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Normalizing the Paranormal: The Present and Future Roles of Affordances in Social Media Platforms

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Abstract

The affordances provided to users by a social media platform both enable and restrict communication. There is considerable variation among platforms in what users are able to do, which tends to shape discourse on the platform. Communicating about paranormal topics is a serious and sometimes risky undertaking for some people. Much like relating mystical experiences, the act of reporting personal paranormal events often takes courage and determination. For example, it can be a challenge to find the words to describe what is often called an ineffable experience. Several months of postings in a subreddit (r/Paranormal, 1.1 million registered users) of the popular social media platform Reddit were analyzed to determine which affordances were useful in helping users communicate effectively about paranormal topics. While some were predictable, such as the ability to post using a pseudonym, others, like the ability to state one's professional credentials, were less obvious. Based on that analysis, a list was developed of additional, technically feasible affordances that could be added to social media platforms to improve communication about paranormal topics. These may help to address our currently impoverished methods of communicating about phenomena that we cannot fully understand. On a deeper level, this thesis raises the possibility that some of the online discourse about the Paranormal combines both the internal and external dimensions of reality. Because of this unique positioning, this discourse might move society in a direction where both the paranormal and our human nature are better understood.

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Acknowledgements 3 Chapter 1: Introduction 6 Scoping the Paranormal 6 Anomaly Gaps and Paradigm Shifts 7 Affordances 8 The Ongoing Evolution of Computer Mediated Communication (CMC) 9 Social Media Platforms Can Take on a Life of Their Own 10 Chapter 2: Literature Review 12 Technological Determinism and Social Construction of Technology. 12 Science and the Paranormal 14 The Internal Mind and the External World 15 Development of Affordance Theory. 17 Characteristics of Media Relevant to Communication about the Paranormal. 18 Applying Concepts from Marshall McLuhan to Paranormal Communication 18 Relevant Contributions of the McLuhan's Intellectual Heirs. 20 Affordances of Social Media Platforms 22 Chapter 3: Theoretical Framework 25 Sigma 25 Lack of appropriate vocabulary 26 Absence of community 27 Gender Issues 27 Lessons from Communication About Mystical Experiences 28 Ineffability. 28	Abstract	2
Scoping the Paranormal 6 Anomaly Gaps and Paradigm Shifts 7 Affordances 8 The Ongoing Evolution of Computer Mediated Communication (CMC) 9 Social Media Platforms Can Take on a Life of Their Own 10 Chapter 2: Literature Review 12 Technological Determinism and Social Construction of Technology 12 Science and the Paranormal 14 The Internal Mind and the External World 15 Development of Affordance Theory 17 Characteristics of Media Relevant to Communication about the Paranormal 18 Applying Concepts from Marshall McLuhan to Paranormal Communication 18 Applying Concepts from Marshall McLuhan's Intellectual Heirs 20 Affordances of Social Media Platforms 22 Chapter 3: Theoretical Framework 25 Communicating About the Paranormal: Different but Not Unique 25 Stigma 25 Lack of appropriate vocabulary 26 Absence of community 27 Gender Issues 27 Lack of appropriate vocabulary 30 Trepfability 30 Trepidation 30	Acknowledgements	
Anomaly Gaps and Paradigm Shifts 7 Affordances 8 The Ongoing Evolution of Computer Mediated Communication (CMC) 9 Social Media Platforms Can Take on a Life of Their Own 10 Chapter 2: Literature Review 12 Technological Determinism and Social Construction of Technology 12 Science and the Paranormal 14 The Internal Mind and the External World 15 Development of Affordance Theory 17 Characteristics of Media Relevant to Communication about the Paranormal 18 Applying Concepts from Marshall McLuhan to Paranormal Communication 18 Relevant Contributions of the McLuhan 's Intellectual Heirs 20 Affordances of Social Media Platforms 22 Chapter 3: Theoretical Framework 25 Communicating About the Paranormal: Different but Not Unique 25 Stigma 27 Leskons from Communication About Mystical Experiences 28 Ineffability 30 Trepidation 30 Chapter 4: Methodology 31 Choosing a Platform 31 Copyright Issues 33	Chapter 1: Introduction	6
Anomaly Gaps and Paradigm Shifts 7 Affordances 8 The Ongoing Evolution of Computer Mediated Communication (CMC) 9 Social Media Platforms Can Take on a Life of Their Own 10 Chapter 2: Literature Review 12 Technological Determinism and Social Construction of Technology 12 Science and the Paranormal 14 The Internal Mind and the External World 15 Development of Affordance Theory 17 Characteristics of Media Relevant to Communication about the Paranormal 18 Applying Concepts from Marshall McLuhan to Paranormal Communication 18 Relevant Contributions of the McLuhan 's Intellectual Heirs 20 Affordances of Social Media Platforms 22 Chapter 3: Theoretical Framework 25 Communicating About the Paranormal: Different but Not Unique 25 Stigma 27 Leskons from Communication About Mystical Experiences 28 Ineffability 30 Trepidation 30 Chapter 4: Methodology 31 Choosing a Platform 31 Copyright Issues 33	Scoping the Paranormal	6
The Ongoing Evolution of Computer Mediated Communication (CMC) 9 Social Media Platforms Can Take on a Life of Their Own 10 Chapter 2: Literature Review 12 Technological Determinism and Social Construction of Technology 12 Science and the Paranormal 14 <i>The Internal Mind and the External World</i> 15 Development of Affordance Theory. 17 Characteristics of Media Relevant to Communication about the Paranormal. 18 <i>Applying Concepts from Marshall McLuhan to Paranormal Communication</i> 18 <i>Applying Concepts from Marshall McLuhan is Intellectual Heirs</i> . 20 Affordances of Social Media Platforms 22 Chapter 3: Theoretical Framework 25 Communicating About the Paranormal: Different but Not Unique 25 Stigma 27 Lessons from Communication About Mystical Experiences 28 <i>A Sense of Universality</i> 30 Trepidation 30 Chapter 4: Methodology 31 Choosing a Platform 31 Copyright Issues 33		
Social Media Platforms Can Take on a Life of Their Own10Chapter 2: Literature Review12Technological Determinism and Social Construction of Technology12Science and the Paranormal14The Internal Mind and the External World15Development of Affordance Theory.17Characteristics of Media Relevant to Communication about the Paranormal18Applying Concepts from Marshall McLuhan to Paranormal Communication18Relevant Contributions of the McLuhan's Intellectual Heirs.20Affordances of Social Media Platforms22Chapter 3: Theoretical Framework25Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of communication About Mystical Experiences28Ineffability30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Affordances	
Chapter 2: Literature Review12Technological Determinism and Social Construction of Technology.12Science and the Paranormal.14The Internal Mind and the External World15Development of Affordance Theory.17Characteristics of Media Relevant to Communication about the Paranormal.18Applying Concepts from Marshall McLuhan to Paranormal Communication18Relevant Contributions of the McLuhan's Intellectual Heirs.20Affordances of Social Media Platforms22Chapter 3: Theoretical Framework.25Communicating About the Paranormal: Different but Not Unique25Stigma26Absence of community27Gender Issues27Lessons from Communication About Mystical Experiences28Ineffability.30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy.34	The Ongoing Evolution of Computer Mediated Communication (CMC)	9
Technological Determinism and Social Construction of Technology.12Science and the Paranormal.14The Internal Mind and the External World15Development of Affordance Theory.17Characteristics of Media Relevant to Communication about the Paranormal.18Applying Concepts from Marshall McLuhan to Paranormal Communication18Relevant Contributions of the McLuhan's Intellectual Heirs.20Affordances of Social Media Platforms22Chapter 3: Theoretical Framework25Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of communication About Mystical Experiences28Ineffability.27Gender Issues28Ineffability.30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy.34	Social Media Platforms Can Take on a Life of Their Own	10
Science and the Paranormal14The Internal Mind and the External World15Development of Affordance Theory17Characteristics of Media Relevant to Communication about the Paranormal18Applying Concepts from Marshall McLuhan to Paranormal Communication18Relevant Contributions of the McLuhan's Intellectual Heirs20Affordances of Social Media Platforms22Chapter 3: Theoretical Framework25Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of communication About Mystical Experiences28Ineffability28A Sense of Universality.30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy.34	Chapter 2: Literature Review	12
The Internal Mind and the External World15Development of Affordance Theory.17Characteristics of Media Relevant to Communication about the Paranormal.18Applying Concepts from Marshall McLuhan to Paranormal Communication18Relevant Contributions of the McLuhan's Intellectual Heirs.20Affordances of Social Media Platforms22Chapter 3: Theoretical Framework.25Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of communication About Mystical Experiences27Lessons from Communication About Mystical Experiences28Ineffability.30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy.34	Technological Determinism and Social Construction of Technology	12
Development of Affordance Theory.17Characteristics of Media Relevant to Communication about the Paranormal.18Applying Concepts from Marshall McLuhan to Paranormal Communication18Relevant Contributions of the McLuhan's Intellectual Heirs.20Affordances of Social Media Platforms22Chapter 3: Theoretical Framework25Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of communication About Mystical Experiences27Gender Issues27Lessons from Communication About Mystical Experiences28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Science and the Paranormal	14
Characteristics of Media Relevant to Communication about the Paranormal.18Applying Concepts from Marshall McLuhan to Paranormal Communication18Relevant Contributions of the McLuhan's Intellectual Heirs20Affordances of Social Media Platforms22Chapter 3: Theoretical Framework25Communicating About the Paranormal: Different but Not Unique25Stigma26Absence of community26Absence of communication About Mystical Experiences27Lessons from Communication About Mystical Experiences28Ineffability30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	The Internal Mind and the External World	15
Applying Concepts from Marshall McLuhan to Paranormal Communication18Relevant Contributions of the McLuhan's Intellectual Heirs20Affordances of Social Media Platforms22Chapter 3: Theoretical Framework25Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of communication About Mystical Experiences27Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Development of Affordance Theory	17
Relevant Contributions of the McLuhan's Intellectual Heirs.20Affordances of Social Media Platforms22Chapter 3: Theoretical Framework25Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of community27Gender Issues27Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy.34	Characteristics of Media Relevant to Communication about the Paranormal	
Affordances of Social Media Platforms22Chapter 3: Theoretical Framework25Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of community27Gender Issues27Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Applying Concepts from Marshall McLuhan to Paranormal Communication	
Chapter 3: Theoretical Framework25Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of community27Gender Issues27Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Relevant Contributions of the McLuhan's Intellectual Heirs	
Communicating About the Paranormal: Different but Not Unique25Stigma25Lack of appropriate vocabulary26Absence of community27Gender Issues27Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Affordances of Social Media Platforms	
Stigma25Lack of appropriate vocabulary26Absence of community27Gender Issues27Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Chapter 3: Theoretical Framework	25
Lack of appropriate vocabulary26Absence of community27Gender Issues27Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Communicating About the Paranormal: Different but Not Unique	25
Absence of community27Gender Issues27Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Stigma	
Gender Issues27Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34	Lack of appropriate vocabulary	
Lessons from Communication About Mystical Experiences28Ineffability28A Sense of Universality30Trepidation30Chapter 4: Methodology31Choosing a Platform31Copyright Issues33Sampling Strategy34		
Ineffability		
A Sense of Universality		
Trepidation 30 Chapter 4: Methodology 31 Choosing a Platform 31 Copyright Issues 33 Sampling Strategy 34		
Chapter 4: Methodology 31 Choosing a Platform 31 Copyright Issues 33 Sampling Strategy. 34		
Choosing a Platform	1	
Copyright Issues	Chapter 4: Methodology	
Sampling Strategy	C C	
	Copyright Issues	
	Sampling Strategy	
Content Analysis in a Web 2.0 Environment	Content Analysis in a Web 2.0 Environment	
Chapter 5: Analysis	Chapter 5: Analysis	
Choosing the Affordances	Choosing the Affordances	
Extracting and Processing the Posts	Extracting and Processing the Posts	
Existing Useful Affordances Derived from Postings		
Affordance 1: Video evidence		

Table of Contents

Affordance 2: Photographic Evidence	40
Affordance 3: Ability to provide location	41
Affordance 4: Tags	42
Affordance 5: Anonymity/Pseudonymity	43
Affordance 6: Predictions	43
Affordance 7: Professional Credentials	44
Affordance 8: Affirmation of Religiosity	45
Affordance 9: Global search of r/Paranormal	45
Affordance 10: Review of external sources	46
Suggested New Useful Affordances	47
Suggested Affordance 1: Out-of-band sound translation (Infrasound)	47
Suggested Affordance 2: Tamper-proof predictions	47
Suggested Affordance 3: Remote viewing auditor	48
Suggested Affordance 4: AI-Driven Post Selection	49
Suggested Affordance 5: Instant-on recording	49
Suggested Affordance 6: Glossary of Paranormal Terms as They Are Actually Used	50
Suggested Affordance 7: Paranormal Tour Guide/"Ski Friend"	50
Suggested Affordance 8: Paranormal Concordance	51
Suggested Affordance 9: Paranormal Wirecutter	51
Suggested Affordance 10: Paranormal 911	52
Chapter 6: Findings and Conclusion	53
Key Findings	53
Posters talk freely and in-depth about their paranormal experiences.	53
Gender Issues Do Not Appear to be a Major Factor	54
Users Learn About Affordances from Experience and From Other Users	
McLuhan Still Casts a Deservedly Long Shadow Even Over New Media	55
Benefits of the Study	56
Limitations	56
Directions for Future Research	58
Conclusion	59
Appendices	60
Appendix 1 – Copyright Notice of r/Paranormal	60
Appendix 2 - Excerpts from r/Paranormal Community Rules	
Appendix 3 – Procedure for locating a specific r/Paranormal post from its Reddit ID	
References	

Chapter 1: Introduction

"Pressing a button means something; it mediates and communicates," (Bucher & Helmond, 2018). *The Affordances of Social Media Platforms*

Beyond their remarkable ability to reach a huge audience almost instantaneously, social media platforms offer nuanced and powerful tools for communicating ideas, opinions, and experiences about almost every topic. This certainly includes the paranormal, which is defined as "supposed psychical events and phenomena such as clairvoyance or telekinesis whose operation is outside the scope of the known laws of nature or of normal scientific understanding " (OED Online, 2023, n.p.). This thesis explores the existing affordances of a popular social media platform (Reddit) and how they are being used to communicate about paranormal topics. It then suggests new affordances that could make that communication more effective and more meaningful to users. This research does not take a position for or against the reality of paranormal phenomena. Instead, it focuses on how people use social media to communicate about that subject and how that communication could possibly be improved in creative ways.

Scoping the Paranormal

For the purpose of this study, the term "paranormal" will include ghosts, apparitions, hauntings, and other similar phenomena, as well as topics including telepathy, telekinesis, ESP, remote viewing, possession, voodoo, spells, and poltergeists. Commercial exploitation such as the long-running "Ghost Hunters" (IMDb, 2023a, n.p.) or newer "Paranormal Survivor" (IMDb, 2023b, n.p.) television genre will be excluded, as well as fictional works, satire, advertisements, hoaxes, and other material that clearly seeks to deceive or merely entertain the audience.

Anomaly Gaps and Paradigm Shifts

Many definitions of the term "paranormal" include the phrase "not explainable by science," though in some cases, a more nuanced phrase, "not currently explainable by science," is used. An interesting example of this dynamic epistemological perspective is found in an online encyclopedia (Academickids, n.d) where the word Paranormal redirects to Anomalous Phenomenon which in turn is defined as "an observed phenomenon for which there is no suitable explanation in the context of a specific body of scientific knowledge, e.g., astronomy or biology." The entry goes on to note that "Many bodies of knowledge exhibit 'anomaly gaps' where theory does not explain (or seem to explain) one or more observations." It gives as examples "out-of-body experiences, near-death experiences, extrasensory perception, ghosts, UFOs, alien abductions and close encounters." The article explains how science can sometimes catch up with anomalies. "As the body of knowledge available expands, some anomalies are incorporated into an explanatory framework and lose their standing as anomalies." For example, "while the idea of stones falling from the sky was long ridiculed, meteorites are now acknowledged and well understood." (Academickids, n.d., n.p.)

In *The Psychology of Paranormal Belief: A Researcher's Handbook*, Irwin (2009) refines this concept, dividing paranormal phenomena into those that are (currently) "scientifically inexplicable" and those that "*contravene* scientific principles" (p. 14, italics in original). As an example of the first, "if an unknown monstrous creature were to be washed up on the shores of Loch Ness…biologists would be quick to find a phylogenetic place for it." (p. 14). However, "precognition…might be held to be incompatible with a basic scientific law of causation, namely that a cause must precede its effect." (p. 15).

Indeed, the fundamental business of science (and other knowledge disciplines) is to expand our current thinking to help explain the unexplainable (Kuhn, 1956,1962). It is entirely possible that we are on the cusp of a disruptive revolution in our thinking about the paranormal and that some comments on social media may be the harbingers of how that may happen.

Affordances

The term "affordances" initially referred to a concept in ecological psychology. It was coined by Gibson to describe the possibilities that the environment affords to an animal. (1966). Gibson has confirmed that he created the term as a noun form of the verb "to afford" (Gibson, 1979, p. 127) and used it to mean the things that an organism is able to do and knows that it can do.

Donald Norman broadened the concept and moved it into the popular lexicon with his eminent book, *The Design of Everyday Things*. In it, he defines affordance as "the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used. A chair affords ("is for") support and, therefore, affords sitting. A chair can also be carried." (Norman, 2013, p. 6).

As explained in more detail in Chapter 2, researchers soon adapted the ecological concept of affordance to apply it to communications entities such as social media platforms. There is certainly variation across social media platforms in the affordances that they permit. For example, a Twitter user can generally send a direct message to any other Twitter user (Twitter, 2023). However, a user of the Twitter-like platform Parler must first provide documentation, including government-issued identification, to be able to do this. (Parler, 2022).

The Ongoing Evolution of Computer Mediated Communication (CMC)

Walther's prophetic 1996 article in *Communications Research* provides a solid foundation for taking CMC about the paranormal seriously and even with some degree of reverence. Long before the advent of social media, he wrote that "growing numbers of reports are appearing that reflect more personal CMC interaction, sometimes just as personal as face-toface (FtF) interaction, or even describing interaction that surpasses FtF in some interpersonal respects" (Walther, 1996, p. 4). Walther goes on to envision "online friendships" and "virtual communities" (1996, p. 4) all of which have definitely come into existence in the age of new media.

As Delia Dumitrica (2015) points out in her review of Robin Mansell's book, *Imagining the Internet*, "contemporary social imaginaries of the Internet are framed by two conflicting visions: information scarcity and complexity paradoxes." She explains that the complexity paradox refers to the "vision of the Internet as a complex technological system *with self-adaptation mechanisms* that appear to make it impossible for humans to control and change the development of this system." (Dumitrica, 2017, p. 177, italics added.)

While information scarcity is hardly a problem today, the self-adaptation model is clearly at work in the evolution of social media platforms, which do often take on a life of their own. This thesis argues that while humans may not be able to control the evolution of a social media platform precisely, the collective input of users and platform creators often drives substantial changes in social media platforms, specifically in the affordances offered to users. A further claim is that certain new affordances may offer the possibility of even better communication about paranormal topics.

Social Media Platforms Can Take on a Life of Their Own

Even the creators and owners of a platform are sometimes unable to direct its evolution once it has been released to a large user base. The social media site Parler, based in Nashville, TN, has been hugely controversial since its inception in 2008. The *Washington Post* called it "The conservative alternative to Twitter (that) wants to be a place for free speech for all." (Lerman, 2020). It has been lauded, criticized, de-platformed by service providers, banned for a time from the Apple and Google app stores, and implicated in the organization of the January 6, 2021, events at the U.S. Capitol.

According to Smith (2021), Parler's founders intended the platform's name to be pronounced par-lay, as in the French verb "to speak." However, users quickly started calling it "parlor"- a baggage-laden American term that connotes a private space or retreat.¹ Parler executives quickly saw the brilliance of that re-branding and accepted the name change.

Another example of users changing the very nature of a social media platform is the saga of U.K.-based onlyfans.com which self-describes as "the social platform revolutionizing creator and fan connections" (Onlyfans, 2023, n.p.). With a claimed user base of 150M, the site claims to pay out "\$5,000,000,000+" every year to content creators, while taking a 20% fee for itself. (Onlyfans, 2023.) In 2019 the site announced that it would ban pornography, which had become a significant part of its online content. Five days later, the site's operators reversed that position "in a stunning U-turn that came after fierce backlash from its users." (CNBC, 2021).

¹ As Smith explains, "In Victorian times, many homes' parlors were places where white Americans could retreat to celebrate, reinforce, and perform their whiteness. The parlor was a space where they would sing songs mocking Black people, adorn their spaces with symbols of their privilege and class-based refinement, and indulge in xenophobia and racism in a private, 'safe' setting." (2021, n.p.)

These are both examples of how the "wisdom of the crowd" has significantly shaped a social media platform. They also raise the intriguing possibility that platform users may be able to take matters into their own hands by creating new affordances for existing platforms, which could greatly enhance communication about paranormal topics. This thesis builds on that principle by showing both "what is" and "what could be" in terms of the affordances of a specific social media platform.

Chapter 2: Literature Review

This chapter situates my study within the existing body of literature on technological determinism and social constructivism with a focus on social media platforms. It also explains the concept of affordances and its application to communications research. It positions communications about the paranormal as a topic that straddles the boundary between the internal mind and the external world, suggesting that we may be approaching a Kuhnian "paradigm shift" in our understanding of paranormal phenomena.

Technological Determinism and Social Construction of Technology

The functionality of communications media, such as social media platforms, can be considered from both the Technological Determinist (TD) perspective and the Social Construction of Technology (SCT) lenses. Proponents of TD argue that the capabilities provided by a technology effectively define and determine the ways in which it can and will be used. As Kline writes, "technology develops autonomously according to an internal logic and forces a prescribed social change" (2001). Wyatt (2008) takes a more nuanced view, noting that there are actually varieties of TD and citing the continuum framework of Smith and Marx:

Smith and Marx (1994: ix–xv) suggest that technological determinism can take several forms along a spectrum between hard and soft poles. At the "hard" end of the spectrum, agency (the power to effect change) is imputed to technology itself, or to some of its intrinsic attributes; thus, the advance of technology leads to a situation of inescapable necessity (Smith & Marx, 1994: xii)

At the "soft" pole of TD, we find that technology is located "in a far more various and complex social, economic, political, and cultural matrix." (Smith & Marx, 1994: xiii). These concepts start to border on SCT - the belief that technology is socially constructed and potentially shaped, redefined, and given meaning by those who use it.

12

We find both poles operating in current social media. If a platform simply *will not let you do something* (like post a photo), TD is operative and is setting limits on you. It is important to note that the average user may not be fully aware of exactly how TD is operating on a particular platform. An affordance may be available but not widely known or understood by users of the technology. Also, affordances can be enabled or disabled by those in control of the platform, for all users or just certain users.

An example of an affordance that is not widely understood is the EXIF (exchangeable image file) format information on photographs, which most digital cameras (and smartphones) automatically record. It contains a variety of metadata about the image, including date and time, camera type, exposure, and often the exact latitude and longitude where the photograph was taken. Platforms, including Facebook, strip away this data for privacy reasons (TechWithTech, 2022). On the other hand, cloud storage services such as Apple's iCloud generally retain the EXIF data (Apple Support Communities, 2021).

Confusion about this affordance caused serious problems in 2014 when iCloud suffered a breach and hundreds of celebrity photos were stolen. Some were nude and semi-nude images (Barnett, 2014). By the design of iCloud, most of those photos still contained EXIF information which could potentially allow those who obtained them to determine things like the home addresses and favorite stores of selected celebrities. This example illustrates the important concept that an affordance is only an affordance if you understand it and know how to use it. The ill-fated celebrities whose pictures and data were stolen did not fully understand the affordances related to EXIF data. The people who hacked the site, or who distributed copies of the images, most definitely did.

A delightful example of SCT at work in social media is the case of Botto Bistro, an Italian restaurant in San Francisco's Bay Area. Like most restaurants, it appears on the rating site called Yelp. Users can leave star ratings and reviews as well as comments on the restaurant, and Yelp makes money through paid advertising. Chef Dave Cerretini rebuffed salespeople from Yelp who wanted him to buy ads. Mysteriously, his praise-laden five-star customer reviews kept disappearing. "I came from Italy, and know exactly what mafia extortion looks like," he said (Crockett, 2019, n.p.). So, Cerretini made his customers an offer they couldn't refuse -- "Give us one star on Yelp and get 50% off any pizza". His plan worked, garnering reviews like "Botto Bistro sucks…Delicious food priced fairly. One star", as well as many hilarious tongue-in-cheek comments. His act of defiance redefined, at least for some, the whole ecosystem of Yelp restaurant reviews, though that company disparaged him as "an atomic particle in an ecosystem that contains 185m reviews." (Crockett, 2019, n.p.). Cerretini's new-found fame did provide a springboard to his next career. He now teaches cooking classes and charges \$3,000 for each.

Wyatt concludes that TD "remains as a heuristic for organizing accounts of technological change" (2008, p. 176). With this in mind, TD concepts will be used in this thesis to explain limitations on affordances and the implications. It will also be used to envision new affordances. SCT will also be employed where it provides the best explanation for an existing or envisioned affordance.

Science and the Paranormal

Since we live in a society that is largely driven by science, as opposed to superstition, religion, or the pronouncements of a king or dictator, it is important to consider how science and the Paranormal can interact.

In addition to giving us the much-overused term "paradigm shift," Thomas Kuhn's *The Structure of Scientific Revolutions* (1962) proposed that scientific progress is not linear and continuous, but rather occurs through periods of normal science followed by sudden and disruptive paradigm shifts. Those revolutions also involve cultural and social factors. In an earlier book, he explained how the change from a geocentric to a heliocentric model of the solar system involved not only anomalous data that could not be explained by the old planetary model, but also social and cultural factors that allowed this idea to be accepted. (Kuhn, 1957).

While Kuhn is certainly the most influential theorist of the scientific process of our time, it is important to note that ideas about the subtleties of the scientific method stretch back at least to the 18th century. The French mathematician and philosopher Pierre-Louis Moreau de Maupertuis, wrote, in 1740, "If the sciences are grounded on certain simple and immediately clear principles, on which all the truths that are the object thereof depend, they have yet other principles, less simple indeed, and often difficult to discover, but which once discovered, are of very great utility." (Maupertuis 1740, 170). From that perspective, there may well be principles underlying some paranormal events that, when once discovered, will indeed be of great utility.

The Internal Mind and the External World

While a full discussion of the concepts of "internal" and "external" as they are used in psychology and neuroscience is well beyond the scope of this thesis, these two key concepts are vital to understanding the implications of the paranormal on our lives.

Internal refers to processes that occur within the mind. For example, when someone remembers their fifth birthday party, that is an internal process. It is subjective since it is being experienced only by the person doing the recollecting. External involves stimuli from the

environment such as sensory input. It is a potentially communal experience. When you see a beautiful sunset, the person standing next to you sees it too.

The two concepts are interdependent in a complex way. Seeing the sunset can make you happy. However, the internal factor of having just had a fight with a loved one can make the vista unappealing. These concepts are highly relevant to this thesis as I will argue that the Internet, and r/Paranormal in particular, are opening up a new way of uniting our internal and external worlds as they apply to the Paranormal.

Terje Simonsen writes that "(paranormal) phenomena could be said to belong to the *twilight zone*, the borderland of consciousness – a sphere that we may have a vague notion about, but that most of us are not really familiar with." (2020, p. 28). He also notes that Professor Brian Josephson, who won the Nobel Prize in Physics in 1973, "claims that both telepathy and psychokinesis…are 'objectively occurring phenomena (not just hallucinations, etc.)". (p. 29)

This liminal area of consciousness is garnering serious attention in the scientific community. Psychologist Lisa Feldman Barrett wrote, "the last two decades of neuroscience research have brought us to the brink of a paradigm shift in understanding the workings of the brain." (2017, 1). She then elaborates a unifying theory called "constructed emotion." In arguing for it, she provides an inspiring perspective that is applicable, not only to her own research, but to the deeper objective of this thesis:

Scientific revolutions are difficult. At the beginning, new paradigms raise more questions than they answer. They may explain existing anomalies or redefine lingering questions out of existence, but they also introduce a new set of questions that can be answered only with new experimental and computational techniques. This is a feature, not a bug, because it fosters scientific discovery (Firestein, 2012). A new paradigm barely gets started before it is criticized for not providing all the answers. But progress in science is often not answering old questions but asking better ones. (2017, p. 14).

16

Development of Affordance Theory

The concept of affordances originated in the field of ecological psychology "to designate all kinds of action possibilities latent in the physical environment." (Bucher & Helmond, 2016, p. 4). Affordances "do not cause behavior but constrain and control it" (Gibson, 1982, p. 411). Importantly, they are relational and relative to the user. As noted by Gibson, "knee-high for a child is not the same as knee-high for an adult." (2015, p. 120).

The wider public gained familiarity with the concept of affordances through Donald Norman's landmark book, *The Design of Everyday Things* (Norman, 2013). In it, he defines the concept as "the perceived and actual properties of the thing, primarily those fundamental properties that determine just how the thing could possibly be used" (Norman, 2013, p. 9)."

It is important to note that affordances are dynamic and can be enabled or disabled. They are actually a protocol (set of rules) governing interaction that is negotiated between the relevant parties, be it a fox and its natural environment or a social media platform and its users.

In collaboration with my supervisor, I have settled on a definition of affordance that I believe can be operationalized for the purposes of this thesis:

Affordance:= (i.e., definition): A communication protocol designed to address and possibly resolve contentious issues in the context of social media internet communication (i.e., 'platforms' pertaining to a certain subject). The protocol defines a range of activities that platform participants can employ and know they can employ to make headway with respect to the issue in question.

Characteristics of Media Relevant to Communication about the Paranormal

In a prophetic August 1937 essay, H.G. Wells observed, "The encyclopedias of the past have sufficed for the needs of a cultivated minority." (1938, p. 58). He went on to advocate for "a world synthesis of bibliography and documentation with the indexed archives of the world" (p. 60) which he called a "Permanent World Encyclopedia." One can debate whether or not Wikipedia, or the Internet as a whole, or artificial intelligence models like ChatGPT have truly fulfilled this vision. However, it is clear that tools like the Paranormal subreddit play a part in the democratization of information (and misinformation) and its essentially free, global, and effortless distribution, which was what Wells envisioned, albeit on paper.

Communications theorists, including Marshall McLuhan and his intellectual heirs, provide a solid foundation for understanding and deconstructing the role of a platform like the paranormal subreddit (r/Paranormal) in helping people communicate about these topics.

Applying Concepts from Marshall McLuhan to Paranormal Communication

McLuhan's idea that the communications medium shapes and controls the content and meaning of communication is clearly an important premise of this thesis. McLuhan writes, "it is the medium that shapes and controls the scale and form of human association and action." (2013, p. 13). Without this subreddit, or something like it, those who wish to talk about the Paranormal would have been much more limited in the number of people they could reach and the quality of their interaction. The affordances being addressed (and proposed) in this thesis shape what they are able to do to communicate their ideas and experiences to the world.

This accords very well with McLuhan's concept of "the new world of the global village" (2013, p. 87), which McLuhan explains is "an instantaneous reassembling of all its (our

civilization's) mechanized bits into an organic whole." (p. 87). For those interested in a topic, like the paranormal, a subreddit like this pulls together fragmented knowledge into a compact entity.

McLuhan speaks of hot and cool media, (p. 26ff.), the former being high definition, low participation (like viewing a photograph), and the latter low definition, high participation (like speaking on the telephone.) In a Web 2.0 environment, participation is essentially a given – anyone can post and comment on the posts of others.² The question of definition is more subtle since some posters describe their experiences in exquisite detail while others provide only the bare bones. However, as will be discussed later, the ability to attach images, video, and sound certainly raises the definition level of social media.

McLuhan writes, "We appear to be poised between two ages — one of detribulization and one of retribulization" (p. 314). This informs this analysis in that r/Paranormal is clearly a kind of self-selected tribe. Only 1.1m of the world's estimated 8 billion human beings are part of it. They are there by explicit choice and bound together by a common interest. McLuhan suggested that we may be returning to a state where people are connected to selected others more closely than before. Again, this appears to be a good description of at least some social media, as people form very strong bonds with people on them, sometimes even stronger than "in real life."

Finally, McLuhan proposes that changes in technology have altered how people perceive and interact with the world around them. This seems almost trivially true if we consider the

² In this thesis, the nouns post and posting are used interchangeably, as are the verb forms of those words. This accords with common practice in the literature. The Cambridge English dictionary also gives very similar definitions at <u>https://dictionary.cambridge.org/dictionary/english/posting</u> and

https://dictionary.cambridge.org/dictionary/english/post

changes technology has wrought since 1964. In particular, the ability to talk about topics like the Paranormal with a sympathetic audience is, as will be discussed later in this thesis, a key development. Using the now quaint term "electric information," McLuhan wrote that "As electric information levels rise, almost any kind of material will serve any kind of need or function, forcing the intellectual more and more into the role of social command and into the service of production." (p. 37). One implication of this is that the role of intellectuals will change in that they will need to be generalists more than specialists and to draw on many kinds of information, as well as the help of others. This concept inspired one of the proposed new affordances (#7) proposed below.

Relevant Contributions of the McLuhan's Intellectual Heirs

Numerous academics have used McLuhan's seminal work as the jumping-off point for understanding "the new media," of which r/Paranormal is certainly an example. McLuhan's friend and colleague, Robert K. Logan, notes that, back in 1964, McLuhan expressed "fear the television posed a threat to literacy (2016, p.47). Logan goes on to suggest that "a new antibiotic has been developed that counteracts the harmful effects of TV." (p. 47). That antibiotic is "new media" as embodied by the Internet, email, text messaging, and the World Wide Web.

Logan proceeds to show how most of McLuhan's predictions have come true in the world of new media, even though McLuhan didn't live to experience it. Logan addresses the challenging question "Was McLuhan a Technological Determinist?" Logan agrees that "McLuhan is guilty as charged if one wishes to label anyone who posits a relationship between technology and societal transformation as a technological determinist." (2016, p. 24). However, he rails against regarding McLuhan as "a naïve technological determinist" (p. 26). Instead, Logan argues that McLuhan uncovered the equivalent of scientific laws and that "if the principles that he formulated for the "old media" hold true for the "new media" we may regard this as empirical verification of his theories."

Perhaps the most salient point for this thesis is Logan's analysis of McLuhan's second most quoted aphorism (after "the medium is the message") which is "the user is the content". Logan explains that McLuhan felt that the way people use media is more important than the content itself and that media technologies are not just tools for transmitting information. They are extensions of human consciousness and capabilities. The way people use media has a profound impact on their individual and collective experiences, shaping the way they think, act, and perceive the world. As McLuhan wrote about language:

The classic curse of Midas, his power of translating all he touched into gold, is in some degree the character of any medium, including language. This myth draws attention to a magic aspect of all extensions of human sense and body; that is, to all technology whatever. All technology has the Midas touch. When a community develops some extension of itself, it tends to allow all other functions to be altered to accommodate that form. Language, like currency, acts as a store of perception and as a transmitter of the perceptions and experience of one person or of one generation to another. (McLuhan, 1964, p. 127).

With respect to r/Paranormal, the ability to participate freely in a discussion of sometimes forbidden topics may well have a profound effect on users. Typically, they are not writing about news events or recipes. They are, to the extent that they can put them into words, communicating profound and personal internal experiences and sharing them with others. Paul Grosswiler is another scholar who has worked to update the ideas of McLuhan and also to reconcile them with the ideas of Karl Marx. In the process, he brings in a range of theorists including Theodor Adorno, Walter Benjamin, Raymond Williams, James Carey, Jean Baudrillard, and Umberto Eco.

Perhaps the most relevant takeaway from Grosswiler's work for this thesis is his discussion of McLuhan's Four Laws of the Media and their fundamental connection to the concept of Metaphor, which "bridges gaps rather than following connections" (Grosswiler, 1998, p. 77)

In the brief journal article introducing the Laws of the Media, McLuhan wrote:

There seem to be only four features, and they are in analogical proportion to each other: (a) What does it enhance? (b) What does it obsolesce? (c) What does it retrieve that had been obsolesced earlier? (d) What does it flip into when pushed to the limits of its potential (McLuhan, 1977, p. 175)

McLuhan then uses this framework to come to what he called "a surprising discovery, namely that all the extensions of man, verbal or non-verbal, hardware or software, are essentially metaphoric in structure... In a word, metaphor is a kind of bridging process, a way of getting from one kind of experience to another" (p. 176). Communication about the paranormal often bridges internal (subjective) and external (objective) reality in a way that will be discussed later in this thesis.

Affordances of Social Media Platforms

Bucher & Helmond (2016) present some of the affordances of social media, such as posting, re-posting, and liking. They also discuss Schrock's (2015) affordances which include

availability, floatability, and multimediality. Those in control of platforms may add and delete functionality and will often copy an affordance that is offered on another platform.

Their seminal article on social media affordances begins with a lament over Twitter's changing the meaning of one particular affordance on the platform. "The favorite button, symbolized by a star and once a main feature and part of Twitter's brand identity, was changed into a much more generic like button, indicated with a heart symbol." (Bucher & Helmond, 2018, p. 1) These authors go on to note that this change "caused a storm of reactions from its end-users." The Twitter Star had acquired a meaning and purpose, and people had become very attached to it.

A similar outcry occurred when Twitter's relatively new owner Elon Musk moved in late 2022 to change the meaning of the platform's time-honored "blue check" to make it a revenue generator. The old blue check was earned by a validation process such as sending proof of identity and was used by celebrities and public figures. The new badge is basically proof that you pay Twitter a monthly fee, and it was not well received. To be fair, there are also some "eligibility criteria" such as having an account for over 90 days and providing a confirmed phone number. (Twitter, 2023) One poster on Twitter gave Mr. Musk some excellent free advice, suggesting valuable new affordances such as "verified replies only, verified feed...new verified follower count". (Holcomb, 2022). These suggestions are highly relevant to a discussion about the Paranormal because the field is rife with fake, distorted, commercialized, and frankly dishonest content, which impedes sincere discussion about the subject. There are also issues like fake accounts and bots, which further detract from the discourse.

It is worth noting what is *not* considered a social media affordance for the purposes of this study. Since the definitions of affordances typically talk about things that you can do, and *know that you can do*, hidden "Easter Egg" type functionality would be excluded unless it became widely known to the user base. Likewise, functionality that has been taken away (the "old" blue check on Twitter at this moment) ceases to be an affordance. I would also argue that "freemium" features that are only available upon payment should be excluded. On the Reddit platform, these would be the affordances offered by Reddit Premium, which costs \$50US/year and gives a few perks like ad-free browsing.

Chapter 3: Theoretical Framework

This chapter presents the overall theoretical framework for the analysis conducted on social media postings on r/Paranormal, a subreddit of the social media platform Reddit. It explores why paranormal topics have some special characteristics that can influence how people communicate about them on social media. It also draws on the literature relating to communication about mystical experiences to further explore communication about paranormal topics.

This thesis aims to answer the primary research question: "What social media affordances are being used to communicate about the paranormal, and how are they being used?" A secondary question is "Are there new affordances that could improve communication about the paranormal, and if so, what are they?"

Communicating About the Paranormal: Different but Not Unique

Social media platforms are used for everything from sharing recipes to fighting brutal political and religious battles online. So, it might seem reasonable to assume that communicating about paranormal topics would have similar characteristics to other social media posts and that what researchers have learned about social media, in general, can be applied to communication about paranormal topics. However, there are a number of factors that can make this type of communication qualitatively different.

Stigma

Because paranormal topics are controversial, some people are reluctant to post about them. They may also want to hide their true identity to avoid unpleasant conversations with their neighbors and co-workers about ghosts in the attic. Much of the scientific literature around paranormal belief falls into the realm of psychology and may well help to reinforce the stigma around talking about the Paranormal. Drinkwater et al. (2021) illustrate the view of mainstream psychology regarding the Paranormal. The title of their article reporting a study of paranormal belief in almost a thousand U.K. adults contains the term "Delusion Formation." In that article, they conclude there is "tentative support for the notion that paranormal attributions represent a form of non-psychotic delusions within general populations." (2021, p. 12.)

While discussing mystical experiences, Kelly et al. (2007) observes that they "have been largely ignored by mainstream psychology and neuroscience, and generations of reductionist clinical psychologists and psychiatrists have consistently sought to devalue and pathologize them." (pp. 41-42)

Lack of appropriate vocabulary

A famous concept in linguistics called the Saphir-Whorf hypothesis holds that we can only think about things for which we have words. As explained by Boroditsky, the hypothesis arose in the early twentieth century and was always controversial. By the 1970s many scientists had abandoned it. However, there is now "a solid body of empirical evidence showing how languages shape thinking." (2021, p. 63). For example, studies have shown that speakers of different languages that have different words for talking about time, "differ in how they describe events and, as a result, who did what." Having no suitable words to describe a paranormal experience forces the communicator to rely on inadequate metaphors and analogies.

Absence of community

While spiritualist churches and organizations such as London's Ghost Club (founded in 1862) have been around for decades, many people were unable to access them to talk about their paranormal experiences in a supportive environment. Of course, the Internet has changed all that, and there are a host of platforms that can provide a community for discussing paranormal topics. Indeed, the goal of this thesis is to analyze one of them and to suggest how it can be made better.

Gender Issues

Studies in a number of countries have found that women are more likely than men to believe in the Paranormal. A survey article in 1993 found that "The endorsement of most, but certainly not all, paranormal beliefs is stronger among women than among men." (Irwin, 1993, p. 8). In particular, women were more inclined to believe in ESP, telepathy, hauntings, and psychic healing. On the other hand, men showed higher tendencies to believe in UFOs "and in extraordinary life forms such as the Loch Ness monster." (p. 8).

Many authors, notably Belenky et al., have proposed that there are unique "Women's Ways of Knowing" and it seems reasonable to address how gender might play a role in the discourse about the paranormal. For this study, their concept of "Constructed Knowledge," in which women confront traditional models of knowledge and create new knowledge, is the most relevant. (1986, pp. 131-152) Challenging hegemonic concepts is often an important part of communicating about the paranormal.

When considering gender as it applies to computer-mediated communication, Turkle discussed the concept of female "computation reticence," writing that "The computer has no inherent gender bias" (2004, p. 33). She goes on to note that women may, however, reject a

relationship with computer technology because they have "a reticence to become more deeply involved with an object experienced as threatening" (2004, p. 33). Turkle adds, "My research suggests that women's phobic reactions to the machine are a transitional phenomenon." (p. 33)

This research cannot comment definitively on whether or not that transition has occurred simply because, due to the pseudonym-based structure of Reddit, it is not always obvious if the poster is male or female. However, in reviewing many posts in r/Paranormal, some of which do disclose the poster's gender, it appeared that everyone was fairly comfortable using the technology and did not exhibit significant reticence. Of course, we have no idea if some people were so intimidated that they did not post at all. However, it appears likely that the comfort with computer technology in women that Turkle predicted two decades ago has indeed become a fact and is serving them well.

Lessons from Communication About Mystical Experiences

While mystical and paranormal experiences do not precisely coincide, they do have many similarities. Much can be learned from the extensive body of literature on how we communicate about mystical topics.

Ineffability

In *Mysticism and Philosophy*, Stace (1960) makes a fascinating point about mystical experiences. He observes that people who have them often describe the phenomenon as "ineffable" (1960, p. 277). This term is defined as "incapable of being expressed in words" with a secondary meaning of "not to be uttered - taboo" (Merriam-Webster, 2021, n.p.). Despite having had experiences that they cannot put into words, people who experience a paranormal or mystical phenomenon frequently have a burning desire to communicate about their experiences.

This may partially explain why r/Paranormal has 1.2 million registered users, which is quite high for a subreddit.

Keefe et al. (2007) put it this way: "Having declared that their experience cannot be described in words, (mystics) immediately go on to describe it, often at prodigious length". This rather delightful paradox is addressed by another author, Price (1962) who suggests that the mystic simply does not have the words to express a concept that is relevant to their experience. He uses the example of "Scotch mist," which describes a state where it is both raining and not raining. Without knowing that phrase, this concept is hard to articulate. Keefe et al. suggest that "more first-person familiarity with mystical experience could lead to reduction of the apparent paradoxicality." They suggest that "we need to extend and refine our currently impoverished methods of phenomenological description and analysis.' (p. 504, footnote 7)

As for how we might gain that familiarity, thoughtful and open-minded reading of sources like r/Paranormal may help. We could also turn to prophets, philosophers, and poets.

T.S. Eliot made masterful use of "ineffable" in describing the secret third name of a cat:

But above and beyond there's still one name left over, And that is the name that you never will guess; The name that no human research can discover— But THE CAT HIMSELF KNOWS and will never confess. When you notice a cat in profound meditation, The reason, I tell you, is always the same: His mind is engaged in a rapt contemplation Of the thought, of the thought, of the thought of his name: His ineffable effable

Effanineffable

Deep and inscrutable singular name (Eliot, 1939)

A Sense of Universality

Stace also comments that people who have mystical experiences frequently choose certain words to describe them, and the terms (allowing for language translation) span across many cultures. For example, the Brihadranayaka Upanishad says, "As a lump of salt thrown into water melts away...the Individual soul, dissolved is the Eternal – pure consciousness, infinite transcendent." (Stace, 1960, p. 118) Many centuries later, the English poet Alfred Lord Tennyson wrote in a letter about "a kind of waking trance...individuality itself seemed to dissolve and fade away into boundless being" (p. 119). Stace goes on to note how "the words 'fade away' and 'melt away' keep reappearing in the descriptions, which we cull from different cultures, times, lands, all over the world." (p. 119).

Trepidation

All is not sweetness and light in the world of paranormal (or mystical) communication. A surprising number of posters described genuine fear, bordering on terror, as a result of the events that they had experienced. This rarely happens in a subreddit devoted to Cooking Tips, and yes there is one, r/Cooking. Having fear that talking (even online) about a paranormal experience may make it worse is a factor that definitely sets this subject off from the norm of online communication. A similar phenomenon was noted in Dr. Glasberg's in-person class on Paranormal Communication, in which a few people expressed concern that even talking about their spiritual experiences might, in some way, make them worse.

Chapter 4: Methodology

To answer the primary research question, "What social media affordances are being used to communicate about the paranormal, and how are they being used?" It was first necessary to select a relevant social media platform to study. For consistency, I decided to find a single platform that had sufficiently rich data about the paranormal, and that could be accessed and analyzed in a systematic fashion.

Choosing a Platform

Consideration was given to all of the leading general-use social media platforms (e.g., Facebook, Instagram, Twitter, YouTube, TikTok, Reddit) as well as niche platforms like Parler, Gab, and Telegram. (Statista, 2022). Some, like Parler and Gab, were eliminated because of their clear ideological bias, which might drive away users with valuable things to say.

Platforms that are predominately in a language other than English (Weixin/WeChat, Douyin, Sina Weibo) were eliminated because the translation process could alter the data significantly. Others (e.g., TikTok and YouTube) are primarily video platforms that would have required transcription to turn their content into analyzable text. It was also decided to avoid highly specialized platforms or those that restrict access or charge a fee for basic user access.

Another consideration was safety from a technological perspective. There have been anecdotal reports of viruses and spyware propagating on some of the more notorious platforms like 4chan and 8chan.

A final consideration was the ability to obtain and use material from the platform from both technical and legal perspectives. These will be discussed in detail below with respect to the platform that was selected. The detailed selection criteria used were:

Criterion	Rationale
Primarily text-based	To enable effective content analysis
Not overly political or ideological	Such an orientation might bias the postings and mask important information
Widely available internationally (though not necessarily in every country, e.g., China)	To allow a cross-cultural data sample
Free to use, aside from Internet access costs	To allow as wide a data sample as possible
"Scrapeable" – i.e., there exists a procedure (automated or manual) to download postings for analysis.	Most platforms are ephemeral, so postings need to be captured. The data also needs to be preserved for research documentation purposes.
Doing the study is not prohibited (e.g., by copyright law, firewalls, etc.)	Obviously, the research should not contravene any laws or ethical principles.
The platform should have a sufficient volume of relevant postings	To provide a rich data set for analysis
The platform should have been in existence for a substantial period of time.	To provide a rich data set and at least the possibility of some longitudinal analysis.

Reddit, and in particular, the subreddit r/Paranormal, was selected as the platform of choice. This subreddit has 1.1m users (though it is not stated how many of them are active) and has been in existence since July 10, 2008. In its "About Community" section, it is described as follows:

r/Paranormal provides a platform to discuss and share true first-hand paranormal experiences, evidence, thoughts, and theories. The r/Paranormal community is a place for believers and skeptics alike. (Reddit, 2023)

There is a substantial volume of relevant postings available, and they have unique identifiers (Reddit IDs).

The deeper rationale for this choice is that a major goal of this study is to hear and understand the thoughts and experiences of the common people about paranormal topics. TV producers, famous psychics, and book authors have long been able to get their ideas in front of the public. What is fascinating and exciting about social media in general, and this study in particular, is that anyone, anywhere, with Internet access can make a contribution that, if it merits attention, can be viewed widely, and impact many people.

I will also argue that social media platforms have an excellent opportunity to introduce new affordances that will inspire more comfort and confidence in those who wish to discuss paranormal topics in a mature and serious fashion.

Copyright Issues

The only area where r/Paranormal is problematic relates to copyright and direct quotation of posts. The subreddit has a prominent notice stating restrictions on the use of content (see Appendix 1). Essentially it mandates contacting the original poster for permission to quote their submission.

However, guidelines for the ethical use of social media data usually advise against a researcher interacting with posters. Kosinski writes, "Social scientists disagree on whether collecting publicly available data falls within the regulatory definition of HSR" (human subjects research) (2016, p. 551). They do provide general guidance permitting the use of "information that is publicly available." (p. 553). Essentially, the direction is to avoid any interaction with the individuals and to maintain anonymity. Also, "No information that can be attributed to a single

individual, including demographic profiles and samples of text or other content, is to be published or used to illustrate the results of the study." (p. 553).

From the legal perspective, since this thesis is being written in Canada, the *Copyright Act* of Canada is applicable. As noted in a posting from the Simon Fraser University library, "It is important to make sure that you consider the Canadian law and are not relying on U.S. information, which has no jurisdiction in Canada." (SFU, 2022). That source explains the "fair dealing exception," which "allows you to use other people's copyright protected material for the purpose of research, private study, education, satire, parody, criticism, review, or news reporting, provided that what you do with the work is 'fair.'" (SFU, 2022)

It was therefore decided that, for the purposes of this study, postings could be used and analyzed without directly quoting them. Instead, they are described in general terms, and the specific affordance(s) involved are explained and analyzed. No information that would identify a poster is included. This set of rules accomplishes the goal of the research question while complying with both the letter and the spirit of the r/Paranormal notice and Canadian legislation. It is worth noting that this explicit copyright notice was actually very helpful in thinking through these issues. Many social media sites (and, in fact, most subreddits) do not lay out their ground rules this clearly.

Sampling Strategy

There are certainly research questions like "What percentage of postings are accompanied by an image?" that would require a quantitative approach, such as downloading 1,000 postings and counting the ones with images. However, the research question in this study is quite different. I am essentially seeking to build a list of affordances that are relevant to how users talk about the paranormal. This suggests the use of purposive sampling, a non-probability sampling method in which postings are selected because, in the judgment of the researcher, they help to answer the research question. Dudovsky adds that purposive sampling "can be effective in exploring anthropological situations where the discovery of meaning can benefit from an intuitive approach." (Dudovsky, 2022, n.p.)

Therefore, the study will not make any quantitative claims about the data set or assert that a representative sample has been obtained. In fact, the nature of purposive sampling means that another researcher might well select different postings and consequently find very different affordances.

Building the List of Affordances

Automated data gathering tools such "Python Reddit API Wrapper (PRAW)" are available to automatically scrape postings (and replies) into a text file. (Tanner, 2019). However, the output format of PRAW was less useful for the purpose of this study than the normal Reddit interface, so PRAW was not used. Instead, the data was collected by selecting postings of interest and manually copying them into a Microsoft Word document for archival purposes, along with noting their Reddit ID.

The researcher scanned through several months of posts, looking for ones that may indicate additional affordances. If a new affordance was observed, it was added to the list, and the posting that inspired its addition was added to the archive file.

Content Analysis in a Web 2.0 Environment

Skalski et al. noted, "In order to content analyze interactive media content, it's important to understand that interactive media users are more than just receivers or consumers (2017, p. 201). "They observe that platform users "have an active role in adapting, altering, and even producing content." (p. 201). The data set chosen for this analysis (selected postings in r/Paranormal) always have an original post and often comments from other users. As there are sometimes hundreds of comments, the analysis has been restricted to the original post for manageability.

Since the goal was to identify affordances being used, a straightforward explicit content analysis, as described by Neuendorf (2016), was used. Postings were read in the Reddit interface and copied to a file if they might potentially yield new affordances of interest. They were then reviewed to find the best example of each.

The unit of sampling was the complete original post, and the unit of analysis was a "statement" within the post that was relevant to an affordance. (Neuendorf, 2016, p. 70). Other data analysis techniques, such as Critical Discourse Analysis (CDA) as per Krippendorff (2009), were considered but were not deemed necessary to identify affordances. In addition, the copyright and policy restrictions on *verbatim* quotation of posts would have made the reporting of CDA results problematic.

Data Handling and Retention

The researcher will provide the original texts of posts that were included in the thesis to the supervisor for archival purposes, and to confirm that the researcher has faithfully gone from "Posting text" to "Summary without direct quotation." The researcher will correct any
deficiencies or inaccuracies. After the defense, copies of the original archive files will be destroyed except for one to be kept in a secure location by the supervisor for a period of five years. This policy and time period are consistent with the University of Calgary Research Policy, which says, "The University advises students conducting independent research to apply this rule to their scholarly information assets." (University of Calgary, 2014).

Chapter 5: Analysis

The goal of this research is to explore the affordances of social media and how they are being used to communicate about paranormal topics. A secondary goal is to suggest additional affordances that could improve that communication process and help to normalize the paranormal.

Choosing the Affordances

While the concept of affordances was initially developed in the field of ecology (Gibson. 2011), scholars in the field of culture, communications, and technology have applied and extended it to analyze the capabilities of social media platforms and how they are used. Each author brings their own analytic perspective (Foucauldian power perspective, techno-determinism, social constructivism, etc.), which informs the list of affordances they provide. Sun & Suthers (2021) summarize the situation with "a consensus on the definition of affordances does not exist and indiscriminately applying these concepts in the field of social media studies may lead to further confusion and misinterpretation." (3017).

Instead of using lists of social media affordances from prior research, this study iteratively developed a list of affordances from actual postings in the target data set (recent postings on the r/Paranormal subreddit.) A consequence is that some affordances identified may seem self-evident or even a necessary part of a social media platform. However, it is important to note that social media platforms actually do vary significantly in the affordances they provide, who can use them, and how they can use them.

Extracting and Processing the Posts

As described in the methodology chapter, respect for copyright law, as well as the stated policy of the site, precludes *verbatim* quotation of r/Paranormal postings. Instead, they are described, and the relevant affordances are analyzed. For audit purposes, each description contains the unique Reddit-issued identifier of the post, for example, zzpkc6. At least while the posts are still available on Reddit, anyone seeking to read the full post (without violating any copyright or other restriction) can put that Reddit ID into a standardized URL. The procedure for doing this is found in Appendix 1. Recognizing that Reddit may take down posts over time, the full text of the posts is also being retained in an archival document which is being kept separate from this thesis.

The dataset was obtained by manual screen-scraping at various dates in the period February 1, 2023, to March 25, 2023, using a newly registered Reddit account (u/Brilliant-One2461) that had no posting or viewing history. The unique identifier assigned by Reddit ensured that the same posting was not considered more than once., except where it illustrated multiple affordances. Again, the affordances identified will be those that were found to be useful and are (or could be) available on Reddit. Often there were multiple postings demonstrating an affordance, so the clearest and most compelling example was chosen for inclusion.

My goal was to find ten different and relevant existing affordances and then develop ten additional ones that would be useful and improve communication about the paranormal. It is important to note that comments about what is available in r/Paranormal are accurate as of the time of writing. Since affordances are dynamic, they could be added, deleted, or changed at a later date.

Existing Useful Affordances Derived from Postings

Affordance 1: Video evidence

Reddit ID: zzpkc6.

Summary without direct quotation: The poster's child was suddenly yanked out of bed by something unseen. The poster submitted video evidence of this happening from a camera in the child's room.

Affordance demonstrated and added to list: Video evidence.

Why it enables discourse about the Paranormal: Simply describing this incident would have been far less impactful than actually posting the video. It also allows those who wish to debunk it to watch the video.

Does r/Paranormal have this? Yes, by embedding a link to an external video source. According to the site Community Rules (Appendix 2, Rule 2), imgur.com is the only approved video source. However, this posting links to a YouTube video, https://youtu.be/Kf7tC5ISYr8

Affordance 2: Photographic Evidence

Reddit ID: 1234zt6.

Summary without direct quotation: The poster found a tooth in the bathroom and asked if anyone had lost one, and no one had. On request by another user, the poster submitted a photograph of the tooth in a plastic bag.

Affordance demonstrated and added to list: Photographic evidence.

Why it enables discourse about the paranormal: Other posters commented on the photograph, some noting that it does indeed appear to be a human front tooth, including one who claims to "work in dental." Others opine that it is from an animal such as a dog or a deer. On paranormal topics, the original poster received mainly reassurances that it was unlikely to be anything particularly evil but might be a message from someone who had recently died.

Does r/Paranormal have this? Yes, and imgur.com is the specified photo-posting site.

Affordance 3: Ability to provide location.

Reddit ID: 10zymou

Summary without direct quotation: The person reports staying in a specific hotel, feeling heavy pressure, and seeing a dark figure. A companion reported having very dark dreams. The room felt very cold, and the Wi-Fi connection, usually good, became very slow.

Affordance demonstrated and added to list: Ability to describe a specific location.

Why it enables discourse about the Paranormal: Precisely naming the hotel was a vital part of telling this story and also contextualized it in terms of the geographical location. It also enabled others who commented on this post to build on it, saying things like "South Carolina is nicknamed 'The Home of the Devil."

Does r/Paranormal have this? Yes, location can be mentioned in text, but there is not full geotagging.

Affordance 4: Tags

Reddit ID: 10xno1e

Summary without direct quotation: A person in a graveyard has trouble finding their grandfather's grave; closes eyes and sees a tall figure (grandfather was 6'5") and is then led to the person's gravesite. The original poster selected the Flair "Apparition".

Why it enables discourse about the Paranormal: The fact that this is tagged with "Apparition" allows people who are interested in certain paranormal phenomena to find posts of interest to them easily.

Affordance demonstrated and added to list: Tags.

Does r/Paranormal have this? Yes, and there is a predetermined list of tags. They are called "Flair," and each posting must have at least one Flair checked. This list of allowable entries is established and maintained by the subreddit moderators. At the time of this writing, the list includes Question, Debunk This, Findings. Equipment, EVP, Photo Evidence, Video Evidence, Apparition, Cryptids, Demonic Activity, Demonic Possession, Deja Vu/Jamais Vu, Ectoplasm or Ecto-Mist, Elf/Fairy, Encounter, Experience, Haunted House, Haunting, Jinn, Orbs, Ouija Board Experience, Poltergeist, Residual Activity, Tulpa, UFO, Unexplained, Evocation, Extrasensory Perception, Locution, Levitation, Psychokinesis, Retrocognition, Telekinesis. Telepathy, Xenoglossy, Astral Projection, Deathbed Phenomena, Hypnagogic Experiences, Incubus, Mutual Dream, Out of Body Experience (OBE), Precognitive Dream, Visitation Dream, Shadow Man, Shadow People, Sleep Paralysis, Succubus

Affordance 5: Anonymity/Pseudonymity

Reddit ID: 10vsu3n

Summary without direct quotation: The person reports the same growling, non-human voice on the phone occurring two years apart. They say they do not tell people about it because it sounds weird and outlandish.

Why it enables discourse about the paranormal: Poster is able to report an experience, obviously of concern to them, that they do not want to be attributed back to them. By using a pseudonym, they were protected from embarrassment or other adverse consequences.

Affordance demonstrated and added to list: Anonymity/Pseudonymity

Does r/Paranormal have this? Yes, in fact, a randomly assigned user name is the default on Reddit. It requires some effort to change it.

Affordance 6: Predictions

Reddit ID: 1109w92

Summary without direct quotation: The poster reports two incidents in which they predicted, in dreams, that someone would die, and then they actually did pass away soon after.

Affordance demonstrated and added to list: Predictions.

Why it enables discourse about the paranormal: Predictions that actually come true provide some evidence to counter the tendency to dismiss the Paranormal. To be clear, the predictions mentioned are not verifiable since the person is reporting after the fact and could certainly be lying or exaggerating.

Does r/Paranormal have this? Definitely -- just the way this poster did it. Interestingly, Reddit also has other "prediction" affordances though they are not very well known. One feature is called "prediction tournaments."(Reddit, 2021) It allows people to compete in making predictions, though they are usually about things like "Who will win an Oscar?"

There is also a subreddit specifically for predictions related to the Paranormal. It is called r/predictions and is much smaller than r/Paranormal (only 7,400 members currently, even though it was created on January 10, 2009). Reddit users must apply for access. The subreddit's description reads, "This is a place to make your predictions utilizing methods like scrying, clairvoyance, prophetic dreams, remote viewing, automatic writing, numerology, astrology, all forms of divination. This is not for marking your words or for a "called it" type of thing. There are subreddits for those things. This is for extrasensory or esoteric predictions." (Reddit, 2009). Compared to r/Paranormal, this subreddit gets far fewer postings, around one a week or so, so it was not analyzed in this study.

Affordance 7: Professional Credentials

Reddit ID: 10ydtl6

Summary without direct quotation: Poster, who says they are a firefighter/medic, reports going to a house fire, hearing someone screaming for help but not finding anyone, and being told to stand down. After the fire was extinguished, they searched for two hours and never found any trace of a person.

Affordance demonstrated and added to list: Professional credentials.

Why it enables discourse about the Paranormal: The (self-described) professional credentials set the context for the story and also bolster the credibility of the witness.

Does r/Paranormal have this? Yes, by self-assertion, as in this post. There is no mechanism to prove or confirm credentials.

Affordance 8: Affirmation of Religiosity

Reddit ID: vubwnf

Summary without direct quotation: The poster describes numerous disturbing experiences relating to Catholicism, i.e., things that happened in church and at the homes of parishioners.

Affordance demonstrated and added to the list: Description of religious affiliation.

Why it enables discourse about the Paranormal: The story would not make much sense if not situated in the Roman Catholic environment.

Does r/Paranormal have this? Not explicitly, but as evidenced by this post, it can be embedded in the title and text of a post and was easily found using the Reddit search function with the term "Catholic."

Affordance 9: Global search of r/Paranormal

Reddit ID: 1234zt6

Summary without direct quotation: The poster reports finding an (apparently human) tooth and asks about the significance. Others (found with a search on the word tooth) reply about their teeth-finding experiences.

Affordance demonstrated and added to the list: Global search function.

Why it enables discourse about the paranormal: Details are often important to those who report paranormal experiences, and the search function is an efficient and effective way to find others who have had similar experiences. It also helps people to find a posting that they recall but can only remember certain key words.

Does r/Paranormal have this? Yes, there is a search bar that searches the subreddit either for single words or for phrases (using quotation marks). It can also be set to search all of Reddit, though this is likely to produce a large amount of data.

Affordance 10: Review of external sources

Reddit ID: 12k61uy

Summary without direct quotation: Posters notes that they have just signed up for a T.V. service and noticed how many tv shows there are about the paranormal and seeks recommendation as to which ones are worth watching.

Why it enables discourse about the Paranormal: "Charlatans" (the word used by the poster) are a real problem in the paranormal space, so advice on good quality paranormal content might be of great benefit to this poster and many others.

Does r/Paranormal have this? Yes, and this poster promptly received 16 comments, most of them helpful.

Suggested New Useful Affordances

A secondary research goal is to conceptualize possible additions to r/Paranormal (or other social media platforms) that would help facilitate and normalize communication about paranormal topics. Many involve small technological developments, but all are feasible. The list is by no means exhaustive but is intended to inspire thinking about interesting new affordances that could be developed. This section is written specifically with respect to r/Paranormal, but, like the previous catalog of affordances in use, it should be more broadly applicable.

Suggested Affordance 1: Out-of-band sound translation (Infrasound)

Description: Reports of paranormal phenomena are sometimes accompanied by descriptions of sounds that are outside the range of human hearing and certainly beyond the capability of the Internet and home computer speakers to reproduce. They can be captured with specialized recording equipment. Reddit (and all other social media platforms) lack the ability to transmit that sound. However, a simple bit of programming could translate the sounds into those within the range of human hearing. They could then be attached to a video, etc.

Suggested affordance: Technologies exist to translate sounds outside the normal human hearing range into audible frequencies. One company (Sonotec, n.d.) makes a software-based "heterodyne and phase vocoder" that is used for engineering applications like leak detection in compressed air systems.

Suggested Affordance 2: Tamper-proof predictions.

Description: It was surprising to learn that Reddit (unlike most other social media platforms) does have some infrastructure for making predictions and even a subreddit (r/predictions) dedicated to paranormal-related predictions of the "Putin will die in August"

variety. However, there is significant room for improvement since posters can delete posts (e.g., predictions that did not come true). Psychics often make predictions, and of course, they remind you when they come true and tend to forget about them if they do not.

Suggested affordance: A simple add-on to the platform could allow a person to make a prediction and "seal it" until a certain date in a tamper-proof way. This could be accomplished by inscribing it on a blockchain (much like the way Bitcoin is protected). An entry on the blockchain cannot be altered by anyone, including the originator, and can be viewed by anyone, allowing us to confirm if that prediction actually came true.

Suggested Affordance 3: Remote viewing auditor.

Description: Remote viewing is one of the more common examples of claimed paranormal phenomena. (Targ, 2010, Simonsen, 2020). It was reportedly used by spy agencies in the U.S. (Project Stargate) and elsewhere "with the specific objective of gathering intelligence information of military significance." (Srinivasan, 2002, p. 1). With today's technology, someone could attempt to use a program like Google Maps to fake remote viewing. However, Google Maps photos are often months out of date and certainly not in real-time.

Suggested affordance: It may be feasible to recruit someone who is actually at the "remotely viewed" site to confirm or deny if what the remote viewer is reporting is factually correct and contemporaneous. Video technology (such as a Zoom call) can be applied, perhaps implemented as a browser plug-in for ease of access.

Suggested Affordance 4: AI-Driven Post Selection

Description: Reddit has a fairly sophisticated rating system, which is based on upvotes and downvotes as well as "Karma points" and "Awards." The currently top-ranked posting (Reddit ID: jxdggs) in r/Paranormal is written by a woman who describes how her father used to be an exorcist and would bring her along when he did the rite. She recounts some amazing childhood experiences.

Suggested affordance: While the "top" and "hot" posts are usually well worth reading, everyone has their own idea of who writes the most interesting posts. Like most social media networks, there is a "follow" function, and you can certainly use it to see the posts made by a particular person. However, with artificial intelligence technology advancing the way it is, there should be a way to say, "Show me more posts like this one" or even "Show me more posts that I will like."

Suggested Affordance 5: Instant-on recording.

Description: A post (Reddit ID 1206e8q, which actually made "post of the week") describes an instance of xenoglossia in which a woman reports that every night, her husband speaks in a foreign language even though he only knows English. She complains that she has tried to record him doing this but never gets the recorder on her phone working on time.

Suggested affordance: It would be quite simple to create an app that could begin instant audio (and also video if desired) recording at the touch of one button. She would still have to keep her phone (or other device -- this could also be done with a smart speaker like Alexa) handy. However, it might address this concern and also be useful to other people who come upon instances of the paranormal and want to start recording them immediately.

Suggested Affordance 6: Glossary of Paranormal Terms as They Are Actually Used

Description: This was inspired by a post (Reddit ID 11w29hs) that talks about a 2-yearold child "breaking an invisibility spell" by making her lost pacifier suddenly re-appear under her crib, after her parents had searched for it all day. The poster also gives other examples and notes that the pacifier "actively appeared" before his very eyes. While there is a common sense understanding of the term "invisibility spell," if you look it up, e.g., on Google, you are first taken to material about the Dungeons & Dragons game, which is somewhat confusing. Another example is a post (Reddit ID: 12i52oa) that uses the term "cryptid." That word does not appear in *Henderson's Dictionary of Biology* (Lawrence, 2008). While a suitable definition is easy to find through an online search, it would be helpful to have one that is specific to the r/Paranormal context.

Suggested affordance: Just as there is a list of tags (and they too could use definitions), a helpful affordance for r/Paranormal and similar sites would be a glossary that contained the usual meaning of terms like this and which is maintained and kept up-to-date.

Suggested Affordance 7: Paranormal Tour Guide/Ski Friend

Description: Some postings (for example, Reddit ID: 12k4ux5) are basically of the "I'm new here" variety and seek guidance on how to use the subreddit effectively.

Suggested affordance: A "buddy system" or match-up with a co-explorer could be available so that new (or experienced) platform users could explore the subreddit and other paranormal topics with a supportive online friend. This accords very much with the welcoming attitude of the subreddit, i.e., the above post was immediately met with positive comments and offers of help. In an analogous way, Ski Friends are volunteers at ski areas who take strangers on their favorite runs, not for compensation but for fellowship.

Suggested Affordance 8: Paranormal Concordance

Description: This is somewhat similar to the previous two affordances and, in a way, combines them. Biblical concordances are a time-honored tool for sermon-writing clerics and lay students of scripture. For example, using (KingsBible, n.d.), you can quickly find the 13 verses in the Old and New Testament where the word "earthquake". The suggested affordance could pull together both short definitions of terms and pointers to places where they are mentioned. To some extent, this is served by the tagging function ("Flair"), but this would be more precise.

Suggestion affordance: An online engine such as thekingsbible.com/Concordance/ to assist readers in finding uses of terms of interest. The key difference from using the search feature would be the presence of short definitions, which can be important to disambiguate terms that are used differently in the context of the paranormal discussion.

Suggested Affordance 9: Paranormal Wirecutter

Description: Wirecutter is a long-running feature of the New York *Times* in which experts review products and provide detailed product recommendations, usually based on having tested the products. For example, a recent column reviewed drip coffee makers. (Wirecutter, 2023). These reviews are prized for their honesty and objectivity and are a very popular feature of the newspaper. The website has features like allowing you to save reviews and products of interest. People pay extra for it, beyond the regular subscription price.

Suggested Affordance: A review site modeled on Wirecutter, in which reviews of relevant technology (e.g., sound recorders) and books can be presented and discussed. While the

terms of r/Paranormal (Rule 1) ban promotional submissions, this could be something separate that users go to voluntarily.

Suggested Affordance 10: Paranormal 911

Description: A number of the posts reviewed indicated high levels of fear, bordering on panic, on the part of the poster. One post (Reddit ID 122bezt) talks about having nightmares for ten years over a ghostly encounter. Additionally, in Professor Glasberg's class on "Paranormal Communication," he made it clear that certain types of interaction with the paranormal could have serious negative consequences and that students should be alert for that. There are clearly some cases where people need immediate help. By its nature r/Paranormal is asynchronous, so it is not likely that someone in a panic would get immediate help and support.

Suggested affordance: This affordance would work like the "988" suicide prevention line, which immediately connects the person with someone who can help them. It could be staffed by volunteers and, of course, be confidential. The interaction could be by text or voice at the option of the person needing help.

Chapter 6: Findings and Conclusion

This thesis provides a critical analysis of the affordances provided by a popular online discussion space dedicated to communication about paranormal topics. Affordances that are actually used are documented and explained, and new affordances that might improve this communication process are proposed.

Key Findings

Posters talk freely and in-depth about their paranormal experiences.

The subreddit investigated, r/Paranormal, has 1.2 million registered users. There is no information available on how many are regular users of the site. However, indirect evidence of user volume comes from the fact that at noon on a specific Saturday (April 8, 2023), the site shows 407 "Paranormal Enthusiasts Currently Seeking the Truth" (active users). Further indirect evidence is the volume of new postings, which at that time was exceeding one per hour. This does not include comments on other postings, so it seems clear that the site is quite active.

It is difficult to say if people interested in the paranormal are being muted by Foucault's concept of "governmentality." He addresses the power dynamics in society and suggests that "state-phobia runs through many contemporary themes and has undoubtedly been sustained by many sources for a long time." (Focault, et.al., 2008.) So, it is certainly possible that fear of social, economic, or even legal consequences may have an inhibitory effect on talking publicly about the paranormal, even in a pseudonymous venue.

There are certainly parts of the world where expressing interest in the paranormal could lead to adverse consequences, up to and including being imprisoned for witchcraft. According to a 2008 report from the Central African Republic, "Almost half of the 42 women held in the Bimbo prison facility have been accused of PCS (practices of charlatanism and sorcery), listed as a crime on the statute books in the poor central African country." (Arab News, 2018.) The article also notes that "even if women accused of PCS (offenses) get out of jail, they run the risk of being rejected by their community" and describes "the body of an elderly woman accused of witchcraft who was atrociously mutilated and cut into pieces."

From an extensive reading of posts on this subreddit, it appears that most of the posters are in the North American cultural environment and are not being hampered by such social strictures. Of course, we have no way of knowing what is going on in the minds of those people who have a paranormal experience and then choose, for whatever reason, not to make a posting.

A review of postings has also confirmed that paranormal content has much in common with reports of mystical experiences. As Stace (1960) observes, there is often a burning desire to talk about one's paranormal experience, coupled with a lack of suitable vocabulary. The subreddit under review here provides a powerful venue for at least attempting such communication.

Gender Issues Do Not Appear to be a Major Factor

Understanding the possible role of gender might play in paranormal communication was not a research goal of this study. Additionally, posters on r/Paranormal do not explicitly declare their gender, though sometimes it can be inferred from their comments. It is, however, worth noting that the "computational reticence" predicted by Turkle did not show up in the postings. Some postings did exhibit aspects of "constructed knowledge" as described by Belelenky.in that people are developing a narrative sense of self as well as seeking to de-compartmentalize reality. (Belenky, et al., 1986).

Users Learn About Affordances from Experience and From Other Users

In one posting (Reddit ID: 12e7qve, not otherwise analyzed in this thesis), the poster provides a link to a video (Affordance 1), noting that they did not know that links were allowed in a posting. There is also a Reddit practice forum, and one of the suggested affordances (Suggested Affordance 7) involves explicitly seeking out help from others in the online environment.

McLuhan Still Casts a Deservedly Long Shadow Even Over New Media

Some of the aspects of McLuhan's thought, such as hot and cool media, are addressed earlier in this thesis. They continue to provide useful insights and models for analysis.

His four Laws of the Media provide an especially rich framework for thinking about the paranormal. As noted above, McLuhan suggested a tetrad of functionality (a) What does it enhance? (b) What does it obsolesce? (c) What does it retrieve that had been obsolesced earlier? (d) What does it flip into when pushed to the limits of its potential.

Based on the analysis of r/Paranormal postings,

- a) The platform enhances open communication about the paranormal, specifically by allowing people to reach and interactive with large numbers of interested parties.
- b) It obsolesces, to some extent, spiritualist clubs and churches and other venues where people have traditionally talked about the Paranormal.
- c) It retrieves a kind of tribal discussion that we might have seen around a campfire long ago as people shared their fears around natural phenomena like volcanos.
- d) When pushed to its limits, one possibility is fragmentation. Just as in politics people may choose to self-select into echo chambers with others who share their views. However, it is also possible that pushing this medium to the limits might result in a more universal appreciation of the natural world, and perhaps even to new ways of thinking about what science "cannot (yet) explain."

Benefits of the Study

Having a list of affordances that are being used to improve communication may be of benefit to people who want to discuss the paranormal, either on r/Paranormal or elsewhere. There may well be things that they have not thought of on the list of affordances provided. This information may also benefit platform builders by telling them what affordances may be important, at least in this context. These benefits can extend well beyond r/Paranormal and even Reddit.

On a deeper level, I believe there is an important reason why people are so passionate about paranormal topics and discussions of them. Paranormal events can open a door into a kind of thinking that merges the internal world of the mind and the cold facts of external reality. It is frequently life changing.

As Simonsen writes, "such experiences do not have to be confusing or intimidating, but in fact can be deeply meaningful" (2020, p. 29). Perhaps the best example is when someone has a near death experience. "Many people experience a new and more serene relationship with both life and death...where one typically has a feeling of leaving the body, being enclosed by a great light, meeting deceased family members, angels or other spiritual beings, and the like." (p. 29).

This study has only lifted the first veil on the true meaning of paranormal experiences, and communicating about them, but what we see from that uncovering is certainly intriguing.

Limitations

Early in the research process, my peers and professors sagely advised me to restrict my data set to a single, suitably rich social platform. Reddit and its subreddit r/Paranormal were chosen based on a set of criteria. While Reddit is typical of social media platforms, there are

variations in affordances offered. Therefore, the results given here are specific to Reddit and r/Paranormal, though most of them are generalizable to other social media platforms.

A major limitation of this study is the use of purposive (non-probability) sampling to select posts of interest. Essentially, r/Paranormal posts were reviewed for affordances that supported effective communication about paranormal topics in the judgment of the researcher. In cases where there were multiple examples, the one deemed clearest was chosen. This is an inherently subjective process driven by the interests, ideas, and experiences of the person reviewing the posts. Another researcher would undoubtedly have found different affordances of interest and given different examples. This technique fulfilled the research goal of this study, but no claims can be made that the posts selected are a statistical sampling of the posts on r/Paranormal.

Posts on r/Paranormal (and most of the posts on Reddit) are generally pseudonymous. For example, when I created a new account for the purpose of this study, Reddit assigned it the name u/Brilliant-One2461. While it is possible to change to a more meaningful username (Stanton, 2022), actually doing that is quite rare. As a consequence, this study cannot draw any conclusions about the demographics of respondents, such as age, geographical location, or gender. While gender has been addressed as a factor in technology use, this study does not have the data to draw conclusions about it except to say that it did not appear to be a barrier to participation, as a significant number of posters who do choose to mention their gender disclose that they are female.

One of the key ideas behind this thesis is that affordances can (and should) change over time. Therefore, it is important to note that the comments about what can and cannot be done on various social media platforms are correct as of the time of writing (early 2023).

Directions for Future Research

An obvious extension would be to broaden the data source from this specific subreddit. As noted above, that restriction was imposed to have a manageable amount of data and also for it to be in a consistent and analyzable form. The first expansion would be to analyze other relevant subreddits (r/Ghosts, r/ParanormalEncounters, r/ParanormalScience, r/Thetruthishere). Then other social media platforms could be included. Facebook, for example, has the Hauntings, Paranormal, and the Unexplained Discussion Group, with over 228,400 members.

This analysis was restricted to original postings only. Many posts garner dozens, even hundreds of replies. These could also be mined for useful affordances, specifically those that involve person-to-person communication about paranormal topics.

It is important to note that, unlike so many online venues, r/Paranormal is almost unfailingly gracious and helpful. Even if they are debunking a posting, people generally give the poster the benefit of the doubt and almost never suggest ill will. In this respect, it was a remarkably pleasant task to read hundreds of postings, unlike so many other social media sites. Of course, substantial credit should go to the site's moderators, both through the establishment of thoughtful rules (Appendix 2) and the prompt deletion of posts and comments that might be problematic.

This research did not analyze the content of the postings using techniques like Critical Discourse Analysis (van Dijk,1985; 1993). Much could be learned by doing that. In particular,

insights could be obtained about the tantalizing "next question," which is whether or not the online discussion of the paranormal can actually serve as a bridge between the internal and external dimensions of reality.

Conclusion

This study set out to investigate how the affordances of a specific social media platform, r/Paranormal on Reddit, serve to facilitate communication about paranormal topics. As a secondary but related research question, new affordances were proposed that might improve that communication process. Along the way, some of the special features of paranormal communication were explored, especially the idea that it may suggest a new way to bridge the worlds of the internal mind and the external universe.

Such a bridging could have profound effects on our society. Finding a purposeful internal-external interface on the Internet could lead to a significant shift in our cultural evolution and possibly reduce some of our current socioeconomic dysfunctions. If we can talk calmly about topics as challenging as ESP and apparitions, perhaps we can find common ground in many other areas of discourse. It is certainly something that is necessary and would be beneficial to human beings. While only 1.1 million of the Earth's 8 billion people are currently interacting on r/Paranormal, I come away from this study believing that they may well be in the vanguard of the next evolution of both neuroscience and communication.

Appendices

Appendix 1 – Copyright Notice of r/Paranormal

COPYRIGHT INFO: NOTE TO ANYONE WISHING TO USE CONTENT FROM THIS SITE: All experiences submitted herein belong to the original poster. If you fail to ask permission before narrating, translating, producing, or sharing their post to another page/website, the original poster has the right to file a DMCA strike against you. Meaning that they will be able to have their content removed from your page and seek legal action. All inquiries for permission of use must be handled privately. Public postings, comments, chats, or inquires will be removed and the user who posted will be subject to ban.

Appendix 2 - Excerpts from r/Paranormal Community Rules

(To provide a flavor of the "rules of the road" for r/Paranormal, here are some of the highlights of the key rules. These have evolved over the years, probably in response to postings that were deemed to be problematic. For full details, see <u>https://www.reddit.com/r/Paranormal/wiki/index/</u>)

Rule 1: Direct Links, Promotional, Spam, and Use of Bots Violation

r/Paranormal allows all users to submit sourced direct link content only if it supports the submission or comment. However, users are prohibited from posting content that requires or requests subscriptions or followers, promotional content of any kind, content that is related to memes or does not support the submission, purchasing of goods, any social media platform outside of Reddit, or prayer videos. promotional and spam rules are covered under Reddit's Content Policy.

Rule 2: EVPs, Images, and Videos

Users may submit original first-hand EVPs, images, or videos to r/Paranormal by following certain guidelines. Users submitting the post should only provide links to evidence in the text body of the post, not the comments. This can be done by inserting a link (Using https://imgur.com/ only. We do not accept links GoogleDrive or Social media posts) into the body of the post during the creation of a post, or in a post edit after it has already been submitted.

EVPs

EVP evidence should be original first-hand content from the O.P. that contain only the parts that present the evidence. Do not submit full-length audio clips with noted timestamps.

Images

Image evidence should be original first-hand content from the O.P. Users must submit a raw image of the evidence without any editing. If a user wishes to make image corrections (brightness, contrast, etc.), add text, arrows, or an outline to the image, they may do so as a secondary image. NOTE: https://imgur.com/ is the only site approved for images/videos. We do not allow Google Drive or Social Media links to content.

Videos

Video evidence should be original first-hand content from the O.P. without text or background music, and contain only the part(s) that present the evidence. Do not submit full-length video clips with noted timestamps.

Rule 3: Low-Effort & Wall-of-Text Submissions

Users are responsible for adding to the discussion when submitting content to the community. Submissions that show low-effort will be removed.

Rule 4: Non-Paranormal, Fictional Stories, or Non-Personal Experience

r/Paranormal prohibits the submission of non-paranormal, fictional stories, or non-personal experiences.

Rule 5: Bullying, Harassment, Threats, and Trolling

r/Paranormal does not tolerate bullying, harassment, threats, or trolling by any user no matter what side their on. This includes all material or comments that's geared to target or shame other users, and users who have verbal altercations in the comment section. Violators will be banned and their account information will be forwarded to Reddit Admin for review. This rule is also covered under Reddit's Content Policy.

Rule 6: Spamming Submissions, Post Frequency, & Segmented Submissions

r/Paranormal prohibits users from spamming the same post to five or more subreddits, which includes cross-posting, posting too frequently, and segmented submissions. Users who violate any of these are subject to a ban. This rule is also covered under Reddit's Content Policy.

Rule 7: Reference of Substance Use

Users are prohibited from submitting content that reference substance use, such as alcohol, drugs, or prescription medication. Use of certain substances may result in mind-altering events, and will be ruled as a contribution to hallucinations rather than a genuine experience. Additionally, submissions with context that references these substances, but has no clear indication of use, are subject to removal based on moderation review and the post history of the user.

Rule 8: Personal Information & Social Media

Reddit's Content Policy states that users are prohibited from posting other users personal information, which includes any content that does not belong to the user. Additionally, r/Paranormal prohibits the submission of its user's own personal information, to include former addresses where experiences may have occurred. Violation of this policy may result in permanent ban. r/Paranormal defines a users personal information as:

Rule 9: Urgent, Health Related, & Life or Death Submissions

Users are prohibited from submitting content that requests an urgent response from the community, regardless of the reason. Users who believe they are in immediate danger, or feel at risk of harm, should retreat to a safe location and contact a friend or family member, their local

authorities, or an appropriate source for assistance. Users should not rely on an online forum for assistance.

Users should consider seeking medical attention if they suddenly feel sick, lightheaded, dizzy, dread, paranoia, or other symptoms. While the r/Paranormal community may suggest or assist with urgent, health related, or life and death submissions, users should only accept medical advice from a licensed healthcare professional. Users should not follow the advice of self-claimed healthcare professionals over Reddit or the Internet. r/Paranormal is not liable for the loss of life or injury as a result users who relied on responses to their submission.

Rule 10: Request Threads

While normally reserved for paranormal-based celebrities or publicly known persons, the r/Paranormal permits users to submit and participate in various request threads on a case-by-case basis, both within the community and externally, but only by request and approval from the r/Paranormal moderation team. Additionally, users are required to provide proof of user verification before approval. Users, regardless if they have been previously verified, are prohibited from submitting request threads to r/Paranormal without moderation approval. Violators of Rule 10 are subject to a ban. r/Paranormal describes request threads as:

Appendix 3 – Procedure for locating a specific r/Paranormal post from its Reddit ID

Reddit archives posts and comments that are over 180 days old, which means they cannot be voted on, replied to, or reported. Such posts are usually still available and easy to access if you know the unique, alphanumeric Reddit ID of the post.

For r/Paranormal, the procedure for doing this is to create a URL of the following form:

https://www.reddit.com/r/Paranormal/comments/ followed by the Reddit ID.

For example, the posting supporting Affordance 1 (Video Evidence) has the Reddit ID zzpkc6

It can be viewed by entering <u>https://www.reddit.com/r/Paranormal/comments/zzpkc6</u> in a browser bar.

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