a broader analysis of the blindingly fast communication present in these spaces. The core of this event still, however, as a result of the foundations of literacy, is still based in how we

look at the community as an ecosystem – how participants in the community are interacting with each other.

Generally, it can be said that the ecology metaphor presented in Barton's previously mentioned work can be positioned in relation to the community in which individuals interact rather than based in otherwise common skills based, autonomous characterizations of literacy. These practices, while incorporating an exchange of language, are also, "shaped by the social rules which regulate the use and distribution of texts, prescribing who may produce and have access to them" (Barton and Hamilton 7). So, such practices are contextual (such as digital and film literacies), cultural (wherein they are dictated by the domain in which they occur such as school or home), permeable (as there may be crossover between domains and cultures), and often dominant (one type of practice is valued above others in the domain) (Barton and Hamilton 9-11). However, we can't limit interactions within a single community as being a complete representation of the ecosystem – the cross-over between online spaces (transitioning between communities and domains) requires a more permeable, impactful characterization of the social practices that require literacy. This forces us to consider not only the local interactions that exist within an individual community, but in understanding where and how literacy practices originate from outside of the community as well.

While considering literacy in local contexts is important, Brandt and Katie Clinton in "Limits of the Local: Expanding Perspectives on Literacy as a Social Practice," posit that the contexts of literacy are not limited to just local communities. As in the research on literacy sponsorship and literacy practices, Brandt and Clinton continue to support the claim that literacy itself is predicated on socially situated phenomenon (Brandt and Clinton 337-338). However, literacy practices are not created and sustained in only local contexts, rather they serve multiple

interests, establishing larger enterprises that play out away from the local; most notably that literate designs that influence local practices originate from other places (Brandt and Clinton 338). To understand these growing contexts, then, one must consider how a literacy artifact integrates into the local, where the artifact came from, and how the local views the artifact (Brandt and Clinton 343-344). In this case, the first outside influence from which this phenomenon of practices originating outside of local community contexts that comes to mind is digital technologies, as in our current moment much of our communication originates from and is centered in digital spaces. The usage of Twitter hashtags on Facebook, memes from reddit or 4chan being shared on Twitter, or the permeability of communication tools on websites like Twitch.tv require users to think outside of their local contexts. These spaces are focused around the same premise as Barton and Hamilton's claims that literacy contexts are contextual, cultural, permeable, and dominant. Thus, digital communities and technologies exemplify the literacy contexts and practices proposed by Barton, Hamilton, Brandt, and Clinton.

David Barton and Carmen Lee help further identify this trend in *Language Online:*Investigating Digital Texts and Practices, noting that it is becoming more and more acceptable, and expected, that digital technologies influence all aspects of our lives (Baron and Lee 1).

Although, these technologies may influence people's literacy practices, they do not automatically create brand new practices for individuals, rather it is important to pay attention to how people use technology as the means to enhance their communication (Barton and Lee 2). In terms of written language, stylized writing such as emoticons and unconventional punctuation are highly contextual within specific situations and subject to social, cultural, and identity influences (Barton and Lee 4-5). Additionally, in terms of what we consider to be the modern Web, user generated content is the primary means through which literacy practices become evident, and

may take the form of written text, image, video, or sound byte (Barton and Lee 9). Of these, in recent years, one of the most common forms of communication, and evolution of the emoticon, the emoji, has become a staple in literacy practices on the internet. Because of this, we must ask the following questions to begin to understand how literacy enhances this staple of digital communication:

- Why are emojis and emotions important to literacy?
- Who sponsors the adoption of new emoji and emoticon languages?
- How do they appear in literacy practices, and in what contexts?

In Qiyu Bai's meta-analysis of current trends in research concerning emojis, he identifies that contextuality is a common trend that shows most people identify emojis as a method of expressing identity, abstract emotion, and even as a method of overcoming language barriers in simple communication (Bai). Similar to how motivation operates in literacy, motivation has a primary role in why emojis are used. While the aforementioned usages of emoji may be important motivating factors, for literacy we may also look to how emojis influence the context of interactions between individuals through a reduction in ambiguity, intensification of speech and writing acts, and how they might be used for deception (Bai). Allisa Freedman notes in her history of emoji literacies that culture plays a dual role in this influence, being the influencer and influenced of culture that results in more or less ambiguity in communication depending on the user's presupposed cultural knowledge (Freedman). This results in a more locally centered understanding of such symbols and communication (Freedman), similar to how Barton described in literacies of the local, however, communication practices are still influenced by outside forces such as the creators of Unicode, the companies creating technology capable of utilizing emojis, and the differences in emojis on different platforms. This establishes the methods through which

literacy practices in these spaces are formed. The context proposed by the creators, the influences that culture has on those common symbols, the permeability that these symbols have across contexts, and how some of these symbols become dominant forces us to consider how this relates to literacy in a more complex way. Particularly, it forces us to consider how these symbols are a part of an ecosystem rather than isolated instances of a literacy event.

As emojis have become a staple of basic communications in these spaces (Sampietro 28), Sampietro notes that many participants in her study acknowledged that emojis helped to create an ecology between users, making the users feel closer, like their communication is more precise (Sampietro 31-32). While it would seem that users then would have a clear understanding of emoji and emoticons, many participants didn't agree on the meaning of most emojis, instead describing them with varying degrees of synonym, but nonetheless different interpretations that can impact literacy practices involving the pictographs (Sampietro 32). As such, as Jennifer Casa-Todd noted in her dissertation, A Contextual Approach to Digital Citizenship, Digital Literacy, and Student Voice, user generated content - such as written, visual, or auditory media is subject to community established norms, similar to the notion of local literacies insinuated by Barton, but subject to the permeability of outside influences (Casa-Todd 92-93). Casa-Todd's study shows how these outside influences were necessary to her students' adherence to digital literacy norms, noting that parental intervention played a distinct role in correcting illiteracy when students behaved in an unprofessional or disrespectful way (Casa-Todd 93). As such, the sponsors of literacy, local or otherwise, have an impact on the usage of both old (traditional written language) and new (emoticon/emoji, mp3, video, etc.) tools for communication.

Through Hannah Gerber's essay, "ESports and Streaming: Twitch Literacies," it becomes apparent how Barton, Brandt, Street, Hamilton, Clinton, and these conversations about emoji

literacy culminate on Twitch.tv to create a unique literacy ecosystem. Gerber notes that streaming is quickly becoming one of the most complex and popular examples of digital literacy practice (Gerber 343). This practice, which on the surface is a seamless negotiation between many modalities of communication, is actually the navigation between "reading, writing, listening, speaking, and presenting" for the broadcaster (Gerber 343), and constant visual and written communication between various viewers and the broadcaster, oftentimes with upwards of thousands of individuals. While there are difficulties in navigating such literacies, the reward for doing so may come from eSports scholarships, prize money from winning tournaments for particular games, and increased revenue from users that offer their own money to live streamers for their entertainment (Gerber 344). Herein, is also the incentive for literacy sponsorship.

Monetary gains and holding a position of power within the culture of the platform or within a single channel is a desirable drive for literacy sponsorship. However, this doesn't yet reveal how literacy sponsorship Thus, we may further contextualize Twitch.tv as a new media platform that provides the necessary affordances of new media to approach these new literacies.

3 CHAPTER TWO: THE TWITCH PLATFORM, A RHETORICAL CONSTRUCTION

Twitch as a digital platform is filled with various modes of communication, ways of building communities, and is predicated on users' understanding of contemporary video games and the culture surrounding them. As such, the analysis that I conduct of the platform will follow key aspects of Twitch as a product of the digital age. Defining aspects of Twitch through Lev Manovich's ideas of new media and identifying the communication affordances and constraints will bring us to an understanding of how Twitch operates in a way that is conducive to the acquisition and practice of unique literacies.

Understanding Twitch as a platform predicated on new media will allow us to understand how communication and therefore literacy practices come to be on the platform. While there are many researchers that I might draw from to establish this connection, I believe one of the most comprehensive definitions of new media is offered by Lev Manovich. Manovich's The Language of New Media, a text that defines how media in digital spaces is oftentimes unique from previous forms of media, is thus necessary in understanding the affordances that new media has for literacy events and practices. In this work, Manovich sets out to identify what makes media "new" and how that corresponds with our conception of language and language practices. Manovich identifies that there are two layers in the transcoding of new media – the cultural and computer layers – that influence each other (45-47). In this manner, digital spaces, and new media by extension, are constructed as uniquely reproducible, while the cultural layer may be seen as the human interpretation of standardized media such as the aforementioned emojis found in Unicode. The representation of these layers comes in the form of five core principles that Manovich notes are: numerical representation, modularity, automation, variability, and cultural transcoding (Manovich 20). Numerical representation, Manovich notes, is the mathematical de/construction of a new media object, such as a photograph being manipulated to change contrast, edges, proportions, etc. (Manovich 27-30). The modularity of new media is represented through independent components that fit into the same structure – such as how the internet is composed of websites, which are composed of pages, which are composed of sections, until you reach the smallest component – all of which exist separately but are all accessed at the same time (Manovich 30-31). The accessing of new media, such as it may all be accessed at once to create the completed media object, is the result of automation that might create, edit, or operate within restricted or unrestricted rules set by the creators (Manovich 32-36). That said, while automation

may make it possible for the recreation of the same object numerous times, variation within a new media environment is similarly possible and a common outcome of variability in user engagement (Manovich 37-39). Using these defining characteristics, I establish how Twitch fits into the fold of new media, especially as it pertains to how users and the platform operate rhetorically and provide a framework for analyzing user engagement with this new media in the terms of literacy.

As for the affordances and constraints of the platform, we may look back to Kress' definition of affordances in digital spaces, but also to James Gibson's "The Theory of Affordances" in which he describes affordances as the environment that is an extension of the old; this modified environment is created with the intention of amplifying what is beneficial while reducing that which hinders those in the environment (Gibson 56). In the case of digital spaces, we then view it as an extension of the old environment – a medium through which we can conduct much of our communication by taking advantage of the tools that make such actions easier just as what would have been seen in a pub, town square, or town-hall meeting. In the conversation of the digital environment then, I look to how Twitch is composed of distinct yet mutually necessary computer and cultural layers, how the media used for communication is codified in numerical representations, how the platform is built modularly and communication requires modularity on the platform, how some aspects of communication are automated, and how cultural transcoding allows for unique communication practices. This further allows for an understanding of how the basis for new media coincides with the characteristics of literacy that have been previously laid out. Because of this, I will begin to make connections between the two through their shared contextual emphasis on culture, permeability, and social understandings.

3.1 The Computer and Cultural Layers of Twitch

Building off of Lev Manovich's conception of new media, we may begin by looking at how Twitch separates itself into the two distinct cultural and computer layers. The cultural and computer layers of the platform become evident as you examine how the creators constructed it rhetorically. Liza Potts and Angela Harrison posit in "Interfaces as Rhetorical Constructions: reddit and 4chan during the Boston marathon bombings," these digital spaces are simply a modernization of the rhetorical canons set forward by classical rhetoricians. Delivery, Memory, Arrangement, and Style are alive in the platform and system, affordance and meme, layout and template, and the text and images respectively (Potts and Harrison 143). It is here that we see much of the computer layer. Twitch positions itself as a creator-centric platform built around the familiar video streaming system that we see on other platforms like YouTube and Netflix. Twitch's attempt to deliver a similar experience is built around a system that offers much of the same opportunities for accessing content – a front page that directs users to content based on previously viewed content, categories that viewers to specified content, and a favorites list that guides users to channels that they frequent. Then, the final connection that Potts and Harrison offer that is relevant to the computer layer is in the arrangement (the layout) of the website. While the platform doesn't focus on "memes" in the computer layer, the inclusion of affordances for communication in the form of "emotes" that represent integral moments of Twitch's history and content creators offers a similar focus on memory – users have to type a specific code to make an emote appear. This is also representative in the style of the site, wherein the platform finds consistency in text and images through this codified language for visual representations. It's in this consistency that the cultural layer becomes clearer.

The culture of this digital space is what makes these connections possible, as the platform's rhetorical affordances are utilized to mirror these rhetorical principles (Potts and Harrison 143). This culture thrives on the expansion of available information and tools, the speed of change which allows access to new developments on the platforms and information that occurs outside of them, and the diversity of perspectives and experiences that become available through these new discourse technologies (Conole and Dyke 116-117). In this way, the cultural layer of the platform arises in the broadcasters who create their own custom emojis, and how various communities begin creating diverse experiences with them. That being said, the culture itself is also subject to change through these technologies due to the ability of users to communicate with, reflect on, and critique each other accordingly (Conole and Dyke 117-118). On Twitch, the afforded ability to participate in these culturally formative actions is through the broadcasters' chatrooms. Users use these chatrooms to create experiences with custom and "global" emotes influences the culture of the platform in such a way that perceptions of the website change drastically.

While it would seem that these communities and cultures are substantial in the way that a society may be, Kelemen and Smith offer a distinction: what is taken to be a community is reducible to neo-communities in which individuals are more closely related by behaviors that do not have finality (Kelemen and Smith 374). From this distinction, we might place individual chatrooms into this category of neo-community, wherein the interactions that occur (usually based in memes and humor) don't have a lasting effect on the individuals involved. In this regard, the rhetorical communities that exist in these spaces may be more similar to the literacy communities discussed before – though they are dictated by somewhat impersonal relationships

² I use the term global here as it is used by Twitch to denote which emojis are available to all users across the platform, regardless of paid subscription status to broadcasters or to Amazon's Twitch Prime service.

without dictated morality, desires, or interests which exist prior to the formation of the digital community (Kelemen and Smith 375). Hence, while we may assign a community to a specific game or genre of livestream, the choice to partake in the content of a specific channel may be without this shared morality, desire, or interest. To this extent, then, we must look to what connects individuals within these communities, and how they form their community.

Lucy Anne Johnson, in *How Sight Becomes Subject: Cultural Image Design inn the Age of Digital Rhetoric*, her dissertation, she redefines the role that digital rhetoric has at its core, defining it as an embodied practice that relies on the design of the platform to provide resources and modes that are significant to the community (Johnson 31). The shared resources that I look to on Twitch as a representation of this are the emotes that users gain from participation in a channel. The prime example of this is in the subscription based emotes wherein users pay a fee to support broadcasters and in exchange gain access to channel specific emotes that can be used on the rest of the website. These neo-communities, to some extent form around the support of the broadcaster and the usage of their emotes. A common example of this may be seen in Moonmoon's neo-community, as his emotes generally are used in other chatrooms to convey a breadth of different emotions or ideas. The people who use his emotes are referred to almost exclusively as "Moon subs" and are identified through the communication resources that they have access to rather than through any central ideology. That being said, the neo-community can still be broken down further.

When breaking down the neo-community into two primary components, streamer and audience, unique rhetorical circumstances emerge, particularly in that the streamer becomes the primary voice amongst the neo-community in which they become the "opinion leader" or influencer of the community (Sjöblom et al. 23). Continuing this reading of Moonmoon's

community, Moonmoon as the broadcaster and other commonality amongst the community becomes, in a way, the key individual among the community that influences the behavior of his cohort. This requires users to be aware of the contextual differences that arise as a result of the community, meaning sequenced arrangements of emojis may function as rhetorical communication (Ge 426). What Jing Ge found in their analysis of emoji sequences is that most users were utilizing the pictographs as a method of engaging and communicating their stance to their audience, which may then be extrapolated to how users may convey their own personal identities to a community through emoji (Ge 427). In this way, the opinion leader, community, and individual viewer each plays a role in how the culture is established and maintained.

That being said, the broadcaster doesn't partake in the usage of emojis on their own channel, instead communicating almost exclusively through their audio and video. In this manner, it becomes clear that the stance that is often attributed to emoji as seen in Ge's study is instead attributed to the audio-visual component that is the streamer. They may take their position as opinion leader and use it to influence viewer behavior. Most notably, this can be seen when streamers reference common Twitch Further affordances that impact this rhetorical community are the revenue affordances that impact the streamer's livelihood (Sjöblom et al. 23-24). This affordance often comes in the opportunity for viewers to contribute to the livestream in some way, often through a message that emerges on the video aspect of the stream which is then made apparent to the community (Sjöblom et al. 24). This interaction allows users to essentially buy rhetorical power within the neo-community for the purpose of being the opinion leader for a moment, or for the purpose of being recognized as an individual amongst the community. In doing so, they can greatly skew the culture of the chatroom for a moment. This may be seen as a donation alert that acts as a call to action for other users watching a broadcast to use another

broadcaster's emojis. So, clearly, emoji act as a primary communicative component of the platform, embodying the computer and cultural layers simultaneously.

This simultaneous embodiment of computer and culture allow an inroad for us to observe emoji as a form of literacy that occurs in this digital space. When placed in the context of both the culture of the platform and the neo-communities that are present in digital spaces, emoji are not limited to simply a digital representation of words, nor are they limited by individual cultures, rather they are built on the same cultural contexts, permeability between culture and neo-community, and contextual social understandings that literacy is. This, in addition to David Keller's insinuation that the acceleration of technology instituted an acceleration in literacy is precisely why it's important to look to this definition of new media and digital culture as an epicenter of literacy research. However, looking beyond the similarities between literacy and new media, some defining features of Twitch need to be addressed before progressing into an analysis of the literacies present on the platform. For that reason, I ask: what are the requisite necessities to build a language in new media, and how does that translate to literacy; and how do emoji on Twitch fit into the other aspects of Manovich's definition of new media?

3.2 Numerical Representations of Twitch Emoji

The first aspect of new media that Manovich details is numerical representation, seemingly stating that the code and numbers behind technological innovations are what create the distinction between old and new media. Manovich notes that new media are subject to mathematical de/construction, such as a photograph being manipulated to change contrast, edges, proportions, etc. (Manovich 27-30). On Twitch, numerical representations are most easily since in emoji once again, as creators and Twitch staff that create emojis for the platform are required to fulfill basic guidelines for the numerical identification of each pictograph. Twitch describes

these qualifications as, "a single square image file between 112x112px and 4096x4096px that is under 1MB in size. This file will then be automatically converted into our other required sizes" or a broadcaster can choose to manually submit their emoji in the required sizes of 28x28px, 56x56px, and 112x112px (Twitch). While this is merely a mathematical construction of the size of the emoji (at least at this stage of development), it falls into Manovich's classifications in regard to manipulatable proportions, whereas the development of the emoji occurs in programs that set the contrast, edges, and other characteristics before Twitch adjusts the size of it.

Considering these numerical representations, especially as Twitch primarily concerns itself with the size of the emotes, we may also look to how the culture of Twitch has affected the size of some user generated emoji. Community created extension programs like BetterTwitchTV (BTTV) and FrankerFaceZ offer users numerous additional free emojis to communicate with. These emotes commonly follow Twitch's guidelines for numerical representation; however, the community has made a point to break away from these restrictions. One such affordance of BTTV is emotes like widepeepoHappy or WideHard which occupy the space generally occupied by two emotes. While these emojis are reminiscent of emojis that already exist on the platform or extensions, this deconstruction of Twitch's numerical representations indicates how a culture of user engagement has an impact on communication affordances on the platform. This consistency of cultural permeability is again present as we look to modularity, wherein the common numerical representations allow for permeability of communication tools across the platform.

3.3 Modularity

Manovich, continuing onto modularity, posits that modularity is seen as components come together to complete an individual object – such as how the internet is composed of websites, which are composed of pages, which are composed of sections, until you reach the

smallest component – all of which exist separately but are all accessed at the same time (Manovich 30-31). On Twitch, excluding extension programs for a moment, modularity becomes clear in the constructed arrangement of the platform. The website is primarily represented as a platform through which content creators can share what they're doing with their audience. However, to create a seamless communication platform in addition to being a video streaming platform, Twitch relies on modularity to allow for simultaneous usage of video, audio, and chatroom. These may be seen as the primary modules that Twitch utilizes for its most basic functionality. Even further, though, users can further interact with a broadcaster's page to subscribe, follow, donate, or navigate to the broadcaster's declared categories. This additional functionality offers us a glimpse into how these components come together to afford users access to far reaches of the website from a singular page. However, the true moments of modularity come in the tools used to communicate between users and broadcasters.

As mentioned previously, the "global" emotes and emotes unique to subscribers of specific channels are a key aspect of the communication that takes place on the platform. These tools are built on the premise of modularity to allow users to access all the emotes they have access to regardless of the channel that they're in. As such, a user that subscribes to one channel, can then use that emote, along with the standard emotes that Twitch offers for free, in another channel on the platform. Not only does this provide ease of use, but the presence of these tools across contexts on the platform provides some indication of how the new media of Twitch plays a key role in the permeability of literacy through the modularity of the platform.

Beyond standard emotes and specific channel emotes, the aforementioned extension programs, BTTV and FrankerFaceZ represent additional modularity. These extensions, as they fit modularly onto a user's browser rather than onto Twitch directly, impact the platform

differently than the modular inclusion of a livestream next to the chatroom or access to emotes across various channels. Rather, the way that these extensions work – by identifying codified text to become an emote on the screen of users that are using the extensions as well – are contingent on community-wide usage. The culture of the platform being centered around this communication tool, and the desire for more of these tools, results in the modular inclusion of these extensions and permeability beyond the scope of Twitch in the form of Google Chrome or Firefox extensions. This leads to the seeming emphasis that the community, and the platform places on communication tools and begins an indication of the importance of literacy with these new tools that is crucial to participating in literacy events on the platform as a whole.

3.4 Automating Communication

Much of the above, as I've alluded to, is the result of automated processes that create, edit, or operate within restricted or unrestricted rules set by the creators (Manovich 32-36). In this regard, Twitch and the community that creates emotes for broad public use are the primary creators of these automated processes and rules. Twitch, as noted before deals in the automation of the resizing of emoji on the platform to set a central standard. Meanwhile, the communities behind BTTV and FrankerFaceZ break this mold of automation while introducing their own. In this regard, the restricted rules of Twitch and the more unrestricted rules set by the community creators set an expectation of how these pictographs are represented on that platform.

Regardless, the primary form of automation is the identification of specific terms that automatically translate into emoji on the platform. The primary automation, and affordance of the platform is found in users typing words like Kappa, TriHard, pepeLaugh, and PogChamp to automatically populate the associated emoji into the chat once the message is sent.

While this doesn't make any great connection to the literacy theories established by Barton, Street, Brandt, Clinton, Hamilton, and Lee, this does approach the foundational aspects of literacy that I skipped by in favor of Barton's ecology metaphor. The automation of these emojis is founded on the presumption that users know the code associated with the emoji they want to use and can then write it correctly to initiate the automation. Likewise, the ability for users to recognize pictographs and make the connection between them and the words they're generated from satisfies the basic definition of literacy noted earlier. This basic representation of literacy is vital to the basic proficiencies that users need to be active members in the Twitch ecosystem. As such, the automation of the platform is crucial to interactions between the broadcaster and their audience as seen in many of the clips that I will refer to later. While this automation is imperative to communication and literacy practices on the platform, Manovich's idea of cultural transcoding is likely the most important aspect of his theory of new media when considering the connections between literacy and new media.

3.5 Culturally Transcoding Emoji

Cultural transcoding, as Manovich refers to it, expands the possibilities of Twitch's communication affordances tremendously, as well as begins to display how imagination is a crucial component of communication and literacy. Considering his defining characteristic for cultural transcoding, the variability in which new media is used in literacy practices. The variations that occur, usually dictated by the culture of the neo-communities present on the platform (and a broader culture that encompasses all users on the platform) fit into how Barton, Brandt, and Clinton established the idea of literacy being contextualized within a community and culture. As such, the "cultural transcoding" component of new media on Twitch is a result of users engaging in literacy practices in a way that reflects their ability to understand and compose

emoji in nuanced ways that offers variability in not only the emoji available to convey similar emotions and ideas, but also in the individual uses of a single emote.

Imagination follows a similar trend. This cultural transcoding is reminiscent of how cultural metaphors and memory impact the common use of emotes and how the audience makes sense of their interactions with other chatters and what they're experiencing through the broadcast. The culture of each neo-community, while still sometimes following the common usage of an emote, will often see users utilizing emotes in unique ways based on the resources they have access to. These unique moments establish how users on the platform utilize imagination to form literacies around new media and digital spaces. However, there is a specific type of imagination that we must look to when identifying this connection between literacy and new media: the sociocultural, psychological imagination of Giambattista Vico?

4 CHAPTER FOUR: VICO, AND WHAT HIS IDEAS OF IMAGINATION HAVE TO DO WITH LITERACY AND NEW MEDIA

To better understand the effects and reasons for these literacies, it will be useful to understand the rhetorical purpose that can be presented by written, oral, and digital communication on Twitch, and even more how the early theories proposed by Vico fit into rhetoric in ways similar to how culture, context, and influence fit into literacy. To further understand this rhetorical theory of imagination that will be necessary to this analysis, the historical intersections of imagination between philosopher Giambattista Vico, Aristotle, and George Campbell can provide an understanding of how this imagination operates³.

³ A historical understanding of imagination between the different eras of rhetorical thought is certainly possible, as there has been phenomenal nuances, agreements, rebuttals, and conversations held on the role of imagination. Of particular note, as mentioned here, are the ideas posed by Aristotle, Campbell, and Vico as they are introduced in contemporary teachings on

Considering, then, Vico's work on the research methods of the enlightenment and those of the ancients (Greek and Roman in particular), he makes keen observations on issues of philosophical critique and language that are valid for this discussion. The application of this approach to research methods is reflected in cultural and artistic pursuits – the volume of artistic productions (both new productions and with the printing press the number of reproductions), which may be taken as an indication of advancement into individuals maintaining knowledge of a diverse portfolio of examples (Vico 12). Such is this acceleration that it is better to view masterworks as a domain of culture rather than as individual representations (Vico 12). While instruction based on these masterworks and methods of research are important, Vico insists that imagination and memory are the faculties of the mind that require further development and support from educators (Vico 13-14). Through an education of these masterworks and methods of interpretation, individuals can attain, through a similar process to literacy sponsorship, the ability to navigate and utilize these signs, symbols, myths and metaphors in nuanced ways when addressing an audience or companion. It is then through imagination and memory that adolescents, or any learning individual, is able to grasp the topoi and loci necessary to forming clear communication (Vico 14-16, 19). Essentially, by gaining a grasp of the ability to understand contexts and metaphor, the individual can utilize exemplary communication (Vico calls it Poetry), showing how the individual's command over both ideas and language is enhanced by their imagination and memory (Vico 42). As such, poetics and in turn literacy, are representative of the writer's invented reality (Vico 43, Barton 17). These invented realities become consequential of the sociocultural experiences of our everyday lives.

rhetoric. Although, there are numerous examples of "imagination," in various definitions, that have come up over the millennia.

As Luca Tateo notes in his essays, "Giambattista Vico and the Psychological Imagination" and "Poetic Destroyers. Vico, Emerson, and the Aesthetic Dimension of Experiencing," that imaginative function is absolutely necessary for us to make sense of our experiences (Tateo 146, 2015; Tateo 338, 2017). From this, he insinuates that

From the child's animistic world to the joys of sex, from the episode narrated in the Gospels about a simple tax collector, Matthew, that becomes an apostle, to the visionary Steve Jobs that from a garage becomes an apostle of technology, from the mystic of hermits' visions to the work of art, from the mythological hybrid creatures to the theorization in physics, the ubiquitous nature of imaginative process in everyday activities shows that imagination is strictly related to sense making and signs. (Tateo 338, 2017)

It is in this sense that he pushes forward this idea that psychological perceptions of reality and our imaginations are intrinsically linked to make sense of trends in the development of our society. These trends are then influenced by meanings of signs, or the linguistic and aesthetic influences that people place on them (Tateo 146, 2015; Tateo 339, 2017). Through this lens, we may look at imagination and poetics in light of Aristotle's idea that they may be used to determine what is probable (Tateo 154-155, 2015), and human experience in all forms can be viewed as an "artifact" (Tateo 352, 2017). Imagination thus may be described as the sociocultural determination of signs as a form of communication that requires contextual understanding.

Aristotle offers us some basic guidelines that are crucial to this understanding of imagination, and how I will consider enlightenment thoughts as an important component of the Twitch literacy ecosystem. Aristotle offers two types of imagination in his treatise, *On Rhetoric*, *phantasia* and visualization. *Phantasia*, Aristotle notes, is related to that which is pleasurable, honor is the imagining of having admirable qualities (Aristotle 90), admiration of others and for others (Aristotle 91), and similarly *imagining* revenge on someone who has angered you is also pleasurable (Aristotle 116). In this sense, *phantasia* is a type of imagining through which the

individual is able to position themselves in relation to others and to actions that have not yet occurred. Visualization, on the other hand, is a more concrete form of imagination, found often in metaphors and enthymemes where the audience is brought to understand that "this is that" or something similar (Aristotle 218-221). These forms of imagination fall into line with Vico's ideations of invented realities – which may be pleasurable – and of the *topoi* and *loci* that may be found in cultural metaphors as Aristotle observes. Imagination, then, must be centered around communities that share similar linguistic understandings – and in terms of rhetoric, this should then be extended to our understandings of audience, *topoi*, invention, and enthymeme which are contingent upon cultural understandings as well.

George Campbell continues this trend. While writing on the subject of rhetoric after Vico, his ideas are still more closely related to Aristotle's ideations of communication, therefore, we may look to Campbell as another connection between the two rather than observing them chronologically. By looking at Campbell as a neoclassical connection, we come to a better understanding of how imagination is integral not only to constructing realities, but also in the role that imagination has in communication rather than the psyche and how imagination is used effectively. For the purposes of analyzing communication in communities on Twitch, Campbell's ideas about imagination are needed.

Campbell brings us a more modern version of imagination, noting that in its extreme it is "no better than a castle in the air" (Campbell lxxi), insinuating that imagination is in relation to that which cannot be real. Although, he does concede that imagination exists in each individual to some proportion, regardless of its basis in reality (Campbell lxxi), such as Aristotle and Vico's observations that imagination may be used as a means to invent realities for the audience.

Campbell recognizes that the purpose of speech or writing is to have some effect on the

audience, usually to "enlighten the understanding, to *please the imagination*, to move the passions, or to influence the will" (Campbell 1, emphasis mine).

In this regard, imagination becomes a central part of human communicative experiences, especially when said communication is to bring the audience to an intended end. This may come in the form of moving an audience to anger, pleasing their imagination with the thought of revenge, and then influencing their will with a call to action — on the other hand, pleasing the imagination may also be a result of eloquence in which Vico's position on poetry, and Aristotle's on poetry, is repeated by Campbell. However, the imagination is not so easily appealed to, as Campbell notes that "what gives principal delight to the imagination, is the exhibition of a strong likeness, which escapes the notice of the generality of people" (Campbell 74). This is continued in Campbell's discussion of sensible and intelligible things, in which he makes the claim that truth discerned from perception is in some ways weaker than that which comes from imagination (Campbell 304). This is similarly seen in literacy and new media where local and non-local cultural implications of communication and cultural transcoding result in an emphasis not on literal interpretations/observations but on the strength of the contexts present in the literacy event or artifact respectively.

Although the imagination is limited in communication to intelligible likeness between objects, which Campbell explains through example metaphors such as the wings of a bird being called a sail and the sail of a ship being called wings – as these terms are of a similar class, it is discernable what the intended meaning is (Campbell 304). As such, the operative metaphors proposed through communication are subject to contextual circumstances that dictate whether or not the imagination is capable of recognizing the connection the speaker is trying to make – similar to how a necessary grasp of literacy is necessary to understand practices in specific

communities based on culture, permeability, or dominant practices. This is vital herein as we approach literacy practices on Twitch. These communication practices, whether persuasive as in rhetoric or participatory as in literacy, are dictated in some sense by imagination. Twitch, offering a dynamic integration of emotes, video, audio, and communication between broadcaster and audience offers those insights.

5 CHAPTER FIVE: LITERACY AND IMAGINATION ON TWITCH

As noted previously, channels on Twitch become the center of player communities centered around a single broadcaster (Hamilton et al. 1315). These player communities are likely to form as the viewers are only required to have an anonymous, free account to communicate with other users on the platform, while the broadcaster (streamer) is able to communicate via audio and video (Hamilton et al. 1315). The purpose of these channels of communication is primarily sociability, the communication and engagement that arises from "humorous banter or lighthearted conversation" which lends itself to being a type of neo-community that was described by Kelemen and Smith. This is further enhanced as the subscribers, users who contribute revenue to specific broadcasters to support their content creation, utilize tools that are created by those broadcasters such as unique emotes to communicate within that neo-community (Hamilton et al. 1316). These communities, then, are strengthened by the trend towards these users sharing values as they spend time in the same community (Hamilton et al. 1318). As such, these communities are built around non-local and local contexts – general users on the platform all have equal access to content and therefore there is a permeating culture on the platform, but there's also the local contexts in which paying users engage with specific cultures and contexts for their exclusive communication tools.

Considering this, literacy must be understood within the context of the community. As Barton and Hamilton note in their book Local Literacies: Reading and Writing in One Community, the first step in reconceptualizing literacy is to, "accept the multiple functions literacy may serve in a given activity, where it can replace spoken language, make communication possible, solve a practical problem or act as a memory aid – in some cases all at the same time" (Barton and Hamilton 11). As such, my analysis of the case studies that follow will be built around an attempt to understand how literacy is being used through imagination to engage with the culture of the channel, how literacy sponsors influence the literacy practices of participants, the permeability across channels and in some cases websites, how dominance of certain symbols is instated or challenged by communities, and the results of literacy events in these communities. Additionally, it is possible to explore the social and participatory aspects of the literacy practice to determine the purpose of the practice, the roles of each participant (whether they actively write or read in the situation), and how those roles are determined. Through case studies of nmplol and Sodapoppin's channels, and how they, along with their audiences, display use of imagination as they navigate the emotes available to them to form complex written communication I define how traits of literacy are reliant on imagination in these digital spaces.

5.1 Nmplol Case Study

Nmplol (commonly referred to as NMP) is a streamer whom many would consider a decently sized with an average audience of around 3000-5000 viewers. Among his audience, he sports his fair share of fans and trolls that both utilize his and other emotes to communicate using sarcasm and to follow his lead as opinion leader – though this lead is often more of a prompt that beckons a response rather than his audience mimicking what he says. Here the observed,

sequenced arrangement of emotes may function as rhetorical inventions (Ge 426). What Jing Ge found in their analysis of emoji sequences is that most users were utilizing the pictographs as a method of engaging and communicating their stance to their audience, which may then be extrapolated to how users may convey their own personal identities to a community through emoji (Ge 427). As such, the interactions that exist between him and his audience exist as literacy events wherein the audience must understand any verbal references or consider the contexts of what is occurring on the stream before they can compose a message in response. Utilizing Twitch's clips feature, I present four examples of how NMP and the community he built have established their own culture around literacy practices, how NMP and his moderators act as literacy sponsors, and how the contexts around these practices provide evidence for the imagination that Vico described.

5.1.1 Emote Substitution for Written Communication

In Clip 1 (can be found with the other clips in the Appendix) NMP can be seen talking about his community along with his audience's reaction. While discussing a post on his subreddit, he discusses a meme where people hold up signs that reveal embarrassing secrets about them, someone in his chat quickly speaks up saying "I watch nmplol," in a sarcastic manner to insinuate that watching nmplol is an embarrassing secret. After reading the comment out loud, his audience takes on a number of different emotes to express their own opinions or to continue the commentary about the meme displayed on screen, however the former dominates the chatroom. In response to the meme, multiple users utilize the PogO emote (a variation on the PogChamp emote that is normally used to signify excitement, whereas PogO changes the face's expression to one of cringing) to express how they are cringing over the man in the meme holding up a sign that reads "I love feet." Other users use KreyGasm (as the name of the emote

implies, it is reminiscent of an exaggerated orgasming face) and DansGame (an emote that is used to express disgust) to portray how they are reacting to what's on screen. However, as the chat catches up to what NMP is saying, as the opinion leader, they begin to follow suit. Some of them use LulW (a close up of a laughing face), OMEGALUL (which is the same laughing face as LulW but distorted and the mouth expanded to show more intense laughter), and then POGGERS (a display of excitement similar to PogChamp but using Pepe the Frog as the foundation for the emote) as he talks about potentially collaborating with another streamer. All of these are being used to show their reaction to how the conversation is developing as NMP provides commentary about the single comment that sparked the monologue, but also to construct a reality around the symbols that they are all aware of. The community laughs together at NMP acknowledging the trolls in his chat, but they do so in different ways, constructing their own sort of visual metaphor for their reaction. Meanwhile, other users are expressing their disgust for what's present on the screen, clearly showing that their imagination for how they react is focused on that aspect of the audio/video dynamic. And still, more users are expressing excitement for a collaboration that doesn't yet exist, using their imagination to choose which symbol might best encode their desired meaning for other users or NMP.

This provides a distinct example of how a neo-community has emerged on Twitch under the shared interest in NMP's streams, but value different levels of interaction and discourse tools. Some members of the neo-community respond more to what is occurring on-screen while others respond to the commentary. Similarly, some users respond differently to what they identify as prompts – the dichotomy of PogO and KreyGasm in response to "I love feet" shows how even though users display imaginative approaches to how they communicate their reality (or as a joke) they do so from different perspectives. This sort of variation in community perceptions is

touched on in "Rhetoric, Community, and Cyberspace," where Zappen et al. contend that these types of communities, in a rhetorical sense, have always existed on the basis of conflicts between "communitarianism and liberalism, self and Other, culture and marginalized, and One and Many" (Zappen et al. 400). These communities, as they exist in our real world, similarly begin to emerge in digital spaces as well (Zappen et al. 400). Rather than being composed of individual local communities, communities in these digital spaces are composed of individuals that bring many perspectives from many other local communities that they are participants in (Zappen et al. 401). While it would seem that these communities are likely to be sustained by what brings individuals together, Zappen et al. note that the reality is that local communities dissipate almost as soon as they are formed (Zappen et al. 412). These local communities are subjects formed through common sentiment within the larger rhetorical community, which allows them to have cultural weight within the space (Zappen et al. 412). This comes to reveal of NMP's community is that even though they have disjointed views and values, they come together through the usage of emotes to communicate their perspective through image based metaphors for how they may or may not actually react.

Considering this focus on using new media tools for communication and imagination's primary role in the variance between how viewers participated in the literacy event, we may look back on the connections between Manovich's defining traits of new media and literacy to understand how the culture of the neo-community results in these different approaches. While there may not be concrete shared values among viewers of the community, the different emotes they use provides a glimpse into the cultural transcoding of different participants even though they are participating in the same context. The difference in the choice between KreyGasm and DansGame, visual metaphors for pleasure and disgust, seems to show a distinct difference in not

only perspective, but a difference in imagination and in turn a difference in culture. This difference in culture, while responding to the same context, puts imagination on display as the primary tool for participation in this literacy event.

5.1.2 Literacy Event in Action

This trend continues into Clip 2 as NMP reads through another post that appears on his subreddit. The original post is simply a picture of him and his girlfriend, however the first comment utilizes the textual codes that would present an emote on Twitch. In this context, since the post appears on Reddit, the emotes don't appear and are left as text for the audience to interpret and make sense of. It should be noted that once again, NMP is reading this post aloud positioning him once again as an opinion leader that influences the community to act on behalf of whatever they are prompted to do. In this case, by reading aloud the text of the emotes, NMP is essentially instructing his audience to post those same emotes in his chat, and they do.

In terms of how this is representative of the audience's literacy, the ability for many of them to decode a verbal message, translate it into a written form, and to type it correctly to produce the desired result indicates their literacy in using emotes as a substitute for traditional written communication. The use of the emotes being prompted additionally shows how a literacy event may be initiated on Twitch, by calling out the names of emotes and observing responses as a teacher might do in a classroom with children learning how to spell. Looking a bit closer at how this reflects imagination, one need not look beyond this ability to choose the best fitting pictograph in response to the prompt, and then translate that verbal communication to the textual code for the emote. While this is aided by the automation of Twitch, it shouldn't be ignored that once again, as in the first clip, viewers are using emotes as the means to express how they view the text on screen and what NMP said through their imagination, in which they may have already

made the translation from the written or spoken word to the associated image. NMP's prompting for emotes shouldn't be confused for literacy sponsorship, though. The ability for viewers to respond using emotes indicates their ability to understand the language of Twitch, but NMP has not yet revealed how he acts as a sponsor of unique literacies within his community.

5.1.3 Literacy Sponsorship

As we move onto Clip 3, through another discussion over a post on Reddit, we begin to see how he and his moderators act as literacy sponsors, either withholding or enabling literacy or literacy practices from individuals within the community. Within this post, a viewer from NMP's community airs grievances against one of NMP's moderators for restricting access to an emote. The message, "Tell HarleyJ to stop nuking Kreygasm its pretty 4WeirdW," explicitly states how the moderator in questions, HarleyJ, is withholding literacy from the community by restricting access to an emote that we've previously seen is used to convey excitement within this community. As NMP scrolls down on the post, the viewers can then see how the community and moderator reacted on Reddit, while also giving additional context to not only the reason for this type of literacy sponsorship, but also for the literacy practices associated with the emote in the community. Comments such as "Jerk off before the stream.....," "Coomers malding PepeLaugh," "Well stop using kreygasm to write creepy sexual comments about malena maybe" (Malena being NMP's girlfriend), and "PogO I got [timed out] for kreygasming nick that wasn't very xqcL of u" display, in addition to literacy sponsorship, a wide array of contexts, the culture of the community, the permeability between communities on Twitch, and dominance of literacy within NMP's community specifically.

HarleyJ's decision to time out (temporarily ban) users for using KreyGasm may indicate that while utilizing emotes is an accepted form of literacy, certain uses are deemed unacceptable

to at least a subset of NMP's community – once again reflecting how the neo-community has come together around the broadcaster and not any shared morals or opinions, but there still exists cultural contexts for the literacy event that is either appropriate or inappropriate. By utilizing their power, HarleyJ is able to influence the audience to choose a different practice with the literacy they have, pushing them to find an alternative within the context of NMP's stream. NMP, on the other hand, voices his own opinion and seemingly supports the use of the emote. By asking, "Do we not like KreyGasm around here?" and following it with his own answer, "Personally, in my opinion, KreyGasm is like a compliment." In response to this, many viewers in his chatroom begin to use the emote, saying things like "KreyGasm top left" (referring to his webcam's position on screen) and simply posting the emote repeatedly. These conflicting viewpoints of literacy sponsors effectively indicates how two literacy sponsors can impede literacy practices (by outright restricting usage of terms or symbols) or promote them (by voicing an opinion from a position of power that supports the practice). Regardless of how these sponsors act, it is once again clear the role that imagination is playing in how the audience makes sense of the emote.

The previously mentioned comments, ""Jerk off before the stream.....," "Coomers malding PepeLaugh," "Well stop using kreygasm to write creepy sexual comments about malena maybe" Malena being NMP's girlfriend, and "PogO I got [timed out] for kreygasming nick that wasn't very xqcL of u," each provide a different glimpse into the interpretations that each viewer had for the emote, rooted in imagination through the cultural and metaphorical interpretations that are being made. The first comment is a plain response to how they imagine other viewers using the emote, that they should find sexual release before harassing people that appear on the broadcast. The second comment, written by HarleyJ, insinuates that "coomers" (a term used to

refer to an individual that overly sexualizes things) are angered by her actions, indicating that she agrees with the interpretation of the first commenter. However, the inclusion of PepeLaugh shows that they are finding humor in the anger of others and that within the culture of the community usage of KreyGasm to indicate sexual attraction of some sort is common. This insinuation is supported by the following comment, wherein another user reports that they interpret uses of KreyGasm to be directed at NMP's girlfriend. This indicates that this user may be communicating that their imagination has led them to understand the common use of the emote to be for expressing sexual interest in women that appear, however the next comment offers a rebuttal to that. By saying that he got timed out for directing KreyGasm at NMP, and NMP's own commentary that he thinks it can be a compliment, offer a glimpse of another cultural purpose that the symbol may be used for – the orgasming face is a compliment, not harassment. This is further established by this commenter's inclusion of xqcL, an emote of another Twitch streamer to indicate loving affection. This inclusion helps to communicate how the commenter imagines the meaning of KreyGasm and how it constructs a reality of either harassment or admiration. As a result of all these conflicting imaginations, the context for a cultural understanding on the basis of imagination is difficult to establish. As such, determining permeability and dominance of these literacy practices is necessary to come to a conclusion on how these literacy practices occur in this community.

Looking ahead to the permeability and dominance of the practice, we may once again look at the inclusion of another broadcaster's emote in the decoding of KreyGasm, the literacy practices displayed after NMP's brief commentary on the emote, and ultimately HarleyJ's role as a literacy sponsor. The decision for the last commenter to include "xqcL" As Barton and Hamilton described it, indicates that there is some permeations between XQC's community and

NMP's. This permeability may also offer some insight into why there such a difference in the understanding of what KreyGasm means between different viewers. This permeability does not cross over to the sponsorship of the literacy practices associated with the emote, however once NMP states that he views the emote as potentially endearing, his chatroom erupts in usages of the emote in that same context. That being said, the dichotomy of literacy sponsorship between NMP and HarleyJ forces users to decide on which usage will be dominant in that moment. The way the chatroom almost unanimously began using KreyGasm in the context of it being a compliment, seems to show that once again the opinion leader has more power as a literacy sponsor than someone that only has power to restrict literacy practices.

Altogether, this moment of NMP's stream illustrates the intertwining of imagination and literacy in a much more observable way. As literacy sponsors, NMP and HarleyJ have the power to influence the culture of the community, leading to those with less power to follow their interpretations of common symbols, the permeability of imagination and literacy between communities, and how certain sponsors can establish a dominant practice or a dominant imagining of a symbol or metaphor

5.1.4 Translating Imagination to Literacy

In the final clip of NMP's stream, we begin to see how emotes are created within the community. Following suit with the rest of the clips, a reddit post proposing a new emote to the community, an image of NMP wearing a crown and staring into the camera, to which both NMP and his audience attempt to determine what the emote could be called. His chat responds with various examples such as nmpKing, Soy, SoyKing, nmpK, nmpShy, nmpSoy, nmpHappy, and nmpAww, each one providing variations in what may be determined to be the imagination and literacies of the audience. This chorus of responses continues, slowly converging on a couple of

these, however, a brief analysis of each one is necessary to determine how imagination is playing a role in the community and their literacy practices.

The responses nmpKing, nmpShy, nmpSoy, nmpHappy, and nmpAww are all representative of what one would expect of a Twitch emote. They are brief, descriptive, and easy to remember, but they also leave little room for additional interpretation. Instead they establish their own context without needing to know information about the community that it originated in (similar to the aforementioned xqcL which is a simple human-like drawing holding a heart). Because these codes for the emote aren't predicated on the culture of the community, the imagination that may be used to interpret them within the neo-community is also limited, resulting in an emote that might only be used in specific literacy contexts. Considering this, this symbol lacks the literacy merit that is associated with culture, context, and permeability that Barton and Hilton valued within their own research. Seemingly, some members of the neo-community felt the same.

The next suggestion that follows the Twitch emote format, nmpK, results in a more interesting proposal which may result in the imagination-literacy interaction that would promote additional contextual uses outside of the neo-community or specific contexts that are promoted by the others. Taking again for example xqcL, rather than being limited by the code itself, the pictograph associated with it is allowed to be the driving force of communication. XqcL, because it is usually just seen as an image of a heart to indicate caring or similar emotion, finds usage in a variety of positive contexts where users would utilize it to convey their love, compassion, thanks, etc. to whomever it is directed at. Assumedly, the suggestion to be ambiguous through nmpK would have a similar effect, allowing it to encapsulate some of the other suggestions that would be used in more specific contexts. As such, it would be able to work in multiple contexts and

potentially find permeability outside of the neo-community as a communication tool that could call another person a king, show shyness or happiness, or even be used to describe something as or respond to something cute, opening up the potential for these intended meanings and imagination to work its way in as well. However, there is more than just signs of imagination and literacy here as we look to the "Soy" response.

The user that chose to suggest "Soy" as a potential code for the mote provides evidence of illiteracy on the platform. While they have the imagination to suggest a name for the emote, they do so without the channel's prefix. Without this prefix, the emote can't be submitted to Twitch and then made available to the community. As such, this illiteracy highlights how the viewer that suggested it may not be aware of the platform or how emotes function. Furthermore, they have shown through their illiteracy that they aren't apart of the neo-community.

As we've observed through these clips and audience's interactions, literacy and imagination are alive in NMP's neo-community. In the first clip, both literacy and imagination were exemplified through users' ability to deftly navigate multiple emotes to fit the context, and in that ability demonstrating their imagination as they use culturally recognizable emotes as metaphors for how they felt about what was being displayed. The second clip builds on this literacy, showing how the audience was able to recognize and translate spoken word to the corresponding emotes. The third, highlighted how literacy sponsorship operates in the space through both the broadcaster and moderators while expanding on the potential imagination that users exhibit as they use the same emote in different contexts. Then the fourth clip provides a glimpse into how imagination and literacy operate not only in the usage of emotes but in their creation. Considering these different aspects of literacy and imagination that present themselves in NMP's community, it's clear how the two are intertwined on Twitch. Using different emotes

to communicate with each other in solely shared symbols with cultural contexts requires proficient literacies within the communities that utilize those symbols. Similarly, the usage of the emotes requires a strong imagination to signify intended meanings and to decipher the metaphors that arise. Now that we have an example of how these different ideas come together on Twitch, we may move onto our next case study where these concepts are pushed to their limit.

5.1.5 Connecting nmplol to Literacy and Imagination

The ecology of NMP's neo-community, as seen in these clips, is a hotbed for literacy and imagination through the tools of new media. The focus that is being placed on community and variance in culture allows for the audience and broadcaster to think about how local and nonlocal contexts impact their usage of emotes. By characterizing these literacy contexts in the sense of local community and site-wide ecosystem, it is easier to understand how literacy is employed on the platform. In this sense, while these literacy events illustrate language and behavior in relation to new media, they are even more representative of Hamilton, Brandt, Clinton, and Barton's theorizations. By understanding interactions in this community through the lens of these theories and metaphor for literacy, we can observe how they allow for participants to engage with each literacy event by way of the socially constructed culture of the community, and in that same vein, through imagination. It's through the user's understanding of the sociocultural background of the community that they are able to identify an emote that likely has a connection to a more detailed message. However, this requires other participants to actively interpret these emotes. The issue with this then comes as the strength of the pictograph-centered metaphor must appeal to the imagination of other viewers, and in some cases moderators or broadcasters, so that the intentional message isn't lost. While this is done easily in some cases, such as in the case of the first clip, this can cause problems like those in clip 3 to arise.

It is in events like clip 3 that imagination must be regulated by literacy sponsors. The literacy sponsor, depending on their position, has the power to withhold the tools to craft an inappropriate visual metaphor for the context or culture it is being used in, or they can promote imagination that they believe fits with the culture or context. While this is the case, it can be seen in clip 3 how a community can influence a literacy sponsor or sidestep their authority. The user that argues for their usage of the emote KreyGasm does so by appealing to the imagination of NMP and the community who eventually agree with his position. As such, literacy sponsorship, somewhat identified as being based in ideology, is navigated through the imagined, constructed realities of those who have the power in the literacy ecosystem to enact the constructed reality that they most agree with. The same occurs for new communication tools that are being proposed, as in clip 4. While participants in the community can attempt to imagine the best codified language for a pictograph to complete a metaphor based on context, those with power have the capability to approve or deny these suggestions. This leads to an understanding, then, that NMP and his community display the formation and enactment of the basic connections between new media, literacy, and imagination, but a more complex understanding can be achieved by observing Sodapoppin's channel wherein highly accelerated communication places more emphasis on emotes to insinuate more detailed reactions and responses.

5.2 Sodapoppin Case Study

Sodapoppin, a creator that has been growing a following on Twitch since 2013, boasts a larger viewer-base that reaches almost 20,000 strong for nearly every broadcast. As such, his chatroom flies by without much chance for users to read longer messages from other viewers, creating an environment where emotes take a primary role in communication between the broadcaster and audience. These emotes range from the global emotes that are available to

everyone on Twitch to more niche emotes that were selected from the scores of emotes available through the chat extensions discussed before and subscriptions to other channels. Because of this role that emotes play in this community, a closer look at *how* the emotes are being used will take a more present role than discussions in the community about how the emotes are interpreted.

In this case study, I observe three clips obtained over the course of a single broadcast.

These clips offer insights into the permeability of emotes between broadcasters, especially in cases of popular broadcasters that have crossovers in their communities; how the community that Sodapoppin cultivates perceives outside interpretations of common symbols and the ways they react when their imagination isn't appealed to properly; and then finally coming to a more pointed glimpse into how imagination plays a role in a literacy event in which users and the people on the broadcast argue back and forth about perceived realities associated with the emote before the audience's imagination is appealed to in a way they accept and therefore begin to employ in their own written communication.

5.2.1 Permeability of New Media Cultures

In the first clip of Sodapoppin's stream we witness a "host" from another popular broadcaster. These hosts are a way for broadcasters to send their viewers to another broadcaster seamlessly. During the initial moments of a host it is common for viewers of the hosting broadcaster to begin using the emotes associated with that broadcaster in the new chatroom. In this case, Moonmoon hosted Sodapoppin and his viewers almost immediately began to post a variety of Moonmoon's emotes in the chat as Sodapoppin reacted. Some of the emotes from Moonmoon's viewers included moon2M (a close up "smug" facial expression), moon2SPY (an image of the popular Overwatch character Widowmaker with a fake nose and mustache disguise), and moon2N (another image of Widowmaker but in a much lower quality and with a

blank expression) as they announce their arrival and respond to Sodapoppin. These emotes dominated the chatroom and pushed out most of the symbols associated with Sodapoppin's channel. However, while these emotes were used to announce an arrival, they do so in different contexts and with different imagination.

The Moon2M emote was used almost exclusively without text to accompany it, with the exception of one user who said "Moon2M:)" without the automated translation to pictograph to show that he wasn't subscribed to Moonmoon. These faces served to be a metaphorical message of "I'm here" to the broadcaster and viewers to announce their arrival without much additional context for the other viewers. Essentially, the emote serves as an imaginative way to use a relatively common emote (due to the large number of subscribers Moonmoon has) across the website to metaphorically tell other users that the channel has been hosted. That being said, the face's nature as being "smug" results in another layer to this metaphor. In a way, it seems that it is being used in a tongue-in-cheek way rather than taking on the positive connotation that xqcL did in the case study of NMP's channel. This is supported further as Sodapoppin reacts to the emotes as he looks back to his chatroom from the game he's playing, saying "Moon subs, silence, quiet."

Here, the other emotes come into play as tools for the Moonmoon subscribers to respond to this order from an opinion leader that they don't identify with in their community's culture. Many of them begin posting the Moon2N emote, using their imagination to find an emote that would represent silence, even though they're continuing to post messages. This is also an interesting example of how conversations can begin between broadcaster and audience, where a single statement can provoke a literacy event wherein the audience has to find an effective way of communicating their own perspective on the situation. This is seen again as other users,

assumedly Sodapoppin's viewers who also subscribe to Moonmoon, or Moonmoon's subscribers, begin making self-deprecating jokes by posting Moon2SPY with accompanied text such as "quiet moon subs," "Moonsubs out," and "yeah f*** them subs," "F***ing disgusting moon subs," and "moon subs where" as the messages are surrounded by the moon2N emote. The spy emote seems to be taking advantage of a permeable cultural metaphor that nearly everyone recognizes through the poorly constructed disguise and then used to communicate humorous messages about themselves.

Through their imagination, both Moonmoon and Sodapoppin's subscribers employ a variety of emotes to communicate effectively. In this literacy event they show their proficiency with their unique communication tools as they respond to the opinion leader whilst dominating the literacy practice with highly contextualized pictographs that were created outside of the space. In that, the permeability of the emotes also indicates a sort of dominance. The fact that users are able to utilize these emotes to communicate their presence, respond to the broadcaster, and then make jokes shows us how permeable symbols can transcend the culture that they were created in – allowing for the users to appeal to the imaginations of fellow viewers and the broadcaster. In this case, the success of that appeal is seen in how more viewers began to use the same symbols to convey the same message.

5.2.2 Determining Cultural Meaning and Rhetorical Purpose

In the next clip, Sodapoppin talks with some of the people he's playing the game with as they verbalize a common emote used to denote sadness (Sadge) to which he corrects them with an emote that he recently added to his own channel (Catge). The ensuing discussion is comprised of Sodapoppin trying to educate them on what the purpose of Catge is, that it's meant to be a replacement for the popular Sadge emote in his chat (and that it may be a replacement

elsewhere). In this regard, Sodapoppin acts as a literacy sponsor to promote the literacy present on his channel and to potentially appeal to the imagination of those he's talking to as he argues for the potential interpretation of the symbol.

His viewers seem to have their own opinions about it, though, questioning whether or not it could come into dominance or if it's something that's better suited for niche contexts. As the discussion progresses, some members of the audience begin adding text to accompany the emote that the whole chat had been posting for nearly a minute. Some of these messages include "wtf am I," "this is so dumb," "END MY SUFFERING," "KILL MEEEE," and "f***in sucks" as they make jokes about and with the emote. The consensus, whether clear opinion or joke about how the emote may be suffering, seems to be that it wouldn't function as a replacement for Sadge.

When considering how this same chat used Moonmoon's emotes without necessarily requiring additional context through written language, it is apparent how without context, the audience is incapable of interpreting the purpose of the emote, nor can they assign a metaphor to it through imagination. Sodapoppin's failed appeals to his community indicates that while he attempts to appeal to his audience by appealing to their imagination as a literacy sponsor, the lack of an effective appeal to the faculty results in an inability to sponsor this new tool.

5.2.3 Imagining Purpose of New Communication Tools

As the conversation continues, the discussion turns from literacy for the emote to a more specific discussion based in imagination. The person who first raised questions about Catge's purpose notes that the emote "Doesn't look sad," which is the common intended use for Sadge – to communicate sadness. Sodapoppin seems to justify this by saying "it looks like it's happy, but it doesn't know how to be happy." Here another person they're playing with chimes in with "I

actually can't even tell what it is." After this, the person who first questioned it says that it "just looks like the R slur." This conversation, once the audience chimes in, begins to display how the culture of the community results in an acceptance of this metaphor for what the new emote is meant to convey.

As the conversation develops, the different ideas that were put forth each may be seen as a different potential use of the symbol to communicate within a specific context or how it might be used through imagination to present an idea. The first concern, that it didn't look sad, opens up the possibilities of how the emote might be used in new contexts, but notes how even with imagination it wouldn't work in the literacy events that Sadge is currently being used in. This difference in contexts places an emphasis on the literacy that is offered in this clip – particularly that the contesting of the emote's purpose is based in the literacy of the one who believes that it wouldn't work in the same ways. By interpreting the purpose of Sadge and what it is meant to visualize, this person's understanding of the language of the platform, the culture of the channel, and the role that imagination has in understanding the purpose of symbols in various contexts shows how beyond the inclusion of emotes, the purposeful decision to not use a certain emote in the wrong context, is further evidence of proficiency in the literacy of the platform and also a strong imagination that can determine the likeness between emotes and potential perceptions of each of them.

Most notably though, is how the original questioner notes that the emote has the potential to be used as the R slur. In this case, the visualization of people potentially using it in this way was realized almost immediately in the chatroom, with one viewer immediately accompanying the emote with "I'm r*****." This potential sponsorship allows us to see how once again an appeal to the imagination of the audience can incite an immediate adoption when the likeness

between the emote and textual is identified, when the culture of the neo-community is accepting of the interpretation, and how that then translates to a component of the language of those within the community. This sponsorship, that uses an appeal to the imagination of the audience for the purpose of winning an argument, was primarily reliant on the imagination of the audience. By appealing to the audience's imagination, they enable the acquisition of new tools for communication which can then be used in new literacy events in contexts where the users of the emote seek to use this slur or to use it as a metaphor for something similar.

5.2.4 Connecting Sodapoppin's Community, Literacy, and Imagination

Observing the behaviors surrounding literacy in Sodapoppin's channel, it is clear how much imagination has an impact when communication is accelerated. By reducing communication to emotes, users must reach an understanding of the literacy event's context before they can craft a response. This often comes in the form of identifying an initial prompt, in this case from the broadcaster/opinion leader. This initial prompt, beginning the literacy event, need not have an indication of imagination, as seen in clip 1, but the responding audience consistently needs to have a basic level of imagination in order to make sense of what they can use to convey their message and then choose the best fitting pictograph for the situation. This understanding of the contexts surrounding the literacy event, in this case, requires an understanding of the local ecosystem that they're communicating in.

That being said, the emotes that they use might not be limited to the local context of the channel, as Brandt and Clinton established. The tendency of users to reach beyond the local communication tools for the emotes of other channels displays a degree of permeability throughout the ecosystem and the smaller communities that comprise the platform. As a result, the imagination of the users must be honed to identify more than just their current audience and

the culture they're communicating in, they have to understand the context and adapt emotes for new purposes in new spaces. Then, the imagination of the audience determines whether or not the practice of borrowing communication tools from other communities is acceptable for the context or not. In the case of Sodapoppin's channel, it seems that the permeability of emotes is on display, but the cultural differences result, by some degree, in the community and broadcaster acknowledging the permeability and protesting against it. As Sodapoppin tells Moonmoon's viewers to get out and his viewers mock them, the communities (just a small portion of the ecosystem) the emphasis that Vico, Luca, and the literacy scholars placed on understanding the culture of those you're trying to reach.

On the other hand, without context or an established cultural understanding, local or non-local, imagination still allows for participants to create a message in response to the prompt, but there is a lack of consistency in responses, as in clip 2. This may indicate a lack of permeability across users in the neo-community⁴ when there is no established context/purpose for an emote. As such, imagination is not mutually exclusive to literacy, even though it aids in literacy acquisition and practice. This is supported by Vico's insinuation that the development of the faculties can lead to Poetry, however in this modern case it results in the ability to keep up more effectively with a community all "speaking" at once. That being said, the proficiency that is acquired through imagination and the role that imagination has in establishing literacy can't be understated.

The fact that users communicate most effectively when the context of appropriate usage of an emote is known and when an emote is representative of a reality, we can see the

⁴ I use the term permeability in this context because of the nature of the neo-community. The lack of connection between members of the neo-community results in disconnection, and therefore permeability of literacy is essential to the cohesion of the literacy ecosystem, as seen in nmplol's channel and how Moonmoon's subscribers consistently used the same emotes as each other.

on context and culture in both literacy and imagination offers some indication of this connection, however it's once again through Vico's definition of a sociocultural, psychological imagination that this connection is exemplified. Considering the meanings of signs, or the linguistic and aesthetic influences that people place on them (Tateo 146, 2015; Tateo 339, 2017), emotes take on the brunt of assigned meanings through imagination and are then employed in literacy events to convey specific meanings where written language wouldn't suffice in the environment. As such, these three areas are entangled, the literacy of each individual is aided or improved with the faculty of imagination and allows for participation in literacy events in digital spaces wherein communication has been relegated to simple symbols by the acceleration of technology.

6 CONCLUSION

Throughout this work, I've discussed how literacy, imagination and technology have become intertwined in such a way that literacy has become dependent on the imagination of users in these spaces. Considering then what was discussed in the literature review, that literacy is predicated by environment, context, sponsorship, permeability, dominance, etc., we must expand how we understand and look at literacy. I chose to include the line "We use language to imagine what the world is like and what it might be like" (Barton 17) to open the literature review because the role of imagination in literacy seems to be changing as our tools for communication are simplified. Rather than using imagination to interact with the physical world around us, we're relying more on our sociocultural imagination than ever before.

What is demonstrated here, then, is an intrinsic link between how Vico's encapsulation of our sociocultural imagination and how we enact literacy in communication. While demonstrated through emotes, this seems to be becoming a more common form of communication that

necessitates the *topoi* and *loci* that Vico placed in high importance. By understanding the meaning of emotes, we could see in the case study of nmplol's community that a sequence of emotes was necessary to communicate a specific idea, though that idea was still subject to different readings based on how his audience has experienced those emotes in the past. Similarly, as demonstrated with the usages of KreyGasm and xqcL, the different contexts that these emotes are placed in can have a vastly different impact on those reading them, calling for the contextual importance of both Vico's imagination and the contexts necessary for enacting literacy. Most notably though, is that literacy doesn't seem to be in constant flux as an ecosystem on Twitch. Barton's ecology of literacy isn't inherently local, the context of the digital space pushes these literacies to find interconnected contexts, alternative sponsorship through moderators and community perception, unique cultural and responsive practices that rely on context and imagination for composition and response, and as a result dominant practices within specific contexts can be seen. It must be noted, though, that there are additional lines of inquiry that haven't been addressed here. To offer potential paths of research, I pose the following questions:

- What are the ethical implications for the literacies displayed here?
- How do the communities these literacies are founded in result in the further othering of marginalized groups?
- How and why do the literacy practices present on Twitch permeate the internet beyond the confines of the website?

A common problem that has been seen in the gaming community is that of marginalization of non-white male individuals, even though the community today is home for a multitude of identities. This can begin to be seen in both case studies in which a reading of Kreygasm was its potential use in sexual harassment, and in Sodapoppin's case where his emote

could be viewed as being a substitute for the R-slur. While this may be seen as hateful, there has been some research that offers suggestions about the normalization of what many would consider unethical behavior. As Denise Bostdorff notes in "The internet rhetoric of the Ku Klux Klan: a case study in web site community building run amok," the potential of individuals engaging with online messages associated with hateful rhetoric is far higher than the potential for those same people attending a KKK rally or similar gathering (342). That being said, these same individuals are far more likely to become sympathetic or desensitized to this type of messaging that they may not ever really experience in the context of their physical community's morality (Bostdorff 342). Furthermore, those that don't have that sense of physical community may be drawn to online communities, "by which needs for social support and affiliation can also be fulfilled and one's sense of a relationship with like-minded individuals created and bolstered" (Bostdorff 343). The issue that is presented here is the role that these communities play and what is tolerated in them. NMP and his moderator's difference of opinion on the KreyGasm emote reveals how the community may create an unethical environment in which the morality is skewed toward the sexualization of people that appear on screen. Yet this isn't the only ethical dilemma that is present in these online spaces.

These communities may also become an epicenter for online aggression, for example cyberbullying or trolling (Sparby 85-86). This is aided by the illusion of anonymity and results in disinhibition, deindividuation, and depersonalization as individuals begin to identify more with the community rather than themselves (Sparby 86). As seen in the study of Sodapoppin's channel, users differentiate themselves based on the communication tools they use – and by extension the communities that they identify with. This identification based on community and resulting ethical issues with online communication may still find fruits in understanding how

individual users utilize emotes/emoji to display their allegiance to an online community or identity. As Hagen et al. began to find, communication in spaces such as Twitter are utilized by both pro-white supremacists and anti-white supremacists equally, yet they use different emoji to communicate their ideologies (Hagen et al. 202-204); this literacy surrounding emoji seems to be constructed as it is on Twitch, indicating potential for a more thorough study into how people communicate their perceptions of reality, and the ethical implications of pictograph communication.

Outside of the ethics of online literacy and communication with emotes/emoji, there are more positive routes that can be explored regarding the intersection of literacy, technology, and imagination. An analysis of the broader permeability of website specific literacies could be done, such as how the popular Twitch emote "Pogchamp" has found its way onto other popular platforms like Youtube, Twitter, Tiktok, and Reddit, how the culture of other websites that offer similar video streaming services causes different interpretations of common memes and metaphors, or potentially how literacy changes between these platforms and how imagination finds a home in different forms of communication. While there seems to be a lack in research about the permeability of digital and media literacies that emerged in regard to pictographs and communication patterns, Julian McDougall and their associates found that there is observable permeability in literacy in the real world. In their findings of how media literacy transitions from the classroom to civic engagement, they note how students were not only more positive about the empowering qualities of this literacy, but were more comfortable employing what they learned in different literacy events where they could take advantage of those skills, as compared to people without any training in media literacy (McDougall et al. 14). Notably, the tendency for comfortability is where we find an inroad for further research development. While this sets the

stage for further study, it doesn't approach how individuals continue using literacies across platforms, or why. A further case study of individual users of Twitch and other social media platforms would be necessary to understand how they carry their knowledge and communication practices outside of that space.

Nonetheless, literacy's dependence on imagination cannot be understated. Where there is written communication, there is room for interpretations based on context, culture, and the ability for the users of such literacies to navigate events that force them to consider authorial intent – especially in digital spaces where communication has become so simple, yet so complex.

APPENDICES

Appendix A: nmplol Case Study Clips

https://youtu.be/HPdgkZkMx14

https://youtu.be/jU1lo8hFLRI

https://youtu.be/q43_ag8QSZo

https://youtu.be/Nu9kkDhZXvY

Appendix B: Sodapoppin Case Study Clips

https://youtu.be/etxQ5ig9pp4

https://youtu.be/fvxyYRmdF 0

https://youtu.be/MwMKfadCubg

WORKS CITED

- Aristotle. *Aristotle: On Rhetoric: A Theory of Civic Discourse*. Translated by George A. Kennedy, Oxford University Press, 2007.
- Bai, Qiyu, et al. "A Systematic Review of Emoji: Current Research and Future

 Perspectives." *Frontiers in Psychology*, vol. 10, 2019, doi:10.3389/fpsyg.2019.02221.
- Barton, David. *Literacy: an Introduction to the Ecology of Written Language*. Blackwell Pub., 2007.
- Barton, David, and Carmen Lee. *Language Online: Investigating Digital Texts and Practices*.

 Routledge, 2013.
- Barton, David, and Mary Hamilton. *Local Literacies: Reading and Writing in One Community*. Routledge, 2012.
- Bostdorff, Denise M. "The Internet Rhetoric of the Ku Klux Klan: A Case Study in Web Site Community Building Run Amok." *Communication Studies*, vol. 55, no. 2, 2004, pp. 340–361., doi:10.1080/10510970409388623.
- Brandt, Deborah. "Sponsors of Literacy." College Composition and Communication, vol. 49, no. 2, 1998, pp. 165–185. JSTOR, www.jstor.org/stable/358929. Accessed 18 Dec. 2020.
- Brandt, Deborah, and Katie Clinton. "Limits of the Local: Expanding Perspectives on Literacy as a Social Practice." Journal of Literacy Research, vol. 34, no. 3, 1 Sept. 2002, pp. 337–356., doi:10.1207/s15548430jlr3403_4
- Casa-Todd, Jennifer. "A Contextual Approach to Digital Citizenship, Digital Literacy, and Student Voice." Ontario Tech University, 2019.
- Campbell, George, and Lloyd F. Bitzer. The Philosophy of Rhetoric. Southern Illinois University Press, 2008.

- Freedman, A. "Cultural Literacy in the Empire of Emoji Signs: Who Is Crying With Joy?". First Monday, Vol. 23, no. 9, Sept. 2018, doi:10.5210/fm.v23i9.9395.
- Ge, Jing. "Emoji Sequence Use in Enacting Personal Identity." *Companion Proceedings* of The 2019 World Wide Web Conference, May 2019, pp. 426–438., doi:10.1145/3308560.3316545.
- Gerber, Hannah R. "ESports and Streaming: Twitch Literacies." Journal of Adolescent & Adult Literacy, vol. 61, no. 3, 2017, pp. 343–345., doi:10.1002/jaal.692.
- Granatella, Mariagrazia. "Imaginative Universals and Human Cognition in The New Science of Giambattista Vico." Culture & Psychology, vol. 21, no. 2, 7 June 2015, pp. 185–206., doi:10.1177/1354067x15575795.
- Hagen, Loni, et al. "Emoji Use in Twitter White Nationalism Communication." Conference Companion Publication of the 2019 on Computer Supported Cooperative Work and Social Computing, 2019, doi:10.1145/3311957.3359495.
- Hamilton, William A., et al. "Streaming on Twitch." Proceedings of the 32nd Annual ACM

 Conference on Human Factors in Computing Systems CHI '14, Apr. 2014, pp. 1315–
 1324., doi:10.1145/2556288.2557048.
- Johnson, Lucy Anne, and Victor Villanueva. "How Sight Becomes Subject: Cultural Image Design in the Age of Digital Rhetoric." Washington State University, 2018.
- Kelemen, Mihaela, and Warren Smith. "Community and Its 'Virtual' Promises: a Critique of Cyberlibertarian Rhetoric." Information, Communication and Society, vol. 4, no. 3, 2001, pp. 370–387., doi:10.1080/13691180110044470.
- Keller, Daniel. Chasing Literacy: Reading and Writing in an Age of Acceleration. Utah State University Press, 2014.

- Kress, Gunther. "Gains and Losses: New Forms of Texts, Knowledge, and Learning." Computers and Composition, vol. 22, no. 1, 2005, pp. 5–22., doi:10.1016/j.compcom.2004.12.004.
- Levine, Joseph M. "Giambattista Vico and the Quarrel between the Ancients and the Moderns."

 Journal of the History of Ideas, vol. 52, no. 1, 1991, pp. 55–79. JSTOR,

 www.jstor.org/stable/2709582.
- Manovich, Lev. The Language of New Media. MIT Press, 2000.
- McDougall, Julian, et al. "Media Literacy, Education & (Civic) Capability: A Transferable Methodology." Journal of Media Literacy Education, vol. 7, no. 1, Apr. 2015, pp. 4–17.
- Potts, Liza, and Angela Harrison. "Interfaces as Rhetorical Constructions." Proceedings of the 31st ACM International Conference on Design of Communication SIGDOC '13, 2013, doi:10.1145/2507065.2507079.
- Sampietro, Agnese. "Use and Interpretation of Emoji in Electronic-Mediated Communication: A Survey." Visual Communication Quarterly, vol. 27, no. 1, 2020, pp. 27–39., doi:10.1080/15551393.2019.1707086.
- Sjöblom, Max, et al. "The Ingredients of Twitch Streaming: Affordances of Game Streams."

 Computers in Human Behavior, vol. 92, 2019, pp. 20–28.,

 doi:10.1016/j.chb.2018.10.012.
- Sparby, Erika. "Digital Social Media and Aggression: Memetic Rhetoric in 4chan's Collective Identity." Computers and Composition, vol. 45, 2017, Pages 85-97. https://doi.org/10.1016/j.compcom.2017.06.00mcf

- Street, Brian V. "At Last: Recent Applications of New Literacy Studies in Educational Contexts." Research in the Teaching of English, vol. 39, no. 4, 2005, pp. 417–423.

 JSTOR, www.jstor.org/stable/40171646.
- Tateo, Luca. "Giambattista Vico and the Psychological Imagination." Culture & Psychology, vol. 21, no. 2, 2015, pp. 145–161., doi:10.1177/1354067x15575695.
- Tateo, Luca. "Poetic Destroyers. Vico, Emerson and the Aesthetic Dimension of Experiencing."

 Culture & Psychology, vol. 23, no. 3, 2017, pp. 337–355.,

 doi:10.1177/1354067x17701270.
- Vico, Giambattista. *On the Study Methods of Our Time*. Translated by Elio Gianturco, Cornell University Press, 1994
- Zappen, James P., et al. "Rhetoric, Community, and Cyberspace." Rhetoric Review, vol. 15, no. 2, 1997, pp. 400–419., doi:10.1080/07350199709359226.
- Zittoun, Tania. "From Vico to the Sociocultural Imagination." Culture & Psychology, vol. 21, no. 2, 2015, pp. 251–258., doi:10.1177/1354067x15575796.