



UMBC REVIEW

JOURNAL OF UNDERGRADUATE RESEARCH

2022 VOL 23

UMBC REVIEW

JOURNAL OF UNDERGRADUATE RESEARCH



© COPYRIGHT 2022

University of Maryland, Baltimore County (UMBC)

All rights reserved

EDITORS

Will Murphy

Darius Aligholizadeh

Levi Lewis

DESIGNER

Amy Phan



UMBC REVIEW

JOURNAL OF UNDERGRADUATE RESEARCH

2022 VOL 23



Consistent with its commitment to academic freedom, UMBC does not restrict the topics of inquiry that can be accepted for publication in the *UMBC Review*, the conclusions that are reached in student work, or the representations chosen by the student and mentor for that work. With the approval of their mentors, students may submit any mentored research or scholarship to the editorial board of the *UMBC Review* while they are UMBC undergraduates. Each submission's complete text has been approved by the mentors and editors following outside review of experts in the field of research. UMBC supports the rights of our student researchers to academic freedom and stands by the final products as the original and professional results of advanced undergraduate research.

TABLE OF CONTENTS

- 15** **MARYAM ELHABASHY** *Anthropology*
“Beyond Alternative: Hijama’s Place in the Health Beliefs of Muslim Women Living in America”
- 41** **TERRENCE MOORE** *Social Work*
“Physician–Assisted Suicide and Maryland’s End-of-Life Option Act”
- 53** **KEREN HERRÁN** *Public Health*
“Analysis of Mental Well-being of Environmental Migrants in Maryland: A Comparison Study”
- 83** **KARINA LOPEZ-BROWN** *Information Systems*
“Digital Divide During the COVID-19 Crisis: Lack of Internet Connectivity and Community Mesh Networks”
- 97** **JOSHUA WALTERS** *Mathematics*
“Mathematical Model of Computer Viruses Spread on a Closed Network”
- 115** **MATTHEW KELBAUGH** *Linguistics/History*
“Restoring Russian Hegemony in the Caucasus: Coverage of Georgian President Mikheil Saakashvili and the 2008 Russo-Georgian War in Russian and Ukrainian Print Media”
- 141** **TRISTAN HEIBEL** *English*
“Agency in the Representations of Medieval Aristocratic Women in the Illuminated Manuscripts of Chrétien de Troyes”
- 173** **MELISSA A. WILLIAMSON** *History*
“The Role of Art in the Tulipmania Speculation during the Dutch Golden Age”
- 201** **YONI ISAACS** *History*
“At the Birth of Modern Socialism: A Comparative Study of the Ideas of Thomas Paine and Thomas Spence”



EDITORS' INTRODUCTION

Welcome to the 23rd volume of the *UMBC Review!* For over 20 years, this journal has featured the exceptional research completed by undergraduate students on campus. Throughout the last two years of living in a global pandemic, the traditional ways through which students have approached research and their education have undoubtedly changed, but the ambitious work in this journal reflects an impressive commitment to academic excellence and exploration. These authors have completed thoughtful research, asked new and exciting questions, and looked back in order to contextualize the present.

The work in this journal stretches across disciplines, centuries, and continents. We are proud to present the following nine articles, which reflect a diverse selection of research organized according to the shared themes and concerns these authors investigate. Authors **Elhabashy** and **Moore** explore marginalized and controversial notions of health and well-being, underlining how autonomy in wellness nourishes quality of life, even through the choice to end it. **Herrán** and **Lopez-Brown** analyze inequities within the physical and virtual realm to examine how climate change and the COVID-19 pandemic have affected our health and how to remedy such detriments. **Walters** investigates the ever-growing role of computers in our lives as well as how to protect our devices from external invasion. **Kelbaugh** and **Heibel** analyze conflicting artistic and textual accounts to better understand how various mediums communicate unique perspectives on agency and intention. Finally, **Williamson** and **Isaacs** offer rigorous historical analyses which seek to correct dominant narratives and contextualize modern socio-economic conflicts. The following papers include new and insightful research that advance their respective fields and contribute to our understanding of the changing world around us.



MEET THE AUTHORS

Maryam Elhabashy explores hijama, or cupping, as a medical practice used by Muslim women to create unique health and healing systems.

Terrence Moore examines Maryland's End-of-Life Option Act of 2020 through a social work lens and proposes a grassroots advocacy plan in favor of aid-in-dying legislation.

Keren Herrán investigates the mental well-being of migrants in Maryland who were displaced by disasters related to climate change, and then determines what areas of concern need to be remediated for improved health services.

Karina Lopez-Brown scrutinizes the unequal access to Internet resources and how it was exacerbated during the COVID-19 pandemic, as well as how wireless mesh networks may hold the key to solving this crisis through equitable and widespread Internet access.

Joshua Walters evaluates the spread of computer viruses within a network of devices through a mathematical model and determines how certain safety measures may optimally help the containment of that virus.

Matthew Kelbaugh analyzes Ukrainian and Russian print media's coverage of the divisive political figure and former President of Georgia, Mikheil Saakashvili, highlighting the cultural and political zeitgeists at work during the 2008 Russo-Georgian War.

Tristan Heibel studies manuscripts of twelfth-century French poet Chrétien de Troye to illuminate his depictions of women's agency in the aristocracy.

Melissa Williamson offers a nuanced study of art history, botany, and the formation of the Dutch Republic to explain the often misunderstood "Tulipmania" economic bubble.

Yoni Isaacs contrasts the work of 18th century revolutionaries Thomas Paine and Thomas Spence to contextualize the foundations of socialist theory.

The *UMBC Review* publishes undergraduate research of the highest quality. Each paper underwent rigorous peer review from off-campus faculty and professionals, who evaluated the authors' contribution to their respective disciplines. Additionally, the authors worked through several rounds of revision with the editors to further refine their paper. The end result is the professional research you see here. We hope you will take part in and enjoy this journey of discovery.



ACKNOWLEDGMENTS

Faculty advisors play an essential role in the process of creating ideas and publishing research at UMBC. We'd like to thank the following faculty advisors for providing guidance and support to our student authors throughout the publication process:

Dr. Sarah Chard
Dr. M. Nicole Belfiore
Dr. Foad Hamidi
Dr. Dawn Biehler
Dr. Brad Peercy

Ms. Vira Zhdanovych
Dr. Gail Orgelfinger
Dr. Amy M. Froide
Dr. Daniel Ritschel
Dr. Bambi Chapin

We would also like to thank our off-campus peer reviewers. We are particularly grateful for the time they spent to review undergraduate research, and for the expertise they provided which aided us in our process.

Dr. Alan Wiig
Ms. Barbara Benitez-Curry
Dr. Maria K. Cameron
Dr. Yan Wu
Dr. Jocelyn Turner-Musa
Dr. Anton Fedyashin
Dr. Erick Lauber
Dr. James Kunz
Dr. Shawn P. Cooper
Dr. Jessica Keene
Dr. Reba Soffer

Dr. Gail Savage
Dr. Jared A. Ball
Dr. Christopher M. Masciocchi
Dr. Daniel E. Cohen
Dr. Stephen C. DiBenedetto
Dr. Jennifer Joelle White
Dr. Shao-yun Yang
Dr. Jill Scheibler
Dr. Gitika Talwar
Dr. Jean Russo
Dr. Nicholas Foreman

Finally, we would like to thank the on and off campus proofreaders. We are grateful to these individuals for their diligent review of each paper.

Dr. Tanya Olson
Dr. Ryan Bloom
Dr. Jessica Berman
Dr. Diane Lee
Dr. Elaine MacDougall
Dr. Kathleen A. Carroll
Dr. Sarah Fouts
Dr. Marilyn Demorest
Dr. Anne Sarah Rubin
Dr. Arthur Johnson

Dr. Aubrey Etopio
Dr. Timmie Topoleski
Dr. Mirela Cengher
Dr. Dillon Mahmoud



FURTHER ACKNOWLEDGMENTS

Thank you to the following for their financial support of the *UMBC Review* and their commitment to undergraduate research:

Dr. Freeman Hrabowski –

President of UMBC

Dr. Katharine Cole –

Vice Provost and Dean of Undergraduate Academic Affairs

Dr. April Householder –

Director of the Undergraduate Research and Prestigious Scholarships

The Office of the President

The Office of the Provost

Finally, we would like to thank our own advisors for their time and guidance, and especially for their support in helping us develop and publish this edition of the *UMBC Review*:

Dr. Molly Ayn Jones-Lewis –

Editorial Advisor, Department of Ancient Studies

Mrs. Laura Schraven –

Graphics Advisor, Associate Director of Marketing & Promotions,
Campus Life, Division of Student Affairs

We invite you to enjoy the 23rd Volume of the *UMBC Review*!

Will Murphy –

Senior, Theatre Studies Major,
Media and Communication Studies Major

Dariush Aligholizadeh –

Sophomore, Biochemistry & Molecular Biology Major
Computer Science Major

Levi Lewis –

4th Year, English Communication & Technology Major
Media & Communication Studies Major Music Minor

Amy Phan –

4th Year, Computer Science Major
Visual Art: Concentration in Graphic Design Major



01

Beyond Alternative Medicine: Hijama's Place in the Health Beliefs of Muslim Women Living in America

Maryam M. Elhabashy

Department of Sociology, Anthropology, and Public Health
Dr. Sarah Chard & Dr. Bambi Chapin

Image: Ahmadiyeva, Aisyly. "Vacuum therapy. Cup massage. Hijama." *Shutterstock*. Item ID: 1564606489.

BIOGRAPHY

Maryam Elhabashy was a Cultural Anthropology major and graduated from UMBC in May 2021 with a minor in biology and a certificate in Human Context of Science & Technology.

During her time at UMBC she served as President of the Anthropology Club and was the 2021 recipient of the Outstanding Student in Anthropology Award. This study exploring hijama among Muslim women in America received funding through the UMBC Undergraduate Research and Distinctive Undergraduate Experience Research Awards and was presented at the 2021 annual meeting of the American Anthropological Association.

Immediately after her graduation, Maryam interned at the National Institute on Minority Health and Health Disparities as an AMGEN Scholar. Currently, she is working as a research assistant at the Rutgers School of Public Health. She intends to attend medical school with aspirations to continue exploring and bridging gaps between social phenomena and medical outcomes in increasingly diverse patient populations.

RESEARCH JOURNEY

When I first heard of hijama, I was 11 years old. I recall that throughout the conversation I silently recoiled at the descriptions of the practice, which involves making small incisions on the skin and applying suction with cups to draw out toxic blood. Fast forward a decade later. I was a junior in college tasked with conducting an independent ethnographic research study on a topic of my choosing as a capstone. My curiosity about hijama was reignited. I decided to conduct research on how cupping fit into the health narratives of Muslim women in the Baltimore–Washington area with the intention of better understanding how people may consume and promote traditional healing techniques. This transpired into a project that encompassed more questions pertaining not only to hijama's significance as a modification to the health schema of clients, but also to the role hijama practitioners have in changing these health and wellness perceptions. With the support of fellow anthropology students and the invaluable guidance of my advisors and professors, Dr. Sarah Chard and Dr. Bambi Chapin, I was able to complete research which was presented at two URCADs and became the subject of my senior honors thesis.

ABSTRACT

Hijama (also known as cupping) has long been practiced among Muslims for the maintenance of health and the preservation of sunnah (Arabic for prophetic practice). The practice of cupping is an ancient one. The earliest records are found in the ancient Egyptian Ebers Papyrus. Growing interest in cupping in the United States has prompted questions regarding the utility and efficacy of the practice and where it fits (if at all) within mainstream biomedical narratives. These questions have become increasingly relevant to both hijama practitioners and clients, especially in the context of the COVID-19 pandemic. Through qualitative interviews with hijama providers (N=8) and clients (N=7) from across the country, I explore ways in which Muslim women's current pursuits of hijama present unique schemas of health and healing. This project builds on my previous work that focused on Muslim women's use of hijama as a holistic medical treatment in the Baltimore-Washington area. These new findings, which explore hijama in the context of COVID-19, further elucidate the nuances of the hijama healing system. For both practitioners and their clients, pursuing optimal health and wellness during a pandemic requires navigating complex internal, interpersonal, and religious relationships.

This work was funded, in part, through an Undergraduate Research Assistantship Support (URAS) Award from the UMBC Office of the Vice President for Research.

INTRODUCTION

In recent years, the human body has become commodified to the extent that much individual and societal dysfunction is defined through a medical lens; this is a phenomenon commonly known as medicalization.¹ Often perceived as atomization and objectification of the body, many people are driven away from the realm of biomedicine towards the holistic approach of alternative medicine, which seeks to provide healing when cures are less tangible.² One such alternative practice is cupping, known to many Muslims as hijama—the ancient practice of applying cups to selected skin points and creating sub-atmospheric pressure through suction or heat.³ Today, cupping exists in many forms, though practices are mainly separated into one of two categories: wet cupping (in which incisions are made to the skin so that the suction draws blood), and dry cupping (in which the skin is pulled through suction without any incisions).⁴ Hijama falls into the category of wet cupping.⁵

Hijama is often seen as a means of returning the body to its natural healthful state.⁶ However, the term and practice of hijama also carry Islamic significance. It was recorded on several occasions as a prophetic medicine in *Sahih Al Bukhari*, a ninth century book globally renowned by Islamic scholars for the quality and authenticity of its nearly 8,000 prophetic narrations which were compiled by Muhammad Al Bukhari over the course of 16 years.

When I first began conducting research on Muslim women's experiences with hijama in January of 2020, I found a complex intersection of medical, social, and religious narratives. I found that together, these narratives created a rich health discourse characterized by Muslim women using hijama to care for their bodies, minds, social networks, and religious states of being. These alignments between the practice of hijama and the personal values and experiences of Muslim women made this alternative medical approach extremely appealing and its benefits incredibly diverse in nature (i.e., social, physical, and religious). Biomedical approaches in this context were not rendered useless; however, the extent of their practicality paled in comparison to hijama.

When I returned to the subject of hijama discourse in the context of COVID, I became interested in reinspecting my previous findings. I wondered how clients of hijama internalized the events of the pandemic and how their perceptions of hijama within the context of biomedicine had changed (if at all).

Based on participant observation and qualitative interviews with clients and providers, I argue that although hijama is largely medicalized in the schema of Muslim women who discover and engage with it for medical purposes, this medicalization morphs into a perception that increasingly separates hijama from biomedicine and the pursuit of health (in the biomedical sense) altogether. This presents a liminal space that practitioners must navigate, being tasked with ensuring that the efficacy and efficiency of their practice satisfies the needs of their

clients who have expectations pertaining to both spiritual/religious as well as biomedical aspects of health and wellness. I believe it is the client's pursuit of this holistic wellness, which hijama alone provides, along with the practitioner's devotion to client and custom, that make hijama a fixture in the health beliefs of so many Muslim women, even in the face of a pandemic.

I begin by presenting background about the practice of cupping therapy. I will then describe my research methodology and data analysis from an ethnographic perspective. My findings will be divided into two categories: clients and practitioners. Each of these categories will include subcategories of their own. This will be followed by the conclusion, through which I will connect all my evidence back to the central claim that hijama occupies a unique space within the healing systems of Muslim women—one that both intersects with, yet in some ways transcends, the biomedical approach. I will close with the implications of my research.

BACKGROUND

EXISTING RESEARCH

The National Institute of Health's Center for Complementary and Integrative Health states that research on cupping is often "of low quality," presents evidence that it "isn't very strong," or exists as part of "very preliminary" studies, whose promising results should be approached with some skepticism.⁷

Current research on cupping has focused on patients suffering from conditions ranging from nicotine dependence to back pain, hypertension, herpes zoster, and carpal tunnel syndrome.^{8,9,10} In contrast to much of the existing research on hijama, which seeks to establish the therapeutic efficacy of hijama for specific medical problems, I sought to identify how hijama maintains credibility and creates an impact on the Muslim women who engage with it as clients and practitioners.

HIJAMA ORGANIZATIONS/PRACTITIONER CERTIFICATION

Few statistics regarding the prevalence of hijama exist. One international hijama directory reports 350 hijama practitioners are found worldwide (I am omitting the name and reference of this source for confidentiality). Of the 350 practitioners, more than 100 disclose that they practice in the United States. This organization, however, is only one of several avenues through which certification can be attained to practice hijama in the United States; additional providers may also be practicing without certification.

Certification from one of the several international credentialing organizations involves the completion of a fee-based comprehensive curriculum and demonstration of proficiency on quizzes and practical exams wherein students

perform hijama on at least one live subject as a final assessment.

In America, hijama falls under the realm of pastoral medicine.¹¹ Thus, physicians do not perform or prescribe hijama to patients. In the same vein, hijama practitioners cannot diagnose those who come to them with health concerns—nor can they formally refer to those who seek their services as patients. A participant explained this formality concisely:

We [hijama practitioners] get licensed by the Pastoral Medical Association, which works in the US and Canada... So, with all alternative medicine practitioners, there are certain rules that govern us... and one of those is that—because we're not medical doctors and we're not trained as medical doctors—we cannot call our clients patients. –Dina

Throughout my research, I found some practitioners did use the terms of 'patient' and 'client' interchangeably. However, I refer to all those who sought hijama therapy as clients. In the same vein, many of the practitioners used the terms of 'hijama' and 'cupping' interchangeably. Moving forward, I employ the term hijama, which is the term most familiar in Muslim communities and which reflects the practice's inclusion of concepts from Islam that are not found in general cupping curricula.

RESEARCH DESIGN/METHODOLOGY

This ethnographic study involved 15 semi-structured interviews, as well as participant observation, through an online hijama certification course. Despite the interactional nature of the participant observation and the qualitative interviews, this project was firmly rooted in a textual analysis consisting of three types of texts—client interviews, practitioner interviews, and hijama course materials. The project was approved by the UMBC Institutional Review Board. All individual and organizational names are pseudonyms.

DATA COLLECTION

Interviews

Interviews averaged about 35 minutes in length and were person-centered in nature. Seven of the interviews were conducted with hijama clients who were selected based on religious affiliation (Muslim), gender (Female), and age (persons above the age of 18). Interviewees were also selected on the conditions that they were current United States residents who spoke and understood English and had engaged with the practice of hijama within the past year.

At the start of each interview, I obtained oral consent. Questions aimed to understand the individual's healing system—how religious and gender identities factored in, where hijama belonged within it, and whether anything had changed,

either consciously or inadvertently, during the COVID-19 pandemic. When asking questions about upbringing, personal medical models, and processes involved in learning, pursuing, and promoting hijama therapy, I tried to discern and dissect schemas about health and wellness. At the conclusion of each interview, compensation was sent in the form of a \$25 e-gift card.

The eight remaining interviews were conducted with hijama practitioners. Although hijama clients did not need any prerequisite skills to qualify themselves as potential participants in this study, I wanted to ensure that the hijama practitioners demonstrated a professional level of mastery and background knowledge in the subject of hijama. This assurance was achieved by recruiting practitioners through The Hijama Network (THN), a widely respected professional hijama organization.

When asking questions about the practice of hijama itself and about how clinics were managed, I sought to investigate nuanced understandings of hijama's relationship with physical, mental, and spiritual health. The person-centered aspects of the interview, like those demonstrated in the client interviews, sought to examine personal healing systems—how they have been established, and how they have changed in the face of COVID-19, if at all. The consent and interview process mirrored that of the client interviews described above.

Hijama Course Materials

Because in-person participant observation was infeasible for the duration of the project, I conducted participant observation remotely. Although interactions with hijama webpages and forums constituted a portion of this activity, the bulk of my remote participant observation took the form of enrolling in the Serenity Hijama Course. Like THN, Serenity Hijama is an organization through which hijama services and certifications are offered. After establishing myself as a student researcher, I began taking field notes detailing interactions I had in the process of enrollment. I kept notes of all emails, personal and automated, that were sent to me during and after my enrollment. The bulk of my (field) notes were taken over the course of my studying. The Serenity Hijama Course includes several documents and study materials, all of which are relevant to two online exams that are required for course completion.

DATA ANALYSIS

All interviews were transcribed and coded to pinpoint themes and recurring concepts across the data.¹² The process of generating a codebook began through the deductive coding of two interview transcripts (one client and one practitioner) which I thought presented multiple bedrock themes and concepts demonstrated throughout all 15 interviews. These themes were the internal, interpersonal, wellness, and religion-based motivations of hijama clients and practitioners. From themes, I generated codes based on subtleties that rose out of

conversation with the participants. For example, in analyzing an interview transcript for the theme of religion, codes emerged such as Islam, sunnah (Arabic for prophetic practice), value, and belief. Thus, I was able to generate what Johnny Saldana refers to as a “streamlined code-to-theory model for qualitative inquiry.”¹³

Throughout the coding process I also conducted schema and narrative analyses. Probing the health schemas of the participants and deconstructing their healing systems and mental models involved observing patterns of speech and the repetition of specific words or phrases within and across the individual interviews. When possible, I analyzed metaphors to gain a deeper understanding of shared or nuanced elements of the participants’ health discourses.¹⁴ Thematic and schematic analysis of hijama course materials were also performed. In absorbing and analyzing the curriculum as a former hijama client and prospective hijama practitioner, I transitioned from what had initially been a somewhat etic approach to the study of hijama practices among Muslim women in America to an emic one. This enriched my analysis as I explored internal, interpersonal, and religious components of different healing systems and medical schema of Muslim women as they pursued health and wellness (either as clients or practitioners) in the face of a pandemic.

FINDINGS AND DISCUSSION

Data analysis revealed multiple themes surrounding Muslim women’s perception and participation (or lack thereof) in hijama during the COVID-19 pandemic. I found that in seeking health and wellness through providing or receiving hijama during COVID-19, Muslim women reveal a reverence for security in internally, interpersonally, and religiously fulfilling experiences. This finding manifests itself in a dynamic between clients and practitioners that revolves around a shared and unique healing system in which hijama and biomedicine are perceived as largely separate, but equal. This dynamic is not intrinsic to hijama clinics; rather, it develops over time as clients and practitioners develop a relationship of trust and a mutual respect for the ritual and clinical contexts of the ancient and prophetic practice of hijama.

What follows is an analysis that loosely takes the form of a typical client’s hijama narrative. I will begin by exploring the experience of the client. I will describe how the clients navigate the curiosity and decision-making that comes with an inaugural hijama attempt, and how their perception and reliance on hijama changes with time. Next, I will focus on the practitioners, exploring how they tailor their services to the needs and desires of their clientele and how they traverse the liminal space that exists between biomedical and complementary clinical spaces—presenting their hijama as both an authentic means of prophetic healing and a biomedically sound approach to health—all while maximizing

client comfort and satisfaction. Finally, I will discuss how this dynamic between the clients and practitioners gives hijama permanence and perpetual appeal, even under extenuating circumstances like those presented by the COVID-19 pandemic.

CLIENTS, CONTROL, AND COVID – HIJAMA FOR HEALTH, HIJAMA FOR HEALING

Over the course of this project, I found that dissatisfaction with biomedical treatments, coupled with a faith in the sunnah, almost always serves as the impetus to try hijama. Over time, however, this reliance on hijama morphs into an entity of its own such that clients choose hijama both as a means of taking control of their health narratives and for a different form of healing altogether. It is the pursuit of this unique experience and feeling of health and wellness that drives many clients to continue hijama consultations, even during a pandemic.



Figure 1. Depiction of changing dynamic between practices of biomedicine and hijama in health schema of Muslim women.

Figure 1 illustrates these changing models of health and healing in Muslim women who pursue hijama. Before trying hijama for the first time, or even during their initial hijama consultation, I found that clients often perceive hijama as a practice that, by virtue of its connection to the sunnah, may contribute to health and healing that they were unable to achieve through biomedical means. Thus, hijama is viewed as a last resort and a suboptimal alternative to biomedical approaches. This lack of confidence in hijama is presented as a small circle, meant to represent the disproportionate emphasis on biomedical approaches which Western societies often perpetuate as the most effective ways to achieve health and address illness.

Upon completing their inaugural hijama appointments, I observed that clients grew to view hijama as almost equal to biomedicine in its efficacy. As a relationship develops with the practitioner and as health outcomes continue to improve, hijama's significance is amplified in the healing system of the client and doubts recede in the face of positive outcomes. The newfound respect for hijama is depicted by the enlarged hijama circle. However, hijama at this point is still perceived from a biological perspective, which is depicted by the signifi-

cant overlap between the biomedical and hijama circles.

It is not until consistency is established and a deeper trust between the practitioner and client is fostered that hijama becomes an entity that is seen as largely separate from biomedicine, and at this point the circles diverge. As clients continue visiting their practitioners, they become more acutely attuned to the changes they feel from a holistic aspect—one which encompasses physical, mental, and spiritual health. Although some individuals start to avoid biomedical approaches or abandon them altogether, my findings present evidence that most clients establish a balance between reliance on biomedicine and hijama. However, biomedical approaches are no longer seen as the only option for achieving health. Rather, biomedical approaches come to occupy a space in the healing system devoted to more localized issues. Hijama comes to represent a means of achieving a deeper sense of healing which targets the body as a whole—mind, body, and soul.

To illustrate this process, I will focus on the example of Alia, a 42-year-old whose experience with hijama stemmed from a crisis that afflicted her in her 30s. She described feeling widespread inflammation and an overall lack of health. As I discuss Alia, I will put her reflections in dialogue with those presented by several other participants whose experiences or views either complemented or expanded upon those she relayed to me.

INITIAL HEALTH CONCERNS AND HIJAMA'S INCREASING APPEAL: THE HIJAMA CIRCLE ENLARGES

I'm 42, but like when I was like, um, when I was like, in my early thirties, I started to literally feel like an old person... And I just felt like the root of everything that I was feeling was inflammation. And the doctor was like, well, you can take Ibuprofen, like literally every day... and stuff like that. But I felt like that those were not really cures? I felt like they were just sort of making me sort of mask what was actually going on with my body. What my body was telling me.... I didn't really want to do acupuncture. I felt like thinking about one or the other [acupuncture and hijama, respectively], I felt like one is like an, ancient sort of like Asian thing to do, but I felt like the cupping was more of something that came from the sunnah? And I wanted to go that route first. So, um, so we started off with that. —Alia

Like many individuals, Alia's interest in hijama stemmed from dissatisfaction with her health and with the advice she had received from primary healthcare providers. From the above passage, it does not take much to deduce what drew her to an alternative such as hijama. Although she had been relying on her doctor for help, she found the advice of her doctor less than satisfactory and in a sense,

contradictory to what her “body was telling” her. So, her decision to try hijama was centered around trying to resolve the issue of inflammation that had not been resolved elsewhere; she thought that hijama could help her body achieve something it was not really achieving through conventional means.

Though it does not seem Alia received a formal diagnosis (or, if she did, she did not think it a detail relevant enough to our conversation), the other clients I spoke with described several ailments with varying degrees of severity, about which they had consulted physicians and/or specialists before considering the option of hijama. Clients’ health complications included diabetes, chronic migraines, acid reflux, lupus, and cancer.

Though at the root of these clients’ experiences was a desire to improve health or alleviate symptoms, this ostensibly straightforward desire was quite layered and demonstrative of nuanced health discourses. First, it seemed there was a dissonance in clients’ perceptions of what it meant to be healthy and what doctors had been prescribing. Clients did not want to be dependent on medications to live a semblance of a healthy life, and they certainly did not want their dependence on medication to come at a physical and financial cost to themselves (which inevitably, they thought, it would). Alia put it quite plainly in the passage above: “You can take Ibuprofen, like literally every day... and stuff like that. But I felt like that those were not really cures.” The participant who had acid reflux shared a similar sentiment when she recounted that “they [doctors] started putting me on medication, which was very expensive. And I’m like, no. I know that’s not the remedy. I know I have to do something about it.”

Thus, although the biomedical system was not by any means failing, it was not providing health as the clients saw it. As another client put it using a reference to the squirrel from the movie *Ice Age*, “the acorn is stuck in the big ice mountain... The guy smelled it and then another hole pops up. I’ve always thought of medicine like that... You take this [medication] and then there’s something else. Something else is broken.”

This lack of comfort the participants felt with the ways of the American medical system is not a new concept. Past research has increasingly sought to understand how physicians can enhance cultural competence and make Muslim patients feel comfortable within American clinical spaces. Such research has cited that differing values pertaining to concepts such as diet, traditional remedies, and gender are among the obstacles for Muslims seeking medical care.¹⁵

There also tend to be somewhat diverging values and perspectives on what causes illness and how it should be cured. Whereas physicians can be expected to rely on the higher power of science and biomedicine, many Muslims conceptualize a more complex relationship that incorporates divinity into the science of healing.¹⁶ As one participant stated, “The causer of all illnesses is Allah, right... So, in a way I really feel medicine on any level is sort of like a means that is unneces-

sary. Because if Allah wanted to cure you, those are—it's like a fire doesn't burn, unless Allah creates it to burn." Another participant shared a similar sentiment, "I think it's all about niyyah (intention) in the end. Your intention matters and Allah just brings the baraka (blessings)... [doctors] are forced to work so they can make money but there is no sincerity. So, in any profession or in any matter, in any dealing, if you're not sincere, you're only going to defeat the purpose and you're only going to hurt people, more than benefiting them." Thus, although it can be said that both physicians and hijama practitioners rely on a higher power (medical science and Allah, respectively—though the two were not mutually exclusive to many of this study's participants), many hijama clients believed that physicians' sole reliance on one and disregard for the other made for a less comfortable and less holistic experience within the biomedical system.

As Alia described, part of her decision to try hijama was inspired by her own Islamic values. She describes a point in time when hijama and acupuncture were both presented to her as alternatives; but given hijama's roots in the sunnah, she decided to "go that route first." Many clients described feeling a similarly subliminal connection with hijama by virtue of its being a sunnah which could also have implications for health.

To summarize, the initial affiliation with hijama stems from the hope that, if nothing else, this sunnah might alleviate symptoms or improve health in a way that might almost supplant or at least supplement popular approaches. This is reflected in the portion of Figure 1 depicting quite a bit of overlap between biomedicine and hijama. Hijama at this point still occupies a relatively small and supplementary role in the health schema of study participants. However, in speaking with clients I found that this perception of hijama usually changed.

Hijama Sessions and Accompanying Paradigm Shifts: The Circles Diverge

I liked [hijama sessions] with [the practitioner] because she would play audio recordings of Quran—she'd say bismillah [in the name of Allah], and she would talk about different duas [supplications] to say. And, um, I think one of the things, number one that was really helpful was the feeling of making my own decisions about my health. It felt a lot more empowering... Like, it helped me listen to myself a lot better. Taking medicine and doing some of the things that the doctor wanted me to do... I felt like they were numbing, and it did not allow me to actually feel, feel like I was healing? And I think [hijama] also pushed me to also explore what was happening to me... it started to allow me to tweak and know better what was working and wasn't working. —Alia

The quote above represents a paradigm shift that occurs within the perceptions of clients as they accumulate positive experiences and associate positive outcomes

with hijama over time. Note that in her statement above, Alia does not explicitly differentiate between the physical outcomes she was observing with hijama as opposed to with biomedicine—she does not present hijama as a better ‘cure’ per se. However, what she does describe at length is an atmosphere of comfort, empowerment, and ultimately, healing, that she felt with hijama. These qualities of comfort, empowerment, and healing are fostered in part by the spiritual and codependent nature of the practice. Alia described her practitioner’s incorporation of Quran and dua into her practice—both of which were characteristics that were almost always mentioned by clients in their recollections of what they appreciated in their early hijama sessions.

When Alia elaborated further on the observed distinction between hijama processes and outcomes in comparison to those of biomedicine, she emphasized the concepts of empowerment and control, which I found were recurring themes. From the perspective of the clients, as they gained more experience and familiarity with hijama, a shift would occur in their perception of hijama as a system of healing. Not only did hijama align with religious values and present an alternate route to achieving specific health outcomes, it provided an avenue for empowerment through a newfound sense of holistic agency and for reclaiming their health narratives.

I use the term holistic agency because I believe it captures the aspect of overall wellness—physical, mental, and spiritual—that makes the practice of hijama such an asset to these clients, despite the biomedical tools and resources at their disposal. Though no client used such a term when describing her evolving relationship with hijama, the concept seemed to come up time and again across several interviews. The client with lupus described this agency in the context of good days and bad days. “It got to the point I didn’t have any good days... but I just feel like with hijama... I just, I feel it’s like it’s an overall wellness.” Another client used a comparison to make her point: “A lot of times, when you go to a doctor, they refer you to a different specialist because ‘No, you have a problem here specifically,’ whereas with hijama, it’s kind of a whole full-body holistic approach.”

Although both of these clients (and several others) acknowledged this emerging holistic agency that stemmed from hijama, both described a relatively balanced dependence on hijama and biomedicine, scheduling regular appointments for both to treat a myriad of health problems. This was not the case across all the participants. Although the emergence of holistic agency was a recurring theme, it did not necessarily coincide with decreased reliance or faith in biomedicine (note that the size of the Biomedical circle does not change in Figure 1). However, it did seem to contribute to the paradigm shift in which hijama became an entity largely separate from biomedicine with respect to expected outcomes and perceived contributions to health and wellness. To elaborate on this point,

I will return to my interview with Alia.

Later in my conversation with her, Alia described holistic agency when she explained her rationale for reaching out to a biomedical professional as opposed to a hijama practitioner: “When things are localized... I’m going to go to the doctor. But when I feel overall off, that’s when I feel like there isn’t a pill that’s going to solve that.” In contrast with her counterparts, Alia described disparate dependencies on hijama and biomedicine. Here, Alia presented a discrete differentiation between hijama and biomedicine. Whereas at the start of Alia’s pursuit for hijama she sought a cure for inflammation that had not been provided through biomedical means, hijama came to have a much broader purpose and breadth of utility.

However, despite this difference in reliance on biomedicine across the participants (which is to be expected in a sample of people with a variety of health conditions and varying degrees of severity), there is still a shared perception of hijama as an alternative approach that empowers an individualistic and holistic approach to health. In this context, it makes sense that hijama would be a consistent activity, even when discouraged during a pandemic. Clients feel hijama allowed them to take control of their health narratives in a way they did not believe was possible if one relied solely on the secular and often less effective approaches of biomedical actors. By incorporating elements of religiosity and medicalization into their practices, hijama practitioners create not only a sense of balance for the client, but also a sense of empowerment to take control of one’s health narrative.

PIETY, PROTOCOLS, AND THE PRACTITIONER – BALANCING THE RITUAL AND THE CLINICAL

As I was conducting interviews with clients, I grew increasingly aware of the aforementioned paradigm shift which manifests in the health schema of Muslim women who come to see hijama as unique from biomedicine, but not entirely separate. In my study of the Serenity Hijama course materials, I noticed a similar framing; whereas some elements of the curriculum had clear religious undertones and contexts, other elements were much more based in the sciences and relied on medical terminology and the detailed listing of ethical considerations and practical applications (including revised protocols specifically for practicing during the pandemic).

Upon personal reflection as I compiled field notes, I realized I was internalizing information within ritual contexts and clinical contexts. This was partially a result of the structure of the curriculum itself. The first half of the curriculum had dense Islamic contexts and was presented in the form of sections that focused on hijama during periods of fasting, sunnah cupping points (i.e., regions of the body which have been prophetically narrated to be particularly beneficial), and

sunnah days on which hijama should be performed. Such sections were largely free of medical terminology but rich in Arabic words and prophetic narrations meant to be revelatory of Islamic values and evidence for the adoption of hijama among other prophetic remedies. I interpreted a lack of medical jargon as an implication of the divine nature of hijama and the aspects of it which do not require logical or biological rationale—that an implied belief in the validity of information relayed by prophetic narrations was required to understand these sections. It is with this mindset that I, as the student, was to adopt the belief that hijama is “the best form of cupping,” as it was worded in the course materials. I was surprised to hear similar sentiments in practitioners, one of whom put it this way: “With the dry cupping yeah, it is beneficial, but with the wet cupping, there’s much more benefits because you’re actually removing the stagnant bloods and everything—And, especially that it’s part of the sunnah, like, it’s more popular within the Muslim community.”

The second half of the course was much more medicalized. It relied a great deal on medical terminology and reminded me of many procedures I have read for labs—detailed stepwise procedures, contraindications, and discussions of ethics and professionalism. There remained a smattering of references to sunan (plural for sunnah), such as the use of black seed oil and/or honey or the contraindications rooted in black magic or evil eye. However, the presentation of the ritual practice of hijama and the clinical practice of hijama were largely separate.

As one of the Serenity Hijama Course texts put it, “Cupping has been practiced as a remedial therapy for thousands of years; its origins being from China... When Hijama was legislated as a highly recommended means of cure in Islam, it came with its own rules.” As a Muslim woman, I found myself understanding and internalizing boundaries between the ritual and clinical aspects of hijama, where they were clearly drawn and where they were blurred. I concluded that the ritual and clinical elements of hijama (as well as the ritual and clinical expectations of hijama clients) converge in a way that creates a liminal space for practitioners. I became curious about other practitioners’ approaches to hijama. From my own experience receiving hijama and from the experiences I had heard about from clients, it seemed to me that practitioners are able to create a dynamic between the ritual and clinical elements of hijama in a way that gives it a contemporary credibility, comparable to that of conventional alternatives, while also preserving the authenticity of an ancient and Islamically significant practice.

In this section, I will draw from the experiences of the practitioners I interviewed as well as my own experiences with the Serenity Hijama Course to describe the implications of this liminal space on the practices of hijama practitioners. As the expectations of the client fluctuate between medicalization and holism, it is the practitioner’s responsibility to provide a service that caters to the changing needs and desires of their clients from several aspects, including

but not limited to, the religious and medical aspects. I investigate how practitioners navigate the pressures of being medical actors in the 21st century, in addition to being agents of this prophetic practice in a way that makes sense to themselves and their clients.

Here, the discussion centers around Ibtihaj. She opened her clinic about a year and a half ago, which makes her clinic a newer establishment than others I encountered, the oldest of which had been operating for 10 years. However, I felt that Ibtihaj's relatively new induction into the community of hijama practitioners made her more attuned to nuances in practice and in client experience that more experienced practitioners may have glossed over or explained in less detail by virtue of perceived banality.

I will begin by exploring the ritual and the clinical aspects of practicing hijama, respectively, before probing the liminal space between the two. I will conclude the section with a brief discussion of how practitioners use ritual and clinical contexts and approaches to navigate the liminal space between the two which hijama creates.

Ritual

I pray, and I ask them as well to pray. If they are non-Muslims, I ask them if it's okay for me to play [audio recordings of] the Quran... because the spiritual aspect is very, very integral.... For the Western side of medicine, a lot of the people do not even believe that God exists, you know, so for you to now incorporate [into biomedical spaces] something about, making dua, performing ablution before you carry out your hijama, [doctors] going to look at you like—'what kind of treatments are you giving your patients,' you know... They'll call it a placebo effect at the end of the day—that's all you're giving to your clients. But it's not so. I can understand them thinking that way—but practicing hijama properly needs a certain kind of mindset... The mindset you should always have is, I am just a vehicle through which Allah heals people. You can never ever say 'I healed this person.' No. You do not heal anybody. You just use the knowledge which Allah gave to you... So, you are just a means to an end, that's it. —Ibtihaj

The quote above demonstrates the elements of ritual and spirituality that pervade the practice of hijama. Ibtihaj was one of the few practitioners who described working with non-Muslim clients, and it is telling to see that she prioritizes the ritual aspect of hijama to the extent that she strives to implement it even when working with clients who are not Muslim. She describes the utilization of Quran and dua in her practice, as well as performing ablution (known in Arabic as *wudu'*) prior to working with a client. Although it would be a generalization to

assume that all hijama practitioners use such tools in the same way or to assume that there are no practitioners who rely on more or fewer spiritual elements during their sessions, every practitioner I spoke with incorporated something into their practice which connected directly to the Islamic faith. This makes sense, given hijama's roots in the Islamic faith. However, there is more to it than that. Ibtihaj touched on it above when she described how hijama may become perceived as no more than a placebo to a biomedical professional, when "it's not so." Another practitioner—whose background as a student of *Unani Tibb* (Arabic for Unani medicine) in 2017 led her to hijama certification and a naturopathic clinic—elaborated on why hijama is more than placebo:

In Islam... when health is a balance and it's stable and everything is according to what it's supposed to be doing, the functions of the body and also the mindset, it's like the person feels whole. If one thing is out of balance, the person's not going to feel whole. So, a lot of it's due to spirituality. Like people who come, and they don't pray, [for] example, you see that they don't have a spiritual guide in their life... You definitely pick it up, you see people that are very spiritual and you, and you see that positivity in them, and they do heal much quicker than those who are lacking that.
– Pamela

Thus, incorporating things like Quran and wudu' into one's hijama practice is about more than the practice of hijama itself. It is about a larger perspective held among practitioners (which seems to become transmitted to clients over time) focused on balance. This presents one argument for how practitioners navigate their liminal space. They create an environment that acts as a buffer to the hyper-medicalized spaces and perspectives that exist in the mainstream, a space in which health encompasses a balance between not only the body and the mind, but also the spirit and the soundness of the Muslim identity. Practitioners do not necessarily play the Quran or request that their clients pray or come in a state of purity (i.e., wudu') to save face by projecting Islamic rituals onto an Islamic practice; they do so as a testament to Islam's role in a Muslim's overall wellness. By exposing clients to Quran and asking that they make dua or pray before their appointments, practitioners reinforce this point and subliminally relay to their clients that these spiritual practices can serve not only as a reminder to uphold a level of belief and commitment to faith, but as a means of achieving greater and deeper healing.

However, it seems that such practices are also meant to serve as a reminder to the practitioners as well—not as a reminder to uphold faith and seek healing through religiosity—but as a reminder to maintain humility and sincerity in their practice. As Ibtihaj put it, practicing hijama requires a specific mind-

set, “I am just a vehicle Allah is using to heal people.” This feeds into the larger theme of humility and sincerity, which I noticed throughout interviews with practitioners, and which builds on the observations I made with clients who expressed admiration for practitioner sincerity as was discussed earlier. Ibtihaj described the mindset that she adopts as a hijama practitioner, and it is one she embodies regardless of the creed of her client. Despite being the medical actor in her clinic, it does not give her an air of pride or superiority to the client who seeks her help—an impression that clients often get from their doctors. She sees herself as no more than a vehicle for divine healing.

Several practitioners displayed this mentality in their own accounts of experiences with clients, which became clearer through my sociolinguistic analysis of the respective narratives. It came up rather organically in a conversation about flyers with a practitioner of six years. “Through my flyers I put *hadith* [prophetic narrations] in the flyers and send so people can read and get a review of the hadith too, that it’s related to our Islam and that... we will get cured by it *insha’Allah* [by the will of Allah].” Even in discussing something as trivial as flyers, the practitioner defaulted to describing hijama as a cure that works only by the will of God. As it was described by Serenity Hijama, “It is of importance to recognize that Allah alone is the One who is able to cure the illness.” This statement reinforces the concept of humility which practitioners should always embody.

This medley of sincerity and humility manifests itself differently across practitioners. For some, like Ibtihaj, it is a mindset. For others, it is a belief in Allah’s control over *shifaa’* or healing. Still for others, it manifests itself in refusing monetary compensation. Only one of the practitioners I interviewed described declining all monetary compensation—“She couldn’t move, she couldn’t walk. So, she asked me... I said, sure auntie! I’ll come. She’s like, how much do you charge? I said nothing, just give me your dua, that’s it.” Despite this being the only example in the data of a practitioner refusing payment, the emphasis on dua and gratitude as an invaluable form of payment was something I observed in my capstone research; I believe it speaks to a larger ritual aspect of hijama.

Thus, hijama ultimately is a sunnah practice which, in the context of this research, is largely performed by Muslim women for Muslim women. When clients and practitioners initially meet, there is an implied understanding of shared ideologies relating not only to basic tenets of the Islamic faith, but to a belief in divine healing from hijama—which intrinsically relies on divine tools, including but not limited to the Quran, dua, and prayer. Shared beliefs extend into concepts such as payment and the belief that, in addition to whatever monetary reward may be involved, there is a divine reward to be had. As one practitioner put it, “Just doing [practicing hijama], it’s an honor for me to be part of reviving the sunnah and helping people feel better.”

The significance of ritual in hijama manifests itself in almost all aspects of

the practice because it is so deeply ingrained into the mindset of the practitioner. This reliance on and application of Islamic tenets in consultations, actual hijama sessions, transactions, and general practitioner-client interactions give hijama appeal to Muslim women who are either seeking to partake in a sunnah, searching for alternative approaches to biomedicine, or both. However, ritual is only one of the criteria that clients value and that practitioners must satisfy. As one client who sought hijama for emotional and physical wellness stated, “If their practice is safe and they’re knowledgeable to do it, then I’m happy to do it. But if I fear for my safety or thinking the person is knowledgeable, I’m not going to definitely pursue it. I’ll only pursue it if I have that right combination.” This section investigated the significance of Islamic knowledge to this ritual. Next, we will address the other half of the combination—safety.

Clinical

So they go, and then at the same time, they change as well into the gowns, and by this time I will have already prepared the room. I prepared the bed, all the equipment and everything I need. I go through their medical charts once again, just to make sure that we have everything right. And then I quickly go through the flow of what the exercise is going to be like. I go ahead and take things like their blood pressure, I take the litmus test of their saliva just to see where it’s at, at that point in time, and then I go ahead and, feel for their muscles, especially in the regions where we’re going to be working, just to see how tense or how relaxed they are. So, depending on how tense they are, I give it a couple of minutes, just talking them through, especially first-timers... Just to make them feel comfortable, I show them some of the hijama marks I have on myself... So that kind of makes them feel a bit better. And then once the session starts proper, I tell them what I’m going to do, and then I get permission from them, if I can go ahead and do it. – Ibtihaj

Ibtihaj engaged in an intriguing change of tone in her discussion of hijama as a ritual practice as opposed to a clinical one. In the quote above, Ibtihaj elucidated the points she was making as she described the ideal mindset of the hijama practitioner. Her tendency to explain the ritual aspects of hijama were echoed in the narratives of other practitioners, such as Pamela, who was also quoted earlier. However, when I asked Ibtihaj to describe the structure of her clinic and her hijama sessions, there was little explanation of any rationale, if any. Medical histories were reviewed, blood pressures were taken, litmus tests were performed, and consent was paramount throughout. The tone of conversation became almost automated, and at one point in her description of these protocols Ibtihaj actually paused and said, “Stop me if the information I’m giving you is not relevant.”

Perhaps it was remiss of me not to ask why such precautions were taken or why she performed these procedures that one may typically associate with a conventional biomedical space. However, I think my lack of intrigue at hearing Ibtihaj drone through her procedures is symbolic in and of itself. When Ibtihaj brought up the mindset of the hijama practitioner, she subconsciously felt the need to explain herself—I did not need to ask her to elaborate on the mindset required for the ritual of hijama. Her experience as the first in her family to learn hijama and as a practitioner who works with non-Muslim clients likely exposed her to many people who inquired about such a mindset. So, when it came up in conversation with me, she did not wait for me to ask what she meant when she said “mindset.” She took it upon herself to explain a concept that may be unfamiliar to her audience (me, in this instance). However, there was no need to explain why a blood test or a medical history was necessary, because the logic behind those steps should be self-evident (and to me it clearly was, as I felt no need to follow-up), so much so that she interrupted her own chain of thought to acknowledge that she would not mind me stopping her if such facts were too obvious for the purposes of my research. I believe such a verbal cue speaks to medicalized schemas of health and healthcare that are deeply internalized by individuals seeking hijama as well as individuals providing hijama as a service.

In this case, as was the case with ritual aspects of hijama procedures, assumptions that hijama practitioners all rely on the same clinical practices for the same clinical outcomes would be a generalization. However, explanations of protocols as they pertained to clinical aspects of practice were much more direct than those of ritual aspects. Like Ibtihaj, practitioners often justified the requirements of rituals such as Quran, dua, and/or prayer without prompting. On the other hand, items such as blood tests and medical histories were presented as commonplace, almost unworthy of mentioning.

Despite the aforementioned concept of divine healing, there are precautions and procedures put in place to ensure that hijama presents as little risk and discomfort to the client as possible. Seeing as most clients are individuals who have been socialized within Western medical society, they expect certain elements of medicalization, even in their pursuits of alternative or religious therapies. In the same vein, practitioners who have been socialized within that same Western society understand and perhaps feel obligated to accommodate such needs as both hijama practitioners and medical actors. So, although the hijama practitioners’ schema for health seem to emphasize religiosity and spirituality, there is an understanding of a responsibility to cater to the schema of the client population, which is deeply medicalized. Thus, although hijama may not have been performed in the same clinical context hundreds of years ago (i.e., probably no medical masks and antiseptic creams), there is an understanding that in many ways, providing care is synonymous with optimizing comfort.

It was also interesting to hear many practitioners promote hijama by virtue of its clinical implications in contrast with its spiritual implications. Previously I discussed a lack of explanations towards clinical practices such as taking blood pressure and taking medical histories. This presented somewhat of a contrast to the more thorough explanations of the clinical outcomes of hijama. One homeopathic physician and hijama practitioner of five years described the mechanism of hijama:

So, the basic thing is excess fatty acids, debris, toxins, all that's come out. And that increases your blood circulation, your lymphatic circulation—like, naturally when your blood circulation increased, your organs get more blood supply, then the blood is pure from the toxins, like its capacity to absorb the oxygen is more. And so, your organs get more oxygen, the body releases more nutrition, it also clears your digestive tract. So, when your digestion is good it increases your metabolic rate... So when you do the incisions... your immune system sends out more WBCs [white blood-cells]... One scientific study shows that your RBCs [red blood cells] get increased after doing hijama... Your immunity is increased, your body's capacity to fight against the disease is increased. This also stimulates your parasympathetic nervous system, so it produces relaxation, so your muscles get relaxed and definitely like your pain gets reduced. —Ummia

Such a medical context for hijama could serve as a way to preempt potential hesitation or doubt in clients who, being new to hijama, may question the extent of its effectiveness or its connection to scientific research.

It should be noted that Ummia, like Ibtihaj, practices hijama on both Muslim and non-Muslim clientele, which could expose them to more skepticism in their client populations. Practitioners in their position are less capable of relying on religion and sunnah to justify hijama to clientele who do not share the same religious beliefs. Practitioners I spoke with who only worked with Muslim clientele often had less to say when it came to skeptical clients—and although they often discussed the physiological mechanisms by which hijama improved health and/or wellness, such descriptions were never as detailed or densely populated by medical terminology as Ummia's. One practitioner addressed the question about skepticism and doubt this way: "The majority of the time, the sense that I get from my clients that are first-timers and nervous is that they're worried that it might hurt, and they're worried that it might not work for them. I don't know if they just doubt the whole premise—I don't think that's where they're coming from. I think it's just a fear of going into something unknown and just having like the, you know, the reservations that come with that." Another practitioner echoed this sentiment when she said, "I think a lot of people who have

come to me have a foundational belief, but still, they have questions—how it works. And the way I explain them, it's very simple. First of all, for me, of course, it's my faith." Practitioners like these are often able to persuade their clients to try hijama more because of its Islamic significance. However, when religious identities differ—as is often the case with Ibtihaj and Umnia—practitioners are made to rely more on shared beliefs in scientific research to help both Muslim and non-Muslim clients rationalize and eventually believe in the implications of hijama enough to try it once and observe the results themselves.

Navigating the Liminal Space

Through this reliance on ritual and clinical aspects of hijama delivery, practitioners can somewhat guide Muslim clients as they come to increasingly depend on hijama. Circling back to Figure 1, practitioners, like their new and sometimes hesitant clients, acknowledge the Islamic significance of hijama. To build the client's faith and confidence in hijama, the practitioners depend both on shared religious identities and on that which—up until that point—is most intrinsic to the client's health schema: medicalized terminology and clinical practices. The "hijama circle" within the schema of the client enlarges at the notion that hijama is a medically credible practice. Practitioners then establish consistency with hijama sessions and foster a relationship with the client that differs from those experienced in biomedical spaces. Faith and trust in the health outcomes of hijama morph into something more profound as the hijama circle diverges from biomedicine and the client develops a sense of empowerment and agency unparalleled and unattainable in biomedical spaces. Thus, whereas such curricula as those of Serenity Hijama stress the importance of incorporating clinical and ritual approaches into hijama therapy, these findings suggest practitioners internalize such contexts and approaches in a way that most logically conforms to the health schema of Muslim women living in America.

CONCLUSION: THE PERMANENCE OF HIJAMA'S APPEAL IN THE FACE OF A PANDEMIC

These findings reveal the continual exchange between clients and practitioners. Hijama's role in the client's healing model morphs overtime into a tool for achieving a holistic health that is not offered in the realm of biomedicine. This pursuit on the clients' part presents a liminal space for practitioners, who are tasked with ensuring that their practice satisfies the needs of their clients who have expectations pertaining to both biomedical and spiritual aspects of health and wellness. As a result, practitioners perceive the desires and deeply medicalized schemas of clients and act accordingly by strategically incorporating conventionally clinical and biomedical practices into their hijama clinics without compromising the

ritual aspects or undermining the Islamic significance of hijama. In this way, practitioners guide clients as they foster a relationship and a reliance on hijama based in trust and reverence for the sunnah. Likewise, clients guide practitioners as they develop a newfound agency and more actively pursue health and wellness through intuition and instinct.

This project revealed that in light of the pandemic, the space which hijama occupies in the healing systems of Muslim women became clearer. Clients seek out a holistic wellness that they cannot achieve through conventional means, not for failure of the biomedical system per se, but for the fact that hijama provides something more. In the same vein, hijama largely becomes seen as a unique and specific entity with unique and specific outcomes. Clients come to see themselves as taking control of their health narratives. Practitioners then, in their pursuit of providing effective care and reviving the sunnah of hijama, work to establish practices and relationships that optimize comfort while preserving the prophetically narrated characteristics of the practice. Observing these elements in tandem, we get a sense of how hijama has stood the test of time and has maintained its importance and appeal—even in the face of a pandemic.

The purpose of this project was to qualitatively identify the characteristics of hijama which preserve its credibility within communities of Muslim women, even if existing research does not yet recognize the same extent of the practice's efficacy. By approaching this research from the perspectives of clients and practitioners, as opposed to health outcomes and biomedical efficacy, this research extends current understandings of hijama. Ultimately, this research reveals hijama empowers Muslim women to take control of their health narratives and redefine their perceptions of health and wellness through the lens of holism.

WORKS CITED

- [1] Kevin White, *An Introduction to the Sociology of Health and Illness*, (Thousand Oaks, CA: SAGE Publications Inc., 2002): 42-43.
- [2] Syed Amin Tabish, "Complementary and Alternative Healthcare: Is it Evidence-based?" *International Journal of Health Sciences* 1, no. 2 (2008): 5-9.
- [3] Tamer S. Aboushanab & Saud AlSanad, "Cupping Therapy: An Overview from a Modern Medicine Perspective," *Journal of Acupuncture and Meridian Studies* 3, no. 11 (2018): 83-87.
- [4] Al-Bedah, Abdullah M.N., Ibrahim S. Elsubai, Naseem Akhtar Qureshi, Tamer Shaban Aboushanab, Gazzaffi I.M. Ali, Ahmed Tawfik El-Olemy, Asim A.H. Khalil, Mohamed K.M. Khalil, and Meshari Saleh Alqaed. 2018. "The Medical Perspective of Cupping Therapy: Effects and Mechanisms of Action." *Journal of Traditional and Complementary Medicine* 9 (2): 90-97.
- [5] Almaiman, Amer A. 2018. "Proteomic Effects of Wet Cupping (Al-Hijamah)." *Saudi Medical Journal* 39 (1): 10- 16.
- [6] Maryam Elhabashy, "Cupping and Wellness Among Women in the Baltimore-Washington Area" (2020).
- [7] "Cupping," National Center for Complementary and Integrative Health. National Institutes of Health, November 2018. <https://www.nccih.nih.gov/health/cupping>
- [8] Mohammed Imran Sajid, "Hijama therapy (wet cupping) – its potential use to complement British healthcare in practice, understanding, evidence and regulation," *Complementary Therapies in Clinical Practice*, no. 23 (2016): 9- 13.
- [9] Sulaiman M. Al-Eidi et al., "Wet Cupping—Traditional Hijamah Technique versus Asian Cupping Technique in Chronic Low Back Pain Patients: A Pilot Randomized Clinical Trial," *Journal of Acupuncture and Meridian Studies* 6, no. 12 (2019): 173-181.
- [10] Hanan M. Al-Yousef et al., "Knowledge, attitudes, and perceptions of cupping therapy (CT) in Saudi Arabia—a cross-sectional survey among the Saudi population," *Biomedical Research* 17, no. 29 (2018): 3351-3355.
- [11] Lauren Silverman, "Pastoral Medicine Credentials Raise Questions In Texas," *Shots*, NPR, April 25, 2016, <https://www.npr.org/sections/health-shots/2016/04/25/475165193/pastoral-medicine-credentials-raise-questions-in-texas>
- [12] Peltto Pertti, *Applied Ethnography*, (New York, NY: Routledge, 2016), 199-215.
- [13] Johnny Saldana, *The Coding Manual for Qualitative Researchers*, (Thousand Oaks, CA: SAGE Publications Inc., 2015): 14.
- [14] Russell H. Bernard and Amber Wutich and Gery W. Ryan, *Analyzing Qualitative Data: Systematic Approaches* (Thousand Oaks, CA: SAGE Publications Inc., 2016), 318-321.
- [15] Attum, Basem, Sumaiya Hafiz, Ahmad Malik, and Zafar Shamoon. *Cultural Competence in the Care of Muslim Patients and Their Families*, (Treasure Island, FL: StatPearls Publishing, 2021).
- [16] Padela AI, Gunter K, Killawi A. Meeting the healthcare needs of American Muslims: Challenges and strategies for healthcare settings. (Washington, DC: Institute for Social Policy and Understanding, 2011).

A hand is shown from the top, holding a tangled ball of string. The string is dark brown and forms a dense, chaotic mass. The hand is rendered in a light brown color, with fingers visible at the top. The background is a solid, bright yellow. The number '02' is overlaid in the center in a large, white, sans-serif font.

02

Physician-Assisted Suicide and Maryland's End-of-Life Option Act

Terrence Moore

Department of Social Work

Dr. M. Nicole Belfiore

Image: A Plus Vector. "Mental health, illness, brain development, medical treatment concept, hand holding puppet strings with a thread of brain, vector illustration." *Shutterstock*. Item ID: 1744209140.

BIOGRAPHY

Terrence Moore is a social work major set to graduate in the spring of 2022 with a minor in psychology. He serves as a hospice volunteer for the Jewish Social Service Agency, distributes protective equipment to home nursing staff, and works as an interning therapeutic mentor for Advanced Behavioral Health, where he teaches life skills. Terrence plans to pursue a master's degree in social work, and hopes to find experience working in substance abuse, child welfare, and aging services. Terrence would like to thank Tirza Bartels for her suggestions and edits, as well as his professor and research advisor Dr. Nicole Belfiore, who generously lent her support, encouragement, and guidance to this submission.

RESEARCH JOURNEY

This paper came about as an assignment for SOWK 360, an intermediate social work course focusing on social policy. During the class, I found myself taking an interest in laws surrounding aid-in-dying, as I felt that they played into an important conversation concerning the conflict between autonomy and paternalism. Using Maryland's most recently proposed aid-in-dying bill as an example, I wanted to argue that certain provisions within the bill deliberately exclude people from accessing needed services in an effort to uphold that paternalism, whilst also highlighting what the cost of that exclusion may look like for patients and their families.

ABSTRACT

This paper uses the National Association of Social Workers' Code of Ethics to analyze Maryland's End-of-Life Option Act (2020). It will gauge how social workers following the code of ethics should position themselves in advocating for or against prospective aid-in-dying legislation. There is a well-documented need for physician-assisted suicide within terminally ill populations. Maryland's End-of-Life Option Act, which failed to pass in the latter half of 2020, attempted to address this need by legalizing physician-assisted suicide in a manner that protected patients, physicians, and their families from abuse, coercion, and legal repercussion. The law's provisions that support patient choice, ease of access, and public education are compatible with social work values of personal dignity, social justice, and competence. Conflicts may arise for social workers as they try to balance their commitment to respecting client autonomy via streamlined access to services and their commitment to protecting vulnerable populations who may benefit from increased safeguards and wait times for end-of-life options. Despite these shortcomings, this analysis suggests that social workers should support future versions of this bill. The paper proposes a grassroots advocacy plan in favor of aid-in-dying legislation, whereby advocates are encouraged to gradually accumulate support from relevant local bodies working in aging services.

Physician-assisted suicide, sometimes called medical aid-in-dying, generally refers to a practicing physician making available the means for a patient to hasten death (Maytal & Stern, 2006). Patients often seek these ends when the projected course of their illness conflicts with their desired quality of life (Cooper, 2010). Laws that allow patients to access medical aid-in-dying resources are often referred to as “death with dignity” or “right to die” laws and operate on the notion that certain incurably ill populations, who are also competent, have the right and the authority to end their lives. While the validity of this right and the role that physicians play in upholding it are the subjects of some debate, particularly in the biomedical community, serious ethical issues emerge when patients suffering from adverse medical conditions are denied the resources necessary to exercise this right safely and without risk to themselves or loved ones. This paper will analyze Maryland’s 2020 End-of-Life Option Act; discuss its strengths, weaknesses, and the projected impact of its implementation; and propose a legislative-advocacy plan designed to inform legislators and the public of its necessity.

NEED FOR PHYSICIAN-ASSISTED SUICIDE AMONG INCURABLY ILL PERSONS

National research regarding physician-assisted suicide is generally lacking (Meier et al., 1998). Research that does exist suggests that there is a substantial, if not minority, population of terminally ill adults who wish to hasten death. Brown et al. (1986) surveyed 44 terminally ill adults, the majority of whom were cancer patients, and found that seven (16%) desired or had at one point desired a non-suicidal death. Chochinov et al. (1995) surveyed 200 terminally ill cancer patients and found that 44.5% of patients experienced occasional desires for death to come soon and that 8.5% of patients experienced prolonged and sincere wishes to die. Surveys show that the majority of patients who choose physician-assisted suicide do so as a result of a perceived loss of autonomy (Maytal & Stern, 2006). Physician-assisted suicide has become legal under law in only nine states and the District of Columbia, leaving the vast majority of these groups of terminally ill persons to choose between living a life in conflict with their autonomous desires, or ending their life through alternative means (Lagay, 2003).

Serious issues emerge on either side of the decision. Terminally ill adults who own insurance policies are heavily punished for committing suicide, often through the voidance of the policies or payouts that their family may depend on. This somewhat incentivizes both the policy holder and their family to cover up a suicide that does occur (Quill, 1991). A cover-up puts both the policy holder and the family at greater risk from the state, which holds the discretion to open a formal investigation into cause of death, conduct an autopsy on the deceased, and criminally prosecute those involved, all of which put adverse stress on fami-

lies who are already grieving (Quill, 1991). Terminally ill individuals who do choose to live out the course of their prognosis are, in many cases, still subject to immense suffering, even in the face of palliative care options available today (Quill, 1991). Additionally, non-physician-assisted suicide can put terminally ill persons at long-term medical risk through a failed attempt at suicide (Hassan, 2020). Such issues present serious medical risks to terminally ill persons, in addition to legal and financial risks to their families.

MARYLAND'S END-OF-LIFE OPTION ACT

Maryland lawmakers have attempted to pass legislation addressing this need on several occasions, the most recent of which came in 2020 in the form of House Bill 643 (HB 643), the End-of-Life Option Act. The bill was not reintroduced in the 2021 Maryland legislative session. The bill was introduced in Maryland to mitigate end-of-life suffering and to address terminally ill populations who were otherwise unable to receive medical aid-in-dying. It allowed certain groups of terminally ill patients to request aid-in-dying; outlined rules and regulations around the process; and established legal ramifications and protections for the physician, patient, and family members involved in fulfilling a request for aid-in-dying. These legal protections prevented the disclosure of details surrounding the decision to hasten death in cases of law, asserted that a parent's request to hasten death would not constitute the neglect of a child, and ensured that a physician-assisted suicide would be labeled a death by natural causes. It also outlined punishments for those who coerce an individual into making a request for aid-in-dying, and mandated the Maryland Department of Health to produce and present annual data on the implementation of the bill in order to maintain transparency and inform the public (End-of-Life Option Act, 2020).

HB 643 was introduced to the Maryland House of Delegates on January 29th, 2020 and was sponsored by 53 out of Maryland's 141 delegates. Fifty-two of the sponsors were Democratic affiliates and one was a Republican. Both the current iteration and earlier versions of this bill garnered support from a variety of civil rights groups and advocacy organizations, including the American Civil Liberties Union (2018), the Central Atlantic Conference-United Church of Christ (Vishio, 2019), the League of Women Voters of Maryland (2018), and the Libertarian Party of Maryland (Blitz, 2019). A number of groups advocated against the bill as well. The National Council on Disability stated its opposition to the bill on the grounds that it could direct attention away from the needs of still-living terminally ill populations (Romano, 2012). Anti-euthanasia non-profit, Choice is an Illusion, took a strong stance against the bill, citing oversight issues and a risk for elder abuse. Maryland Against Physician Assisted Suicide (MAPAS, 2016) took a similar opposition to the bill, stating that the

disabled community opposed its passage. In 2019, roughly 66% of Maryland voters were in favor of legislation that would seek to allow terminally ill adults to request aid in hastening death (Public Policy Polling, 2019).

HB 643 was designed exclusively to address terminally ill adults with a prognosis of having fewer than six months to live who were interested in receiving medical aid in the hastening of their death. It served to give them the option to request aid-in-dying, while also offering the physicians and family the necessary protections under law to carry out such a request. While patients always maintain autonomy in choosing whether or not to voluntarily hasten their own deaths, this bill would have provided access to the aid needed for carrying out such a decision in a medically and lawfully sound manner.

ANALYSIS OF HB 643

HB 643 was set aside in the earlier half of 2020 when the Maryland General Assembly adjourned in response to the COVID-19 pandemic. The bill received a first hearing in the House and Senate, as well as a referral to committee, before dying in committee when the legislative session ended early. While the bill was not ratified into law or reintroduced in 2021, it is likely to be reintroduced to the general assembly soon, just as it has been almost yearly since 2015 (Death with Dignity, 2020). Maryland is still projected to be one of the next states to adopt aid-in-dying legislation (Pope, 2020). As such, an analysis of HB 643 is still highly relevant to social workers looking to understand the legislation's potential compatibility with the core social work values defined in the National Association of Social Workers Code of Ethics, including service, social justice, dignity and worth, human relationships, integrity, and competence (NASW, 2021).

HB 643 was built on the recognition of a terminally ill person's ability and right to make decisions surrounding the hastening of their own death. In doing so, it upheld a number of core social work values, including the recognition of autonomy and the dignity and worth of the individual. It prioritized the autonomy of incurably ill adults and empowered patients by allowing them to define the solutions that would be used to address their own problems. As a direct result, it aided in shifting conversation away from the morality of physician-assisted suicide in favor of a conversation centered around one particular population's need for physician-assisted suicide. It is possible that this needs-based approach to healthcare legislation, if applied today, could lead to future laws that more directly respond to the needs of vulnerable populations, regardless if these needs conflict with the norms or moral preferences of majority populations. The policy would also have supported social work's value for evidence-informed practice and competence by publishing annual data on its implementation.

Other provisions within the law may be deemed more ethically ambigu-

ous. Access to the program, for example, was relatively streamlined for qualified adults. Three separate requests would have needed to be made to the acting physician, including one in writing (End-of-Life Option Act, 2020). The oral requests would have needed to be made at least 15 days apart from each other, meaning that it would take a patient a minimum of 15 days to receive a prescription. While the timeliness of this program ultimately would have aided in its accessibility, some may reasonably argue that 15 days is not enough time to make such a decision, especially for a patient whose desires to end life may be intense but only fleeting. On one hand, the provision would have minimized barriers that could otherwise hinder patients from exercising their right to die, which would uphold that patient's autonomy and worth in the process. On the other, the same provisions could endanger patients with undiagnosed mental illness, who may rely on more prevalent barriers and longer waiting periods to ensure that they receive adequate and informed medical care before making a decision to hasten death. Further research will need to be conducted on the ramifications of these provisions, and social workers will likely need to determine where and how they believe the line between the autonomy and safety of vulnerable individuals should be drawn.

Critics have argued that implementation of the policy in its current form could yield unintended consequences for both qualifying patients and the public. Two very realistic outcomes are suicide contagion and the withdrawal of public attention and funding from problems that exist for still living terminally ill adults. Suicide contagion refers to the transmittance of suicidal behavior from one person or group to another through media, peer interaction, or family exposure (Gould, 2013). Many physicians have drawn a link between Oregon's implementation of physician-assisted suicide laws and Oregon's increase in suicide through the 21st century, though as of 2016, research found the majority of such claims to be unsupported (Francis, 2016).

Some speculated that the passing of Maryland's End-of-Life Option Act would direct public attention and resources away from the needs of still living terminally ill populations. The most prominent reasons for utilizing physician-assisted suicide programs is a perceived loss of autonomy (Romano, 2012). The National Council on Disability has argued that implementing assisted-suicide programs removes the incentive to investigate existing policy shortcomings that may lead to problems preceding a decision to request aid-in-dying (Romano, 2012). Such shortcomings may account for the perceived loss of autonomy that incurably ill patients often experience at the end of life. Without provisions to protect funding for programs needed by still living terminally ill adults, it would be possible for existing end-of-life care options, such as hospices, nursing homes, and palliative care specialists, to see a decrease in state funding, if the demand for such services decline in the face of aid-in-dying availability.

This policy also could hold unintended consequences for non-target populations. Physicians, for example, would need to be trained to handle requests for aid-in-dying, to distribute lethal medication, and to instruct patients on the safest ways to take those medications. They also would need to determine whether their own interpretation of medical ethical values conflicted with their ability to perform impartially. Psychiatrists who evaluate patients would need to decide whether or not a patient's mental illness makes them unable to be deemed competent. If the diagnosis of a mental illness stands the potential to hinder a patient from receiving aid-in-dying resources, then that patient would become somewhat incentivized to hide symptoms of mental illness from practitioners. Individuals and organizations working in end-of-life care also would have a number of introspective decisions to make regarding the policy's implementation. Since members of a qualified hospice program are allowed to administer lethal medications if the patient cannot do so themselves, individual members would need to decide whether or not they would be willing to administer these medications (End-of-Life Option Act, 2020). This could subsequently prompt the hospice program itself to decide whether or not it would mandate or forbid the practice. Hospice programs would need to train members to administer lethal medication, spot patient hesitancy, and define internal policies that safeguard against coercion and ensure patient consent.

Lastly, this policy was deliberately limited in its inclusion. Its goal was not to address incurably ill populations living a life at odds with their autonomous desires, but rather to target terminally ill populations with a prognosis of fewer than six months to live. There are diverse populations of incurably ill people who would and will never receive a six-month prognosis, and who would be denied access to this policy without drastic amendments. Those populations would be left to make the same choice between an internally unacceptable quality of life and a lawfully unacceptable means of death.

ADVOCATING FOR FUTURE AID-IN-DYING LEGISLATION

Despite its shortcomings, HB 643 advanced human rights, was compatible with social work values, and despite failure, should still be deemed worthy of social workers' support. While social workers may feel less inclined to push future aid-in-dying legislation to account for inaccessibility and a lack of protections for the funding of programs addressing still living terminally ill adults, doing so may prove infeasible in a political climate that is hesitant to impose even moderate physician-assisted suicide legislation. For now, social workers should consider supporting future versions of HB 643 on the simple basis that they are urgently needed by incurably ill people, who constitute one of society's most vulnerable

and underrepresented groups. This section will outline a three-step legislative advocacy plan in favor of aid-in-dying legislation similar to HB 643, and will primarily utilize community-based advocacy strategies.

The first step in this plan involves working with local organizations to raise awareness for the issue and garner support for the policy. When selecting organizations to work with, the social worker should consider those that best represent the client base that aid-in-dying legislation most directly pertains to. Organizations working in senior care, such as nursing homes or hospice programs, may serve as good examples. It may be necessary to start as small and as local as possible, or to select organizations from within the social worker's immediate connections. From there, the social worker can write to the organization and ask if a representative would be interested in hearing about potential legislation pertaining to their clients and staff, share some of their own experience as they pertain to aid-in-dying or a lack of access to aid-in-dying service, or collaborate in support of the bill. Strategies like these are at the core of grassroots policy advocacy, and as such, many organizations will inevitably prefer to remain uninvolved. Organizations that do show interest will provide an opportunity for the social worker to inquire whether or not that organization would be interested in vocalizing their experiences to larger institutions through letters, public testimonies, or simply by signing a petition. The more statements of support that a social worker receives, the easier it might become to get the attention of larger organizations or local government bodies.

The second step in this plan involves showing the support garnered to larger organizations, community leaders, and local government bodies in the hopes of gaining their support. This step is otherwise impractical without substantial support from smaller organizations, but it is necessary for such support to reach the House and Senate legislators who will inevitably vote on the bill. It may benefit the social worker to start with organizations that primarily operate in Maryland and that have already expressed a favorable position towards the bill. Organizations such as the League of Women Voters of Maryland, the Libertarian Party of Maryland, or Maryland's American Civil Liberties Union may prove good candidates. The long-term goal of this step is to enable a voice loud enough to be heard by local government bodies, such as the Montgomery County Council or the Montgomery County Human Rights Commission. The Montgomery County Human Rights Commission may serve as a good example for this movement, as the people and bodies associated with a cause often become an integral part of how that issue is perceived, which in turn influences how the issue is responded to (Hill, 2008). Framing an inability to receive aid-in-dying, or an otherwise forced state of living, as a detriment to human rights may push legislators to view the prevalence of such inaccess as unacceptable. The final part of this step involves asking these local government bodies and officials to take a

public stance on the issue and to direct that stance towards legislators through public or private letters.

The final step in this plan is to work with local news outlets to keep the public informed of the issue and its pertinence. Keeping the issue relevant to the public enables that public to remain active and informed in its development. The social worker could ask local newspapers if they would be interested in publishing articles or op-ed pieces regarding the issue or the bill itself, which could include means through which readers could advocate their stance. The social worker could also ask interested organizations to publish some of their own experiences as they pertain to the issue. Research shows that firmness is an integral part of a successful advocate (London, 2010). As such, in all aspects of this plan, the tonality of the social worker's interactions should maintain the stance that alternatives to the bill's passing are simply unacceptable.

HB 643, Maryland's End of Life Option Act of 2020, established a basis for autonomous decision making in the face of moral ambiguity. It reinforced a terminally ill person's right to end their own life by providing the necessary medical and legal aid in a manner that is streamlined and accessible for the target population. It provided adequate protections for patients, families, and physicians involved in the program and included a number of safeguards against coercion and abuse. Despite shortcomings in patient accessibility, the current political climate may make it necessary for social workers to support future aid-in-dying legislation as it comes. A plan to advocate in favor of this legislation should take advantage of the preexisting and diverse support it has garnered and should maintain the long-term goal of directly informing legislators voting on the bill. In all steps of this plan, the worker should maintain a need for access to aid-in-dying legislation, in response to the well documented consequences of inaccess. Compromises to the full range of autonomy and dignity that all individuals are entitled to exercise via a final decision at the end of life, should be deemed unacceptable.

REFERENCES

- American Civil Liberties Union. (2018). ACLU of Maryland 2017 General Assembly Report. <https://www.aclu-md.org/en/publications/2017-general-assembly-report>
- Blitz, E. (2019). Statement of Support: End-of-Life Option Act. *Libertarian Party of Maryland*.
- Brown, J. H., Henteleff, P., Barakat, S., & Rowe, C. J. (1986). Is it normal for terminally ill patients to desire death? *The American Journal of Psychiatry*, 143(2), 208–211. <https://doi.org/10.1176/ajp.143.2.208>
- Cooper, S. (2010). Taking no for an answer: Refusal of life-sustaining treatment. *American Medical Association Journal of Ethics*, 12(6). <https://doi.org/10.1001/virtualmentor.2010.12.6.ccas2-1006>
- Death with Dignity. (2020). Maryland. *Death with Dignity*. <https://deathwithdignity.org/states/maryland/>
- End-of-Life Option Act, MD, H.B. 643. (2020). <http://mgaleg.maryland.gov/mgaweb/Legislation/Details/hb0643>
- Francis, N. (2016). Physician use of misinformation to speculate 'assisted dying suicide contagion' in Oregon. *Journal of Assisted Dying*, 1(1), 1-6.
- Gould, M. S., & Lake, A. M. (2013). *The contagion of suicidal behavior*. The National Academies Press.
- Hill, K. (2008). A strengths-based framework for social policy: Barriers and possibilities. *Journal of Policy Practice*, 7(2-3) 106-121.
- Lagay, F. (2003). Physician-Assisted Suicide: The Law and Professional Ethics. *American Medical Association Journal of Ethics*, 5(1).
- League of Women Voters of Maryland. (2018). Death with Dignity Position Statement. https://compassionandchoices.org/wp-content/uploads/LWVMD_DWD_PositionStatement.pdf
- London, M. (2010). Understanding social advocacy. *Journal of Management Development*, 29(3). <https://doi.org/10.1108/02621711011025768>
- Maryland Against Physician Assisted Suicide. (2016). Assisted Suicide Proponents Wilt After Tough Questioning by Committee. *Maryland Against Physician Assisted Suicide*.
- Maytal, G. & Stern, T. A. (2006). The desire for death in the setting of terminal illness: a case discussion. *Primary care companion to the Journal of clinical psychiatry*, 8(5), 299–305. <https://doi.org/10.4088/pcc.v08n0507>
- Meier D. E., Emmons C., Wallenstein S., Quill T., Morrison R. S., Cassel C. K. (1998). A National Survey of Physician-Assisted Suicide and Euthanasia in the United States. *The New England Journal of Medicine*, 338(17). <https://doi.org/10.1056/NEJM199804233381706>
- National Association of Social Workers. (2017). *Code of ethics of the National Association of Social Workers*. <https://www.socialworkers.org/About/Ethics/Code-of-Ethics/Code-of-Ethics-English>
- Pope, T. M. (2020). Medical Aid-in-dying: Key Variations Among U.S. State Laws. *Journal of Health and Life Sciences Law*, 14(1). <https://doi.org/10.2139/ssrn.3743855>
- Public Policy Polling. (2019). Maryland Survey Results. *Public Policy Polling*.
- Quill, T. E. (1991). Death and Dignity: A Case of Individualized Decision Making. *New England Journal of Medicine*, 324 (10), <https://doi.org/10.1056/NEJM199103073241010>
- Romano, N. (2020). NCD Letters to MD state senators regarding assisted suicide proposal. *National Council on Disability*.
- Vishio, A. F. (2019). Testimony Prepared for the House Health and Government Operations Committee on House Bill 0399. *Central Atlantic Conference-United Church of Christ*.



Analysis of Mental Well-being of Environmental Migrants in Maryland: A Comparison Study

Keren Herrán

Department of Geography & Environmental Systems

Dr. Dawn Biehler

Image: Nouwens, Hein. "Human brain / vintage illustration from Meyers Konversations-Lexikon 1897." *Shutterstock*. Item ID: 100336682.

BIOGRAPHY

Keren Herrán is a first-year Presidential Fellow and Ph.D. student in Health Promotion, Education, and Behavior at the University of South Carolina. Keren completed her interdisciplinary BS degree titled "Global Health Considering Environmental Factors" in Spring, 2021 as a Meyerhoff Scholar, France-Merrick Scholar, and Honors College student at the University of Maryland, Baltimore County (UMBC).

Regarding her global health background, Keren was involved in a leadership capacity with Global Brigades, providing a wide variety of medical and public health support activities in rural areas of Nicaragua, Panama, and Honduras. She also studied abroad in Italy and Belize. Her longest international fieldwork experience was during the summer of 2019 when she conducted research on the social determinants of adolescent pregnancy in rural Ecuador. Keren desires to sustainably mitigate health issues within the dynamic socio-political, economic, and cultural frameworks they exist in.

Publication of this article and data collection was funded by the University of Maryland, Baltimore County's Undergraduate Research Award grant.

RESEARCH JOURNEY

As an aspiring mixed methods researcher and the daughter of Latin American immigrants, my intellectual passions include designing, implementing, and evaluating collaborative social-behavioral interventions that benefit marginalized migrants, women, and youth in Latin America and the Caribbean (LAC). While spending summers in my mother's Salvadorian hometown, I witnessed unequal social burdens as women risked their lives daily retrieving water near gang activity. Equally disturbing, my father's family in Puerto Rico endured economic stress, youth drug addiction, and mental health challenges exacerbated by natural disasters. Motivated by these anguishing crises, I designed an individualized major to engage in transformational LAC research. Given the limited literature on climate migrants' mental health and how the majority of publications focus solely on populations in Pacific Island Countries, Bangladesh, and Africa, my degree mentor Dr. Biehler suggested to me in 2019 the formation of this study to characterize the mental health experiences of climate migrants relocated to Maryland in comparison to other forced displacement migrants in Maryland. Hence, my familial experiences and research background inspired me to pursue this research project. To our knowledge, this is the first analysis that explores how the mental health of environmental migrants in Maryland can be best supported.



ABSTRACT

By 2050, more than 250 million people will have to relocate because of anthropogenic phenomena such as sea-level rise, drought, and intensified weather events. Despite the advancing onset of climate change and climate-drive migration, research on the mental health (MH) experiences of environmental migrants (EM) are limited and mostly focused on Pacific Island communities. Therefore, this mixed-methods cross-sectional study aims to identify the MH experiences that adult EM experience as a result of their relocation in comparison to other forced displaced migrants (FDMs) while also synthesizing what these migrants report should be done to improve MH services.

INTRODUCTION

In 2019, the sum of international migrants worldwide reached an estimate of 272 million individuals.¹ It is projected that by 2050 this number will increase to 405 million international migrants.² Migration is, “the movement of persons away from their place of usual residence, either across an international border or within a State.”³ Migration is volatile and complex, impacting health at many levels. Migration may exacerbate a migrant’s pre-existing health vulnerabilities or negatively impact their health due to discrimination, language barriers, or subpar living/work conditions in receiving host communities.⁴ Migration may also improve an individual’s health outcomes by increasing their access to quality health services or safer environments.

A specific category of migrants whose health experiences need further study are climate migrants.⁵ The naming convention for migrants displaced by disasters that may be related to climate change remains contested; this migrant subgroup may also be referred to as environmental migrants or eco migrants. Whereas the media may refer to climate migrants as climate refugees, this terminology is not recognized by international law since the label “refugee” implies crossing international borders and possessing the right to return to one’s home once it is safe to do so. Climate migrants often relocate within the borders of their origin country and may never be able to physically return to their home due to permanent environmental destruction (e.g. sea level rise that irreversibly overtakes their land).⁶ The International Organization for Migration defines environmental migrants as those who, “for compelling reasons of sudden or progressive changes in the environment that adversely affect their lives or living conditions, are obliged to leave their habitual homes, or chose to do so, either temporarily or permanently, and who move either within their country or abroad.”⁶ By 2050, if anthropogenic greenhouse gases increase on their current trajectory, bringing intensified weather conditions and natural disasters, one in every 45 people worldwide may be displaced by climate change.⁶

Thus, scholars have applauded the increased research about the impacts of climate migration on migrants’ health.⁷ Studies at the nexus of climate migration and physical health provide insights that may help improve quality of life for climate migrants, but investigation of the mental health consequences endured by climate migrants remains scant.^{5,8-11} Tangible, physical health concerns such as malnutrition, infectious disease, or injury may seem more obvious or pressing than investigating or funding psychosocial interventions and services. Professionals who work with climate migrants recognize the need for greater mental health evaluation and support for eco migrants, and some environmental migrants themselves have expressed that their mental health is a greater or more immediate source of concern than their physical health.¹² Furthermore, while there is need for further study of climate migrants all over the world, certain regions

remain particularly under studied, while many existing studies focus on Pacific Island states, Bangladesh, and Africa. This small, novel study therefore seeks to address the overall gap in scholarship on climate migrants' mental health and the geographical gap of the Caribbean and North America to characterize the mental health experiences of climate migrants relocated to Maryland in comparison to other forced displacement migrants in the state.

Elsewhere we have reviewed existing literature on mental health and climate migration, finding much need for further research.¹³ Among other concerns, some of the reviewed scholarship references a kind of distress related to loss of home due to environmental degradation and destruction, termed solastalgia.¹⁴ A more recent review of the literature on solastalgia itself reveals that the majority of studies have focused on “western” viewpoints.¹⁹ Indigenous and other non-European experiences have been neglected, but those studies that did address non-Western worldviews stress the oneness of social and ecological aspects of belonging in the home-place and alienation from that unique environment.¹⁴ Furthermore, climate migrants from the geographic regions we focus on here find in a receiving location like Maryland a much more individualistic and less communal society along with new and difficult-to-access health care systems. This research explores how this transition from belonging to potential alienation may affect mental health in the context of irreversible environmental change.

The following questions helped guide this research:

1. What are the M3 mental health scores of adult environmental migrants relocated to Maryland? How does this compare to the M3 mental health scores of the group of non-environmental migrants? What may this imply?
2. What experiences do adult eco migrants relocated to Maryland undergo and how does this impact their mental health? Do their experiences differ from those of adult forced migrants for whom environmental change was not a factor in migration?

We hoped that by investigating these questions we might develop improved guidance for health professionals, community advocates, and climate migrants themselves to help identify particular mental health challenges and needs. Ideally, climate change mitigation and increased support for climate change adaptation would help people stay in their home communities, but in light of climate and migration trends, we aim to contribute to better frameworks for mental health support.

METHODS

STUDY DESIGN AND INSTRUMENTS

To gather data on migrant mental health experiences, structured qualitative individual interviews and the M3 Checklist were used. The 15-question interview guide was developed by the authors in early 2019 and was preliminarily tested with environmental migrants during March 2019 to ensure question word choice and phrasing was clear. Question formulation was based on in-depth review of mental health literature and determination of where there exist gaps in knowledge regarding environmental migrant experiences.¹³ Interviews were conducted via WebEx video platform during January 2021 and only audio was recorded. Participants who identified as non-environmental forced displacement migrants were asked the same 15 questions as environmental migrants except that the phrases “environmental change” or “environmental factors” were replaced with “factors” or “the factors that caused you to move.” The questions are listed below in Table 1. Interviews lasted between half an hour to a full hour depending on the interviewee’s length of question response. The first question was an icebreaker, followed by 14 questions that invited subjects to reflect on their mental health experiences according to the migration journey progression of before relocation, immediately after relocation, and present-day.

Each migrant also shared their M3 score as part of their participation in the study. The M3 Checklist is a free 27 question mental health diagnostic tool created from a National Institute of Mental Health collaboration.¹⁵ The instrument was validated in 2010 and is available online for free via Google Forms.¹⁶ The assessment is given in a multiple-choice format and takes approximately 3 minutes to complete. Information collected by M3 remains anonymous and is not sold. This ensures the M3 Checklist is confidential and posits no data confidentiality risk to its users. Upon completing the M3 survey, individuals are emailed a detailed report that provides feedback on their risk of depression, anxiety, PTSD, and bipolar disorder, along with a general overall mental health score based on symptoms that occurred within the last two weeks. M3 categorizes these latter cross-sectional mental health scores according to the following symptom burden categories: low (0-1), mild (2-11), moderate (33-51), and severe (52-108) mental health risk. Ultimately, upon filling out the M3 Checklist and receiving their official report, participants verbally shared with investigator KH their cross-sectional M3 score either via email or during their interview. Participants completed the M3 Checklist prior to interview and did not forward their entire diagnostic report to research team members. Hence, subjects’ privacy was respected since they did not share their exact answers from the questionnaire nor any additional information from their M3 result report.

	Question Text
1	Tell me more about the place where you came from.
2	What environmental factors caused you to move and how did this impact your mental health? By mental health, we are referring to your, “emotional, psychological, and social well-being,” as defined by MentalHealth.gov.
3	How did your mental health suffer when you experienced this environmental change?
4	Did the environmental change you experienced create a barrier between yourself and your prior location’s health services?
5	Did you expect the environmental change to impact your mental health the way it did? Why or why not?
6	What health interventions existed after the environmental change and what do you believe made these strategies ineffective or effective?
7	Did the environmental change impact your mental health in ways you did not note until relocating? If so, how? Why was this not detected/diagnosed sooner?
8	Before this environmental change, were you aware that such an environmental change could change one’s life and mental health as it did or did not for you?
9	Based off your environmental change experience, what do you now believe constitutes an environment capable of facilitating optimal mental health?
10	How did you observe the environmental change impacting the health of individuals already struggling with mental health?
11	What do you wish someone would have told you to do proactively regarding your mental health status before the environmental change?

	Question Text
12	How did you reach out for health resources (if at all) post environmental change?
13	Did your environmental migration journey worsen your mental health? If so, how?
14	How has your definition of mental health changed?
15	Is there anything more you would like to add?

Table 1. Interview questionnaire guide (environmental migrants' version).

STUDY POPULATION AND RECRUITMENT

The study population consists of current students at the University of Maryland, Baltimore County (UMBC), the investigators' institution. The investigators chose this population subset because interviewing migrants from another community, such as outside the investigators' university institution, would have necessitated forming new relationships and investing more time to ensure participants felt comfortable with the research team. Migrants are a vulnerable population,¹⁷ and the presidential election and COVID-19 pandemic within Maryland, during the period of data collection, may have heightened migrants' stress and wariness towards engaging in a research project. Therefore, it was deemed that containing the study population to UMBC scholars would be more feasible and appropriate.

Originally, the recruitment flyers approved by the UMBC Institutional Review Board were designed such that both UMBC faculty and students were invited to participate, however the enrollment process only yielded student participants. Passive recruitment strategies were used to reach out to potential participants. The flyer was disseminated in email campaigns, university communication platforms, and social media applications. Word of mouth also accounted for recruitment of two environmental migrant participants. The announcement described environmental migration to Maryland as leaving one's home community due to environmental threats such as, "1) A natural disaster (e.g. hurricane, tsunami, earthquake, mudslide, etc.)" or, "2) Climate change exacerbated weather conditions (extreme drought and water shortage, heat wave/forest fire, sea level rise, etc.)" Forced displacement non environmental migration was described as relocation to Maryland due to "unprecedented external factors"

for reasons including, “1) political persecution, 2) violence and crime, 3) job loss, economic recession, or poverty.” Participants chose for themselves which category of migrant they identified as based on these specifications and were encouraged to reach out to the research team if they were uncertain. Inclusion criteria for enrollment in the study encompassed fluency in English, adult legal status (18 years of age or older), being a current UMBC student or employee, having access to a private space for interview experience, and strong internet connection for video calls.

ETHICAL CONSIDERATION

The institutional review board at UMBC approved this study via expedited full-board review (protocol #Y21DB19063). Potential participants emailed KH to express interest. KH then replied by providing an electronic version of the informed consent form. Participants could take up to a week to read the consent form and decide whether or not to electronically sign the form and partake in the project. During this week of decision-making, potential participants were encouraged to email the research team with any questions or uncertainties they may have. To ensure participation in the study was not the result of undue influence or coercion, video call interviews first began by asking the interviewee to verbally confirm that they were taking part in this research out of their own will and interest and that they understood they could withdraw from the study at any time.

Video interviews were audio recorded on KH’s iPhone 10 device. Participants who completed the interview received eGift Cards of \$20 as compensation. By requiring each participant to complete the M3 survey and encouraging nonjudgmental discussion of their mental health experiences, the investigators aimed to help individuals recognize whether or not they should seek additional mental health support. Participants will also receive results of the study overall, which may help them recognize patterns of mental health challenges and needs beyond themselves in their families or communities. Furthermore, this study aims to benefit participants and other migrants to the area in the future by providing information about mental health of eco-migrants to professionals and community organizations in Maryland. Finally, we hope that the results of this modest study can help inform global efforts to protect and improve environmental migrants’ mental health as also migrant mental health in general.

The main potential risk involved in this procedure was that participation in reflection and discussion of migration and mental health experiences may have caused recollection of potentially negative and painful memories. To protect the emotional well-being of participants, upon starting the video call, the interviewer verbally reminded participants of their right to (1) Request to skip answering any

question that discomforted them, (2) Ask to continue the interview at another time, and (3) Decline to continue to participate further in the study (which would result in permanent deletion of any information collected thus far). Lastly, the researchers followed institutionally recommended online protocols by using a video conferencing platform that minimized breach of confidentiality.

DATA ANALYSIS

Interview recordings were transcribed verbatim by KH and scrutinized via an inductive exploratory methodology. The analytical approach of grounded theory led to systematic review of the data by hand, meaning without the need for a supplementary computer program software. Open, axial, and selective coding of the information was complemented by elements of the phenomenological strategy. For reference, open coding refers to identifying patterns in interview transcripts, axial coding is the recognition of relationships between these patterns, and selective coding consists of classifying pattern associations within an overarching category. Techniques borrowed from the phenomenological strategy included the interviewer embracing epoche (the “bracketing” or “setting aside” of personal views), reviewal of data as organized by the interview questions (enabling in-depth comprehension of emerging patterns), and utilizing participants’ direct quotes within thematic analysis. Exploratory frameworks were constructed to reflect the complexity of resulting patterns and their relationships (Figures 1 and 2). To ensure the themes and connections within these frameworks were consistent with participants’ experiences, interviewees were invited to provide feedback to refine these models. This iterative process of triangulation ensured proper conceptualization and rigorous analysis.¹⁸ Inter-rater reliability of qualitative data was ensured via the co-authors applying metacognition and comparing coding consistency.

RESULTS

The tables and figures below present individual participants’ key responses and aggregated models for each subgroup of participants (environmental migrants and other forced displacement migrants). Key information on participants’ migration and mental health histories is summarized in Table 2 (for environmental migrants) and Table 3 (forced displacement migrants). Figures 1 and 2 present explanatory models for the patterns found across participant interviews in each respective subgroup; as noted above, these were arrived at and refined through iterative analysis and feedback. Dashed lines represent themes that are connected to secondary codes, meaning motifs that are more distant in defining the mental health experiences of migrants. Finally, a list of key preliminary recommendations

for supporting the mental health of environmental migrants and other forced displacement migrants, based on questions nine and eleven of the interview guide, were also organized into table format (Tables 4 and 5). The key recommendation tables outline the participants' own reflections on their migration and mental health journeys, providing direct quotes from the interviews and summary phrases for quick-reference use as a tool that complements the explanatory framework.

Migrant	Place of Origin	Reason for Migration	Gender
A	New Orleans, Louisiana	Hurricane Katrina	Male
B	Puerto Rico (rural)	Hurricane Maria	Female
C	Puerto Rico (rural)	Hurricane Maria	Female
D	Puerto Rico (rural)	Hurricane Maria	Female
E	Puerto Rico (urban)	Hurricane Maria	Female

Age at time of relocation	Season and year of relocation	Specific mental health challenges faced since relocation	Did they reach out for any mental health support since relocation?	Current M3 Mental Health Score (01/2021)
4	Summer 2005	<ul style="list-style-type: none"> • Social integration • Solastalgia 	Yes	33 (moderate)
18	Summer 2018	<ul style="list-style-type: none"> • Anxiety • Insomnia • Panic attack • PTSD 	No	15 (mild)
18	Fall 2018	<ul style="list-style-type: none"> • Panic attack 	No	10 (mild)
19	Fall 2018	<ul style="list-style-type: none"> • Anxiety • Depression • Stress 	No	29 (mild)
19	Fall 2017	<ul style="list-style-type: none"> • Anxiety • Depression • Panic attacks 	No	19 (mild)

Table 2. Brief demographic and mental health details of interviewed environmental migrants (n=5).

Migrant	Place of Origin	Reason for Migration	Gender
F	Puerto Rico (rural)	Family economic needs	Male
G	French Republic of Guinea (rural) - Refugee, Sierra Leone heritage	Civil unrest, war, and dangerous/violent surroundings	Male
H	Nigeria (urban)	Family economic needs, troubling ethnic clashes, and family conflict	Female
I	Iran (urban)	Persecution due to political activism	Female
J	Pakistan (urban) - Refugee, Afghanistan heritage	Civil unrest war, and dangerous/violent surroundings	Female

Age at time of relocation	Season and year of relocation	Specific mental health challenges faced since relocation	Did they reach out for any mental health support since relocation?	Current M3 Mental Health Score (02/2021)
7	Fall 2007	<ul style="list-style-type: none"> • Social integration 	Yes	39 (moderate)
7	Winter 2004	<ul style="list-style-type: none"> • Anxiety • Depression • Social integration • Stress • Suicidal ideation 	Yes	21 (mild)
9	Spring 2010	<ul style="list-style-type: none"> • Nyctophobia • Vivid and frequent nightmares 	Yes	14 (mild)
18	undisclosed	<ul style="list-style-type: none"> • Anxiety • Depression • Stress 	Yes	40 (moderate)
27	Spring 2010	<ul style="list-style-type: none"> • Anxiety • Depression • Loneliness • Stress 	Yes	0 (low)

Table 3. Brief demographic and mental health details of interviewed forced displacement migrants (n=5).

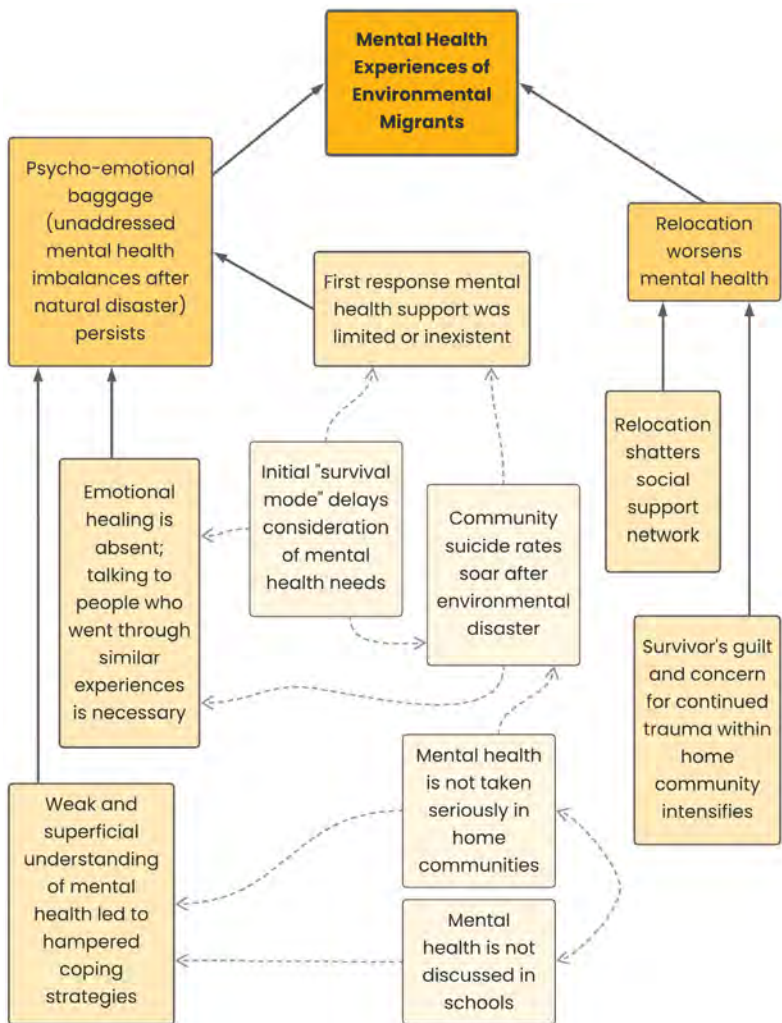


Figure 1. Proposed explanatory model, according to grounded theory analysis, for mental health experiences of environmental migrants.

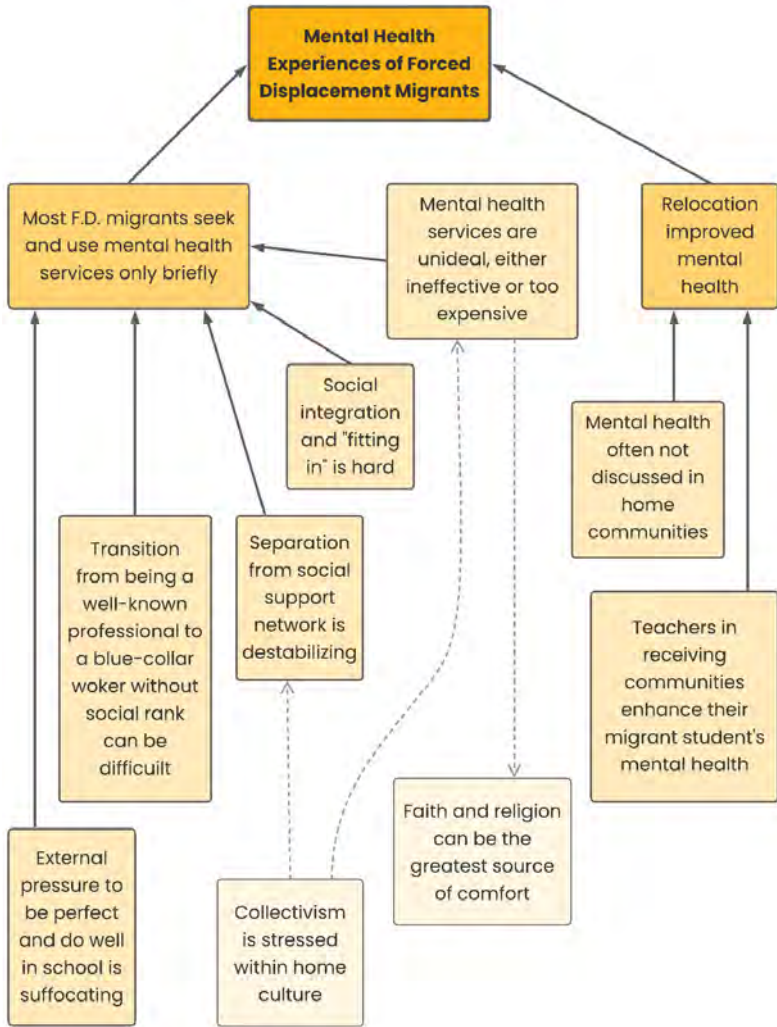


Figure 2. Proposed explanatory model, according to grounded theory analysis, for mental health experiences of forced displacement migrants

Migrant	What do you wish someone would have told you to do pro-actively regarding your mental health status?	Based off your experience, what do you now believe constitutes an environment capable of facilitating optimal mental health?
A –	<p><i>“I think if I were at the very least able to tell my younger self anything, I guess it would be, try to talk to your parents and grandparents a little bit more cause it will feel a lot better than just talking with nobody and just existing in your own head for a few years. And probably uh go outside and be a little more active.”</i></p> <p>Summary → Share with others how you feel and maintain yourself physically active</p>	<p><i>“I think having people that you can talk to about that [mental health] is very very important, whether that’s therapists or friends that experienced the same thing. Or also just being in like a financial situation where you don’t have to worry about like day to day expenses.”</i></p> <p>Summary → Sharing with others how you feel and financial stability</p>
B –	<p><i>“I think getting hobbies that didn’t have to do with technology obviously. Um I was a very big avid reader when I was younger and that’s something that I rediscovered during Hurricane Maria and the whole recovering process, um, like little hobbies like drawing and coloring and reading, those types of things are obviously the only things we could do. So I think that also goes hand in hand with unplugging and not being so attached to our phones and streaming services and all of that.”</i></p> <p>Summary → Have non-tech-based hobbies</p>	<p><i>I think it really needs to be implemented from a young age that mental health is really important. Um, I think that it needs to be part of the education system... mental health is important, we need to be prepared for anything that comes our way and build a strong tolerance for the unexpected from a young age. Especially when we live in a location where the weather can be so volatile.”</i></p> <p>Summary → Mental health discussions within the education system, starting at a young age</p>

Migrant	What do you wish someone would have told you to do pro-actively regarding your mental health status?	Based off your experience, what do you now believe constitutes an environment capable of facilitating optimal mental health?
C -	<p><i>"I guess talking to other people about it so that way you don't feel like you're alone in it or you don't think you're crazy or out of the normal. I guess that would have helped."</i></p> <p>Summary → Share with others how you feel</p>	<p><i>"Having immediate access to either a doctor, a psychologist, or a therapist or something like that."</i></p> <p>Summary → Immediate access to health professionals</p>
D -	<p><i>"I guess just be a little more expressive about how we feel. I feel like it's taboo in Hispanic cultures to express yourself and kind of be open and you know, sit down with your Mom or Grandma and be like, "hey! I feel kind of sad" or, "this has been happening." We don't do that very well and so I think opening a conversation and a little channel of communication would be tremendously helpful for a lot of people."</i></p> <p>Summary → Share with others how you feel</p>	<p><i>"I think we need more outlets, where we can talk about the way we feel. Or even if you don't know it, kind of have these open areas where and then maybe some of these issues might come to light, but there's really not much else you can do cuz you can't, you know, stop a hurricane from happening."</i></p> <p>Summary → Sharing with others how you feel</p>

Migrant	What do you wish someone would have told you to do pro-actively regarding your mental health status?	Based off your experience, what do you now believe constitutes an environment capable of facilitating optimal mental health?
E -	<p><i>"I probably wish beforehand someone would've told me to be conscious of myself and how I was feeling in the moment, and not just bottle everything up, honestly... just you know be conscious and with myself that I couldn't do everything, that I can't control everything."</i></p> <p>Summary → Share with others how you feel</p>	<p><i>"People just trying to stay positive and trying to um accept when they need help, I think would help mental resources to better do their jobs. Because most of the times people think it's just a bunch of craziness to say the least or that it's not necessary or that it's just going to fade away through time."</i></p> <p>Summary → Positive mindset and taking one's mental health seriously, accepting mental health support</p>

Table 4. Mental health recommendations from environmental migrants.

Migrant	What do you wish someone would have told you to do pro-actively regarding your mental health status?	Based off your experience, what do you now believe constitutes an environment capable of facilitating optimal mental health?
F -	<p><i>"I think I wished someone told me that you don't always have to fit-in. Like fitting in is good but it - if that is your only goal, I feel you are always going to be disappointed, because not everyone is going to accept you for who you are."</i></p> <p>Summary → Be yourself</p>	<p><i>"I don't think it's good for your mental health to say in one place too long. Like, I guess, for example like COVID and people quarantining."</i></p> <p>Summary → Freedom of movement and change of scenery is essential for mental health</p>

Migrant	What do you wish someone would have told you to do pro-actively regarding your mental health status?	Based off your experience, what do you now believe constitutes an environment capable of facilitating optimal mental health?
G -	<p><i>"I wish someone told me that it was okay to cry... it doesn't make me less of a Christian to acknowledge that life is painful."</i></p> <p>Summary → Do not suppress your emotions</p>	<p><i>"Yeah, I feel like, in general, any environment where people have the ability to reflect on their own experiences without feeling judged for any differences and how they had grown up."</i></p> <p>Summary → Nonjudgmental spaces of reflection</p>
H -	<p><i>"Um, that it's not my fault. Like a lot of things that happened you know, like not to blame myself, like... I'm the victim so I should not blame myself whatever is happening."</i></p> <p>Summary → Avoid excessive self-blame</p>	<p><i>"Having my own space, so I guess choosing whether to interact with others, not like, just giving, that, yeah I think it's just having my own space."</i></p> <p>Summary → Privacy and independence</p>
I -	<p><i>"Maybe start therapy a little, as soon as I got here or as soon as, yeah, as soon as I got here."</i></p> <p>Summary → Do not hesitate to start mental health therapy</p>	<p><i>"Your support, like your people who support you, like people around you - that's I think very important because sometimes you don't even realize what is happening to you."</i></p> <p>Summary → Support system</p>

Migrant	What do you wish someone would have told you to do pro-actively regarding your mental health status?	Based off your experience, what do you now believe constitutes an environment capable of facilitating optimal mental health?
J -	<p><i>"...the way I saw what other refugees went through, it didn't help me that very very serious intervention didn't help me, because it was more individualistic."</i></p> <p>Summary → Mental health therapy may not help you because it is individualistic-based</p>	<p><i>"[Space] available for you to express your sadness, sorrow-ness, or situation that will helps at you to seek services and feel better or get those kinds of services to get to feel better... more information, more spaces available to meet the expectation of people that would help."</i></p> <p>Summary → Collective mental health support, spaces of reflection</p>

Table 5. Mental health recommendations from forced displacement migrants.

DISCUSSION

DATA INTERPRETATIONS: RESEARCH QUESTION ONE

The M3 mental health scores of adult environmental migrants relocated to Maryland ranged from 10-33. The highest M3 score possible is a value of 108. Therefore, the environmental migrant participants received a mental health risk classification ranging from “mild” to “moderate.” The forced displacement group of migrants obtained more varied mental health risk classifications, ranging from 0-39, meaning from “low” to “moderate.” Exploration of the qualitative data suggests that these differences may be due to more forced displacement migrants reaching out for mental health support. Whereas each forced displacement migrant expressed convening with a mental health counselor at some point after relocation, only one of the environmental migrants sought mental health support. Several of the forced displacement migrants explained that it was a teacher at their institution who connected them with mental health services. This was not the case for environmental migrants.

Perhaps if environmental migrants were also encouraged to meet with mental health counselors, their range of M3 scores could also have included “low” risk category values as it did for forced displacement migrants. Environmental migrants clearly emphasized the need to share with others how one

feels, with 80% of them expressing this is what they most wish someone would have told them to do during their migration journey. It is concerning that most environmental migrants did not interact with any mental health services despite consistently having mild or moderate mental health symptom burdens. It is also noteworthy that even though forced displacement migrants frequented mental health centers more, 4 out of 5 interviewed confessed that they stopped either because it was too expensive, or the approaches were individualistic and unduly Westernized. Had the environmental migrants accessed mental health services, they may have experienced similar financial or cultural challenges. These outcomes speak to our concern that environmental migrants struggling with a loss of place, having been severed from their sense of social and environmental belonging, might struggle further because of the jarring change in clinical approaches and cultures in the US. Speaking to the investigators' institutional context, if professors, academic advisors, or other stakeholders are encouraged to identify environmental migrants within their classrooms and explain to them what mental health support may be available to them, it must also be assessed how sustainable this mental health support is financially and whether the individuals' culture and values will remain respected and integrated with their care. In the university context and beyond, stronger policies are needed to assure affordability and to meaningfully incorporate community in mental health care.

DATA INTERPRETATIONS: RESEARCH QUESTION TWO

A striking difference in the migration experiences and mental health adjustment of environmental migrants versus forced displacement migrants was how the latter group agreed that relocation improved their mental health whereas the former contended that relocation worsened their mental health. For instance, one environmental migrant expressed emotional distress and a lingering sense of loss at the realization that the hurricane that destroyed his hometown also permanently destroyed all the buildings and parks in which his first and earliest memories occurred:

“It’s really sad to see I kind of just lost a giant important piece of my childhood. The physical buildings I was going to and the memories there, it was just destroyed. I remember going back to my house and it was covered in water and everything was just out in the street and swept away by the hurricane. We did eventually rebuild, but I usually don’t like go back and look at the house then the same way it was now kind of, it was a different entity when I think about that.”

Within academic literature, this existential distress and violation of one's sense of belonging due to irreversible environmental degradation of one's home is referred to as solastalgia.¹⁹ Whereas forced displacement migrants have the hope

of perhaps one day being able to return to their home community, environmental migrants may literally not have a home or community to return to. Furthermore, whereas study subjects that relocated as forced-displacement migrants often did so due to war, and thus were first refugees elsewhere before arriving in Maryland, most environmental migrants relocated directly to Maryland and not in phases. Therefore, forced displacement migrants coming from refugee camps may have understandably felt that their mental health improved upon reaching Maryland because the security, services, and resources in the US were greater than a prior country's refugee settlement. On the other hand, environmental migrants for the most part were US citizens who lived comfortably in their prior location and had established, thriving social networks of support. Consequently, in comparing these contexts, it is understandable why environmental migrants mostly did not appreciate migration. It is important to note that this comfortable prior life may not be the reality for other environmental migrants today or in the future; this group in the present study happened to have all been displaced by the acute disaster of hurricanes, whereas many environmental migrants from other locations have faced years of chronic drought, for example, resulting in long-term decline of livelihood and well-being. Ultimately, for both groups in this study, shattering of social support networks destabilized mental health. As described by one environmental migrant:

“The American culture is a very unfriendly one... here [Puerto Rico] you have that warmth you know... You go to that bakery, everyone’s really nice. Over there [Maryland], going, to that, I’m going to say it again, unfriendly place, I don’t know if it makes you feel less than in a way, so you become a little more isolated and that doesn’t help at all.”

This quote elucidates that it is not only disrupted social connections that exacerbate mental health conditions, but also differences in culture and behaviors. Across the experiences of both groups, it is also noteworthy that interviewees expressed a total lack of, or limited access to, mental health services. Mental health was often misunderstood and stigmatized within their home communities, causing accumulation of psycho-emotional baggage that added to the stress of migration. The loss of social and environmental belonging in a unique place, with differing cultures of mental health and well-being, and the marginalization that may often accompany immigration experiences, present a particularly jarring and potentially alienating combination of conditions for environmental migrants in the United States.

LIMITATIONS OF STUDY

Author KH knew some of the participants personally beforehand, therefore participants may have struggled with social desirability bias. However, the opposite is also potentially true, that because some participants knew KH beforehand, they were more transparent and complete in their responses. Furthermore, subjects verbally shared their M3 Checklist scores with the investigator and were not requested to provide evidence of their scores, therefore this data may have been affected by self-report bias. Another limitation factor was the sample size. The COVID-19 pandemic and presidential election during January 2021 hampered study enrollment such that all participants were UMBC students. The sample also lacked variation in that European and Asian migrants did not participate in the investigation, there were more female participants than males (7:3), and environmental migrants all relocated for the same environmental reason, hurricanes, and not other additional causes such as drought or landslides. This impacts statistical comparisons and generalizability of results. Moreover, since certain migrants moved at a very young age, recall bias may have also impacted results.

STRENGTHS OF STUDY

Despite the challenges of conducting research on a topic considered taboo, among a vulnerable population (student migrants), during a time of political tension and anxiety due to COVID-19 confinement restrictions, this study does possess notable strengths. These include equal sample sizes for both migrant groups, confidentiality in interview structure (focus groups would have introduced influence of peer norms), and use of video conferencing platform so the interviewer, KH, could be aware of emotional cues. Video conferencing software also allowed interviewees to respond to personal questions from the comfort of their home, a familiar environment that may have helped them be more calm and open in their discourse. Participants also had the mental peace of knowing only audio, and not the video, would be recorded from their interview. Lastly, the interviewer comes from the same university as the participants, which may have facilitated trust between both parties since it gave a certain sense of relatability.

CONCLUSION

In summation, whereas forced displacement migrants varied in M3 MH scores, all five environmental migrants demonstrated a minimum of “mildly concerning” levels of emotional health. The Puerto Rican environmental migrants shared they never sought mental health support and that their overarching regret was their tendency to suppress emotions. Conversely, all forced displacement migrants

shared they visited mental health consultations multiple times. FDMs stressed the need for affordable and more collectivist-oriented mental health services. Environmental migrants underlined the stigma of mental health conversations and the need for (1) more nonjudgmental spaces for mental health discussion and (2) more mental health education. Given the predicted increase in environmental migrants and their more fragile mental health conditions, medical and humanitarian organizations, as well as the institution where this research was conducted, should intentionally strategize MH education and create opportunities for EMs to discuss MH with one another, reducing stigma and achieving psychosocial healing.

To our knowledge, this is the first study to characterize and contrast the MH experiences of EMs, mostly from LAC, to FDMs. It is very concerning that all of the EMs expressed that relocation worsened their MH. The number of EMs continues to increase as the effects of climate change escalate, and these migrants will carry experiences of trauma and loss that need to be met with supportive institutions and communities. This suggests that health professionals, researchers, and policymakers within Maryland and beyond should act urgently to implement the suggestions outlined by EMs regarding how to improve MH services.

REFERENCES

- [1] Geneva: International Organization for Migration; 2019:1. https://www.un.org/sites/un2.un.org/files/wmr_2020.pdf.
- [2] Geneva: International Organization for Migration; 2018:2. [r5_world_migration_report_2018_en.pdf](https://www.iom.int/sites/default/files/r5_world_migration_report_2018_en.pdf) (iom.int)
- [3] Key Migration Terms [Internet]. International Organization for Migration. United Nations; 2020. Available from: <https://www.iom.int/key-migration-terms#Migration>
- [4] Migration and Health. Migration Data Portal. <https://migrationdataportal.org/themes/migration-and-health>. Published June 9, 2020.
- [5] Schwerdtle PN, Bowen K, McMichael C, Sauerborn R. Human mobility and health in a warming world. *Journal of Travel Medicine*. 2019;26(1):1-3. doi:10.1093/jtm/tay160
- [6] Brown O. Geneva: International Organization for Migration; 2008:11-15. <https://publications.iom.int/books/mrs-ndeg31-migration-and-climate-change>.
- [7] Torres JM, Casey JA. The centrality of social ties to climate migration and mental health. *BMC Public Health*. 2017;17(1):600. Published 2017 Jul 6. doi:10.1186/s12889-017-4508-0
- [8] Acharibasam JW, Anuga SW. Psychological distance of climate change and mental health risks assessment of small-holder farmers in Northern Ghana: Is habituation a threat to climate change? *Climate Risk Management*. 2018;21:16-25. doi:10.1016/j.crm.2018.04.002
- [9] McMichael C, Barnett J, McMichael AJ. An ill wind? Climate change, migration, and health. *Environ Health Perspect*. 2012;120(5):646-654. doi:10.1289/ehp.1104375
- [10] Schwerdtle P, Bowen K, McMichael C. The health impacts of climate-related migration. *BMC Med*. 2017;16(1):1. Published 2017 Dec 11. doi:10.1186/s12916-017-0981-7
- [11] Torres JM, Casey JA. The centrality of social ties to climate migration and mental health. *BMC Public Health*. 2017;17(1):600. Published 2017 Jul 6. doi:10.1186/s12889-017-4508-0
- [12] Heaney AK, Winter SJ. Climate-driven migration: an exploratory case study of Maasai health perceptions and help-seeking behaviors. *International Journal of Public Health*. 2015;61(6):641-649. doi:10.1007/s00038-015-0759-7
- [13] Herrán K and Biehler D. Analysis of environmental migrants and their mental health in strengthening health systems [version 1; peer review: 2 approved with reservations]. *F1000Research* 2020, 9:1367 (<https://doi.org/10.12688/f1000research.27272.1>)
- [14] Tschakert P, Tutu R, and Alcaro A. Embodied experiences of environmental and climatic changes in landscapes of everyday life in Ghana. *Emotion, Space and Society* 2013, 7: 13-25 (<https://doi.org/10.1016/j.emospa.2011.11.001>)
- [15] *M3 Information*. (2017). <https://www.m3information.com/resources/>
- [16] Gaynes BN, DeVeaugh-Geiss J, Weir S, et al. Feasibility and diagnostic validity of the M-3 checklist: a brief, self-rated screen for depressive, bipolar, anxiety, and post-traumatic stress disorders in primary care. *Ann Fam Med*. 2010;8(2):160-169. doi:10.1370/afm.1092
- [17] Leyva-Flores R, Infante C, Gutierrez JP, Quintino-Perez F, Gómez-Saldivar M, Torres-Robles C. Migrants in transit through Mexico to the US: Experiences with violence and related factors, 2009-2015. *PLoS One*. 2019;14(8):e0220775. Published 2019 Aug 21. doi:10.1371/journal.pone.0220775

- [18] Tasdik Hasan M, Adhikary G, Mahmood S, et al. Exploring mental health needs and services among affected population in a cyclone affected area in coastal Bangladesh: a qualitative case study. *Int J Ment Health Syst.* 2020;14:12. Published 2020 Mar 5. doi:10.1186/s13033-020-00351-0
- [19] Galway LP, Beery T, Jones-Casey K, Tasala K. Mapping the Solastalgia Literature: A Scoping Review Study. *Int J Environ Res Public Health.* 2019;16(15):2662. Published 2019 Jul 25. doi:10.3390/ijerph16152662

A network of black lines connecting small circular nodes on a yellow background. The nodes are arranged in a complex, interconnected pattern, resembling a web or a neural network. The lines are thin and black, while the nodes are small, light-colored circles. The overall background is a solid, bright yellow.

04

Digital Divide During the COVID-19 Crisis: Lack of Internet Connectivity and Community Mesh Networks

Karina Lopez-Brown

Department of Information Systems

Dr. Foad Hamidi

Image: Natee Photo. "Linking entities, Network simulation, social media, Communications Network, The connection between the two networks. in paper linked together by cotton with a black yarn." *Shutterstock*. Item ID: 547720459.

BIOGRAPHY

Karina Lopez-Brown is an Information Systems major who graduated in May 2021 at UMBC. She is a Cyber scholar in the Center for Women in Technology (CWIT). In 2021, she received the Student Leadership Award for Information Systems presented by the College of Engineering and Information Technology (COEIT) at UMBC. In the future, Karina is thinking about enrolling in a master's degree program, Human Centered Computing (HCC). Also, she is interested in getting a certificate in cybersecurity and computer networks. Her personal mission is to grow professionally and spiritually to be able to help others in need. She would like to express her gratitude to Dr. Hamidi for all his teachings, motivation, and support. Finally, a special thanks to the National Science Foundation (NSF) for sponsoring our research.

RESEARCH JOURNEY

As a cyber scholar in the Center for Women in Technology (CWIT), I was highly exposed to students and professors doing research. At first, I thought research was not for me. However, one day I received an email about joining Research Project Waves. This project was about decreasing the digital gap between communities by providing secure and free or low-cost internet access to low-income households in Baltimore. The research part of the project was focused on studying the impact of having internet access in those households where internet connection was installed. I decided to give it a try and join the team of researchers led by Dr. Foad Hamidi. The team had three undergraduate students, including myself, two graduate students, and our leader, Dr. Hamidi. The first part of the research was to learn about the digital gap, mesh networks, and computer-supported collaborative work (CSCW). During the second part of the research, I was directly contacting participants and conducting interviews to later use that information for our analysis and documentation. I conducted about seven interviews. In all these interviews, the participants expressed having a positive impact by having internet connectivity as well as their gratitude. The last part of the research consisted of presenting our findings. We presented our work in an international workshop, CHI 2021 Workshop – The New Vulnerable. We also presented our research in a workshop at CWIT. The project was sponsored by the National Science Foundation (NSF), but other organizations were involved as well such as the Digital Harbor Foundation (DHF) and Project Waves. This research was exciting for me because it was directly helping vulnerable communities in Baltimore, and it was helping these communities to have a better quality of life. Also, it was extremely important to help as many people as possible to get access to the internet due to the COVID-19.



ABSTRACT

Recent research has shown that the COVID-19 crisis has exacerbated existing inequities, creating and amplifying new vulnerabilities. Additionally, scholars and policymakers have identified digital inequality as a major concern. At a time when many services and resources are rapidly transitioning to online formats, access to high-speed Internet connectivity to benefit from online educational, informational, employment and health resources, among others, is arguably more important than ever before. However, significant numbers of people in low-income settings lack reliable and affordable Internet access. This paper develops three intersecting aspects related to internet connectivity: the digital divide and Internet access for low-income families, Internet connectivity during crises, and utilizing mesh networks as a medium to provide connectivity.

INTRODUCTION

The Internet is an essential infrastructure, enabling communication, access to resources, and social interactions. During times of crisis, such as the ongoing COVID-19 pandemic, lack of access to consistent and high-bandwidth Internet connectivity can lead to inequity and new types of vulnerabilities that have not been considered previously [43]. In this position paper, we describe three interconnected aspects of the issue of technology inequity during crises, how it generates new types of vulnerabilities, and how it may be addressed: the digital divide and Internet access for low-income families, Internet connectivity during crises, and using mesh networks to provide connectivity.

THE DIGITAL DIVIDE AND INTERNET ACCESS FOR LOW-INCOME FAMILIES

The United Nations has recognized the importance of Internet access as a human right. In 2011, the UN report underscored “the unique and transformative nature of the Internet not only to enable individuals to exercise their right to freedom of opinion and expression, but also a range of other human rights, and to promote the progress of society as a whole” [9]. The concept of the digital divide refers to the growing gap between those able to access and benefit from the Internet and other technological resources such as digital devices, experience, and skills required for using them, and those who do not get the same benefits. Each of these dimensions (and more) contribute to forms of disparity [17], and the digital divide has been described as a “combinatorial array” of experiences informed by varying combinations of dividing dimensions, the outcome of which is exclusion from benefit [19]. Some of the primary factors that contribute to the digital divide are race, age, gender, income, geography, and education [17, 20].

In the US, 157 million people lack adequate broadband Internet due to its high cost [26], which disproportionately affects low-income families [35]. Moreover, the inability to access the Internet negatively affects different facets of people’s lives, such as success in education, healthcare knowledge, and social interaction. Therefore, reducing or eliminating the digital divide, especially by expanding home Internet access, could improve life for more people [25] and living conditions for low-income users across multiple dimensions, including employment, family, and private life [13].

Consistent home Internet access has become necessary for students to succeed. Socioeconomic factors play a significant role in students not having access to the Internet at home, and in turn, having lower test scores [21]. Furthermore, a child’s education goes beyond what they learn in school. Access to the Internet is helpful for parents with high levels of digital literacy to notice and track

their child's development [27]. Furthermore, in families in which parents have limited experience with formal education or are not proficient in English, parents depend on children's help navigating information resources more often than they provide it, making Internet access valuable to both children and parents [41].

While no- or low-cost access to the Internet eliminates one barrier, it introduces new ones, such as lack of experience. These barriers limit an individual's ability to utilize the Internet once they have access. For example, access to the Internet without previous experience can be overwhelming for low-income users and lead to fear and loss of trust in the medium, which results in reduced benefit from the Internet [38]. Additionally, other resources are needed to be combined with Internet access to support remote learning: such as access to high-quality devices [3], and safe and private spaces for learning [5], among others.

Despite these issues, the cost of Internet access is still a significant barrier and an important factor, among others, preventing people from having the access they so desire, especially in low-income communities. As we will argue later, the cost barrier to user adoption of Internet services can be managed through additional resources [39].

INTERNET CONNECTIVITY DURING CRISES

During natural and human-made crises, having access to information and communication technologies, including the Internet, are crucial for coordinating rescue efforts, sharing of resources and services, and reducing confusion and paranoia, among others [8]. Crisis informatics is an interdisciplinary research field concerned with the "interconnectedness of people, organizations, information, and technology during crises" [15]. The Internet is a crucial part of crisis informatics as it serves as an infrastructure that many of today's governmental and non-governmental emergency services rely on. These organizations use networks and different devices for preventative measures and data collection during a disaster [18]. Generally, this is done with the help of users sending and entering data either voluntarily or involuntarily. An example is the Ushahidi platform used in Kenya during the post-election violence in 2007 [12, 24]. With the media blackout inhibiting the ability to keep track of the real information and all the violence happening in Kenya at the time, the Ushahidi app was developed to create a map and track incidents of violence reported by witnesses through email. As various tweets came in from Kenyans, the app was used to map the locations of the tweets to show in what areas people were facing the most distress.

This same platform was later used in 2010 after the devastating Haiti earthquake [24]. The Ushahidi app showed how using cell phone towers, Wi-Fi, and social media could save lives. This innovation was proof of the developments being made in technology to make crisis informatics more reliable and usable. Usha-

hidi illustrates the importance of Internet accessibility during times of disaster. Without the Internet, it would not be possible to utilize an online application to track incidents during crises and potentially save lives.

THE COVID-19 CRISIS AND THE DIGITAL DIVIDE

The digital divide is one of the inequalities amplified by COVID-19, given that the pandemic has made it necessary for people to use the Internet to access essential resources such as education, medicine, food, and job opportunities [7, 28]. In 2017 it was reported that about half of the world population does not have access to the Internet [20]. Due to the economic impacts of the pandemic, home Internet may no longer be affordable. At the same time, the ever-evolving situation and the need to stay home to reduce the spread of the virus made the Internet even more of a necessity in daily life. Therefore, lower-income households have become even more vulnerable to the negative effects of the pandemic [8].

The impact of COVID-19 on Internet accessibility is more evident when looking at low-income and middle-income countries. Since the pandemic, developing countries have reported that about 1 in 5 people have Internet access [4].

However, the COVID-19 pandemic isn't only affecting poorer and developing countries. As can be seen across Europe and North America, the struggle to address the digital divide and its impact is an issue that has only been amplified since the pandemic. Countries across Europe are seeing up to a 46% increase in mobile page load times [34]. Canadians in rural areas also struggle with the lack of Internet limiting their access to education, job opportunities, and medicine. According to the Canadian Radio-television and Telecommunications Commission (CRTC), collected during the pandemic, only about 41% of rural Canadians have access to the Internet [6]. The United States is also facing similar issues due to social distancing recommendations that have forced the closure of public or semi-public places that some rely on for Internet access, such as Starbucks and McDonald's [2] and public libraries [37]. Some Americans without fast internet access at home have resorted to sitting in the parking lots of schools, libraries, and stores in hopes of using their free Wi-Fi to stay connected during the pandemic [22].

The current pandemic has led to prolonged periods where users are unable to access the Internet. In a recent study, several respondents acknowledged the impact that an Internet outage might have in terms of their personal relationships as well as other activities, with the acknowledgment of both gains and losses [14]. This is relevant to the current COVID-19 crisis as people worldwide are seeing Internet outages for anomalous amounts of time. Knowles wrote that "Global Internet disruptions saw an unprecedented rise, increasing 63% in March over January, and remained elevated through the first half of 2020

compared to pre-pandemic levels” [23]. The study detailed that the primary negative impacts of long-term Internet loss would affect an array of people, as there would be reduced people connectivity, reduced information access, and reduced emotional health, with long-term Internet outages causing feelings such as stress, anger, and panic [14].

While, as outlined above, the experience of the digital divide is multifaceted and complex, several approaches that combine technical and social factors have the potential to address, at least partially, some of the more severe issues that arise in the face of long-lasting and global crisis. In the next section, we will outline one such approach, Wireless Mesh Networks, that can draw on grassroots community resources to provide affordable and efficient Internet connectivity during and in the aftermath of crises.

USING MESH NETWORKS TO PROVIDE CONNECTIVITY

A wireless mesh network (WMN) is a network that comprises a collection of wireless nodes, devices, or connection points. Each node in the network acts as a forwarding node to transfer the data. Since the network is decentralized, forwarding of data is possible only to the neighboring node. In other words, WMN is a collection of devices that communicate among themselves allowing providers to spread the Internet signal over a specific geographical area and for users to access it without having to have wired connectivity. WMN is an ideal solution to provide both indoor and outdoor broadband wireless connectivity in urban, suburban, and rural environments without the need for extremely costly wired network infrastructure [31]. Mesh network elements work together because the network nodes are composed of mesh routers and mesh clients. Usually, routers are digital units that primarily forward network signals to other nodes, while clients are digital units that receive the signal. In mesh networks, most nodes operate as both host and router [1, 30]. This characteristic allows the WMNs to be extremely flexible and be dynamically re-organized, re-configured, and deployed incrementally. As more nodes are installed, the reliability and connectivity for the users increase accordingly [33].

An example of the use of WMNs is Project Waves in Baltimore City, MD. Project Waves starts by locating a building that usually contains many households. Then it builds the infrastructure using fiber to provide Internet and creates the network by configuring access points in each household and installing antennas. Since May 2020, project Waves has connected 371 low-income households to free internet service. According to Project Waves’ annual report, the median salary income of project Waves users is less than \$13,000 per year, and 100% of users live below the federal poverty line [42]. We have collaborated with Proj-

ect Waves to better understand their approach and their motivation behind it.

Many examples of WMNs implemented worldwide (e.g., in India and Nepal) [32, 10] have shown this approach's benefits in communities that didn't have access to the Internet before utilizing the WMN. Mesh networks work as community-based wireless networks; the community, either trained community members or community-based organizations, oversees managing and operating the network. Since the community can operate WMN, the community and other users can benefit from this technology by using it as a medium to access the Internet at no- or low-cost.

In 2010, the Wireless for Communities project was initiated in Chanderi, India [32]. The motivation factors of wireless for communities were to provide basic connectivity to the citizens outside urban centers and address the lack of benefits to these citizens for not having access to the Internet. In Chanderi, Internet use was almost nonexistent in the community, mainly for lack of economical local connectivity options. Members of the community of Chanderi participated in training sessions to learn how to manage the WMN, giving them the opportunity to have access to economic growth and help their community to have access to the Internet. The Wireless for Communities project is an example of how wireless technologies can improve living standards in underserved communities.

The largest WMN in the world is Guifi.net. It started in 2004 in Catalonia, Spain, and the Iberic peninsula. This project started as an open-source community network. The main objective of Guifi.net is to create a neural network to provide the community with free access to the Internet [36]. A similar example is the NYC Mesh, a community network that offers fast and affordable Internet access to about 600 families in New York City [29], which is the largest WMN in the United States.

These community-based approaches have proved promising during the COVID-19 crisis. For example, Project Waves in Baltimore City has connected almost a thousand individuals in 371 low-income households during the pandemic, offering opportunities for family members to utilize online learning and information resources [42].

CONCLUSION

Internet accessibility is crucial during crises, and low-income families are less likely to have dependable Internet access. In addition, the economic effects of COVID-19 have exacerbated the digital divide, positioning vulnerable populations as doubly vulnerable. In the face of these increased vulnerabilities, it is important to explore the possibilities of grassroots innovations that may provide affordable, sustainable, and community-based digital infrastructure for low-in-

come communities. Wireless mesh networks have the potential to increase Internet access in underserved communities, strengthening them during and beyond times of crisis. In the future, exploring the long-term impact of setting up and having access to these networks can provide insight into how they interface and complement other top-down efforts, such as legislation to provide low-cost Internet to more people, to ensure continued access to resources and services during and in the aftermath of crises.

ACKNOWLEDGMENT

This work is partially supported by the National Science Foundation under Grant No. CNS-2030451. We would like to also thank our community partners Project Waves and the Digital Harbor Foundation (DHF). We would like to warmly thank our research team members, Rushaad Wright, Daniel Laguna, Lydia Stamoto, and Nora McDonald, who contributed significantly to this work.

REFERENCES

- [1] Akyildiz, I., Wang, X., & Wang, W. (2005, January 01). Wireless mesh networks: A survey. Retrieved October 16, 2020, from <https://www.sciencedirect.com/science/article/pii/S1389128604003457?via=ihub>
- [2] Balu, Nivedita. (2020, 16 March) "McDonald's, Starbucks Limit Dine-in Service in US to Slow Coronavirus." Reuters, Thomson Reuters, Retrieved December 26, 2021 from www.reuters.com/article/us-health-coronavirus-starbucks/mcdonalds-starbucks-limit-dine-in-service-in-u-s-to-slow-coronavirus-idUSKB-N2131RC.
- [3] Beaunoyer, Elisabeth, Sophie Dupéré, and Matthieu J. Guittou. "COVID-19 and digital inequalities: Reciprocal impacts and mitigation strategies." *Computers in human behavior* 111 (2020): 106424.
- [4] Broom, Douglas. (2020, 22 April) "Coronavirus Has Exposed the Digital Divide like Never Before." World Economic Forum, Retrieved December 26, 2021 from www.weforum.org/agenda/2020/04/coronavirus-covid-19-pandemic-digital-divide-internet-data-broadband-mobility/.
- [5] Czerniewicz, Laura, Najma Agherdien, Johan Badenhorst, Dina Belluigi, Tracey Chambers, Muntuwenkosi Chili, Magriet De Villiers et al. "A wake-up call: Equity, inequality and Covid-19 emergency remote teaching and learning." *Postdigital Science and Education* 2, no. 3 (2020): 946-967.
- [6] Canadian Radio-Television and Telecommunications Commission. (2020). Communications Monitoring Report. Retrieved December 26, 2021 from crtc.gc.ca/pubs/CMR2019-en.pdf.
- [7] Caumont, Andrea. (2020, 30 May). "Who's Not Online? 5 Factors Tied to the Digital Divide." Pew Research Center, Pew Research Center, Retrieved December 26, 2021 from www.pewresearch.org/fact-tank/2013/11/08/whos-not-online-5-factors-tied-to-the-digital-divide/.
- [8] Chiou, Lesley, and Catherine Tucker. (2020, 13 April) "Social Distancing, Internet Access and Inequality." NBER, 13 Apr. 2020, Retrieved December 26, 2021 from www.nber.org/papers/w26982.
- [9] Council, H. R. (2011, May 16). Report of the Special Rapporteur on the promotion and protection of the right to freedom of opinion and expression, Frank La Rue (Rep. No. A/HRC/17/27). Retrieved December 26, 2021 from https://www2.ohchr.org/english/bodies/hrcouncil/docs/17session/A.HRC.17.27_en.pdf
- [10] D. R. Paudel, K. Sato, B. P. Gautam and D. Shrestha, "Design and implementation of partial mesh community wireless network in Himalayan region," *2012 Third Asian Himalayas International Conference on Internet* (2012): 1-6, doi: 10.1109/AHICI.2012.6408447.
- [11] Frick, Jena. (2020, July 17). Wi-Fi for All: UMB Partners with Project Waves. Retrieved November 09, 2020 from <https://www.umaryland.edu/news/archived-news/july-2020/wi-fi-for-all-umb-partners-with-project-waves.php>
- [12] Gettleman, Jeffrey. (2007, July 17) "Disputed Vote Plunges Kenya Into Bloodshed." *The New York Times*, *The New York Times*, Retrieved December 26, 2021 from www.nytimes.com/2007/12/31/world/africa/31kenya.html.
- [13] González Ramos, Ana M., and Lidia Arroyo Prieto. "Digital Inclusion of Low-Income Women: Are Users of Internet Able to Improve their Life Conditions?." *Proceedings of the 15 International Conference on Human Computer Interaction*, (2014), 1-5.

- [14] Grandhi, Sukeshini A., Linda Plotnick, and Starr Roxanne Hiltz. "An internet-less world? Expected impacts of a complete internet outage with implications for preparedness and design." *Proceedings of the ACM on human-computer interaction* 4, no. GROUP (2020): 1- 24.
- [15] Hagar, Chris. "Introduction to the special section." *Bulletin of the American Society for Information Science and Technology* 36, no. 5 (2010): 10-12.
- [16] Hall, Oneil. (2020, April) "Internet Costs and Accessibility in COVID-19." *Jamaica Observer*, Retrieved December 26, 2021 from www.jamaicaobserver.com/editorial/internet-costs-and-accessibility-in-covid-19_192244.
- [17] Hargittai, Eszter. "The digital divide and what to do about it." *New economy handbook* 2003 (2003): 821-828.
- [18] Herzenberg, Donald E., Newsom, Caroline L., and Swietlik, Craig E. Value of the internet in emergency response. No. ANL/DIS/CP-99120. Argonne National Lab., IL (US), 1999.
- [19] Hilbert, Martin. "The end justifies the definition: The manifold outlooks on the digital divide and their practical usefulness for policy-making." *Telecommunications Policy* 35, no. 8 (2011): 715-736
- [20] International Telecommunication Union. (2017, September) *The State of Broadband: Broadband Catalyzing Sustainable Development*. Retrieved December 26, 2021 from www.itu.int/dms_pub/itu-s/opb/pol/S-POL-BROADBAND.18-2017-PDF-E.pdf.
- [21] Jackson, L. A., von Eye, A., Biocca, F. A., Barbatsis, G., Zhao, Y., & Fitzgerald, H. E. (2006). Does home internet use influence the academic performance of low-income children? *Developmental Psychology*, 42(3), 429–435. <https://doi.org/10.1037/0012-1649.42.3.429>
- [22] Kang, Cecilia. (2020, May) "Desperate for Wi-Fi, Many Have Nowhere to Go but a Parking Lot." Retrieved December 26, 2021 from www.baltimoresun.com/coronavirus/sns-nyt-desperate-for-wi-fi-using-parking-lot-20200505-77uk-siyrnch7pqaaju5dgrxi-story.html.
- [23] Knowles, Catherine. (2020, August) "Internet Outages Drastically Increased during COVID-19 Lockdowns, Report Finds." *SecurityBrief Europe*, SecurityBrief Europe, Retrieved December 26, 2021 from securitybrief.eu/story/internet-outages-dramatically-increased-during-covid-19-lockdowns-report-finds.
- [24] Meier, Patrick, and Josh Nesbit. (2011, January) "Patrick Meier & Josh Nesbit: The Haiti 4636 Story." *PopTech*, Retrieved December 26, 2021 from past.poptech.org/popcasts/patrick_meier-josh_nesbit_the_haiti_4636_story.
- [25] Bier, Melinda, Michael Gallo, Eddy Nucklos, Stephen Sherblom, and Michael Pennick. "Personal empowerment in the study of home Internet use by low-income families." *Journal of Research on Computing in Education* 30, no. 2 (1997): 107-121.
- [26] Microsoft. (2019, November) "Microsoft/USBroadbandUsagePercentages." Retrieved December 26, 2021 from github.com/microsoft/USBroadbandUsagePercentages.
- [27] Munoz, David. "Low-Income Parents' Perceptions of Technology: Value-Based Design Insights." *Low-Income Parents' Perceptions of Technology | CHI '14 Extended Abstracts on Human Factors in Computing Systems*, 1 Apr. 2014, dl.acm.org/doi/10.1145/2559206.2579420.
- [28] National Telecommunications and Information Administration (2020, October 5). "BroadbandUSA Announces New Digital Inclusion Webpage." *National Telecommunications and Information Administration*, Retrieved December 26, 2021 from www.ntia.doc.gov/blog/2020/broadbandusa-announces-new-digital-inclusion-webpage
- [29] NYC Mesh. (2020, September 21). Retrieved December 15, 2020, from <https://www.nycmesh.net/>

- [30] Parvin, J. Regina (2019, June 10). An overview of wireless mesh networks. Retrieved February 09, 2021, from <https://www.intechopen.com/books/wireless-mesh-networks-security-architectures-and-protocols/an-overview-of-wireless-mesh-networks>
- [31] Bruno, Raffaele, Marco Conti, and Enrico Gregori. "Mesh networks: commodity multihop ad hoc networks." *IEEE Communications Magazine* 43, no. 3 (2005): 123-131.
- [32] R. D. Singh, "Wireless for Communities: Empowering Communities through Wireless Connectivity," *IEEE Internet Computing* 16, no. 3, (2012): 77-79, doi: 10.1109/MIC.2012.58.
- [33] R. Sombrutzki, A. Zubow, M. Kurth and J. Redlich, "Self-Organization in Community Mesh Networks The Berlin RoofNet," *Workshop on Operator-Assisted (Wireless Mesh) Community Networks*, (2006): 1-11, doi: 10.1109/WOACN.2006.337188.
- [34] Rajiullah, Mohammad, Ali Safari Khatrouni, Cise Midoglu, Özgü Alay, Anna Brunstrom, and Carsten Griwodz. "Mobile network performance during the COVID-19 outbreak from a testbed perspective." *Proceedings of the 14th International Workshop on Wireless Network Testbeds, Experimental evaluation & Characterization*. (2020): 110-117.
- [35] Rhinesmith, Colin, Bianca Reisdorf, and Madison Bishop. "The ability to pay for broadband." *Communication Research and Practice* 5, no. 2 (2019): 121-138.
- [36] Roger Baig, Lluís Dalmau, Ramon Roca, Leandro Navarro, Felix Freitag, and Arjuna Sathiseelan. 2016. Making Community Networks economically sustainable, the guifi.net experience. *Proceedings of the 2016 workshop on Global Access to the Internet for All (GAIA '16)*, (2016): 31-36. DOI:<https://doi.org/10.1145/2940157.2940163>
- [37] Staff, WUSA 9. "Coronavirus Closures: DC Pride Parade and Festival Postponed Due to Coronavirus Concerns." [wusa9.com](https://www.wusa9.com), 11 Mar. 2020, Retrieved December 26, 2021 from www.wusa9.com/article/news/health/coronavirus/coronavirus-closures-impacts-to-schools-businesses-heres-a-list/65-4346150c-0e20-4f09-a096-2fdb3e4718e4.
- [38] Vitak, Jessica, Yuting Liao, Mega Subramaniam, and Priya Kumar. "I Knew It Was Too Good to Be True" The Challenges Economically Disadvantaged Internet Users Face in Assessing Trustworthiness, Avoiding Scams, and Developing Self-Efficacy Online." *Proceedings of the ACM on human-computer interaction* 2, no. CSCW (2018): 1-25.
- [39] Wamuyu, Patrick Kanyi. "Bridging the digital divide among low-income urban communities. Leveraging use of Community Technology Centers." *Telematics and Informatics* 34, no. 8 (2017): 1709-1720.
- [40] Waves Movement. (n.d.). Retrieved November 1, 2021 from <https://projectwaves.net/>
- [41] Vikki S. Katz, Carmen Gonzalez, Kevin Clark; Digital Inequality and Developmental Trajectories of Low-income, Immigrant, and Minority Children. *Pediatrics* November 2017; 140 (Supplement_2): S132-S136. 10.1542/peds.2016-1758R
- [42] Waves Movement. (n.d.). Retrieved November 01, 2020, from <https://projectwaves.net/>
- [43] Van Deursen A; Digital Inequality During a Pandemic: Quantitative Study of Differences in COVID-19-Related Internet Uses and Outcomes Among the General Population; *J Med Internet Res* 2020; 22(8): e20073 URL: <https://www.jmir.org/2020/8/e20073>

05

Mathematical Model of Computer Viruses Spread on a Closed Network

Joshua Walters

Department of Mathematics & Statistics

Dr. Brad Peercy

Image: Mopic, "A padlock shape made out of hex code - computer security concept."
Shutterstock. Item ID: 177748757.

BIOGRAPHY

Joshua Walters is a first-generation college senior majoring in Mathematics, graduating in Spring 2022. In the Summer of his junior year, Joshua performed mathematical modeling research at Bethune-Cookman University in Daytona Beach, Florida. It was here that Joshua was inspired to pursue modeling and applied mathematics as his field of study thanks to the support he received from faculty and peers. In the future, Joshua plans to earn a Ph.D. in applied mathematics with the goal of researching the effects of human activity on different aspects of the environment. He would like to thank Dr. Seenith Sivasundaram and Dr. Yunkul Kim for their mentorship and facilitation of his research, and his family and friends for their continuous support.

RESEARCH JOURNEY

From the moment I decided that I wanted to go to college to study mathematics, I knew that I would want to someday earn my Ph.D. Despite knowing that I wanted to perform mathematical research, in the early years of my undergraduate education I truly had no idea how research with math was actually performed. When I took my first class in mathematical modeling, I knew for sure that I had made the right decision. I learned for the first time the process in which real world situations could be studied mathematically, and I fell in love. At the end of that semester, I began to look for internships that would allow me to apply my newfound passion. I participated in the Mathematical Modeling in Environmental and other Sciences REU in Summer 2021, Mentored by Dr. Seenith Sivasundaram. At first, I was concerned. Being solely a math major, I had very limited experience in environmental science. However, after spending time working with Dr. Sivasundaram, he introduced me to the field of virology. He encouraged me to relate it to something that I was more familiar with: computers. After another short discussion, I decided that I wanted to study a mathematical model of the spread of computer viruses.

ABSTRACT

We consider a system with a population divided into compartments: strongly protected computers (S), weakly protected computers (W), infected computers (I), susceptible removable devices (R_s), and infected removable devices (R_i). Given the dynamics between these compartments, we develop a mathematical model to study the effect of external removable devices on a system with both protected and unprotected computers (heterogeneous immunity). Considering certain factors such as infection rates, the rate at which removable devices are used, and the probability that infected devices connect with vulnerable computers, we form a system of differential equations that will predict the behavior of the virus. With our model, we determine the general form of the basic reproduction number to study the system and analyze its behavior under different parameters. It was found that increasing the parameters associated with installation of antivirus software and recovery of infected removable devices decreased the amount of infection present in the final equilibrium, and sufficient increase in these parameters yielded the virus free equilibrium. Conversely, decrease in the parameters associated with expiration of antivirus software and the infection of removable devices decreased the infection present in the equilibrium, with sufficient decrease giving the virus free equilibrium. We conclude that careful monitoring of antivirus software is the most effective method of virus elimination after a system has been infected, but management of removable devices is critically important in controlling virus spread. Adherence to these principles could protect the systems of individuals, corporations, and governments and prevent massive damages.

INTRODUCTION

The development of communication networks has made computers ubiquitous in our daily lives. The human dependence on many electronic devices, such as mobile phones and laptops, is increasing every day since almost everything can be accessed online.

The propagation of computer viruses is analogous to that of infectious diseases in that both are transmitted through communication between individuals. Computer viruses are usually transmitted through networks via e-mail messages or when downloading an infected file. They can also be spread when connecting a computer to removable devices such as USB, mobile phones and hard drives. The goal of this work was to build a mathematical model to study the effect of external removable devices on a network that includes computers both with and without antivirus software (i.e. heterogeneous immunity).

Anti-virus software always strives to protect computers from known viruses. However, due to the emergence of new viruses, computers are always at some level of risk as the development of anti-virus software attempts to keep up. As a result, users must update their anti-virus software regularly. Anti-virus software becomes ineffective if it is not updated or allowed to expire.

We believe that a lack of user awareness regarding the correct use of removable devices plays a fundamental role in the spread of viruses, as connecting infected removable media to a computer can cause the virus to spread. The standard Susceptible, Infected, Recovered (SIR) Epidemic model is used as the mainstay of this study, capitalizing on the shared nature of biological virus and computer virus propagation. The basic SIR Model has been extended to account for several concepts unique to computer systems including multiple sources of infection and the continued susceptibility of devices after recovery.

METHODS

In this model we have two main populations: computers and removable devices. The computers are divided into three sets of nodes: Weak, Strong, and Infected. The removable devices are divided into two: Susceptible and Infected. These populations are notated as follows:

$S(t)$	Strongly protected computers	S -node
$W(t)$	Weakly protected computers	W -node
$I(t)$	Infected computers	I -node
$R_S(t)$	Susceptible removable devices	R_S -node
$R_I(t)$	Infected removable devices	R_I -node
$N(t)$	Total number of computers	
$R_N(t)$	Total number of removable devices	

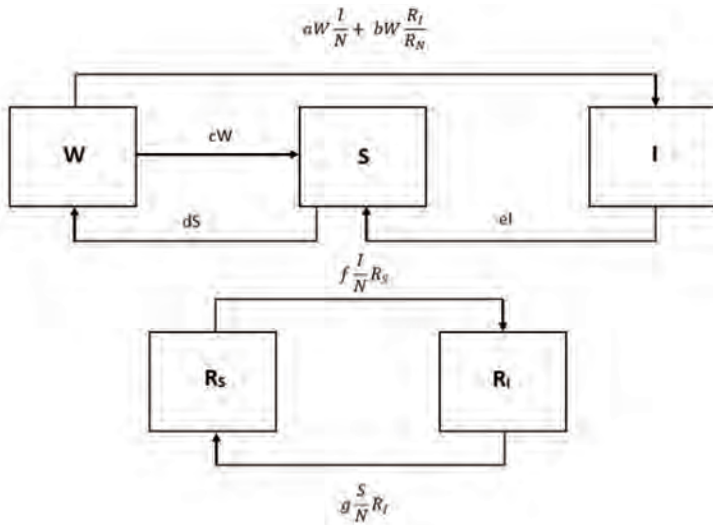


Figure 1: Visualization of the compartmental model for computer virus transmission. Note that while the two sets of nodes W, S, I and R_S, R_I are not linked, they are in fact related. The rate at which weakly protected computers are infected depends on the ratio $\frac{R_I}{R_N}$. Similarly, the rates of infection and recovery of removable devices depend on the ratios $\frac{I}{N}$ and $\frac{S}{N}$ respectively.

We make the following assumptions of the dynamics of this model:

1. The total number of nodes in the network is invariant.
2. Up-to-date antivirus software is powerful enough to keep S -node computers immune from viruses.
3. Every W -node is infected with probability “ a ” per day due to possible

- connection with an **I**-node.
4. **W**-node computers become infected with constant probability “ b ” per day due to connection with an **R_I**-node.
 5. **W**-nodes become **S**-nodes with rate “ c ” per day due to installation of updated antivirus software.
 6. **S**-nodes become **W**-nodes with rate “ d ” per day due to expiration of antivirus software.
 7. Each **I**-node is successfully treated with antivirus software and becomes an **S**-node with rate “ e ” per day.
 8. **R_S**-nodes become infected due to connection with **I**-nodes with rate “ f ” per day.
 9. **R_I**-nodes become susceptible again with rate “ g ” per day due to connection with **S**-nodes.

The infection rate of weak systems is given by the sum of the two sources of infection: infected computers (rate a), and infected removable devices (rate b). For each source, the actual rate of infection is proportional to both the number of weak computers present in the system and the probability that a weak computer will have contact with an infected computer or an infected removable device [6]. Therefore, we have that **W**-nodes become **I**-nodes at a rate of $aW\frac{I}{N} + bW\frac{R_I}{R_N}$.

The rate at which susceptible removable devices become infected is proportional to the number of currently susceptible devices and the probability that it will be connected to an infected computer, giving the rate $f\frac{I}{N}R_S$. Similarly, the rate at which infected removable devices are scanned and recovered is proportional to the number of infected removable devices and the probability that it will be connected to a strongly protected computer $g\frac{S}{N}R_I$.

Given the rate of installation of antivirus software (c), the rate of expiration of antivirus software (d), and the rate at which infected systems are recovered (e), the actual rates at which nodes move between the **W**, **S**, and **I** compartments are proportional to the number of computers currently within them (giving cW , dS , and eI). After considering the dynamics of each population (visualized in Figure 1), the governing equations are

$$W' = -aW\frac{I}{N} - bW\frac{R_I}{R_N} - cW + dS,$$

$$S' = cW + dI - dS,$$

$$I' = -aW\frac{I}{N} - bW\frac{R_I}{R_N} - eI,$$

$$R'_S = gR_I\frac{S}{N} - fR_S\frac{I}{N},$$

$$R'_I = fR_S\frac{I}{N} - gR_I\frac{S}{N}.$$

By assumption 1, the total number of nodes in the system is invariant meaning N and R_N are constant (no computers or removable devices are being added to or removed from the system). We can therefore normalize the system by letting

$$w = \frac{W}{N}, \quad s = \frac{S}{N}, \quad i = \frac{I}{N}, \quad R_s = \frac{R_S}{R_N}, \quad R_i = \frac{R_I}{R_N}.$$

Since we now have that $w + s + i = 1$, and $R_s + R_i = 1$, we can facilitate the model with a sub system considering only the compartments where the virus appears. The model we want to study is therefore given by,

$$w' = -awi - bwR_i - cw + d(1 - w - i),$$

$$i' = awi + bwR_i - ei,$$

$$R_i' = fR_s \frac{I}{N} - gR_i \frac{S}{N}.$$

Given that the spread of computer viruses is analogous to the spread of biological viruses [6], we make use of the basic reproduction number (R_0) [3]. The basic reproduction number is used in pandemic models to measure the transmission rate of different viruses. The higher the R_0 , the more likely the disease is to become an epidemic. An $R_0 = R$ implies that, for every case of infection (Index Case), an additional R individuals will be infected (Secondary Cases) before the index case is no longer infectious.

- $R_0 < 1$ implies the disease is being spread more slowly than it is being cured and will therefore eventually die out.
- $R_0 = 1$ implies the disease remains stable in the community but will not cause a widespread attack (epidemic).
- $R_0 > 1$ implies the disease spreads more quickly than it can be cured and may cause an epidemic.

To derive the basic reproduction number, we first form the next generation matrix [3]. Given our system of equations, consider only the equations describing infection.

$$i' = awi + bwR_i - ei,$$

$$R_i' = f_i(1 - R_i) - g(1 - w - i)R_i.$$

We then calculate the Jacobian matrix for this system of equations and separate

it into two matrices F and V . The elements of F include the terms responsible for new infections, and the elements of V are only the terms responsible for all other transitions between compartments (Refer to Diekmann & Heesterbeek (2000, pp. 105 – 107) [2] and later in Van den Driessche & Watmough (2002) [4]).

$$J_{(i,R_i)} = \begin{bmatrix} aw - e & bw \\ f(1 - R_i) + gR_i & -fi - g(1 - w - i) \end{bmatrix} = F + V,$$

where

$$F = \begin{bmatrix} aw & bw \\ 0 & 0 \end{bmatrix}, \quad V = \begin{bmatrix} -e & 0 \\ f(1 - R_i) + gR_i & -fi - g(1 - w - i) \end{bmatrix}$$

We consider the equilibrium point of the system where infections are zero. The infection free equilibrium point is $(w, i, R_i) = (d/(c + d), 0, 0)$ and we have

$$F = \begin{bmatrix} a\frac{d}{c+d} & b\frac{d}{c+d} \\ 0 & 0 \end{bmatrix}, \quad V = \begin{bmatrix} -e & 0 \\ f & -g(1 - \frac{d}{c+d}) \end{bmatrix}$$

at the infection free equilibrium. The next generation matrix G is then given by

$$G = -FV^{-1} = \begin{bmatrix} \frac{acd + bdf(c+d)}{ceg(c+d)} & \frac{bd}{eg} \\ 0 & 0 \end{bmatrix}.$$

It is important to note that each element of G is itself a reproduction number; each G_{ij} describes the number of secondary infections of population i caused by an index infection in population j . Finally, the basic reproduction number is given by the spectral radius (dominant eigenvalue) of G [4]. Thus,

$$R_0 = \frac{acd + bdf(c+d)}{ceg(c+d)}.$$

Note that R_0 depends entirely on the parameters a through g . The basic reproduction number is a useful tool in predicting the behaviors of this system, but due to some key limitations it is necessary to perform additional analysis [1]. Using this number as well as both stability and sensitivity analysis on the equilibrium, we determine under which criteria the system will reach either a virus-free or virus present equilibrium.

RESULTS

Given enough time, this system will reach a stable equilibrium regardless of initial conditions or parameters $a - g$. In this equilibrium, either there will be some infection present (in either computers or removable devices) or there will be no infection present. Using our model, we facilitate several scenarios demonstrating different levels of infectivity and user awareness.

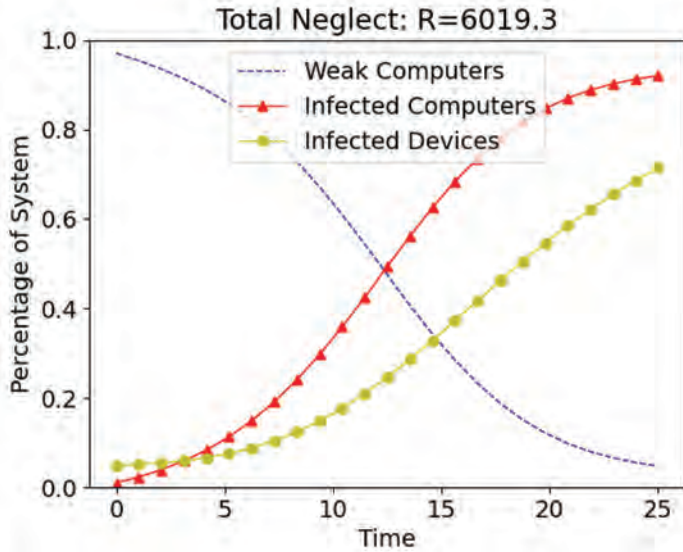


Figure 2: A plot over 25 days of the three populations w , i , and R_i under a set of parameters that simulate a total neglect of system security. It is shown that even with low transmission rates, without security measures the system will succumb to the virus in a short period of time. ($a=0.2$, $b=0.2$, $c=0.02$, $d=0.3$, $e=0.02$, $f=0.1$, $g=0.01$, $w(0)=97\%$, $i(0)=1\%$, $R_i(0)=5\%$)

We analyze the eigenvalues of the Jacobian matrix evaluated at the infection free equilibrium ($i = R_i = 0$) to determine

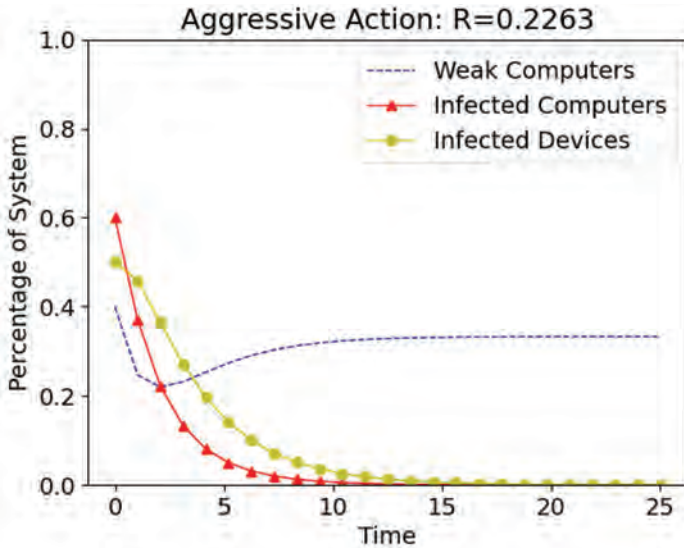


Figure 3: A plot of w , i , and R_i over 25 days with parameters which simulate aggressive action being taken to eliminate the virus. The presence of weakly protected computers in the equilibrium suggests that it is not strictly necessary to install and maintain antivirus software for 100% of the computer population to eliminate the virus. ($a=0.4, b=0.05, c=0.4, d=0.2, e=0.6, f=0.05, g=0.5, w(0)=40\%, i(0)=60\%, R_i(0)=50\%$)

under what conditions it will be stable or unstable.

Theorem:

1. If $R_0 < 1$, then the disease-free equilibrium is asymptotically stable.
2. If $R_0 > 1$, disease-free equilibrium is unstable.

The Jacobian matrix calculated at the disease-free equilibrium has negative eigenvalues if $R_0 < 1$, therefore it will be asymptotically stable. In the case where $R_0 > 1$, the eigenvalues are positive and thus the virus free equilibrium becomes unstable. Maple was used to simulate many sets of parameters with the condition that $R_0 < 1$. In every instance, it was found that the corresponding Jacobian matrix had negative eigenvalues and the virus-free equilibrium was stable.

It is useful to know under which conditions the virus will be eliminated, but understanding the effect of each parameter (and by extension the effect of users' behavior) is also important. Comparing Figures 2 and 3, it is clear that total neglect of system security results in an epidemic, whereas aggressively taking action against the virus prevents an epidemic. There are, however, some cases in which it is more difficult to determine whether an epidemic has occurred. In Figure 4, We have that the system stabilizes with a low rate of infection, yet the basic reproduction number implies that an epidemic is occurring. To eliminate this ambiguity, we define an epidemic as any case in which the final equilibrium

has infection present.

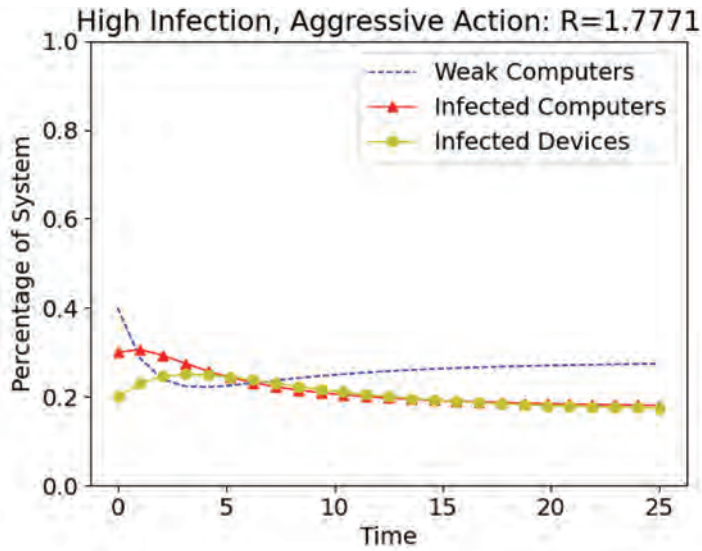


Figure 4: A plot over of w , i , and R_i over 25 days with parameters which simulate very high rates of infection as well as aggressive action being taken to eliminate the virus. ($a=0.6$, $b=0.5$, $c=0.3$, $d=0.25$, $e=0.3$, $f=0.25$, $g=0.4$, $w(0)=40\%$, $i(0)=30\%$, $R_i(0)=20\%$)

This ambiguity also brings the limitations of the basic reproduction number to light: R_0 does not account for factors such as an immune population or active treatment of the virus [3] [1] – both of which occur in this model. Because of this, we perform sensitivity analysis on the infection-present equilibrium to determine what criteria, in addition to the basic reproduction number, affect the final behavior of the system.

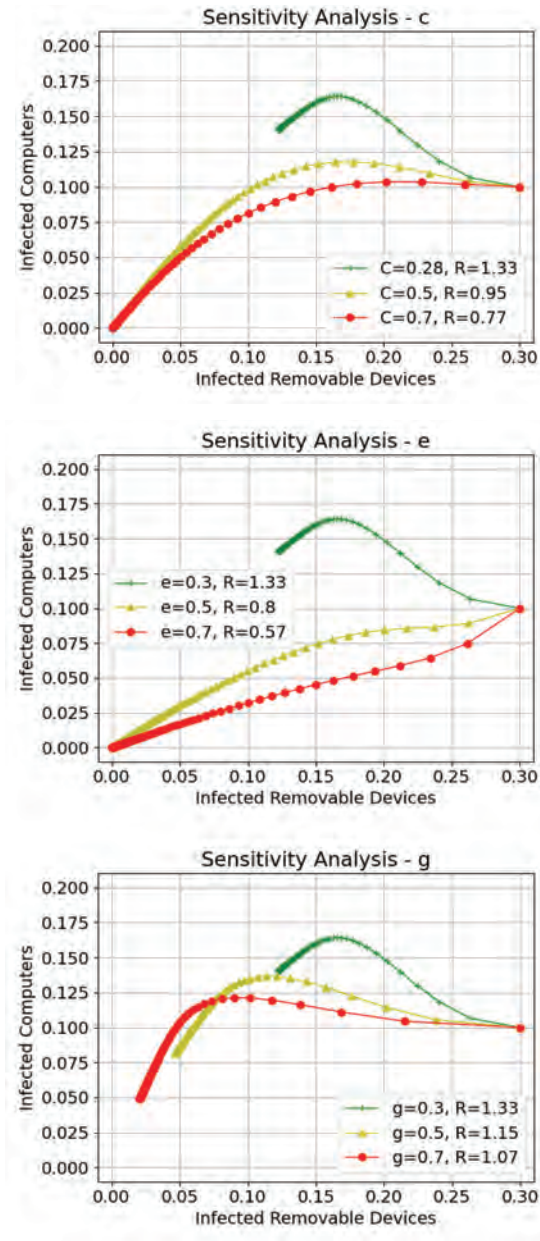


Figure 5: Sensitivity analysis of the parameters c , e , and g on the final equilibrium point of the system. i and R_i are plotted using the same set of parameters and initial conditions ($R_i(0)=30\%$, $i(0)=10\%$) but for different values of c , e , and g . Increasing these parameters corresponds to an increased rate of installation of antivirus software, increase in rate of recovery of infected computers, and increased rate of recovery of infected removable devices. In every case, this increase decreases the amount of infection present in the equilibrium and a sufficiently large increase results in the infection free equilibrium.

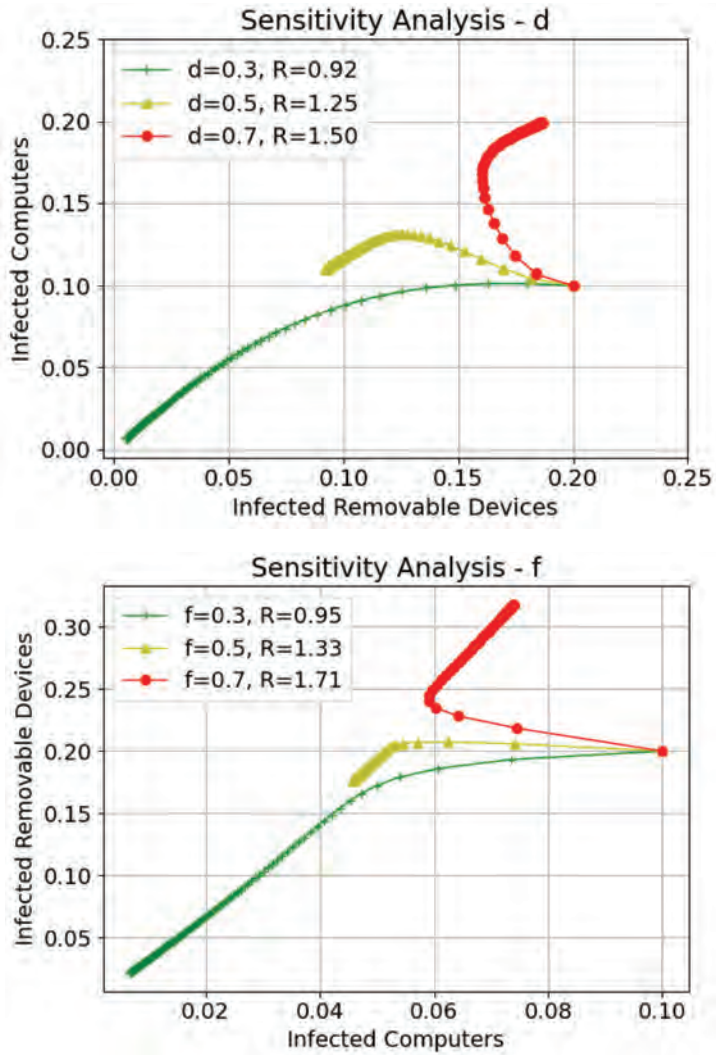


Figure 6: Sensitivity analysis of the parameters d and f on the final equilibrium point of the system. i and R_i are plotted using the same set of parameters and initial conditions ($i(0)=10\%$, $R_i(0)=20\%$) but for different values of d and f . Increasing these parameters corresponds to an increased rate of expiration of antivirus software and an increased rate of infection of removable devices, respectively. An increase in these parameters increases the amount of infection present in the equilibrium.

We measure these effects through sensitivity analysis of certain key parameters on the equilibrium point of the system. In Figures 5c-g, we plot the amount of infection present in both computers and removable devices as the system progresses. These graphs demonstrate the effect of user awareness in the form of diligent installation of antivirus software and careful screening of removable

devices. It is evident that an increase in these parameters c , e , and g (representing the rate of installation of antivirus software, the recovery of infected computers, and the recovery of infected removable devices respectively) decreases the amount of infection present in the final equilibrium, and that sufficient increase in these parameters will result in the infection-free equilibrium. Figures 6d and 6f show that an increase in user awareness in the form of decrease in the parameters d and f (representing the expiration of antivirus software and the infection of removable devices) lowers the amount of infection-present in the final equilibrium, and sufficient decrease of these parameters yields the infection-free equilibrium.

CONCLUSIONS

Given the analysis of the basic reproduction number as well as the stability and sensitivity analysis of the equilibrium, we conclude that:

- If $R_0 < 1$, then the infection-free equilibrium is stable and the system will tend towards zero infection.
- If $R_0 > 1$, infection-free equilibrium is unstable and will reach some equilibrium point with infection present.
- Installing effective antivirus software and updating it regularly will increase parameters c , e , and g , lowering the amount of infection present in the equilibrium.
- Filtering removable devices with antivirus software and disconnecting them from the computer whenever they are unused will minimize the parameters d and f , lowering the amount of infection present in the equilibrium.

It can be seen that in particular, increase in the parameters c and e has the greatest effect on the equilibrium. It is important to note that an increase in either of these parameters has a direct effect on the rate at which the number of **S**-nodes increases. This in turn increases the probability that an R_i -node will be scanned of viruses and decreases the probability that an R_i -node will infect a **W**-node. A decrease in the parameter d (lowering the rate at which antivirus software expires) has a similarly extreme effect on the equilibrium and affects the system in the same way. Though f and g have smaller impacts on the equilibrium than c , e , and d , they do significantly affect the rate at which the virus spreads throughout the system.

Therefore, careful monitoring of antivirus software is the most effective method of virus elimination, but management of removable devices is also important for controlling virus spread. This is an important distinction, as it demonstrates that an increase in user awareness in the form of careful screening of removable devices plays an important role in ensuring the system does not become infected in the first place and that the spread of infection remains slow. However, once an infection is known to be present in a significant portion of

the population, focus should be shifted towards effective management of anti-virus software so that the infection can be removed entirely.

Due to the ever-increasing amount of data being stored on computers, the importance of network security is constantly growing. Many viruses such as ransomware and spyware steal or even destroy information, which could have disastrous results for people, corporations, and researchers or data scientists. This information is essential in protecting the intellectual property of people everywhere. As there are many potential sources of infection in addition to removable devices, this model could be expanded in the future to include infection through unsecured websites, malware links and more.

ACKNOWLEDGEMENTS

This paper and the research behind it would not have been possible without the exceptional support of my mentor, Seenith Sivasundaram. This research project was supported by the National Science Foundation Research Experiences for Undergraduates (REU) Award Number DMS-1755561 Bethune-Cookman University, and I would like to thank the principal investigator Dr. Seenith Sivasundaram and Co-PI Dr. Yungkul Kim for facilitating the REU Program. I would also like to thank Dr. Brad Peercy for his encouragement and assistance in writing this paper, and Dr. Rouben Rostamian for his assistance in utilizing Maple.

REFERENCES

- [1] Paul L. Delamater et al. “Complexity of the Basic Reproduction Number (R_0)”. In: *Emerging Infectious Diseases* 25 (2019), pp. 1–4.
- [2] Odo Diekmann, J. A. P. Heesterbeek, and Johan A. J. Metz. “On the definition and the computation of the basic reproduction ratio R_0 in models for infectious diseases in heterogeneous populations”. In: *Journal of Mathematical Biology* 28 (1990), pp. 365–382.
- [3] P. van den Driessche. “Reproduction numbers of infectious disease models”. In: *Infectious Disease Modelling* 2 (2017), pp. 288–303.
- [4] P. van den Driessche and Watmough James. “Reproduction numbers and subthreshold endemic equilibria for compartmental models of disease transmission”. In: *Mathematical Biosciences* 180.1 (2002), pp. 29–48. issn: 0025-5564. doi: [https://doi.org/10.1016/S0025-5564\(02\)00108-6](https://doi.org/10.1016/S0025-5564(02)00108-6). url: <https://www.sciencedirect.com/science/article/pii/S0025556402001086>.
- [5] Bimal Kumar Mishra and Dinesh Saini. “Mathematical models on computer viruses”. In: *Applied Mathematics and Computation* 187.2 (2007), pp. 929–936. issn: 0096-3003. doi: <https://doi.org/10.1016/j.amc.2006.09.062>. url: <https://www.sciencedirect.com/science/article/pii/S0096300306012252>.
- [6] Pabel Shahrear et al. “Analysis of Computer Virus Propagation Based on Compartmental Model”. In: *Applied and Computational Mathematics* 7 (2017), p. 12.

06

Restoring Russian Hegemony in the Caucasus: Coverage of Georgian President Mikheil Saakashvili and the 2008 Russo–Georgian War in Russian and Ukrainian Print Media

Matthew Kelbaugh

Department of Modern Languages, Linguistics &
Intercultural Communication
Professor Vira Zhdanovych

Image: Gkrphoto. "Newspapers folded and stacked concept for global communications."
Shutterstock. Item ID: 162094310.

BIOGRAPHY

Matthew Kelbaugh is a history and Russian major, who will graduate in the spring of 2023. He is a Humanities Scholar and an officer in UMBC's Russian Club. He has presented research at UMBC's 2021 URCAD and the 2021 Johns Hopkins Richard National Undergraduate Humanities Research Symposium, and he has recently been endowed with an Undergraduate Research Award for research about the 2008 Russo-Georgian War. After graduation, he intends to either enroll in graduate school or work in the public sector, either in intelligence analysis or diplomacy. He plans to earn a doctorate in history.

He would like to thank Prof. Vira Zhdanovych for mentoring this project and helping to translate Russian and Ukrainian sources, as well as Prof. Randy Kidd, who was the primary editor of this document and ensured its readability and conciseness. He would also like to thank Michael Schlitzer for reading this manuscript and offering helpful suggestions.

RESEARCH JOURNEY

The current conflict in Ukraine indicates no signs of reaching a satisfactory resolution, promising to be an aggravating thorn in US foreign policy for years to come. As I am currently majoring in Russian, translating Russian and Ukrainian sources was an excellent means to practice both languages, but more importantly, visiting primary sources enabled me to better understand Ukrainian and Russian cultural perspectives across a range of issues. I had already previously designed an URCAD project with my mentor in which we translated and analyzed Russian and Ukrainian textbooks' depictions of Vladimir Lenin. This endeavor taught me that using cross-language mediums in research was not only feasible, but that this approach could be especially useful when applied to controversial historical/political figures. Furthermore, works pertaining to Russia's relations with its neighbors are immensely valuable to both diplomats and scholars. The only other major instance of Russian imperialism so far in the twenty-first century was the 2008 Russo-Georgian War, an analysis of which would benefit from hindsight, as the conflict has been de facto resolved with the separatist territories of Abkhazia and South Ossetia securely in Russia's grip. To make examining the vast trove of sources feasible, I simplified to mostly studying media coverage of the pro-Western, pro-democracy President of Georgia at the time, Mikheil Saakashvili, and only analyzed the archives' data in the month of August 2008. Strikingly, the rhetoric and actions of the Russian government and military in the conflict with Georgia was a pattern repeated in Ukraine. While Ukrainian media offers the fascinating perspective of a third-party source who shared similar fears and aspirations to embattled Georgia, Russian media's coverage served to justify Russian actions in the region. As a result, studying this war helped provide a nuanced understanding of the current Russo-Ukrainian conflict, and a tentative appraisal of the region's future. This research was submitted to the *UMBC Review* in 2021.

ABSTRACT

Mikheil Saakashvili,¹ the former president of Georgia, is a polarizing figure who has inserted himself in the region's debate to remain in Russia's orbit or to become more Western and democratic in outlook. Ukrainian and Russian print media's coverage of the 2008 Russo-Georgian War reveals some stark differences in depicting Georgia's leader at the time. The differing perceptions of Saakashvili tend to divide Ukrainians and unite Russians. Portrayals of Saakashvili unveil the similar aspirations between both Georgian and Ukrainian nationalists to withdraw from Russia's orbit and Russia's willingness to employ military force first in Georgia, then in Ukraine. Strikingly, the 2008 Russo-Georgian War had similar preliminary patterns to the 2014 Annexation of Crimea and the ongoing violence in eastern Ukraine. In each case Russia wielded political and economic pressure to obstruct nationalistic, Western-leaning politicians' goals, stirred separatist sentiments, and conducted covert military infiltration into border areas. In both countries, the ideologies of Russian imperialism and pro-Western nationalism were at the forefront. The interference in Georgia was a political and military prototype for the ongoing disputes in Ukraine. Studying Ukrainian and Russian print media's biases with respect to Saakashvili, whose vibrant persona occupied the center of the conflict in 2008, provides a nuanced understanding of the cultural and political zeitgeists in both Russia and Ukraine at the time. These sentiments have additionally fueled the current conflict in Ukraine, often with the same actors. Ukrainian print media is relatively balanced between depicting pro- and anti- Saakashvili factions, likely the product of the country's own ambivalence toward its Russian neighbor. In contrast, Russian media's frequently monochromatic condemnation of Saakashvili sought to justify Russian interference in the region.

INTRODUCTION

When Saakashvili rose to power, Georgia, one of the former Soviet republics to regain its independence after the Collapse of the USSR in 1991, was still struggling to develop a post-Soviet identity. Akin to several other newly emerging states, Georgia inherited a nationalities problem exacerbated by previous Soviet policies. The Abkhazians to the northwest and the Ossetians to the northeast had merged into the Georgian state centuries before the Soviet Union granted them semi-autonomous status within the Georgian republic. The dissolution of the Soviet Union left Georgians eager to restore their national pride and sovereignty. This revanchism included reincorporating the Abkhazian and Ossetian territories, while the latter feared losing the Soviet-granted privileges of ethnic status should they remain within Georgia.

Due in part to interminably troublesome Chechnya, Russia had become increasingly involved in the North Caucasus to secure its borders and interests in a progressively unstable region, which guaranteed heightened contact and potential tension with Georgia. In 2003, protests of election fraud led to Georgia's Rose Revolution, sweeping the pro-Western politician Mikheil Saakashvili into power. Under Saakashvili's predecessor, Eduard Shevardnadze, who had supported Gorbachev's policies which ultimately dissolved the Soviet Union, Georgia had remained poor, corrupt, weak, and relatively malleable, and thus not a threat to Russia's regional interests. In contrast, Saakashvili sought to curb corruption and repair the economy while boosting his ties to the West, especially with the President of the United States, George W. Bush. Among Saakashvili's aspirations was to gain membership in NATO, an organization which Russian Prime Minister Vladimir Putin regarded as a threat to Russia's national interests. The pro-Western and reformist president in Georgia threatened to upend Russia's regional hegemony while giving NATO a foothold along Russia's southern border. Accordingly, Russia sought to prevent Georgia from shifting westward by supporting separatist territories and establishing itself as a "neutral" peacekeeper. In addition, Russia proved itself willing to pursue Chechen terrorists hiding in Georgian territory, fueling Georgians' suspicions that Russia did not respect their national sovereignty while also convincing Russians that the Georgians were uncooperative and sympathetic toward Chechen insurgents. Saakashvili was not easily cowed, however, and the Georgian people would not continue to support him if he failed to prevent the loss of historically Georgian territories. Saakashvili shocked the world when he authorized fire upon Russian troops moving into South Ossetia on the night of August 7, 2008, stoking a five-day war which fundamentally impacted Eurasian geopolitics. Ukrainian and Russian media both devoted much time to Georgia's leader during this war and its aftermath, yet they differ greatly in their assessment of Saakashvili's character and evaluation of his decisions.

Georgia's ethnic conflicts, exacerbated by the collapse of the USSR, are a complex saga tracing back to the 18th century, when Tsarist Russia first secured decisive control over much of the Caucasus. To examine the conflict, this project analyzes over fifty widely circulated Russian and Ukrainian newspaper articles about the Russo-Georgian War published in the fateful month of August 2008. By selecting and comparing Ukrainian and Russian print media, this research provides a deeper understanding for the ideological developments in Russia and Ukraine prior to the outbreak of tensions following Euromaidan and the Annexation of Crimea in 2014, as reflected in their differing coverage of foreign events in the Eurasian sphere. The vast troves of archival information evaluated in such a specific frame of time include coverage of the short war, resulting negotiations, and articles generally focused on Georgia's volatile president.²

COVERAGE OF SAAKASHVILI'S RHETORIC

Although Saakashvili was hardly the only pro-Western politician in the post-Soviet space, he was uniquely willing to boldly challenge the Russian narrative and find means of retaliation to Russia's hostile foreign policy. This gumption also proved to be a weakness when faced with Russia's determination to achieve its goals, especially when combined with Western noncommitment. Some Russian accounts combatted Saakashvili's truculence by questioning his sanity, such as mentioning the notorious incident in which he was caught "placing a tie in his mouth and violently beginning to chew, clearly forgetting that he is on camera." As a result, "A scandal erupted on British television, when the BBC showed [this] footage which led to psychotherapists recommending Saakashvili for treatment."³

In another article, which sardonically examined Saakashvili's deliberations to not force Georgian athletes to return to Georgia from the Beijing Olympics for the military draft, the mental status of the Georgian president is mentioned: "The Press Secretary of our [Olympic] squad, Gennadiy Shvets... called Saakashvili 'a mental patient.'"⁴ Pavel Zolotarev, the Deputy Director of the Institute for US and Canadian Studies of the Russian Academy of Sciences, refuted the insanity theories but explained the Georgian President's perceived irrationality to be as ordid political acuity instead: "Saakashvili is not all that of a schizophrenic and wonderfully understands that he himself is not strongly attached to South Ossetia and Abkhazia, but it is important to portray himself as 'a victim of aggression from the Russian side.'"⁵ Some Russian sources assumed that Saakashvili's actions can only be explained by schizophrenia, a view utterly oblivious to Russian involvement in the region. Nevertheless, the archival sample revealed few clear instances of this strategy. In contrast, Ukrainian sources did not explore the mental state of the Georgian president. For example, the archival sample did not reveal any Ukrainian articles mentioning Saakashvili's infamous tie-chewing incident, an event which overshadowed old Soviet propaganda techniques

of psychoanalysis.

Another technique Russian sources use for covering Saakashvili is to depict him as a warmonger by sampling some of his fiery statements without mentioning the Russian provocations that ignited these reactions. Such a strategy is not particularly difficult to implement, considering Saakashvili's reputation for candor. The Russian columnist, Liza Tonakanyan, included Saakashvili's moral posturing of Georgia in an article written halfway through the short war, in which the Georgian president declared, "We transcend the front between Europe and Russia. Georgia—the border which passes through good and evil, civilization and barbarism. Now the entire world sees that David is fighting Goliath!"⁶ In a similar vein, Saakashvili argued that "Russia is isolated more than ever, and Georgia has found unprecedented support... This is a fight between the civilized and uncivilized worlds."⁷ Admittedly, even after the war, Saakashvili was willing to embrace his characteristic candor. In an interview with the independent Russian newspaper *Vedomosti*, he warned that Russia will not be satisfied with its current victory and will be eager to press forward, testing the stability of international means for keeping peace. He concluded that the Russians are pleased with their efforts to destroy: "The idea that they can intimidate, threaten, and destroy intoxicates them."⁸ While state-owned Russian media depicted Saakashvili as a warmonger who is a Western puppet intent to threaten Russia, they fail to mention indisputable Russian interference in the region. The narrative depicting Saakashvili as a conqueror was rather misleading considering his country's profound military and political inferiority compared to its northern neighbor, no matter how bellicose some of his rhetoric appeared.

Ukrainian sources referenced some of Saakashvili's fiery rhetoric, including his candid statements such as, "In the first days the Russian machine of agitation worked well... Russia has for a long-time prepared aggression against Georgia."⁹ Some of Saakashvili's claims included Russia's desire to completely conquer Georgia, seize its energy supply, and overthrow his elected regime.¹⁰ Ukrainian articles were also likely, however, to offer more context by providing longer excerpts from Saakashvili which includes his analysis of Russian actions. One article incorporated Saakashvili's elaborate explanation of his side, which included claims that Russia was not concerned about South Ossetia, but "has prepared in advance military actions upon the territory of Georgia," and intended to "restrict or abolish Georgia's independence... Russia built the infrastructure for an invasion in Abkhazia and South Ossetia. She¹¹ built a base in Java,¹² she distributed leaflets in the Russian army, where it was described how it was necessary to release Georgia from my yoke. This was clear preparation toward a war—absolutely ruthless."¹³ Saakashvili also noted that the timing of Russia's invasion—during the Olympics, when he was gone, was "brilliant:" "Russia was going to swallow Georgia as it had done in the past. Now, we will not be swal-

lowed. We will not only preserve our statehood, but we will expel the Russian force from beyond the limits of Georgia, whatever it costs. I will not consolidate any compromises with Putin's regime... They gave me this offer: come on, you will keep your power, just agree with this: the status of South Ossetia and Abkhazia will be open. But here is the problem: Georgia will never agree to give a centimeter of its territories to either Russia or any other country. We will fight to the end... We are not generally going to lead talks with Russia about our territorial wholeness. Russia has violated it, and we can only lead negotiations about one thing—the withdrawal of Russian forces. We are prepared to discuss all the questions which would lead to a ceasefire of some sort.”¹⁴ Saakashvili also claimed that Russia's aggression is not just in Tskhinvali,¹⁵ but Abkhazia as well, and that Russia was deploying both her air force and her ground troops.¹⁶

Equally significant to Saakashvili's dogmatic nature in perhaps exacerbating the conflict, his rhetoric also framed the narratives surrounding the war. The Russian political scientist Dmitriy Oreshkin argued that the Georgian President did not portray the conflict as an issue between Ossetians and Georgians, but between Georgians and Russians, and that the conflict was international in nature.¹⁷ For example, “Saakashvili asked the Americans for military help, whether they will lead American forces to Georgia de facto, with boots on the ground to protect Georgia from Russian aggression.”¹⁸ Perhaps in part to garner Western support, Saakashvili claimed that Russian attacks on Georgia were aimed at the United States and NATO.¹⁹ This is a claim consistent with Ukrainian sources, which record many of Saakashvili's appeals to the international community: “Georgia is waiting from the international community for an appropriate response to Russian aggression.”²⁰ Saakashvili was hardly obsequious, however, and also accused the West of being too soft and ineffectual in its stances against Russia,²¹ as well as claiming that “They bear their share of the guilt for the crisis in Georgia.”²²

Nevertheless, Russian media, at least independent sources, did include some of Saakashvili's exhortations for peace: “We need to stop the fighting. We do not need a new war. We need to stop this and restore the peace. We will announce a ceasefire and we are prepared to sign a document about the non use of force and the non-resumption of fighting. We are prepared to be sufficiently flexible, as much as possible. We must restore peace and stop these thoughtless, brutal, and completely unacceptable killings.”²³ During the onset of the conflict, a *Kommersant* article mentions Saakashvili's efforts to keep Russia out of the conflict by asking the latter to remove any of its citizens serving their government in South Ossetia: “I urge them to leave from South Ossetia to give us the possibility of demilitarizing the zone and of the conflict and the cessation of the confrontation.”²⁴

SAAKASHVILI-- WESTERN PUPPET?

Naturally, both Ukrainian and Russian articles include their respective politicians' comments and official statements regarding the tensions in Georgia. In the aftermath of the war, Russian politicians routinely blamed the West's support of Saakashvili for the conflict. Sergey Lavrov claimed that Saakashvili relied heavily on the United States for support, and that the United States and its allies sought to implement "their own national interests, not necessarily those of the Georgian people, and chose the regime of Saakashvili, who learned nothing, and will make mistakes on a historic scale."²⁵ Russia's representative for NATO, Dmitriy Rogozin, claimed that NATO's decision in April to give Georgia eventual membership inspired Saakashvili to become increasingly belligerent in the disputed territories and insisted that NATO condemn Saakashvili's "atrocities." Adopting a common device of Western leaders, he even went so far as to compare Saakashvili to Hitler: "Saakashvili is a person with the prototype of a Nazi, given that Nazism provides for the extermination of another people."²⁶

While not a representative of the Russian government, the Russian communist politician Gennadiy Zyuganov adopted similar rhetoric, arguing that Saakashvili was responsible for state terrorism, and was aided by the United States and NATO, who encouraged Georgia to take a course toward war:²⁷ "If Saakashvili were not supported by America, he would have never decided such an adventure."²⁸ Andrei Nesterenko, the representative for Russia's Ministry of Foreign Affairs, reiterated this sentiment that Georgia has "found support from the United States and its allies" who "armed and prepared the Georgian army for the conduct of various military actions, which has resulted in the criminal assault of South Ossetia and Abkhazia."²⁹ Russia's president at the time, Dmitriy Medvedev, more cautious, "did not blame anyone for the war except the President of Georgia, Mikheil Saakashvili, although he hinted that American power in this instance did not protect 'the real interests of the American people, but a mythical ideological framework."³⁰

Similarly, the columnist Liza Tonankanyan stoked the notion of Western malfeasance, claiming "Saakashvili yesterday accepted negotiations with 'Western peacekeepers."³¹ Unsurprisingly, Russian political leaders blaming the West undoubtedly fueled anti-Western conspiracy theories and suspicions about Western involvement in a region in which Russia was actively engaged. The Russian journalist Aleksandr Golts, who published his article "Why Do They Not Believe Russia?" in the Ukrainian newspaper *Den*, mentioned the Russian political commentator Mikhail Leontyev, who outlined "an all-world anti-Russian conspiracy" in which Saakashvili "complies with the assignments of the 'Washington Regional Committee."³²

Furthermore, a Ukrainian article stressed Russia's need to find a Western culprit, mentioning that the state-owned channel Rossiya, "already in the process

of counting the hours after the Georgian bombardment, offered a large, elaborate program about “The Linkages of Georgian Presidents Shevardnadze and Saakashvili with the CIA and with Bruce Jackson,”³³ the founder of the Project on Transitional Democracy, the alleged mission of which is to promote democracy in former Soviet Bloc States. Admittedly, Saakashvili did enjoy a personal relationship and close cooperation with George W. Bush, which naturally solidified Russian perceptions of him as a politician closely allied with the United States. Saakashvili also attempted to capitalize from this narrative, claiming that Bush pledged “full support” for him, and that Russia’s aggression against Georgia impacts the United States as well.³⁴

SAAKASHVILI—DICTATOR OR CHAMPION OF DEMOCRACY?

To justify Russia’s meddling and eventual invasion in the region, Russian sources depicted their country as a savior for the oppressed Abkhazians and South Ossetians while stressing the aggression of Saakashvili. According to Anatoliy Nogovitsyn, “If Saakashvili... Had not been armed to the teeth, he would never have made such a decision [to attack South Ossetia].”³⁵ One particularly fascinating article portrayed Georgia as a threatening militaristic state by mentioning that since coming to office, Saakashvili has increased military spending, to the degree where it was 8.9% of Georgia’s GDP, while Russia’s military spending comprised only 2.7% GDP, a comparison which does not factor Russia’s significantly higher population and GDP.³⁶ In addition, the article highlighted that, unlike the Russian army, which is divided into several sections, the entire Georgian military is solely under the command of Saakashvili,³⁷ implying that such a large force should not be in the firm control of a presumed dictator or “schizophrenic.”

Aleksandr Golts argued that Saakashvili, not Russia, “broke the agreement” and “subjected Tskhinvali to barbaric bombardment.” He also questioned the democratic credentials of Georgia, claiming that the “lion’s share” of broadcast time is given to Saakashvili, who outlined the Georgian side of events.³⁸ Another article suggested the Georgian President was a despot, arguing that he “punched Georgians first” by beginning a war his people did not want.³⁹ Similarly, the Russian political scientist Nikolay Zlobin, writing in an article for *Vedomosti*, accused Western leaders and media of giving Saakashvili undue amounts of airtime, where he appears as a leader resisting Russian aggression for the sake of national sovereignty.⁴⁰ Related to this questioning of Georgia’s democratic credentials, an article from the independent Russian newspaper *Kommersant* explained at great length the implemented restrictions of martial law in Georgia near the end of the war, which gave Saakashvili “unprecedented privileges

for peacetime: to restrict information of mass media, to issue decrees having the power of law, using all resources for military needs and introducing a curfew. To that effect, Saakashvili has not failed to implement any of these.” The article added, however, that “journalists are properly supplied with information.”⁴¹

Russian sources also included excerpts which demonstrate Saakashvili’s unreasonableness, presumably to justify Russia’s aggression. Dmitriy Trenin, the Deputy Director of the Carnegie Moscow Center, believed that Saakashvili’s actions, which threatened to fragment Russo-American relations, only served to strengthen the Georgian President’s hold upon power—“This man will stop at nothing, and his own actions have proved this.”⁴² The Russian general Leonid Ivashov further observed that the violence in South Ossetia demonstrated that politics and diplomacy are insufficient for reeling in Saakashvili.⁴³ All of this served to absolve Russia from any moral responsibility for the conflict by depicting Saakashvili as an irresponsible and recalcitrant politician who left Russia no choice but to entangle itself in a war with its southern neighbor.

In contrast, Ukrainian media never devised a clear narrative questioning Saakashvili’s commitment to freedom and human rights. It was also willing to bolster claims to Saakashvili’s commitment to democracy, as a published article by the Ukrainian politician Vasili Volha noted that the Georgian President supported having fair elections in the contested territories.⁴⁴ This affirmation of Saakashvili’s democratic tendencies is especially significant because Volha is generally critical of Saakashvili and supportive of Russia.

WHO IS THE IMPERIALIST?

Russian media eventually transferred its depictions of Saakashvili as a dictator or warmonger to a debate about territorial sovereignty. This refashioning that Georgia, not Russia, is the imperialist, was prominent in an article headlined, appropriately enough, “Protecting Human Life,” which declared that “Saakashvili chose genocide for the choice of his own political objectives. With this, he singlehandedly threw out all aspirations for a peaceful existence of Ossetians, Abkhazians, and Georgians in a single state.”⁴⁵ The article proceeded to conclude that the separatist territories of South Ossetia and Abkhazia “Rightfully decided their own fate.”⁴⁶ A commentary derived from a *Fox News* interview with an Ossetian immigrant propelled the narrative of Georgian imperialism. Twelve-year-old Amanda Kokoeva, a resident of the United States who returned to her home country to visit relatives, thanked the Russians for protecting her family. Similarly, her aunt, Laura Tedeeva-Korewiski, boldly declared: “Everyone knows who is guilty of this conflict... President Saakashvili began this war. For the past two days he has murdered my people, the Ossetian people. 2,000 people are dead.”⁴⁷ She concluded with the demand that the Georgians with-

draw from South Ossetia.⁴⁸ The president of South Ossetia, Eduard Kokoyty, argued, “Let these people [Georgians] ask Mr. Saakashvili why they are in such a position. We are not the aggressors. Let them ask the aggressor and their own leader who led them [the Georgian army] into South Ossetia.”⁴⁹ Although both the Georgian and Russian militaries were guilty of atrocious and unacceptable behavior during the war, tragically and ironically, local Ossetian militant groups engaged in ethnic cleansing of Georgian civilians while accusing their enemies of genocide. According to Human Rights Watch, “After Georgian forces withdrew from South Ossetia on August 10, South Ossetian forces over a period of weeks deliberately and systematically destroyed ethnic Georgian villages in South Ossetia that had been administered by the Georgian government. They looted, beat, threatened, and unlawfully detained numerous ethnic Georgian civilians, and killed several, on the basis of the ethnicity and imputed political affiliations of the residents of these villages, with the express purpose of forcing those who remained to leave and ensuring that no former residents would return.”⁵⁰ This same report accused Russian occupying forces of failing to protect ethnically Georgian civilians from South Ossetian troops.⁵¹

A quotation of Gennadiy Zyuganov, included in an article of the Kremlin-sympathetic newspaper *Trud*, portrayed Saakashvili as the true aggressor, not only against South Ossetia, but even Russia: “Saakashvili has crossed all imaginable and unimaginable borders. Ninety percent of South Ossetians have Russian citizenship.”⁵² Strikingly, independent Russian journalists and political intellectuals still supported Russia’s aggressive actions in Georgia and implemented Saakashvili’s rhetoric to argue that he was the aggressor. Dmitriy Oreshkin insisted that “Saakashvili withdrew from himself moral obligations for the recovery of territorial wholeness.”⁵³ The independent Russian journalist Aleksey Venediktov even went so far as to compare Saakashvili’s actions in South Ossetia to China’s imperialism in Tibet.⁵⁴ According to the Russian diplomat Yuriy Popov, whom the Russian government appointed to help secure a truce between the Ossetians and Georgians, the Georgian government negotiates in bad faith, agreeing to a ceasefire, and then deciding to attack,⁵⁵ basically implying Georgia’s willingness to break agreements for its own territorial gain.

Independent Russian sources were willing, at times, to suggest Russian manipulation. For instance, Elena Racheva, in an article for the independent newspaper *Novaya Gazeta*, admitted the Russian government’s own willingness to forcibly promote its interests in the region; “Putin is experiencing a furious hatred of Mr. Saakashvili... And he definitely wants to remove his government.”⁵⁶ A *Kommersant* article noted that Russian troops remained in Georgia long after the agreed withdrawal date. As a result, some Georgian politicians believed that Russia would continue to keep forces until the end of the year to dissuade NATO from keeping its promise to incorporate Georgia. Anatoliy Nogovit-

syn, the spokesman for the Russian military, justified the military's tardiness by claiming that Russia would not leave until Saakashvili signed article 6 of the peace agreement,⁵⁷ which basically would give the separatist territories autonomy.

Although Ukrainian sources generally regarded the Russians as the imperialists, they are perhaps not nearly as impassioned as Russian authors: "Russia had already violated numerous times the sovereignty of Georgia, with whole warnings to Saakashvili against aggressive actions."⁵⁸ The Ukrainian political scientist Aleksey Haran observed that if one watched the main Ukrainian channels, it would appear they were more sympathetic to Georgia's side of the story, but there was also representation of other sides and criticism of Saakashvili included.⁵⁹

WHY DID SAKASHVILI ATTACK?

While the backdrop of the Russo-Georgian War was several years, perhaps even several centuries, in the making, the conflict in 2008 formally began when Saakashvili authorized the shelling of Tskhinvali on the fateful night of August 7, 2008.⁶⁰ Saakashvili's unexpected act of retaliation shocked both Russians and Westerners, who in turn speculated about the reasons why Saakashvili attacked. Aleksey Haran was mystified why Saakashvili had ordered troops into South Ossetia and considered the Georgian president to have impetuously retaliated to the provocations in South Ossetia, "without considering the consequences."⁶¹ The Russian side was more willing to provide conclusive theories. One article mentioned that the status of the separatist regions were primary issues for Saakashvili during his election campaign and that accepting their de facto independence would be "political suicide." Accordingly, "Saakashvili's regime has demonstrated its willingness to take back South Ossetia, and thereby avoid accusations of apathy."⁶²

Dmitriy Oreshkin thought it was possible that Saakashvili enticed Russia into becoming embroiled in a war so that Russia would appear in the eyes of the world as the aggressor and lose her influence in the region: "he forced or lured Russia into his own territory, and now it is understood that Russia is losing the status of mediator."⁶³ Similarly, in a *Novaya Gazeta* interview, Sabine Freizer, the Director of the International Crisis Group, argued that Saakashvili started the conflict and that "he must be condemned," noting, "It is entirely possible to say that Saakashvili committed a gross error. But on the other hand, Russia can no longer depend on international acceptance of them as a neutral peacekeeping force."⁶⁴ The Ukrainian-Russian journalist Matvey Ganapolskiy argued that Russia should understand that the need to garner support by creating a public enemy drives much of Saakashvili's policies.⁶⁵ Suggesting that Saakashvili needed to find a "public enemy" in Russia to justify his own actions is a rather flimsy claim, considering that there are numerous reports—Russian or otherwise—of

the Russians training and arming separatists, as well as the presence of Russian troops besides designated peacekeepers within South Ossetia. In addition, prior to the Georgian shelling of Tskhinvali, “there seems to have been an influx of volunteers or mercenaries from the territory of the Russian Federation to South Ossetia... in early August.”⁶⁶

Saakashvili, for his part, insisted that he was merely responding to Russian aggression: “The entrance of Russian tanks—this is how everything began. In our view, the Georgian army acted in response to the Russian invasion.”⁶⁷ Saakashvili stressed in an interview with *Vedomosti* after the war that any democratic nation bound to protecting its citizens would have reacted likewise: “There were 2000 Russian tanks, armored personnel carriers, and weapons.”⁶⁸ Despite the claims of a EU commission investigating the causes of the conflict that the Russians had engaged in no attack before the Georgian offensive,⁶⁹ Saakashvili stuck to his story that Russian forces were already in South Ossetia when he attacked, that Russia had “premeditated” this action: “I had warned about this not for a month, I specifically drew attention to this, that we were expecting something similar in August or September, but no one has undertaken anything.” Furthermore, he insisted that “every television host of intelligence” knew that the Russians were in South Ossetia prior to his attack. Saakashvili admitted that the war sabotaged Georgia’s rapid economic growth, and that thus engaging in a war was the last thing Georgia wanted.⁷⁰ An article from *Kommersant* seemed to support this view, noting that Saakashvili’s announcement that Russia and Georgia were on the brink of war “coincided with Russian tanks entering South Ossetian territory.”⁷¹

WESTERN AND UKRAINIAN OPINIONS ABOUT SAAKASHVILI

Ukrainian sources are more willing to include articles from Western writers than their Russian counterparts, presumably to boost their own political sympathies and national aspirations. Western authors are generally suspicious of Russian activity and therefore sympathetic toward Saakashvili, yet the privilege of distance enables them to provide a deeper and more global outlook regarding the conflict. Nevertheless, the sampled Ukrainian articles did not mention that these sources were translated, nor did they explain where they were initially published. American diplomat Richard Holbrooke, a perennial Westerner who found his articles republished in Ukrainian media, was convinced that “Russia is driven by personal hatred of Saakashvili.”⁷² Holbrooke claimed that Russia attempted to dismiss Saakashvili for the prior three years— “promoting a riot in the country, leading an economic blockade, strengthening enclaves, and finally, initiating military action” in the hope that an opposition leader will arise and overthrow Saakash-

vili.⁷³ Nevertheless, Holbrooke also admitted that Saakashvili's candor has often led to his own undoing, as the latter has criticized Europeans for providing insufficient help and unreasonable requirements for those aspiring for membership into the European Union, and the Georgian president's criticism of Russia has only endangered his own country.⁷⁴ Another notable Westerner is the British politician Chris Patten, who argued that Russia hopes that Saakashvili will go too far, justifying Russian action against Georgia, in which instance they can "crush his poor country like a hammer on an anvil."⁷⁵

Generally, Russian media failed to incorporate Western opinions, even though the latter are generally too dispassionate to approach fanaticism, even if they may be admittedly biased against Russia. Yet interestingly, some Russian sources were willing to interpret Western leaders' reactions instead of directly incorporating the latter; for example, in an opinion piece for *Vedomosti*, Maksim Glikin noted Saakashvili became "inconvenient" for both Europe and the United States, that they now must ask, in light of the infamous necktie chewing incident, whether "Saakashvili has a reasonable mind... Western confidence in Saakashvili is lower than it has ever been before."⁷⁶ This article is notable for mentioning little of Russian action, instead analyzing Saakashvili's erratic behavior or poor decisions in a vacuum.

Ukrainian coverage of the Russo-Georgian War was especially significant because Ukraine had a similar relationship and aspirations to Georgia, yet unlike Russian media, enjoyed a third-party position in this instance. Saakashvili's political equivalent in Ukraine was the Ukrainian President, Viktor Yushchenko, who wanted his country to leave Russia's orbit, similarly to Saakashvili. Yushchenko was a steadfast supporter of Saakashvili's regime and his struggle against Russia, even offering to accept Georgian children during the war.⁷⁷ To that effect, the Ukrainian political analyst Vasili Stoyakin suggested that Saakashvili and Yushchenko have established their respective country's roles to confront Russia,⁷⁸ hence the smooth alignment of their political goals. Russian columnists seemed especially intent to demonstrate the friendship between both pro-Western politicians, with excerpts noting that Yushchenko is "a long-time friend of Saakashvili,"⁷⁹ and that they "almost have family ties—Yushchenko is the godfather of the Georgian president's son."⁸⁰

Pro-Russia political figures similarly transferred their hatred of Saakashvili to Yushchenko. The Ukrainian communist politician Petro Simonenko claimed that it was impossible for Yushchenko to not have known about the plans of his "buddy" Saakashvili which led to an inevitable war.⁸¹ The President of the separatist Republic of South Ossetia, Eduard Kokoyty, did not blame Saakashvili solely for the conflict and the resulting "genocide," saying "in addition to Mr. Saakashvili, the responsibility for the genocide of the Ossetian people must be found in the president of Ukraine, Yushchenko, and all those who armed Geor-

gia. They are all responsible for the genocide.”⁸²

Saakashvili’s pro-Western and pro-democracy stances and willingness to confront Russia directly exposed the divide between Ukraine’s political bodies. While nationalism may be the dominant narrative in Ukraine, especially as recent Russian aggression has ironically ensured that Ukraine would culturally shift out of the latter’s orbit, there were still many Ukrainian politicians, mostly on the political left, who supported Russia. While generally sympathetic to Georgia and Saakashvili, Ukrainian print media did include excerpts from pro-Russian figures, who typically regard Saakashvili as a provocateur or a Western puppet. Petro Simonenko fumed that “Anyone who, by his own illegal actions and at the expense of the Ukrainian people, contributed to the armament of Saakashvili’s regime must be answerable to the law as an international criminal.”⁸³ The Ukrainian pro-Russia politician Yuri Boyko claimed that as long as Saakashvili remained president of Georgia, Georgia’s membership in GUAM (the cooperative alliance between Georgia, Ukraine, Azerbaijan, and Moldova) should be revoked, warning that “official Kiev’s approval of Saakashvili could have the most serious consequences for the domestic situation in the country.”⁸⁴ The ethnically-Georgian Ukrainian parliamentarian David Zhvania, who detested Yushchenko’s capitalization from the conflict, claimed that the Georgian people are tired of this war and suspected Saakashvili of deceiving and manipulating his people, as well as exacerbating the conflict. He further argued that Saakashvili’s regime is neither democratic nor independent, Georgians do not have access to “independent information sources,” Saakashvili embraced a “tight—maybe too tight” relationship with the United States, and that the current tensions with Russia “are a PR stunt” with the full support of the United States. As a result, Saakashvili “has tied up little Georgia into a great geopolitical game.”⁸⁵ In addition, the pro-Russia, far-left Ukrainian politician Vasili Volha supported the narrative of Western interference, claiming that the United States groomed both Saakashvili and Yushchenko.⁸⁶

CONCLUSION

Although Saakashvili defied simple characterization, state-owned Russian sources succeed in consistently depicting him as a warmonger, imperialist, dictator, Western puppet, and one guilty of genocide. The irony of these accusations is that Russia’s leaders helped exacerbate the conflict, exemplified imperialism, and abetted the ethnic cleansing of Georgian villages. Nor can Russia itself be regarded as a guardian of democracy, regardless of the consistency of Saakashvili’s democratic leanings or lack thereof. Yet in this spirit of doublespeak the former Russian President, Dmitriy Medvedev, claimed that Saakashvili “destroyed the hope of the merging of the Ossetians, Abkhazians, and Georgians into a single state”⁸⁷

while simultaneously supporting separatist territories.

While not as shrill in their denunciations, sampled articles from independent Russian media sources still often regarded Saakashvili as a provocateur. Although they were often willing to objectively examine Saakashvili's actions, they inconsistently mentioned Russia's interference, and at times, pure malfeasance, in the region. Russian readers who consulted either state-owned or independent media in their own country were unlikely to encounter any views deeply questioning Russia's actions in the Caucasus, whether they objectively covered Saakashvili or not. Russian readers were often led to believe that Saakashvili was not only an imperialist threatening Ossetia and Abkhazia, but that he was a threat to Russia as well, or at the very least, an aggressive instigator of conflict with Russia. Such an assessment seems ludicrous when assessing Georgia's vast inferiority in population size and military capability compared to Russia, but thus testifies these sources' power in shaping minds. Ukrainian print media was more balanced than its Russian counterpart, in part because it was generally freer, but more importantly, Ukrainians were more divided in their assessments of the conflict and how it impacted them. Ukrainian print media was typically sympathetic to Saakashvili and Georgia, but also included excerpts from pro-Russian Ukrainian politicians who disparaged Georgia's former president.

This conflict is especially notable because the strategies Russia employs in the current conflict in Ukraine were implemented previously in Georgia. In both instances, Russia devised similar techniques and policies of undermining a neighboring state and supporting separatists when nationalistic and pro-Western politicians simultaneously sought to depart from Russia's orbit. Interestingly, his political opponents ousted Saakashvili after he completed his second term, and he settled in Ukraine, where he served as the Mayor of Odessa and was an important figure of the anti-Russian camp before a political fallout with Ukraine's president, Petro Poroshenko, led to the revocation of his Ukrainian citizenship. Although Poroshenko's successor, Volodymyr Zelensky, restored Saakashvili's Ukrainian citizenship, the former returned to Georgia in October of 2021, and the Georgian government imprisoned him on charges of corruption and abuse of presidential power, which he claimed are politically motivated. While coverage of Georgia's former, colorful president and his war with Russia divided Ukraine into pro- and anti-Russian factions, Russian print media was more centralized and united in its condemnation of Saakashvili. Although independent Russian newspapers tended to be more balanced in their depictions of Saakashvili and his actions, they failed to regularly contextualize and analyze Russian actions which galvanized the Georgian President into implementing increasingly belligerent policies.

Russian print media's biases can only further propel Russian imperialism, as well as the violence and strife which historically is guaranteed to follow. Russian

media did not generally encourage readers to reconsider or ponder their politicians' foreign policy, which further justifies the latter's use of militarism and coercion abroad throughout neighboring countries. Russia's legacy in the Caucasus is one of brutal imperialism and tragic shortsightedness. Considering the ethnic diversity and political complexity of the region, if the Russian government, bolstered with Russian media, continues to violate its smaller neighbors with impunity, the consequences of its imperialistic policies will be further resentment. The 2008 Russo-Georgian War was the latest chapter in the saga of a Russian legacy of willingness to wage war in the Caucasus to enforce national interests at the expense of smaller neighbors' determinism. This is not a recipe for reconciliation, and while there may be moments of fragile calm, there will be no long-term peace along Russia's southern border so long as the Russian state perpetuates its policy of dividing ethnic groups in the Caucasus to maintain regional dominance.

ENDNOTES

- [1] The proper romanization of the Georgian surname is Saak'ashvili (Georgian has a series of ejective consonants, which are marked with an (').) I have used the less linguistically precise form Saakashvili because this spelling is more likely to be in print and to be more familiar to English, Russian, and Ukrainian speakers.
- [2] The selection of articles to incorporate was generally determined by the accessibility of their respective archives and their commitment to reporting international news.
- [3] Salakhitdinova 2008.
- [4] Shabalov 2008.
- [5] "Mne Ochen' Zhal', Chto Ya do Etogo Dozhil" 2008.
- [6] Tonakanyan, "Saakashvili Ukhodit iz SNG" 2008.
- [7] "Saakashvili Predlozhil Nakazyvat' za Investitsii v Abkhaziyu i Yuzhnyu Osetiyu" 2008.
- [8] Sienski 2008. Saakashvili refers to Russia by simply using the word "Russkie," which is the label for the ethnicity. The use of the term seems to muddle whether he cares to distinguish any federal entity purporting to represent the ethnic group from the ethnic group.
- [9] "Saakashvili Vvodit' Viys'kovoy Stan. Hruziya u Stani Viyni z Rosiyeyu" 2008.
- [10] "Saakashvili: Rosiya Khoche Vsyu Hruziyu, Shchob Kontrolyuvaty Enerhopostavki" 2008.
- [11] The Russian word for Russia, *Rossiya*, is grammatically feminine, hence Saakashvili used the feminine pronoun *ona*, whereas it is more customary in English to use the neuter pronoun *it*. In respect for the original Russian, especially as the language rarely utilizes the neuter pronoun *ono*, I have decided to translate as "she" instead of "it," even though this pronoun usage is less familiar to speakers of Modern English.
- [12] The largest city in South Ossetia, after Tskhinvali, not the Indonesian island.
- [13] "Saakashvili Zayavlaet, Chto Rossiya Gotolivas' 'Svergnut' Ego—Kompromissov ne Budet" 2008.
- [14] Ibid.
- [15] The capital of South Ossetia.
- [16] "Saakashvili Vvodit' Viys'kovoy Stan. Hruziya u Stani Viyni z Rosiyeyu" 2008.
- [17] Venediktov 2008.
- [18] Ibid.
- [19] Liza Tonakanyan, "Stop Russia!" 2008.
- [20] "Saakashvili Vvodit' Viys'kovoy Stan. Hruziya u Stani Viyni z Rosiyeyu" 2008.
- [21] "Saakashvili Podpisal Soglashenie s Rossiey o Prekrashchenii Ognia" 2008.
- [22] "Saakashvili Obvinil Liderov Zapada v Bezdeystvii" 2008.
- [23] "Gruziya Vozobnavila Obstrel Yuzhnoy Osetii" 2008.
- [24] "Saakashvili Prizval Rossiyu Uyti iz Yuzhnoy Osetii" 2008.
- [25] "Lavrov Proponue Ne Davaty Hruziyi Zbroyi, Poki Tam ne Zminytsya Vlada" 2008.
- [26] "Posol Gruzii Obvinil NATO v Bezdeystvii" 2008.
- [27] "Zyuganov Priyikhav v Ukrainu Ahituvaty za Pivdennu Osetiyu y Protiv NATO" 2008.
- [28] "Mne Ochen' Zhal', Chto Ya do Etogo Dozhil" 2008.
- [29] "MID: Rezhim Saakashvili Ne Imeet Perspektiv" 2008.
- [30] Bocharova 2008.
- [31] Tonakanyan, "Saakashvili Perepisal Mirovuyu" 2008.
- [32] Golts 2008.
- [33] Ka 2008.

- [34] 34 “Saakashvili: Rosiya Khoche Vsyu Hruziyu, Shchob Kontrolyuvaty Enerhopostavki” 2008.
- [35] “Rosiya Zvynuvachuye Ukrayinu i NATO v Pidshhtovkhuvanni Hruziyi do Viyny” 2008.
- [36] “Opyat’ Nedootsenili” 2008. According to data from Data Commons, Georgia’s GDP per Capita in 2008 rounded to \$3,324.739, and the total population was 4,382,070 (see datacommons.org, <https://datacommons.org/place/country/GE>). In comparison, Russia’s GDP per Capita in 2008 was \$11,635.273, and the total population was 142,008,838 (see datacommons.org, <https://datacommons.org/place/country/RUS>). Considering Russia’s significantly larger GDP, this comparison was severely flawed, yet it was a clever manipulation of data to convince Russian readers that Georgia harbored hostile aspirations.
- [37] Ibid.
- [38] Golts 2008.
- [39] Geltishchev 2008.
- [40] Zlobin 2008.
- [41] “Svedenie Boevykh Podschetov” 2008.
- [42] Raikhel 2008.
- [43] “Mne Ochen’ Zhal’, Chto Ya do Etogo Dozhil” 2008.
- [44] Volha 2008.
- [45] “Sokhranit’ Zhizni Lyudey” 2008.
- [46] Ibid.
- [47] Salakhitdinova 2008. The Russian article did not include the last name of Amanda Kokoeva’s aunt.
- [48] Ibid. Interestingly, the American broadcast journalist, Shepherd Smith, acted surprised at the two Ossetians’ pro-Russia stance during the interview, which was cut short for “lack of time.”
- [49] “Yuzhnaya Osetiya Obvinyaet v Genotside Ne Tol’ko Saakashvili, no i Yushchenko” 2008.
- [50] Human Rights Watch 2009, 6.
- [51] Ibid, 6.
- [52] “Mne Ochen’ Zhal’, Chto Ya do Etogo Dozhil” 2008.
- [53] Venediktov 2008.
- [54] Ibid.
- [55] “V Yuzhnoy Osetii Vozobnovilis’ Boi” 2008.
- [56] Racheva 2008.
- [57] “Gruziya Dala Otvod Rossiyskoy Pomoshchi” 2008.
- [58] Ka 2008.
- [59] Romashova 2008.
- [60] Tagliavini 2009, 19.
- [61] Romashova 2008
- [62] Agarkov 2008.
- [63] Venediktov 2008.
- [64] Mineev 2008.
- [65] Venediktov 2008.
- [66] Tagliavini 2009, 20.
- [67] “Saakashvili Otsenil Ushcherb ot Voyny v Yuzhnoy Osetii” 2008.
- [68] Sienski 2008.
- [69] Tagliavini 2009, 23.
- [70] Sienski 2008. Saakashvili claimed that Georgia had the most rapid economic growth for a country without oil reserves prior to the war.
- [71] “Rossiyskaya Armiya Nachala Obstrel Gruzinskiikh Pozitsiy” 2008.
- [72] “U SSHA Dumayut’, Shcho Pislya Hruziyi Mozhe Buty Ukrayina” 2008.
- [73] Holbrooke 2008.
- [74] Ibid.
- [75] Patten 2008.
- [76] Glikin 2008.
- [77] “Yushchenko Zovet v Ukrainu Gruzinskiikh Detey” 2008.
- [78] “Timoshenko, Osetiya i ‘Vybory-2010’” 2008.
- [79] Korets 2008.

- [80] Tonakanyan, “Saakashvili Podderzhali Pyat’ Prezidentov” 2008.
- [81] “Simonenko Khoche Kryminal’nu Spravu po Postavkakh Zbroiy do Hruziyi” 2008.
- [82] “Yuzhnaya Osetiya Obvinyayet v Genotside Ne Tol’ko Saakashvili, no i Yushchenko” 2008.
- [83] “Simonenko Khoche Kryminal’nu Spravu po Postavkakh Zbroiy do Hruziyi” 2008.
- [84] “Partiya Rehioniv Pidihraye Rosiyi z Vidstavkoyu Saakashvili” 2008.
- [85] “Zhvaniya v Pylu Voyny s Yushchenko Naekhal na Saakashvili” 2008.
- [86] Volha 2008.
- [87] “Rossiya Obeshchaet Zashchitu Abkhazii i Yuzhnoy Osetii” 2008

BIBLIOGRAPHY

- Agarkov, Maksim. “Voyna Zakonchilas” [The War Has Ended]. *Trud*, (Moscow, Russia), Aug. 12, 2008, https://www.trud.ru/article/12-08-2008/132069_vojna_zakonchilas.html.
- Bocharova, Svetlana. “Zapad Schitaet, Chto Putin i Est’ Glavny: Vystuplenie Putina Oslozhit Otnosheniya s Zapadom” [The West Considers Putin to Be the Head: Putin’s Statement Will Complicate Relations with the West]. *Gazeta.Ru*, (Moscow, Russia), Aug. 29, 2008, https://www.gazeta.ru/politics/2008/08/29_a_2825701.shtml.
- Geltishchev, Petr. “Saakashvili Voyuet so Svoimi” [Saakashvili Is Fighting with His Own]. *Trud*, (Moscow, Russia), Aug. 12, 2008, https://www.trud.ru/article/12-08-2008/132075_saakashvili_vojuet_so_svoimi.html.
- Glikin, Maksim. “Mikhail Saakashvili” [Mikhail Saakashvili]. *Vedomosti*, (Moscow, Russia), Aug. 18, 2008, <https://www.vedomosti.ru/opinion/articles/2008/08/18/mihail-saakashvili>.
- Golts, Aleksandr. “Pochemu Rossii Ne Veryat?” [Why Do They Not Believe Russia?]. *Den*, (Kyiv Ukraine), Aug. 13, 2008, <https://day.kyiv.ua/ru/article/den-planety/pochemu-rossii-ne-veryat>.
- “Gruziya Dala Otvod Rossiyskoy Pomoshchi” [Georgia Gave a Withdrawal of Russian Aid]. *Kommersant*, (Moscow, Russia), Aug. 20, 2008, <https://www.kommersant.ru/doc/1013556>.
- “Gruziya Vozobnavila Obstrel Yuzhnoy Osetii” [Georgia Resumes Bombarding South Ossetia]. *Kommersant*, (Moscow, Russia), Aug. 11, 2008, <https://www.kommersant.ru/doc/1010329>.
- Holbrooke, Richard. “Chto Mozhet Sdelat’ Zapad?” [What Can the West Do?]. *Den*, (Kyiv Ukraine), Aug. 26, 2008, <https://day.kyiv.ua/ru/article/den-planety/chto-mozhet-sdelat-zapad>.

- Human Rights Watch. *Up in Flames: Humanitarian Law Violations and Civilian Victims in the Conflict over South Ossetia*. 2009, https://www.hrw.org/sites/default/files/reports/georgia0109_brochure_web.pdf.
- Ka, Evgeny. "Voyna v Gruzii Sporadicheskie Otsenki po Goryachim Sledam" [The War in Georgia: A High-level Evaluation with Hot on the Trail]. *Den*, (Kyiv Ukraine), Aug. 13, 2008, <https://day.kyiv.ua/ru/article/den-planety/voyna-v-gruzii-sporadicheskie-ocenki-po-goryachim-sledam>.
- Korets, Marina. "Druzhit' Protiv Rossii" [To Befriend against Russia]. *Trud*, (Moscow, Russia), Aug. 29, 2008, https://www.trud.ru/article/29-08-2008/132712_druzhit_protiv_rossii.html.
- "Lavrov Proponue Ne Davaty Hruziyi Zbroyi, Poki Tam ne Zminyetsya Vlada" [Lavrov Offers to not Give Weapons to Georgia, So Long as There is no Change of Authority]. *Ukrayinskaya Pravda*, (Ukraine), Sept. 1, 2008, <https://www.pravda.com.ua/news/2008/09/1/3540263/>
- "MID: Rezhim Saakashvili Ne Imeet Perspektiv" [Ministry of Foreign Affairs: The Regime of Saakashvili Does Not Have Perspective]. *Gazeta.Ru*, (Moscow, Russia), Aug. 29, 2008, https://www.gazeta.ru/news/lenta/2008/08/29/n_1264234.shtml.
- Mineev, Aleksandr. "My Prognozirovali Voynu v Abkhazii, no Vzorvalos' v Yuzhnoy Osetii" [We Predicted the War in Abkhazia but It Exploded in South Ossetia]. *Novaya Gazeta*, (Moscow, Russia), Aug. 12, 2008, <https://novayagazeta.ru/articles/2008/08/13/36967-my-prognozirovali-voynu-v-abhazii-no-vzorvalos-v-yuzhnoy-osetii>.
- "Mne Ochen' Zhal', Chto Ya do Etogo Dozhil" [I Am Very Sorry, That I Survived This]. *Trud*, (Moscow, Russia), Aug. 11, 2008, https://www.trud.ru/article/11-08-2008/132041_mne_ochen_zhal_chno_ja_do_etogo_dozhil.html.
- "Opyat' Nedootsenili" [They Underestimated Again]. *Trud*, (Moscow, Russia), Aug. 11, 2008, https://www.trud.ru/article/11-08-2008/132031_opjat_nedootsenili.html.
- Partiya Rehioniv Pidihraye Rosiyi z Vidstavkoyu Saakashvili" [Party of the Regions Plays Along with Russia for Saakashvili's Resignation]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 13, 2008, <https://www.pravda.com.ua/news/2008/08/13/3521013/>.
- Patten, Chris. "Voyna Putina za Zolotuyu Medal" [Putin's War for the Gold Medal], *Den*, (Kyiv, Ukraine), Aug. 27, 2008, <https://day.kyiv.ua/ru/article/den-planety/voyna-putina-za-zolotuyu-medal>.
- "Posol Gruzii Obvinil NATO v Bezdeystvii" [The Georgian Ambassador Accuses NATO of Inaction]. *Kommersant*, (Moscow, Russia), Aug. 12, 2008, <https://www.kommersant.ru/doc/1010753>.
- Racheva, Elena. "Zapadnye Izdanie o Konflikte Gruziiya-Rossiya" [Western Publications about the Russo-Georgian Conflict]. *Novaya Gazeta*, (Moscow, Russia), Aug. 10, 2008, <https://novayagazeta.ru/articles/2008/08/11/36916-zapadnye-izdaniya-o-konflikte-gruziia-rossiya>.
- Raikhel, Yuri. "Bol'shaya Kavkazskaya Voyna: V Rossii Pobedili Agressivnie Byurokraty i Soloviki" [The Great Caucasus War: Aggressive Bureaucrats and Security Forces Triumphed in Russia]. *Den*, (Kyiv Ukraine), Aug. 11, 2008, <https://day.kyiv.ua/ru/article/den-planety/bolshaya-kavkazskaya-voyna>.

- Romashova, Nataliya. "Eto Bylo Chernno-Beloe Izobrazhenie: Ukrainsky Politolog Aleksey Haran' Rasskazal v Interv'yu 'Dnyu' o Svoikh Vpechatleniyakh o Prebyvaniya v Abkhazii" [This Was a Black-White Image: Ukrainian Political Scientist Aleksey Haran Told in an Interview with "Day" about His Own Impressions about His Stay in Abkhazia]. *Den*, (Kyiv Ukraine), Aug. 19, 2008, <https://day.kyiv.ua/ru/article/podrobnosti/eto-bylo-chno-beloe-izo-brazhenie>.
- "Rosiya Zvynuvachuye Ukrayinu i NATO v Pidshotkhuanni Hruziyi do Viyny" [Russia Blames Ukraine and NATO Pushing Georgia to War]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 13, 2008, <https://www.pravda.com.ua/news/2008/08/13/3521385/>.
- "Rossiya Obeshchaet Zashchitu Abkhazii i Yuzhnoy Osetii" [Russia Promises Protection of Abkhazia and South Ossetia]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 26, 2008, <https://www.pravda.com.ua/rus/news/2008/08/26/4448652/>.
- "Rossiyskaya Armiya Nachala Obstrel Gruzinskikh Pozitsiy" [Russian Army Began to Bombard Georgian Positions]. *Kommersant*, (Moscow, Russia), Aug. 8, 2008, <https://www.kommersant.ru/doc/1009365>.
- "Saakashvili Obvinil Liderov Zapada v Bezdeystvii" [Saakashvili Accuses Western Leaders of Inaction]. *Kommersant*, (Moscow, Russia), Aug. 13, 2008, <https://www.kommersant.ru/doc/1078362>.
- "Saakashvili Otsenil Ushcherb ot Voyny v Yuzhnoy Osetii" [Saakashvili Evaluates the Damage from the War in South Ossetia]. *Kommersant*, (Moscow, Russia), Aug. 25, 2008, <https://www.kommersant.ru/doc/1078548>.
- "Saakashvili Podpisal Soglashenie s Rossiei o Prekrashchenii Ognia" [Saakashvili Signs an Agreement with Russia about a Ceasefire]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 15, 2008, <https://www.pravda.com.ua/rus/news/2008/08/15/4447735/>.
- "Saakashvili Predlozhit Nakazyvat' za Investitsii v Abkhaziyu i Yuzhnyy Osetiyu" [Saakashvili Offers to Punish Investments in Abkhazia and South Ossetia]. *Gazeta.Ru*, (Moscow, Russia), Aug. 30, 2008, https://www.gazeta.ru/news/lenta/2008/08/30/n_1264395.shtml.
- "Saakashvili Prizval Rossiyu Uyti iz Yuzhnoy Osetii" [Saakashvili Urged Russia to Leave South Ossetia]. *Kommersant*, (Moscow, Russia), Aug. 7, 2008, <https://www.kommersant.ru/doc/1078241>.
- "Saakashvili: Rosiya Khoche Vsyu Hruziyu, Shchob Kontrolyuvaty Enerhopostavki" [Saakashvili: Russian Wants All of Georgia, in order to Control Its Energy Supply]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 11, 2008, <https://www.pravda.com.ua/news/2008/08/11/3514471/>.
- "Saakashvili Vvodit' Viys'kovoy Stan. Hruziya u Stani Viyni z Rosiyeyu" [Saakashvili Introduces a State of War. Georgia is in a State of War Against Russia]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 9, 2008, <https://www.pravda.com.ua/news/2008/08/9/3512548/>.
- "Saakashvili Zayavlaet, Chto Rossiya Gotolivas' Svergnut' Ego—Kompromissov ne Budet" [Saakashvili States, that Russia Was Prepared 'to Depose' Him—There Will Be no Compromises]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 15, 2008, <https://www.pravda.com.ua/rus/news/2008/08/15/4447663/>.
- Salakhitdinova, Malika. "Osetinam Ne Dali Slova" [They Do not Give the Ossetians Words]. *Trud*, (Moscow, Russia), Aug. 18, 2008, https://www.trud.ru/article/18-08-2008/132235_osestinam_ne_dali_slova.html.
- Shabalov, Pavel. "Sbornaya Gruzii Ostalas' na Olimpiade" [Georgia's National Team Remains in the Olympics]. *Trud*, (Moscow, Russia), Aug. 11, 2008, https://www.trud.ru/article/11-08-2008/132058_sbornaja_gruzii_ostalas_na_olimpiade.html.

- Sienski, Yan. “Russkie Smeyutsya nad Mirom” — Mikhail Saakashvili, Prezident Gruzii” [Russians are Laughing at the World—Mikhail Saakashvili, President Georgia]. *Vedomosti*, (Moscow, Russia), Aug. 26, 2008, <https://www.vedomosti.ru/newspaper/articles/2008/08/26/russkie-smeyutsya-nad-mirom---mihail-saakashvili-prezident-gruzii>.
- “Simonenko Khoche Kryminal’nu Spravu po Postavkakh Zbroiy do Hruziyi” [Simonenko Wants a Criminal Case on Deliveries of Weapons to Georgia]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 9, 2008, <https://www.pravda.com.ua/news/2008/08/9/351285/>.
- “Sokhranit’ Zhizni Lyudey” [Protecting Human Life]. *Trud*, (Moscow, Russia), Aug. 27, 2008, https://www.trud.ru/article/27-08-2008/132631_sokhranit_zhizni_ljudej.html.
- “Svedenie Boevykh Podschetov” [Minimalization of Casualties]. *Kommersant*, (Moscow, Russia), Aug. 11, 2008, <https://www.kommersant.ru/doc/1010078>.
- Tagliavini, Heidi. *Independent International Fact-Finding Mission on the Conflict in Georgia*. Volume 1, 2009. http://news.bbc.co.uk/2/shared/bsp/hi/pdfs/30_09_09_iifingc_report.pdf.
- “Timoshenko, Osetiya i ‘Vybory-2010’” [Timoshenko, Ossetia, and 2010 Elections]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 21, 2008, <https://www.pravda.com.ua/rus/articles/2008/08/21/4448365/>.
- Tonakanyan, Liza. “Saakashvili Perepisal Mirovuyu” [Saakashvili Rewrote the Peace Agreement]. *Trud*, (Moscow, Russia), Aug. 18, 2008, https://www.trud.ru/article/18-08-2008/132228_saakashvili_perepisal_mirovuju.html.
- Tonakanyan, Liza. “Saakashvili Podderzhali Pyat’ Prezidentov” [Five Presidents Support Saakashvili]. *Trud*, (Moscow, Russia), Aug. 13, 2008, https://www.trud.ru/article/13-08-2008/132112_saakashvili_podderzhali_pjat_prezidentov.html.
- Tonakanyan, Liza. “Saakashvili Ukhodit iz SNG” [Saakashvili Leaves from the Commonwealth of Independent States]. *Trud*, (Moscow, Russia), Aug. 13, 2008, https://www.trud.ru/article/13-08-2008/132150_saakashvili_uxodit_iz_sng.html.
- Tonakanyan, Liza. “Stop Russia!” *Trud*, (Moscow, Russia), Aug. 12, 2008, https://www.trud.ru/article/12-08-2008/132074_stop_russia.html.
- “U SShA Dumayut’, Shcho Pislya Hruziyi Mozhe Buty Ukrayina” [The United States Thinks, That After Georgia, Ukraine Might Be Next]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 11, <https://www.pravda.com.ua/news/2008/08/11/3514703/>.
- “V Yuzhnoy Osetii Vozobnovilis’ Boi” [Fighting Resumed in South Ossetia]. *Kommersant*, (Moscow, Russia), Aug. 8, 2008, <https://www.kommersant.ru/doc/1009331>.
- Venediktov, Aleksey. *Interview with Sergey Parkhomenko, Konstantin Remchukov, Dmitriy Oreshkin, and Matvey Ganapolskiy*. “Vooruzhenny Konflikt v Yuzhnoy Osetii” [The Military Conflict in South Ossetia]. Ekho Moskvyy, (Moscow, Russia), Aug. 8, 2008, <https://echo.msk.ru/programs/beseda/532613-echo/>.
- Volha, Vasili. “Voyna. Gruzziya. Moya Pravda” [War. Georgia. My Truth]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 18, 2008, <https://www.pravda.com.ua/rus/articles/2008/08/18/4447938/>.
- “Yuzhnaya Osetiya Obvinyaet v Genotside Ne Tol’ko Saakashvili, no i Yushchenko” [South Ossetia Accuses Not Only Saakashvili, but Yushchenko, of Genocide]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 20, 2008, <https://www.pravda.com.ua/rus/news/2008/08/20/4448270/>.
- “Yushchenko Zovet v Ukrainu Gruzinskikh Detey” [Yushchenko Calls Georgian Children to Ukraine]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 16, 2008, <https://www.pravda.com.ua/rus/news/2008/08/16/4447825/>.

- “Zhvaniya v Pylu Voiny s Yushchenko Naekhal na Saakashvili” [Zhvania in the Heat of the War with Yushchenko Tramples over Saakashvili]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 15, 2008, <https://www.pravda.com.ua/rus/news/2008/08/15/4447790/>.
- Zlobin, Nikolay. “Naedine s Voynoy.” [Alone with the War]. *Vedomosti*, (Moscow, Russia), Aug. 11, 2008, <https://www.vedomosti.ru/newspaper/articles/2008/08/11/naedine-s-vojnjoj>.
- “Zyuganov Priyikhav v Ukrayinu Ahituvaty za Pivdennu Osetiyu y Protv NATO” [Zyuganov arrives in Ukraine to advocate for South Ossetia and against NATO]. *Ukrayinskaya Pravda*, (Ukraine), Aug. 9, 2008, <https://www.pravda.com.ua/news/2008/08/9/3512395/>.



07

Agency in the Representations of Medieval Aristocratic Women in the Illuminated Manuscripts of Chrétien de Troyes

Tristan Heibel

Department of English

Dr. Gail Orgelfinger

Image: Figure 6, p. 168.

BIOGRAPHY

Tristan Heibel graduated from UMBC magna cum laude in December 2020 with a B.A. in English. During his study at UMBC, Tristan undertook work in the English Honors Program from Spring 2020 through Fall 2020 and was awarded departmental honors upon completing his honors thesis. In 2020, Tristan was awarded the Undergraduate Research Award for his research into two extant manuscripts of the medieval Arthurian romance *Yvain* by Chrétien de Troyes.

He would like to thank his mentor, Dr. Gail Orgelfinger, for her exceptional help in pushing him to go further in his research and teaching him humility when faced with criticism. Tristan would also like to thank Dr. Kathryn McKinley for introducing him to the world of medieval scholarship as well as for the years he spent under her tutelage. In the future, Tristan will be applying to English programs at universities providing a focus on medieval literature.

RESEARCH JOURNEY

My attention was first drawn to medieval literature in the Spring of 2019 when a course by Dr. Kathryn McKinley informed me of the different roles women played in medieval romance literature. I decided to enter the English Honors Program in the Spring of 2020 to expand on my work in Dr. McKinley's course. The complex roles that aristocratic women played in marriage became immediately evident in the poetry of Chrétien de Troyes, whose poems follow the chivalric adventures of the knights in King Arthur's court. Much more than supportive wives to their chivalric husbands, the wives in Chrétien's narratives can obtain a newfound significance when compared to contemporaneous aristocratic women. The gendered dynamics of marriage in twelfth-century romance drew my attention when I found that marriage was on the cusp of becoming a sacrament in the early thirteenth-century. With this in mind for my Honors Thesis, I then expanded my theory into whether or not my thesis could stretch further than the text and appear within artistic representations constructed in the medieval period.

ABSTRACT

This project extended the scope of my English Honors thesis, analyzing two poems by the twelfth-century French poet Chrétien de Troyes. I initially analyzed how *The Knight with the Lion* (*Yvain*) depicted female agency in the twelfth-century courts with the potential for a contemporary reality to appear. This project asks whether my literary thesis could find validity in the illustrations within the *Yvain* manuscripts. That is: What do manuscript illustrations tell us about how the artists of two *Yvain* manuscripts interpreted Chrétien's portrayal of women exerting their agency? Several scholars interested in the topic, specifically Nancy B. Black, James A. Rushing Jr., and Sandra Hindman, looked at the manuscripts for how they inform the text Chrétien wrote. I would like to compare these interpretations with my analysis of the literary narrative and my own interpretation of the pictorial narrative found within the manuscripts. My research on these two manuscripts looks toward how these artists interpreted Chrétien's text and shows how one manuscript regards Yvain as a knightly exemplum and the other addresses the importance of women to Yvain's journey.

INTRODUCTION

The women in Chrétien de Troyes' (1130-1191) *Yvain* romance demonstrate a form of agency within the chivalric and courtly social structure of twelfth-century French marriage. Writing in the time of Eleanor of Aquitaine, Chrétien utilized influences from contemporary poetry such as the troubadour poets. Chrétien was best known for establishing vernacular Arthurian romance with his five poems *Érec and Énide*, *Cligès*, *The Knight of the Cart or Lancelot*, *The Knight with the Lion or Yvain*, and *The Story of the Grail or Perceval*. Rather than participate in literary didacticism for his audiences, Chrétien demonstrates the failures of aristocratic obligation and the ways that disgraced aristocrats make up for their transgression at court. Rather than express obvious examples of appropriate courtly marriage for readers to follow by example, Chrétien displays marriage as a union that must be worked on between companionate partners. With episodes detailing their atonement for courtly transgression, Chrétien's characters resolve their failure by returning to appropriate chivalric and courtly conduct. I have previously argued that Chrétien comments on courtly perceptions of companionate marriage and how women deploy agency in order to satisfy courtly obligation. I claimed that Chrétien's *Yvain* presents a complex dynamic in which courtly women such as Laudine must utilize their agency as land-owning women to correct their husbands' behavior. They do so out of obligation to their courts. Using surrounding contemporary authors and figures, I argued that Chrétien's women represent a form of contemporary reality among courtly women. Yvain must go through typical chivalric adventures, in which he learns to satisfy his marital obligation instead of his selfish desires. In Chrétien's interpretation, companionate marriage is depicted as marital disagreement and mutual correction that ultimately leads to a stable union.

Moving forward with this understanding of Chrétien's text, this project will evaluate illuminated manuscripts of the *Yvain* narrative in order to find out whether or not Chrétien's women are represented pictorially with the same level of agency they find within his literary narrative. It will begin with a brief summary of the *Yvain* poem, followed by an exact explanation of what I mean by agency in relation to the poem. Next, the contemporary reality of female agency within courtly marriage will be discussed through the example of Eleanor of Aquitaine, the contemporary arguments about marriage in the twelfth-century, and the possible influences that may have inspired Chrétien's construction of the text. Utilizing this interpretation of Chrétien's text and the contemporary reality for aristocratic women, focus will turn towards two extant manuscripts that deliver differing programs of pictorial narrative interpreting Chrétien's text. Comparing similar moments within each program with my reading of Chrétien's text, I will seek to authenticate my theory of female aristocratic agency within artistic representations of Chrétien's Laudine. My interpretation of the

Yvain manuscripts will then be followed by a brief analysis of two manuscript depictions of Eleanor of Aquitaine. This will be done in order to interpret the *Yvain* illustrations and their reading of the text against pictorial interpretations of contemporary reality in order to find similarities to how aristocratic women with agency would have been depicted.

SUMMARY AND CONTEMPORARY REALITY

The Knight with the Lion (Yvain) begins with a knight, Calogrenant, relating his failed adventure fighting Esclados (Laudine's first husband) to Arthur's court, which provokes Yvain to undertake the same quest. Yvain succeeds in defeating and killing the knight Esclados, husband of Laudine. Yvain then finds lodging in Laudine's castle and, with the assistance and persuasion of a maiden named Lunette, weds the reluctant Laudine. After they are wedded, to the great pleasure of Laudine's court, Laudine makes Yvain promise to return after a year at a tourney in Arthur's court. Unfortunately, Yvain fails to uphold his promise and Laudine sends a messenger to reprove her husband. The message from Laudine sends him into madness; as a result Yvain tears off his clothes and runs from the court. Suffering from madness and surviving in the woods, Yvain is brought back to sanity by a maiden with a healing salve. Yvain then sets out on several adventures, such as saving the lion that will accompany him from an evil serpent, saving a baron's court from the giant Harpin, rescuing Lunette from an enterprising seneschal at Laudine's court, settling a dispute between two sisters at Arthur's court, resolving the subjugation of women by two demon knights, and finally reconciling with his wife in the interest of her court. The opportunity for women to demonstrate agency is evident within this brief summary of their role in the narrative; their presence nearby Yvain in the narrative initiates most of his adventures. The *Yvain* story focuses on the marriage between Yvain and Laudine, brought about by the courtly matchmaking Laudine's courtly maiden, Lunette, deploys to reestablish the stability of their court. Yvain must combat his uncourtly conduct and remunerate a broken promise to his wife that sends him into exile from her court. Due to the significant role of Laudine's rebuke of Yvain and her noticeable obligation to courtly governance in the *Yvain* narrative, my argument will rely on her demonstration of agency within Chrétien's poem.

Chrétien presents a complex gender dynamic in which courtly women such as Laudine from *Yvain* demonstrate agency as land-owning aristocratic women to correct their husbands' behavior.¹ In this paper agency refers to the sociological definition found in the *Dictionary of Sociology* stating that the "social psychological make-up of the actor [in this case the women in this poem] ... implies the capacity for willed or voluntary action."² Chrétien establishes women with concerted interests in sustaining the stability of the court. I also argue that

Queen Eleanor of Aquitaine exercised agency that could have inspired Chrétien's depictions of women. Most notably, Eleanor's disputes with both of her husbands (King Louis VII (1120-1180) of France and King Henry II Plantagenet (1133-1189)) may have influenced the women Chrétien created in *Yvain*.

First married to King Louis VII of France and later married to King Henry II Plantagenet of England, Eleanor's marriages were filled with conflict. Her first marriage ended due to her failure to provide a son for Louis VII; however, the marriage was annulled based on charges of an invalid union given a common ancestor between the two. In her second marriage to Henry II, Eleanor's court was subject to Henry's attempts to control and establish governance over her natal lands in France. He attempted to exert control over Eleanor and co-opt her sway in the region to establish policies that would have benefited Henry's rule. Henry utilized Eleanor's rights in Aquitaine as his own, attempting to "subject them to northern 'feudal' obligations."³

Eleanor's allegiance to her native France would have spurred her opposition to her husband's encroaching rule. Her role in France as duchess to her native Aquitaine would allow her enough power to operate effectively outside of the ruling capacity afforded by her marriage to Henry. Eleanor began to oppose Henry's control because "the longer that she resided in her native duchy, the more she identified with her nobility, who resented her husband's infringements on their traditional liberties."⁴ Eleanor's allegiance to her courts and her dissatisfaction toward Henry's infringements on the traditional liberties enjoyed by them could have forced her to reject the English feudal monarchical system. Her urge to repair and reestablish her courts with autonomy apart from Henry would not have gone unnoticed by someone at court like Chrétien.

Possibilities of Eleanor's influence on Chrétien arise when considering her patronage of troubadour poets at her court. She was integral to the development of troubadour poetry and the courtly love sentiments found within them. Eleanor's patronage of several poets at her court would later potentially influence Chrétien's depictions of courtly love in his romances. For instance, Eleanor's patronage of poets such as Wace would help define the genre of courtly love and help establish a chivalric literary tradition. Jean Flori makes note of Eleanor's patronage and the dedications made to her, for "it was to Eleanor, for example, that Wace, in 1155, dedicated his *Roman de Brut*; he had been inspired by the *History of the Kings of Britain* ... source of the Arthurian legend so quickly taken up by romance writers, beginning with Chrétien de Troyes."⁵ Eleanor represents a notable example of women in the twelfth-century courts exerting their right to power within their aristocratic unions and her situation was not entirely unusual for marriage in the twelfth-century courts.

Amy Livingstone's book *Out of Love for My Kin*, examining charters in twelfth-century France, established the contemporary reality faced by aristocratic

land-owning women in the period. Livingstone contends that

*the women of the lands of the Loire were powerful indeed. Not only were these women endowed with considerable properties, they enjoyed control over them. Women's rights to their dowry and dower, moreover, were both recognized and protected by their male relatives.*⁶

Her work provides the example of Adela of Normandy (1067-1137) “taking sole control of the family and offices ... she implemented an alliance system that extended the power of both her natal and affinal families” in the interest of protecting her court.⁷ Livingstone shows that aristocratic land-owning women were not ignored in the dispensation of power in the twelfth-century courts.

The role of men and women in marriage was a contemporary issue that increasingly concerned the Catholic Church. Marriage was on the cusp of becoming a sacrament in the early 13th-century, spurring a growing conversation concerning marital conduct. A notable figure in this discourse, Étienne de Fougères (?-1178), wrote his *Livre des manières* (“Book of Manners”) in the French vernacular to critique what he perceived to be inappropriate conduct in the aristocracy. As bishop in Henry II’s court, Étienne advocated a religious perspective undermining the role of the aristocracy. A potential byproduct of Étienne’s criticism of their courtly conduct could have posed a challenge to the aristocracy’s role in governance. Chrétien and Étienne represent contrasting perspectives on how companionate marriage should correct itself to assure what they respectively considered appropriate conduct within the court. Étienne’s argument hinges on the importance he places on the stability of the “Three Estates,” a theory of interaction between three realms of the medieval social order (church, aristocracy, and peasants). In his work on the *Livre*, Anthony Lodge observes, “Harmony between them was to be achieved by the acceptance of the hierarchical ordering of the Three Estates ... and a clear understanding by each of their mutual responsibilities.”⁸ His interpretation regards the church as the source of aristocratic obligation to which duty-bound aristocrats should conduct themselves in the best interest of their subjects.

While Étienne argues that obligatory duties should fall under the concept of the “Three Estates” and guide aristocratic marriage for the benefit of social stability, Chrétien acknowledges the importance of companionate behavior within courtly social conduct to assure proper governance. Étienne observes, “If he is ordained a knight ... Let him be properly worthy and brave / And of honorable behavior. / Toward the church and toward all people.”⁹ The Chrétien narrator observes, “Now, alas, there are very few disciples; nearly all have deserted him so that Love is held in disrepute. In olden days Love’s disciples were known for courtesy and bravery, generosity and honor.”¹⁰ Appropriate conduct to Étienne focuses on the obligation to the religious order of the knighthood for the better-

ment of courtly social order, while Chrétien advocates for appropriate romantic behavior to satisfy an aristocratic knight's courtly obligation. Thus, both theological and romance texts engage in the conversation concerning appropriate conduct for aristocratic marriage.

The growing discourse in the period perhaps informed Chrétien's literary perspective in which he created a woman concerned with stable governance of her land. Left widowed, Laudine has an obligation to her people and her court to take another husband to fulfill her role as protector of her subjects. With the absence of a man to help Laudine rule, her court fixates on resolving this issue through marriage which Lunette voices concern for in counsel to Laudine. She asks Laudine, "Who will defend your land when King Arthur comes here, for he is supposed to arrive at the spring and the stone next week? ... Now you should be planning the defense of your spring."¹¹ Lunette ushers in Yvain as a replacement to Laudine's deceased husband, participating in a match-making process to ensure the stability of the court. Livingstone attests to this function at court by employing Marie de France's (1160-1215) *lai*, *Guigemar*, which shows a courtly heroine "assisted by her niece, who is pivotal in the romance. She is the matchmaker for the two lovers."¹² Although it is not inappropriate for Lunette to propose this marriage, Laudine responds to this suggestion by admonishing Lunette that "if I ever hear you talk that way again, it will be to your misfortune unless you flee. You talk so much you tire me."¹³ Given Chrétien's interest in aristocratic marriages, Lunette's involvement alongside Laudine represents aristocratic women's role in nuptial arrangements. Laudine's rejection of marital suggestions by the court also highlights the agency women enjoyed in deciding favorable aristocratic unions. Following their marriage, it is Yvain's failure to satisfy his obligation to Laudine that initiates her use of agency. She makes him promise to return within a year, warning him that if he does not fulfill his promise to her that "the love I have for you will turn to hate if you outstay the term I tell you. Know that I will never fail to keep my promise. If you break your word, I will hold to mine."¹⁴ Laudine demonstrates a level of agency in her marriage by laying down rules for Yvain's conduct and makes it clear that she will not abide by his failure to uphold their union in the eyes of her court.

After marrying Laudine, Yvain fails to uphold his promise that he will return to reconfirm the stability of her court after a year at a tourney in Arthur's court. In the chivalric order it was not a light offense for a knight to disregard his promise to his lady, for his reputation at court would be at stake. Laudine duly denies Yvain's return for his failure to uphold his promise to Laudine and her court, labeling him "the liar, the hypocrite, the disloyal traitor, who had tricked and deceived her ... who purported to be a true lover but was a fool, a deceitful scoundrel."¹⁵ With the obligation conferred by her land ownership, Laudine employs agency by rejecting Yvain for eschewing his courtly responsibilities.

Yvain subsequently descends into grief-stricken madness and is only brought back to sanity with the help of a wandering courtly woman with a rejuvenating ointment. Yvain then ventures out on a series of episodic adventures resolving problems that arise in other courts, soon recognizing his failure to honor his obligation at Laudine's court. Yvain thus returns to Laudine's court to reestablish his relationship after ostensibly resolving his transgression through chivalric deeds.

Although Laudine initially denounces Yvain's poor behavior with her agency, the poem concludes with Lunette's cunning plan to bring Yvain back to his marriage with Laudine against her will. Lunette suggests that the knight who saved both her life and Laudine's court should wed her, to which Laudine reluctantly consents. Although Lunette's behavior indicates deceit, Amy Brown interprets Lunette's deception as using "her influence over Laudine to reconcile conflicts and secure the interests of Laudine's dependents."¹⁶ Upon Yvain's revelation that he was Lunette's savior, Laudine reproves Lunette's trickery, remarking that "in spite of myself you will make me love a man who does not love or esteem me ... If it were not too shameful and too base to break an oath, he would never find pardon or peace from me at any cost."¹⁷ Much to her chagrin, Laudine accedes to the promise she makes to Lunette and abandons her previous conviction towards hate for Yvain. Laudine's obligation to the land she governs and opposition to her second husband's behavior justify her use of agency. This obligation motivates Laudine to reject Yvain's return to her in the first place, generating the journey Yvain undertakes to fulfill his courtly obligation to Laudine's court.

Although Chrétien's writing appears to define Laudine and her actions by her obligation to utilize agency for internal stability, it is crucial to understand how representations of her agency would have appeared within artistic interpretations of Chrétien's work. The decorative portions of these manuscripts offer an illustrative exegetical lens through which scholars have deciphered how a medieval reader may have understood literature. Given a significant corpus of scholarship on how illuminations operate as "interpretations," these images can provide intimation of how medieval readers absorbed Chrétien's literary theme and narrative.

This project evaluates two illuminated manuscripts of *Yvain* to discover if the illustrations reflected or contradicted my reading of the text. Illuminated manuscripts decorate hand-written books that offer rich depictions and interpretations of the text they appear alongside. Moreover, they often demonstrate a narrative interpretation of the text that would serve to mark important moments in the text and persuade the audience towards a certain interpretation of the text. James A. Rushing, Jr. concludes of illuminated manuscripts that medieval readers "as they read ... will find that the pictures push them gently towards one particular understanding of the text."¹⁸ The two manuscripts I analyzed are the manuscript

held by the Princeton University Library Special Collections, hereafter referred to as “Garrett” (Garrett MS 125) and the manuscript held by the Bibliothèque Nationale de France in Paris, hereafter referred to as “Paris” (MS fr. 1433). I will also evaluate two depictions of Eleanor to explore a potential thematic connection to ways women’s agency might find representation. The illustrations in the Garrett manuscript are similar to those in two other manuscripts (the Psalter of Amiens and the Walters Museum W 89)¹⁹ which implies that the manuscript was constructed in Amiens at the end of the thirteenth-century. However, the Paris manuscript has proven difficult to place due to its diverse and unusual full-page dynamic scenes. Alison Stones has dated it in the early fourteenth-century, but even she remarks “the format of its illumination is virtually without parallel,” making it a difficult task to place the manuscript at any particular location.²⁰ Although dating remains hard for Paris, the suggestion that they were both constructed within a short time span from one another reveals the complexity of differing interpretations between two artists attempting to represent the narrative. Focused mostly on Yvain’s chivalric accomplishments, Garrett 125 provides a knightly exemplum through which to interpret the literary narrative. Instead of recognizing how gendered relationships thrust Yvain forward in the narrative, the images in Garrett serve only to define Yvain as a positive model for a knight. Rather than focusing on the thematic quality of Yvain’s chivalric deeds, the Paris illuminations focus on the complexity of gender issues in the courtly realm over the course of the narrative.

Black’s “The Language of the Illustrations of Chrétien de Troyes’s ‘Le Chevalier au Lion (Yvain)’” evaluates the interpretations of Chrétien’s text by the artists in the Garrett and Paris manuscripts. Comparing the illustrations, she argues that “their sharp differences from one another, [reveal] two opposing states of mind among medieval readers of the same text.”²¹ Black emphasizes two different readings of the two manuscripts: for Garrett, the images depict contrasting dichotomies of love and hate, harmony and disharmony, peace and war; for Paris, they indicate temporal and gender relationships. I disagree with Black’s assertion that the Garrett illuminator presents complex dichotomies found within Chrétien’s text due to how Yvain operates within each of the images. His presence serves to guide the reader towards the understanding that Yvain’s successes in chivalric or courtly life define Chrétien’s text. However, I agree that the Paris manuscript makes apparent the complex gender dynamics present throughout Yvain’s adventures. Without the presence of aristocratic women expressing their agency within the pictorial narrative and Chrétien’s narrative, Yvain’s journey would remain markedly unsuccessful.

My analysis of the Garrett manuscript accords more closely with Rushing who claims that “the miniature cycle of the Princeton manuscript is an independent interpretation of the *Yvain* story, which it presents as an unproblematic

series of knightly adventures.”²² While Rushing argues for the Garrett manuscript’s unproblematic depictions of knighthood, he also argues that “by locating the narrative at the court where story-telling takes place, the image of courtly conversation that begins the miniature cycle may suggest that this exemplary knightliness is purely fictitious.”²³ Concerning Paris, however, Rushing observes the manuscript with an eye for its complexity and similarity to Chrétien’s narrative. He claims that the Paris manuscript

*may seem at first glance to have a more purely illustrative function, to come much closer to rendering Chrétien’s narrative in images. Nonetheless, the miniatures of BN fr. 1433 develop an independent pictorial narrative ... which guides readers toward a particular understanding of Chrétien’s text.*²⁴

With Black’s and Rushing’s independent interpretations of the manuscripts, my analysis shows that Garrett’s program represents an unproblematic chivalric exemplum whereas Paris’ program represents a diverse examination of gender at the court.

PRINCETON UNIVERSITY LIBRARY, GARRETT 125 AND PARIS, BIBLIOTHÈQUE NATIONALE, FR., MS 1433

YVAIN SAVES THE LION

The Garrett illuminator’s cycle of chivalric endeavor is evident on fol. 37r (Figure 1). Here, Yvain is depicted heroically slaying the dragon in order to save the lion. The Garrett illuminator portrays Yvain leaning down from his horse to cleave the dragon which is assaulting the lion. Situated on a rock on the right side of the image, the lion stands in agony from the dragon’s assault. Although a dynamic and exciting scene of Yvain’s triumph over the evil dragon, the image operates merely to show the climactic event that transitions Yvain out of his madness and sparks his following chivalric deeds. Yvain’s recovery from madness immediately precedes this episode, but the illustrator omits it. The continuation of the illumination cycle with this specific scene from Yvain’s adventure into madness provides a telling sign of the Garrett illuminator’s interest in what the *Yvain* narrative provides. Rushing attests to the implication of this absence, claiming “The effect of this omission on readers is surely intended to guide their reception of the text: although they read the story of Yvain’s exile, the illustrations suggest that these segments are not important.”²⁵ Given Rushing’s analysis the Garrett illuminator’s inclusion of certain scenes and the importance of illuminations to the reception of medieval readers, the lack of any pictorial represen-

tation of Laudine's rejection and Yvain's madness implies that the Garrett artist cares more for an unproblematic chivalric exemplum in Yvain's journey. That Garrett's illumination cycle underscores Yvain's success as a positive knightly figure remains the most important takeaway from the narrative, not the complex arguments he has with his wife.



Figure 1 Princeton University Library, Garrett MS 125, fol. 37r. Yvain Saves the Lion

In contrast, the Paris illuminator employs a more complex depiction of Yvain's interaction with the lion, offering a contextual basis for his accomplishment. This set of images begins with a messenger arriving to deliver Laudine's dissatisfaction (top left), Yvain disrobing into madness (top right), the courtly maiden applying the healing salve and their departure (bottom left), and Yvain's triumph over the serpent (bottom right) on fol. 85r (Figure 2). Clearly, Laudine's repudiation is important to Yvain's journey for the Paris illuminator; it has sent him spiraling into madness. Laudine uses her agency to provide a powerful message for Yvain's misguided interest in tourney over preservation of her court; instead of fighting off potential invaders to Laudine's court, Yvain focuses on tournament combat that will provide him with more fame. To the Paris illuminator, this woman plays a crucial role, which pushes Yvain to partake in chivalric endeavor in the following scene. He slays the serpent on the left and then leaves with the lion

in tow on the right side of the compartment. Although a somewhat simplistic retelling of Yvain's success over the dragon, the preceding scene indicates that without the help of the wandering maiden Yvain would not have acquired his identity as the "Knight with the Lion."



Figure 2 Paris, Bibliothèque Nationale, MS fr. 1433, fol. 85r. Maiden bringing news, Yvain goes mad, Maiden applies ointment to Yvain, Yvain saves the lion

Unlike Garrett's static depiction of Yvain's knightly accomplishment, the Paris illuminator clearly has an interest in depicting the role of women in Yvain's journey. The court would surely approve Yvain's role as savior of the lion. Paris provides a fleshed-out sequence that leads to Yvain's return to sanity after his battle with the serpent, moving through successive scenes that recognize the role of aristocratic women in Yvain's descent into and ascent out of madness. Rushing argues that Yvain's "return to sanity is marked by a return to courtly clothes. Yvain's killing of the dragon, an obvious and well-known symbol for wildness, marks his final defeat of his own wildness and his complete restoration as a courtly knight."²⁶ Compared to Garrett's static scene of chivalric accomplishment over an evil serpent, Paris' diverse program in this miniature provides a fascinating portrayal of the interrelationships between aristocratic women and the courtly

knights who benefit from intercession by high ranking women in the court.

YVAIN FIGHTS HARPIN

The Garrett illuminator depicts Yvain driving his sword into the giant Harpin's face while the lion bites the giant's hip on fol. 56v (Figure 3). Most notable about this scene is how height operates: Yvain appears in full knightly regalia and matches the giant's height. The image does not ignore the lion's role in the Harpin fight because the lion operates in this miniature to remind the audience or reader that the lion is an essential ally to Yvain. The Garrett illuminator clearly hopes to depict Yvain as a knight in prime form, making him capable of toppling giants when accordant with the lifestyle of an exemplary chivalric figure. The illustrator chooses to omit the episode of the baron and the threat against the honor of his daughters in favor of the chivalric conclusions of each episode. In my previous analysis of this episode in Chrétien's narrative, I concluded that these endeavors and the events surrounding them offer a lens through which to understand Yvain's journey and the lessons he learns from them so that he may satisfy his courtly duties at Laudine's court. With the exemption of these surrounding details to the Garrett illuminator's depiction of Yvain's triumph over the giant, the conclusion drawn from this image relates back to Rushing's conclusion that the program features a series of unproblematic knightly endeavors. Without any of the surrounding events, the role of women and their agency within Chrétien's text is disregarded in order to maintain Yvain's status as a knightly role model for the audience. Garrett's treatment of Yvain's combat with a conniving aristocrat at Laudine's court, omitting the surrounding aristocratic women and court in favor of Yvain's accomplishments, represents a similar exemplum.



Figure 3 Princeton University Library, Garrett MS 125, fol. 56v. Yvain slays Harpin

Yvain's first return to Laudine's court (under disguise as "the knight with the lion") to contest the charges a conniving aristocrat and his brothers have levied against Lunette appears in Garrett on fol. 58v (Figure 4). The miniature depicts Yvain saving Laudine's court and Lunette's life from the enterprising seneschal and his brothers. The seneschal and his two brothers charge forward on the right side of the miniature. Here, the Garrett illuminator simply depicts their hostility toward Yvain's presence at Laudine's court. While this scene observes Yvain's devotion to his wife's court, it does not accurately relate the events that came before that would have garnered Laudine some disdain for the mysterious lion knight. Yvain in Chrétien's narrative has learned in Laudine's court that the court is subject to devious plots from scheming interests without his presence. The preservation of courts infected by evil men demonstrates Yvain's clear determination to behave according to chivalric behavior to the Garrett illuminator.

However, this ignores the complexity of the situation that Chrétien establishes throughout each episode. The Garrett painter continues to present an unproblematic depiction of the climax, preserving Yvain as an exemplum for the reader or audience of the narrative. The Paris illuminator takes a different approach for the Harpin battle, placing it between a cycle of images that acknowledges Yvain's duty to Lunette and Laudine's court.



Figure 4 Princeton University Library, Garrett MS 125, fol. 58v. Yvain fights the seneschal and his brothers.

The Paris illuminator economically represents Yvain's adventures before the Pesme episode on fol. 90r (Figure 5) in this miniature sequence. The first panel shows Yvain finding Lunette in her tower prison and shows his promise to return to save her. In the next scene, Yvain fights Harpin in front of the threatened baron's court. The final scene shows Yvain's rescue of Lunette from her prison and the subsequent battle to restore her to Laudine's court. The Paris illuminator offers a more detailed examination of Yvain's battle with Harpin by including the surrounding events that provide a complex reading of the *Yvain* narrative. Because it is placed between two contextual scenes, the battle scene illustration offers a more detailed and interpretive analysis of events surrounding their battle.

The first scene depicts Yvain stumbling upon Lunette locked in the tower on the left side of the register and his prayer to return is shown on the right side. This scene relates the importance of Yvain's obligation to Lunette for her help establishing his marriage. Yvain's courtly obligation to Lunette in this scene is borne out of the agency she enjoys as the aristocratic woman that arranged his marriage for the benefit of Laudine's court. Black writes that the scene "effectively shows the interrelationship among the three events, which the text portrays as a sharp conflict in responsibilities and pressure of time."²⁷ Yvain appears in the next scene charging out of the gate to a castle, fighting Harpin the giant with his dwarf companion while the baron's family watches on the right side of the frame. The Paris illuminator places depictions of chivalric adventure and combat between the promise scene to Lunette and his satisfaction of this promise by protecting her from the charges the seneschal makes against her. This operates to illustrate that Yvain now understands the obligations expected of him when he makes a promise.



Figure 5 Paris, Bibliotheque Nationale, MS fr. 1433, fol. 90r. Yvain takes on Lunette's request, Yvain fights Harpin, Yvain defeats the seneschal and his brothers to save Lunette.

The bottom scene represents the Paris illuminator's most complex attempt at displaying narrative progression and the interrelationship of events within the

narrative. The cycle of events starts with Yvain leading Lunette to the court, where he subsequently fights the seneschal and his brothers to the immediate right. His triumph over them is next, showing one of the seneschal's brothers on the ground killed by the lion in the lower middle of the frame. It then moves into a depiction of Lunette, accepted back into the graces of Laudine's court, where they all stand watching the events unfold. With the previous two scenes, this narrative progression in the miniature demonstrates Yvain's newfound understanding of the obligations he has developed. Making a promise to Lunette (similar to his promise to return to Laudine), Yvain goes off to protect the baron and his daughter yet still returns after his knightly adventure to satisfy his promise to Lunette. The complexity and progression of this miniature is in sharp contrast to the Garrett illuminator's depiction, offering a more dynamic examination of the *Yvain* narrative.

While the Garrett illuminator offers a knightly exemplum, the Paris illuminator demonstrates Yvain's evolved understanding of his duties to courtly women. Garrett recognizes Yvain's great accomplishment in his triumph over Harpin, depicting his stature as a knight in a superior light to Harpin. The Paris illuminator finds equal importance in the Harpin episode, but only so much as it fits into the artist's interpretation of the events surrounding the combat. Rushing comments on the Harpin scene in Paris that "the giant is somehow part of the mission undertaken for the maiden, a necessary preliminary to the rescue scene below."²⁸ The Paris illuminator's inclusion of this event between Yvain's promise and the rescue scene thus demonstrates the importance of women to Yvain's journey. While Garrett creates static scenes of Yvain's quality as a knight, Paris shows a dynamic reading of Chrétien's narrative that values the events and aristocratic women that surround his triumphs in combat.

YVAIN AND LAUDINE'S MARRIAGE SCENES

The Garrett illuminator portrays Yvain and Laudine's marriage in a chapel with a priest joining their hands on fol. 52r (Figure 6). Scholar Sandra Hindman claims this scene "respond[s] to certain changes in feudal society in northern France in the second half of the thirteenth century."²⁹ Although not contemporary to Chrétien's writing, the images correspond to the conversation concerning marriage as a sacrament between aristocrats and the role of the church in this union. Additionally, Hindman claims, "the marriage miniature in the Princeton manuscript depicts an up-to-date marriage of mutual consent"³⁰ and it ignores the deliberation she undertook before consent. The omission of Laudine's protestation and lamentation of her first husband that Yvain kills, Esclados, before she ultimately concedes to the marriage represents the Garrett illuminator's disinterest in Laudine's role in the process of Yvain's journey. Although it is not unusual for romances to represent a knight's marriage as one of many climactic episodes

of his life, the Garrett illuminator does not include Laudine's conflicting feelings. This depiction of Laudine and Yvain's marriage acknowledges the conversation of the church in aristocratic marital unions and whether or not the union should be made a sacrament. This scene, however, does not effectively depict Laudine with the degree of agency she would have exercised given her status as a land-owning aristocratic woman. Garrett presents an unproblematic union that omits Laudine's agency in decision-making leading to her marital consent, much like the unproblematic chivalric illuminations that have previously been discussed.



Figure 6 Princeton University Library, Garrett MS 125, fol. 25r. Yvain and Laudine are married.

The full-page symbolic marriage scene in the Paris manuscript depicts Lunette and Yvain's return to Laudine's court in the upper half of the miniature, Yvain discussing with Laudine on the lower-left, and a lovemaking scene in the lower-right in the bottom half of the miniature on fol. 118r (Figure 7). Presumably, their conversation ends with a reconciliation of their union since this scene moves into a courtly lovemaking scene depicting them in bed with one another in the lower right portion. I interpret this scene as a symbolic marriage based on Hindman's assertion that "as a kind of marriage miniature ... only after Yvain completes a series of quests is he united in marriage with his ladylove, as part of a domestic household."³¹ Much like his reception at Arthur's court after the many deeds he does for the benefit of women, his reentry into Laudine's graces also implies Yvain's transition from a knight concerned only with chivalric adventure into a courtly knight concerned with his obligation to aristocratic women at court. Since there is no previous marriage scene in the narrative, Paris includes it at the end to imply that Yvain was previously not prepared for the obligations expected of him in his marriage to Laudine and her court.



Figure 7 Paris, Bibliothèque Nationale, MS fr. 1433, fol. 118r. Yvain and Laudine ride back to Laudine's court, Laudine meets Yvain and Lunette at the gate, Yvain and Laudine discuss, Yvain and Laudine together in bed.

My interpretation gains traction when evaluating the earlier portions of the manuscript concerning this scene. Looking first to the funeral procession miniature of Esclados, the Paris illuminator devotes an astonishing amount of significance to his death. Devoting an entire miniature frame to the funeral procession of Esclados, the Paris illuminator acknowledges the gravity of his vacancy at Laudine's court. A single static scene on fol. 72v (Figure 8) shows a whole procession of mourners carry Esclados' casket while four figures ceremoniously conduct the procession into a church. Although this scene does not appear in Garrett, it provides needed context for the symbolic marriage scene in the final miniature found in the Paris cycle. The importance the Paris illuminator places on the procession of Esclados' death introduces Laudine to Yvain and indicates the

gravity of an absent ruling lord. A static and straightforward scene, this miniature seems to focus on the gravity of the situation at Laudine's court which Yvain will overlook when he fails to return from his participation at the tournament in Arthur's court. What appears next in the manuscript shows the contrast between Yvain's subsequent chivalric exploits at tourney and his obligation to Laudine.



Figure 8 Paris, Bibliotheque Nationale, MS fr. 1433, fol. 72v. Esclados' funeral procession.

On fol. 80v (Figure 9), the top scene indicates Yvain's triumph over another knight in a lance competition at Arthur's court. Appearing below this scene is the subsequent praise he receives from a crowd of three knights led by Arthur, who receives the horse Yvain won from his competitor. This miniature presents Yvain's quality as a knight at tourney but appears immediately after the funeral procession for Esclados in the cycle of illuminations. The omission of his marriage to Laudine, which takes place in between, and the promise he makes to her is unexpected given the Paris illuminator's interest in representing the role of women at court. Rushing points out that

the links between the episodes are not made explicit, and the narrative might appear to be one ... of isolated moments. Yet in contrast to the illuminations of Garrett 125, the Paris miniatures do create sequences that extend from one miniature to another over many folios.³²

With this understanding of the Paris illuminator's narrative structure, I propose that the scene serves to exemplify Yvain's decided interest in chivalric combat versus recognizing his obligation to fill the vacancy of a man to protect Laudine's court. His failure to uphold his obligation here flows into the following narrative in the cycle, in which Yvain descends into madness and his subsequent adventures to save courtly women. Given this understanding of the progression of the Paris miniature cycle, the appearance of Laudine at the conclusion and her reconciliation with Yvain represents a true marriage, since Yvain may now fulfill his role as husband in service to Laudine's court.



Figure 9 Paris, Bibliotheque Nationale, MS fr. 1433, fol. 80v. Yvain fights a knight at tourney, Yvain praised for his success at tourney.

In this concluding set of images, the Paris illuminator reveals a thematic interpretation of the *Yvain* narrative in its entirety. Their way of representing the

women in Chrétien's narrative implies the importance of women but also displays their integral role in the education of a knight who must learn to uphold his promises. Black astutely argues that the Paris illuminator reads Yvain's story "as a study in temporal and gender relationships."³³ Yvain must undertake chivalric endeavors in the interest of correcting his selfish behavior and coming into accordance with the obligations expected of a chivalric husband to his aristocratic lady. Similarly, Rushing concludes,

by depicting the funeral instead of the wedding in the knight's first series of adventures, and delaying the consummation of the knight's love for his lady to the end of the story, the illuminator of BN fr. 1433 creates a structure analogous to the structure of Chrétien's narrative ... only by undertaking a series of properly motivated battles can the lion-knight at last achieve the romantic bliss that is finally revealed as the goal of his adventures.³⁴

If these "properly motivated battles" refer to combat in the interest of helping women, then the narrative progression of the images recognizes women's importance to the journey of a knight and establishes the significance of aristocratic women with obligations to preserve their court. Garrett's marriage scene demonstrates a climactic moment in the life of a knight, the consensual marriage between two nobles that subsequently inspires Yvain's chivalric accomplishments. But it still acknowledges an unproblematic union. Therefore the Garrett illustrations do not support my analysis of the agency found in Chrétien's literary narrative. The Paris manuscript illustrations, alternatively, examine the complex roles aristocratic women play in the lives of knights that require the intercession of courtly education. Their complex visual cycle and thematic approach allow us to extrapolate agency for women.

ELEANOR IN HAGUE KB, 76 F 13 AND CHANTILLY, MUSÉE CONDÉ MS 867/324

In my literary analysis of Chrétien's work, I hypothesized that Queen Eleanor of Aquitaine offered a contemporaneous example that could have inspired Chrétien's representation of land-owning women. When analyzing the two extant manuscripts of *Yvain*, it will be important to acknowledge the depiction of Eleanor in other manuscripts in the interest of establishing a broader perspective on illustrations of land-owning aristocratic women. This will be done in order to see if depictions of Chrétien's Laudine in both manuscripts demonstrate similarities to interpretations of contemporary reality. To see if this argument was supported by contemporary illustrations I examined depictions of the Queen in manuscript illuminations from Hague KB, 76 F 13 (the Fécamp

Psalter) constructed in the late twelfth-century and Chantilly, Musée Condé MS 867/324 (the *Grand Chroniques de France*) constructed around the early fourteenth-century. Although these are dated later than Chrétien's lifetime, they are integral to understanding how medieval viewers and artists interpreted the manuscripts in the twelfth-century. Much like my previous literary analysis, Marta Pavon Ramirez notes the interconnectedness of text and image that pushes the reader/audience to a certain interpretation of marriage symbolism in the period. Because an illuminated manuscript provides depictions that are

*at the same time pedagogical and autonomous; it can follow the literal sense of the text or it can emphasize one interpretation at the expense of another. This is the power of images, functioning not only to decorate and embellish the text but also to transmit an interpretation.*³⁵

Using this understanding of the tight relationship between image and text, Eleanor's marriage to Louis VII in the Chantilly manuscript depicts what appears to be an unproblematic nuptial scene.

Given the conflict that arose between Eleanor and Louis at her failure to provide a son, their marriage was dissolved based on charges of consanguinity even though the pope had previously permitted their union. Considering charges of consanguinity were utilized to execute a divorce, clearly their marriage was not free of conflict. However, in Chantilly, the illuminator provides a generic marriage scene on fol. 221r (Figure 10) between Eleanor and Louis on the left joining their right hands while a priest conducts the wedding in front of the court onlookers. The right side of the miniature shows Louis sailing off on a crusade in knightly regalia surrounded by other knights. Much like the Garrett illuminator's scene of Yvain and Laudine's marriage, Eleanor and Louis' marriage scene demonstrates a salient moment in the life of aristocrats. The juxtaposition of marriage and crusade suggests their exemplary marriage inspired Louis' courage. Ramirez comments on marriage symbolism that "with the emergence of the sacramental doctrine of marriage, the symbolic aspects of marriage between a man and a woman were increasingly stressed."³⁶ While this image includes a significant moment in Eleanor's life, the symbolic meaning of their marriage highlights Louis' heroism rather than Eleanor's identity as a land-owning aristocratic woman at court.



Figure 10 Chantilly, Musée Condé MS 867/324, fol. 22r. Eleanor's marriage to Louis, Louis setting out on Crusade.

Eleanor appears in the Fécamp Psalter kneeling with her hands together in prayer (fol. 28v (Figure 11)) looking towards the first Psalm on the next page. Henry II's antagonism towards Thomas Becket (Archbishop of Canterbury) generated a great deal of friction between the church and Henry's court, which would have reflected poorly on Eleanor's court by extension. By commissioning this Psalter, Eleanor would have hoped to accentuate her religious dedication in the aftermath of Becket's assassination to recover some of her reputation. Jesús Viejo writes of this standard practice among the aristocracy, claiming psalters such as this "were mostly commissioned ... as a way to promote their personal reputation in court and ecclesiastical circles."³⁷ Eleanor kneels facing a depiction of David and Goliath and Viejo suggests that this juxtaposition "invites the viewer to associate the self-awareness of the woman portrayed on the opposite page with the story of King David, whose life is famous partly because of the continuous struggles that he faced on both political and personal levels."³⁸ It would appear that Eleanor's commission of this psalter functions both as a strong statement of indignation against her second husband's actions against the church and as a reaffirmation of her spirituality. The personal and political complexities in

Eleanor's life are here analogous to the spiritual struggle of David, but Eleanor utilizes this biblical story to insinuate her opposition to Henry and passionate personal devotion to the church.



Figure 11 Hague KB, 76 F 13 (Fécamp Psalter), fol. 28v. Donor portrait of Eleanor kneeling.

While Chantilly depicts an unproblematic union that initiates a chivalric undertaking, Fécamp exemplifies Eleanor's indignation towards her husband with anal-

ogous devotion. In contrast to one another, the illustrations of Eleanor provide disparate interpretations of events much like the disparate readings between the two Chrétien manuscripts. Eleanor's role as a contemporary figure in the Chantilly and Fécamp manuscripts serves less to provide a one-to-one comparison to the Chrétien manuscripts, than to establish the possibility that manuscript representations of aristocratic women might take on nuance. Interpretations of contemporary reality might gravitate towards unproblematic exemplum in Garrett and Chantilly, but they might also operate to interpret reality or literary events into an illustrative narrative containing commentary on the contemporary world they were constructed in.

CONCLUSION

Considering the narrative Chrétien constructs in *Yvain*, women take up an important role in a knight's life utilizing their agency as land-owning aristocratic women as I have argued before. The extent to which Chrétien recognizes the importance of women at court appears in the contemporary reality he reflected in *Yvain*. With significant figures like Eleanor within the twelfth-century court, he had ample inspiration for the women he created in verse. Each manuscript of *Yvain* communicates its respective reading of the narrative. In Black's opinion, Garrett 125 and Paris B.N. fr. 1433 belong to a group of manuscripts already identified by scholars in which visual programs serve as textual glosses. The works in this group demonstrate that medieval audiences had a visual vocabulary and could perceive visual imagery as complementary or explanatory supplements to the literal narrative.³⁹ While there are clear relationships between Chrétien's literary narrative found within Garrett and Paris, they vary in their complexity and thematic approach to the role of women within Chrétien's *Yvain*.

When evaluating Garrett, it becomes clear that the illuminator comes from a tradition that sports a knightly exemplum for the audience receiving the text. Garrett hopes to persuade the viewer to glance at the climactic moments of a knight's life and extrapolate that Yvain's life and marriage represent an unproblematic example for courtly readers to follow. Without demonstrating the complex marital issues that appear between Laudine and Yvain at court in the illustrative program, the Garrett illuminations are unconcerned with a significant portion of the narrative that does not support a knightly role model. As a climactic moment in a knight's life, the marriage scene merely serves to initialize his subsequent accomplishments as a knight for the benefit of his courtly stature. While Garrett presents a simple theme to its illumination cycle, it still places Yvain amongst the court's opinion of his actions. In contrast with Paris, Garrett eschews the complex court relationships between knights and their wives in Chrétien's narrative for unproblematic exemplum.

Paris chooses instead to recognize the issues at court between aristocratic women and their selfish husbands who disregard their courtly obligations to their wives in favor of chivalric accomplishments. The narrative that the Paris illuminator presents is one of complex relationships that recognizes the role of aristocratic women in the lives of their knightly husbands. Women throughout the illumination cycle take up essential roles across Yvain's life and adventures; at times, they even operate to help Yvain accomplish his goals and desires. Utilizing a progression of the narrative that respects the surrounding events during the adventures Yvain undertakes, the Paris illuminator provides a complicated interpretation of the gendered issues in the court. As I have argued above, the commentary provided by the Paris illuminator comes closer than Garrett to my analysis of Chrétien's literary narrative because it acknowledges the role and status of land-owning women at the court. Both manuscripts offer interpretations of the narrative that Chrétien establishes in his poem. However, only Paris comes closely into line with my literary analysis of the demonstrable agency that women in Chrétien's narrative appreciate.

- [1] Tristan Heibel, "Interpreting the Aristocratic Agency Afforded to Chrétien de Troyes Enide and Laudine: Courty Romance or Reflections of Contemporary Reality?" Bachelor Thesis, (University of Maryland, Baltimore County, 2020). Within, I claim that Chrétien's narratives in *Erec and Enide* and *Yvain* present a complex dynamic in which courtly women such as Laudine and Enide must utilize their agency as land-owning aristocratic women to correct their husbands behavior. They do so out of obligation to their courts. Using surrounding contemporary authors and figures and Amy Livingstone's work on land charters concerning women, I argue that Chrétien's women represent a form of contemporary reality among courtly women. Both knights go through typical chivalric adventures, in which they learn to satisfy their marital requirements instead of their selfish desires.
- [2] John Scott and Gordon Marshall, "agency," in *A Dictionary of Sociology*, 3rd rev. ed. (Oxford: Oxford University Press, 2009).
- [3] Ralph V. Turner, *Eleanor of Aquitaine: Queen of France, Queen of England* (New Haven: Yale University Press, 2009), 177.
- [4] Turner, *Eleanor of Aquitaine: Queen of France, Queen of England*, 204.
- [5] Jean Flori, introduction to *Richard the Lionheart*, trans. Jean Birrell (Westport: Praeger Publishers, 2006), 10.
- [6] Amy Livingstone, *Out of Love for My Kin: Aristocratic Family Life in the Lands of the Loire, 1000–1200* (Ithaca: Cornell University Press, 2010), 157.
- [7] Livingstone, *Out of Love for My Kin*, 15.
- [8] Anthony Lodge, "The Literary Interest of the 'Livre des Manières' of Étienne de Fougères," *Romania* 93, no. 372 (1972), 486.
- [9] Margaret Switten, "Chevalier in Twelfth-Century French and Occitan Vernacular Literature," in *The Study of Chivalry Resources and Approaches*, ed. Howell Chickering & Thomas Seiler (Kalamazoo: Medieval Institute Publications, 1988), 444.
- [10] Chrétien de Troyes, "The Knight with the Lion," *The Complete Romances of Chrétien de Troyes*, trans. David Staines (Bloomington: Indiana University Press, 1990), 257.
- [11] Chrétien, "The Knight with the Lion," 276.
- [12] Livingstone, *Out of Love for My Kin*, 39.
- [13] Chrétien, "The Knight with the Lion," 276.
- [14] Chrétien, "The Knight with the Lion," 287.
- [15] Chrétien, "The Knight with the Lion," 289.
- [16] Amy Brown, "Female Homosexuality and the Marriage Plot: Women and Marriage Negotiation in *Cligès* and *Le Chevalier au Lion*," *Parergon* 33 no. 1 (2016): 66.
- [17] Chrétien, "The Knight with the Lion," 337.
- [18] James A. Rushing Jr., "The Adventures of the Lion Knight: Story and Picture in the Princeton 'Yvain,'" *The Princeton University Library Chronicle* 53, no. 1 (1991): 49.
- [19] Robert L McGrath, "A Newly Discovered Illustrated Manuscript of Chrétien De Troyes' *Yvain* and *Lancelot* in the Princeton University Library," *Speculum* 38, no. 4 (1963): 592. McGrath remarks of the provenance of the Garrett illuminator and its comparability to the Psalter of Amiens, claiming "The similar linear and non-functional treatment of drapery and the like arrangement of figures in attitude and disposition in the Princeton and Amiens manuscripts are so suggestive as to render a visual comparison of the miniatures on the part of the interested reader more eloquent than a detailed comparative analysis. Another feature common to the two manuscripts is the occasional suggestion of landscape along the bottom margins of the miniatures. This in itself provides a richly suggestive comparison as well as

- evidence for a close dating of the two manuscripts.”
- [20] Alison Stones, “The Illustrated Chrétien Manuscripts and their Artistic Context,” *Les Manuscrits de Chrétien de Troyes*, vol. 1, eds. Keith Busby, Terry Nixon, Alison Stones, and Lori Walters (Rodopi, 1993), 251. Stones comments on the comparable designs of figures in Walters W 89 and Garrett, suggesting “the figures style ... characterised by tall swaying figures with curly hair, painted in a palette of dark blue, maroon, grey, set against lavish gold backgrounds – is very closely comparable, suggesting that the work of the same painter is present in all of them.”
- [21] Nancy B. Black, “The Language of the Illustrations of Chrétien de Troyes’s ‘*Le Chevalier au Lion (Yvain)*,’” *Studies in Iconography* 15 (1993): 45.
- [22] Rushing, “The Adventures of the Lion Knight,” 49.
- [23] Rushing, “The Adventures of the Lion Knight,” 49.
- [24] James A. Rushing Jr., “Adventures Right and Wrong: The Illuminated Paris Yvain,” *Images of Adventure: Yvain in the Visual Arts*, ed. Ruth Mazo Karras (Philadelphia: University of Pennsylvania Press, 1995), 162.
- [25] Rushing, “The Adventures of the Lion Knight,” 43.
- [26] Rushing, “Adventures Right and Wrong,” 185.
- [27] Black, “The Language of the Illustrations of Chrétien,” 66.
- [28] Rushing, “Adventures Right and Wrong,” 187.
- [29] Sandra Hindman, *Sealed in Parchment: Rereadings of Knighthood in the Illuminated Manuscripts of Chrétien de Troyes* (Chicago: The University of Chicago Press, 1994), 50.
- [30] Hindman, *Sealed in Parchment*, 81.
- [31] Hindman, *Sealed in Parchment*, 52.
- [32] Rushing, “Adventures Right and Wrong,” 182.
- [33] Black, “The Language of the Illustrations of Chrétien,” 71.
- [34] Rushing, “Adventures Right and Wrong,” 193.
- [35] Marta Pavón Ramirez, “Marriage Symbolism in Illuminated Manuscripts of the Twelfth and Thirteenth Centuries: Visualization and Interpretation” in *The Symbolism of Marriage in Early Christianity and the Latin Middle Ages: Images, Impact, Cognition*, ed. Engh Line Cecilie (Amsterdam: Amsterdam University Press, 2019), 247.
- [36] Ramirez, “Marriage Symbolism in Illuminated Manuscripts,” 242-243.
- [37] Jesús Rodríguez Viejo, “Royal Manuscript Patronage in Late Ducal Normandy: A Context for the Female Patron Portrait of the Fécamp Psalter (c. 1180),” *Cere: An Australasian Journal of Medieval and Early Modern Studies* 3 (Perth: University of Western Australia Open Journal, 2016), 7.
- [38] Viejo, “Royal Manuscript Patronage,” 9.
- [39] Black, “The Language of the Illustrations of Chrétien,” 71.



28. Tulipa sulphurea coloris
flamulis rubris.

29. Tulipa alba sub lutea flammis
latisis Cramosino colore.

30. Tulipa lutea oris sulphureis annulo rubro
punctis rubris intus pecto fundo Vario.

08



31. Tulipa purpurea.

32. Tulipa purpurea rub. saturata
albis oris.



The Role of Art in the Tulipmania Speculation during the Dutch Golden Age

Melissa Williamson

Department of History

Dr. Amy Froide

Image: Figure 1, p. 201.

BIOGRAPHY

Melissa Williamson is a part-time returning student, majoring in history with a particular interest in Japan and northern Europe. At 65, she plans to graduate in the next two years. Previously, she was in the Renaissance Scholars program at Montgomery College in Maryland. While in that program she won a Beacon Prize for her paper "Hero in Silk, Hero in Steel" on aspects of the Hero's Journey in *The Tale of Genji* and *Beowulf*. Melissa would like to thank Professor Joan Naeke of Montgomery College, Dr. Andrew Nolan of UMBC, Will Murphy of the *UMBC Review*, and her husband Charles Wingate for his loving support and editing skills. Her deepest thanks and appreciation go to Dr. Amy Froide of the UMBC History Department for her advising, teaching, encouragement, and for sending a notice about History 497 last winter. Lastly, she acknowledges her parents, who taught her to love reading and history.

RESEARCH JOURNEY

In spring 2021 I took History 497, Capstone Historical Research, which focused on disasters and history in the early modern era, including natural as well as other disasters. The course included economic disasters just as the economic "bubble" involving GameStop stock was in the news. To better understand how a bubble happens, I decided to focus my class research on the economic disaster, "Tulipmania," in 17th century Holland. Today information travels quickly via technology; but then in the Dutch Republic, information traveled more slowly by word of mouth and printed material. If tulip investment had been so popular, how did people learn about it? And why a flower? Starting with references and notes from two books by Anne Goldgar and Mike Dash, I looked for primary sources. Due to COVID restrictions, my work was mostly done online with references available through the UMBC library. My research led to several areas, including botany, art history, the formation of the Dutch Republic and its new form of economy, futures trading, international relations, and trade. Dr. Froide provided advice on economic information and reading seventeenth century printed documents. I was also able to find several related pieces of art on the websites of Dutch museums.

ABSTRACT

Since 1929 there have been a number of economic “bubbles” involving large amounts of money invested in schemes that promise great financial returns and then collapse. As recently as January 2021, a bubble with GameStop investments was in the news. The value of the company had surged from \$2 billion to \$24 billion in just a few days, driven not by brokers or investment companies, but by individuals with little or no experience in the stock market. Reporters compared it to the first alleged bubble, “Tulipmania,” which took place in the Netherlands in 1636-7. This was a country with a new form of government and a thriving economy that included stock trading which then became a center for growing an exotic imported flower. Accounts of the event that were written much later maintained that it caused financial ruin to a large number of people of both low and high social levels. But how would those involved have learned of the investing or that tulips were valuable? A major mechanism was another now famous part of Dutch culture: art that included printed works, paintings, and decorative motifs of the tulip.¹

INTRODUCTION

“They then so high did hold/ That one was for a meadow sold.”²

In January 2021, news of an unusual increase in the price of GameStop shares caught the attention of not just financial publications but also national news services. Articles that tried to explain this scenario described it as a “bubble” and often compared it to “Tulipmania,”³ a period of financial speculation in tulip bulbs in the Dutch Republic in the mid-1630s.⁴ It may be asked how something that happened almost four centuries ago was remembered and applied to current events, and whether it is an accurate comparison. When the subjects of economics, financial speculation, or tulips come up, P. T. Barnum is not the first person to come to mind. A master of promotion, he does not seem to have cared for flowers, history, or Holland. But Barnum brought the Tulipmania craze to the attention of the American public in 1866 when he wrote *The Humbugs of the World*, and he did it by plagiarizing. Parts of Barnum’s chapter on this subject are word-for-word copies from his source, Charles MacKay’s 1852 book *Extraordinary Popular Delusions and the Madness of Crowds*.⁵ In both of these accounts, the tulip speculation of 1634-1637 was presented as excessive: “this folly,”⁶ a “craze,” and a “monstrous Dutch gambling fury,”⁷ that in the end ruined much of the Dutch population in all social strata. With these books and other materials, such as those from the Dutch economist N.W. Postumus, Tulipmania has been held up as the first economic disaster in bubble form and is still taught in economics classes.⁸ While there is some disagreement among economists, one definition of a bubble is “any unsound undertaking accompanied by a high degree of speculation.”⁹ But was Tulipmania really a bubble? In order to understand how such an economic event happened, it is necessary to know how the Dutch Republic differed from other European countries in its economic development and its culture. What conditions were in place when tulips went from rare specimens to a commodity for speculation? How could a recently imported flower become so well known that not just the wealthy but working-class people took part in both growing it and engaging in speculation in hopes of great profit? How could they have learned about it? One way was through art of the time which illustrated the flowers in books, paintings, and decorations. In this paper, I argue that art played a significant role in the creation of this economic “crisis” that, in the end, was not the disaster that the nineteenth-century writers made it out to be.

THE DUTCH REPUBLIC AND THE TULIP: HISTORICAL BACKGROUND

The seventeenth century is regarded as the Golden Age for the Dutch Republic

and Dutch art. With a strong and growing economy, there was money to spend on more than just the essentials. There was a market for decorative items, for art, both paintings and prints, and gardens that were ornamental rather than just for food. It was the time of Rembrandt, Rubens, and Franz Hals, and the use of oil-based paints as well as copper plate etching and printing. The number of artists increased with some specializing in genres like the still life. Another innovation was the development of the first gardening catalogues that advertised plants for sale by using pictures. Just as modern advertising may tempt a viewer to purchase a garment, a car, or some other item, the paintings, prints, and decorated ceramics sometimes showed tulips. With these depictions more people learned about this foreign flower, and its popularity grew.

Tulipmania took place in a new kind of nation and in a time of economic and cultural growth. The Republic of the Seven United Netherlands, or as it came to be known, the Dutch Republic, was formed from the seven northernmost provinces of the Low Countries, which now make up the countries of Belgium, Luxembourg, and the Netherlands. It was unlike any other country in Europe at that time. It had broken away from the Spanish throne beginning in 1572. The principal grievances that drove this rebellion were high taxes, the quartering and feeding of Spanish troops at the local towns' expense, and attempts to stop the growth of Protestantism.¹⁰ William, Prince of Orange, who had become Protestant, was chosen by the provincial leadership to be *stadtholder* (steward) of the country and commander-in-chief of Dutch forces. The Spanish responded militarily, but by 1588 the Dutch Republic was an independent country. While the Princes of Orange were still *stadtholders*, the real governing was done by the local city councils. These officials, called *regents*, were not nobility, but instead were wealthy merchants and businessmen whose work had created an economy based on shipbuilding, cloth production, and trade.

With this beginning, the Republic's economy was on a sound footing to expand on a global level. Workers immigrated to the new country drawn by higher wages.¹¹ The formation of the Dutch East India Company in 1602 helped to make the Dutch Republic the largest center for commerce at that time, with contacts in Japan, India, and Indonesia for goods such as spices, ceramics, and exotic animals and plants—plants which included the tulip. The Dutch East India Company also created the first stock exchange, the Amsterdam Bourse, establishing trade of the company's stocks and bonds. Later, the Dutch West India Company was chartered to expand to the Americas, adding to national wealth; of note was the 1628 capture of a Spanish treasure fleet which added more than 11 million guilders worth of metals and goods to the economy.¹² Along with imported goods, international trade and exploration brought large quantities of precious metals to the country. With so much bullion coming in, the merchants needed some way to convert it to usable funds. An innovation

that also bolstered the Dutch economy was the creation of the Bank of Amsterdam in 1609, to “facilitate trade, suppress usury, and have a monopoly on all trading of specie.”¹³ The bank accepted deposits of bullion and coin, then gave a customer a receipt for its value. Depositors had credit in the form of notes that were “bank money” and could be used to pay debts. Payments between bank customers were recorded internally in the bank’s account books with no specie changing hands. These notes could be passed to others as a medium of exchange.¹⁴ This foreshadowed the use of written notes recording information about tulips and prices in the same manner. In the 1637 pamphlet “A Conversation Between Waermondts and Gaeragoedt about the Rise and Decline of Flora,” the florist Gaeragoedt tells his friend that he has received a bottle of brandy from the distiller because he “offered him a little flower.”¹⁵ He explains that he did not give an actual bulb or flower at all, but a transferable note, and writes, “That is what I usually do; I get my meat, my bacon, my wine, for nothing...”^{16,17} This shows that the use of a transferable document in exchange for material goods during Tulipmania was accepted, just as Dutch merchants had used bank money since 1609. In this case the Dutch spent what was accepted as money, or the notarized document, in exchange for tulips.

Tulips were not native to Europe but arrived there as a rare exotic import from the Middle East. The flowers at the center of the economic bubble were descended from the wild tulips of the Pamir-Alai and Tien Shan Mountains, high and inhospitable ranges located between Western China and Central Asia.¹⁸ Wild tulips are hardy plants that can grow at high elevations with cold winters, and they require a period of low temperatures in order to bloom. They have much shorter stems than cultivated tulips. The flowers are generally red, with orange and yellow variations also found.¹⁹ This vibrant coloring was part of the attraction of the tulip and was remarked upon in some European writings, referring to it as a “lille rouge” or “red lily.”²⁰ Over time tulips flourished and spread by natural means east to China and westward across the steppes. The wild plants grew well without cultivation and became common in Central Asia and farther west to Persia. Anna Pavord, in her book *The Tulip*, suggests that tulip seeds or bulbs might also have been carried by persons traveling on the trading routes.²¹ Whether by nature or human intervention, tulips were thriving. Mike Dash, the author of *Tulipomania*, states that to the Turkic nomadic people of the steppes, the sight of tulips blooming was a symbol of hope, life, and the return of spring. By the time that these nomads had reached the Middle East in the tenth and eleventh centuries, there were gardens with cultivated tulips grown for their beauty.²² These flowers do not seem to have been common in the Byzantine period; there is a reference to only one type of tulip being known in Constantinople according to the eleventh century work, *The Book of Tulip Gardens in Istanbul*, and it does not appear in any form of decoration. By contrast, in the

fifteenth century Ottoman Empire the flower was much favored. It was used as a decorative motif and as a religious symbol.²³ Tulips appeared on ceramics and tiles (something that would be repeated in the Netherlands), were embroidered on clothing, and were shaped in metal and jewels on the sultan's armor. They also appeared in paintings. Professional growers bred new varieties, giving the flowers poetic names such as "Rose of the Dawn" and "The Matchless Pearl."²⁴ Some sultans were passionately fond of tulips, and there are records of orders for many thousands of bulbs to be brought to Istanbul and planted.²⁵ Yet the plants had not spread as vigorously farther to the west.

When the first specimens arrived in Europe is not precisely known, although the first reliable references appear in the mid-sixteenth century. Based on some artistic representations, it is possible that some samples arrived earlier, but this is not a certainty.²⁶ Pierre Belon, a French botanist who visited the Middle East in 1546, described Turkish gardens, mentioning "red lilies," that is to say, tulips.²⁷ The common story is that Ogier Ghislane de Busbecq, the envoy from the Holy Roman Emperor to the Ottoman court, saw tulips and, in a book published in the 1580s, wrote of "seeing quantities of flowers – narcissi, hyacinths and tulipans, [sic] as the Turks call them."²⁸ Although written about almost three decades later, this encounter and his report of getting some bulbs is supposed to have happened in 1555. A more certain account of tulips in Europe is that of the botanist Conrad Gesner. He wrote that in 1559 he had visited the garden of Johan Herwart, a counselor in Augsburg in Swabia, and had seen a plant like a "red lily;" it had grown from seed that had been brought from some part of Turkey.^{29,30} Considering the propagation of tulips, the bulb itself would have been growing from the seed for at least five years or more, placing the arrival date at 1554 or earlier. A drawing that Belon made still exists and shows what is definitely a tulip. Belon also reported seeing what were certainly tulips some years later in the garden of a wealthy banking family, also in Augsburg.³¹ The flowers were red, rare enough to be remarked upon and, in both cases, growing in the gardens of high status citizens. Tulips were not yet available for common gardens, but their journey to the Netherlands and popularization had begun with the reports of plant enthusiasts like Belon and de Busbecq.

Over the second half of the sixteenth century, tulips slowly spread to other parts of Europe. Like plants in general, they can be grown from seeds. However, it can take six or seven years or more for a seed to grow into a bulb that can produce a flower.³² The other, faster way to multiply the plant is from the "offsets" that a mature bulb grows in a season, i.e., small clones that can be removed and planted and which will then produce flowers. It is important to note that a seedling is not identical to its parent flower.³³ What kind of bloom it will produce will not be known until a bulb forms and matures over a number of years. But offsets will produce flowers identical to that of the parent. The bulbs that were

part of the Dutch speculation of the mid-1630s were from offsets; therefore, what was known were the colors and patterns, or if they would produce “broken” blooms, that is flowers with streaks of color resembling flames or feathering. The people trading in tulip futures knew what they were dealing with. Over several decades, tulips reached France, Germany, England, and other parts of Europe, where they were collected and grown by connoisseurs and people interested in botany. Professionals, like apothecaries and doctors, looking for new medicinal plants, were interested in “strange kinds of fruits, branches of trees, roots and herbs” that might be on ships arriving from foreign countries.³⁴ Persons of rank or wealth collected rare, exotic, or beautiful things, such as minerals, stuffed birds, pictures of fish, and plants; tulips were a sought-after addition. In order to preserve the ephemeral beauty, still life paintings of flowers were also part of some collections, sometimes paired with tropical seashells, possibly because of the colors and rarity.³⁵ With their blossoms featuring strong reds, yellows and oranges, tulips began to attract attention. In part this was because red was a rare and expensive color for paints or dyes. The available materials were cinnabar, a mercury sulfite ore, or kermes, a dye made from crushed insects. Both were for luxury goods and generally found in royal, noble, and wealthy settings.

There are two factors that separate Tulipmania from other early economic bubbles. The first was the financial environment. Two of the other famous early financial disasters, the South Sea Bubble and the Mississippi Bubble, were formed as ways to deal with national debt.³⁸ The Dutch Republic, in contrast, was in an economic boom. Shipbuilding had enabled the Dutch to create fleets of ships for both the Dutch East India Company and individual owners. These allowed merchants to establish trade routes to many markets, bringing home both necessities, such as grain and cloth, and exotic imports like spices and ceramics from Asia. Industries such as weaving wool and linen cloth grew with the immigrant workers from the southern provinces. While there were still periods of war with Spain, with the Twelve Year Truce of 1609-1621, the Dutch Republic did not have to fund an army, so more money was available for domestic use.³⁹ Great national debt, such as was to occur in England and France, did not exist. The other difference between Tulipmania and the French and British bubbles was that the latter were based only on trades of stocks that increased their value, but not on actual goods. South Sea Company trade to the south Atlantic region was blocked by the Spanish, so no British ships made lucrative voyages to those regions.⁴⁰ The French *Compagnie d'Occident* was formed to have a monopoly on trading in Canadian beaver skins as well as commerce with Louisiana, but sold shares that promised good returns.⁴¹ In the case of Tulipmania, however, there was a very real and tangible product for the speculation: tulips, at increasingly inflated prices, but still real bulbs that had already made real flowers.

TULIPMANIA: HOW IT HAPPENED

Over the second half of the sixteenth century, tulips were noticed by collectors of rare plants, who added them to their gardens to display and propagate their specimens. As tulips grew and multiplied, the owners would correspond with others who had similar interests, often with the aim of acquiring a new specimen. Letters exist thanking someone for plants or asking if bulbs might be sent. Many of these were written to Charles de L'Ecluse, later known as Carolus Clusius (1526-1609), a naturalist. An example is from a plant enthusiast, Jehan Somer of Middelburg in the Netherlands. After writing about some specimens of other plants growing in his garden and offering to send an offset of a martagon lily and other plants that are doing well, he respectfully asks,

"Since I understand that your honor also shares liberally with those who consider themselves connoisseurs (leifhebbers) of flowers, among whom I consider myself to be the very least, I pray your honor with friendship not to forget me, and to honor me with two, three, or four of your beautiful colors of tulips, yes, even if it were only one, for however small it is that comes from your honor's hand I shall receive with the greatest thanks."⁴²

With the letter Somer sent a painting of a yellow fritillary that he had grown in his garden. In the absence of photography, drawings and paintings were the common method to share information about plant specimens. The spread of tulips took several decades, since many original flowers were grown from seeds. Because of the slow increase in the number of bulbs, they were mostly available to the wealthy and specialist collectors in private gardens. There were no large fields of tulips in the 1590s. That did not occur until there were enough bulbs for the professional nurserymen to make the flowers part of their stock in trade.

Clusius was the key figure for the propagation of the flowers in the Netherlands and other parts of Europe. He was a Flemish naturalist who had traveled around Europe collecting specimens, creating gardens, and writing about plants. His influence was so important that one of his friends called him "the father of all the beautiful gardens in the land."⁴³ From his letters we know that he had tulips in the 1570s and would sometimes send bulbs to other persons interested in botany.⁴⁴ He gave an account that the first tulips in the Netherlands had come in a shipment of cloth from Constantinople to a merchant in Antwerp who thought they were onions.⁴⁵ By 1593 Clusius was at the University of Leiden in charge of the botanical garden. Here he grew tulips and continued to send bulbs to others. While others grew and shared tulips, it was Clusius who studied them in depth. He wrote about them and catalogued them in detail regarding what months different flowers bloomed, petal shapes, colors, and whether they were one color or "broken."⁴⁶

Because of their slow growth from seed to bulb, tulips remained relatively rare and expensive in the first decade of the seventeenth century but were to become part of the commercial plant market. Thanks to Clusius and other collectors, the flowers were spreading and being grown in France, Picardy, and other countries. While popular in other areas, the flowers did not become the commodity and item of speculation that they did in the Netherlands with its unique economy. There are stories from France in the first decade or two of the seventeenth century of one tulip being acquired in exchange for a brewery or a mill, which Dash says are likely apocryphal.⁴⁷ While some of the bulb collectors knew how to breed new varieties and conducted experiments with them, many others did not have those skills. They turned to professional nurserymen to help increase the number of bulbs and create new colors and patterns of tulip flowers. The Netherlands became the center of this development.

That the provinces had poor, sandy soils and were subject to cold winters was not detrimental to tulips. The plants were very hardy, originating as they did in cold mountainous regions, and grew well in large areas of the Low Countries. Due to the Dutch trade in grain from the Baltic region, land was available to grow non-food crops, and there already were established Dutch plant growers who knew about cross-breeding plants from working with other flowers. By 1630, professional tulip growers could be found near most Dutch cities and towns.⁴⁸ The collectors and growers now were identified as *bloemists*. By this time, the thriving tulips had become common enough that some growers would get rid of unwanted bulbs, unicolored and ordinary varieties, by handing them off to peddlers who then sold them at local markets and fairs to lower status people such as farmers and laborers.⁴⁹ Thus by about 1633 knowledge and appreciation of tulips had reached all levels of Dutch society.

The flowers that were the subjects of the commodity trading were not the same as the original imported ones. The wild tulips and the cultivars of the Ottoman Empire were of a single solid color, or perhaps the bases of the petals were darker, but generally there were no patterns or multicolored flowers. It was the perfection of the color and the shape of the petals which made a new variety popular in Istanbul. In Europe, the earlier records of tulips do not mention anything unusual about the flowers themselves. The red varieties were notable, but there were also whites, yellows, and lavender. When Clusius had settled in Leiden he noticed that occasionally a bulb that had once flowered normally would grow a blossom that had changed. It might have red or purple “flames” and streaks on a white or yellow background. Once it happened, any future flowers or offsets would also have this property. Such tulips were called “broken” and they began to be in demand. According to Mike Dash, “breaking” was studied in detail in an attempt to find out why it happened and how more could be made, if possible, both in the Netherlands and in other countries. Clusius

experimented with known “broken” bulbs and noticed that after breaking, any future bulbs from offsets tended to be smaller and less hardy and, eventually, the bulbs would stop producing and die.⁵⁰

The knowledge that those flowers considered the most beautiful were not long lasting added to their desirability. Growers tried various methods to create broken bulbs, but they only appeared by chance, so the announcement of a new variety attracted interest and offers for purchase. The Dutch florists gave new broken flowers names that advertised how they were above more common types. Two that commanded the highest prices were “Viceroy” (purple and white) for 4,203 guilders and “Admirael van Enckhuysen” (mostly red and white with small streaks of yellow) at 5,200 guilders.⁵¹ These were considerable sums of money as just one thousand guilders could buy a “modest house in Haarlem” or more than eleven thousand kilograms of rye bread, a staple food.⁵² “Semper Augustus” (red and white) was a legendary tulip that does not appear to have been for general sale because the only specimens were reported in 1624 to have been owned by one grower who would not sell; if he ever did, however, it would have been worth 1,200 guilders per bulb.⁵³ As the varieties of broken flowers increased, the collectors developed a rating system. Blooms that were mostly white or yellow with delicate thin lines of red or violet were “superbly fine,” while those with more color were “rude.”⁵⁴ The latter were less valuable in comparison to the former, but any broken plant was sought after. Ordinary people might have unicolored bulbs in their gardens, with a hope that one might become broken.

Historically, the surge in prices and use of tulips as a medium of exchange, and the start of Tulipmania, began when three bulbs were used to buy a house in the town of Hoorn in 1633. This was the first instance where bulbs were used as a form of money. By this time the flowers were not exclusive to the connoisseurs and wealthy collectors. Professional growers would sell to anyone who had the money to buy. But the idea that bulbs were valuable as a way to make money was started by the house sale, and the news traveled to other cities. In the 1620s there was an economic depression due to a Spanish blockade and war after the Twelve Years Truce ended in 1621. While there was some recovery, the prospect of making substantial profits on a flower bulb was enticing. Dash also attributes a recurrence of the bubonic plague as a contributor. The disease had caused a shortage of labor so that employers raised wages. In this way, the middle and working class had more money, and the desire to make even more. Individuals might acquire a small number of bulbs to trade or plant. Unlike the collectors and specialists, whose trading season was from after a flower bloomed until it was time to plant again in the fall, the new way led to year-round speculation using the agreement notes for futures of the item that was exchanged.

Tulipmania was also an example of one of the first futures markets. During the tulip speculation years, no physical tulip bulbs were present or changed

hands. Since the tulips were either in storage or planted, the agreement was for goods that would not be available until they bloomed in the spring; it was therefore considered a “futures market,” and the bulbs were commodities. The tulip speculation and trading process is described by Gaergoedt as he advises Waermondts on how he might get into the business. He tells his friend that he knows the names of some taverns that hosted the “colleges;” i.e., gatherings of persons from the professional and working classes who were interested in tulip speculation. Once a newcomer is accepted, “They put your name on a slate and then the board goes around. That is, everyone in the club must send the board to anyone whose name is on the slate, and he asks for an offer.”⁵⁵ Gaergoedt then explains the bidding process and how a buyer and seller would conclude their deal after bargaining for a higher price (seller) or more bulbs (buyer) by using their chosen “men,” that is, college members who would negotiate for them. If a sale is not made, the one who did not agree has to pay a small amount to the college; depending on which tavern it would be “...two pennies, in others three, or five, or even six.” This was not a large sum as there were 240 pennies in a guilder.⁵⁶ If a buyer and seller did agree, then “the seller gives a half penny for each guilder,⁵⁷ but only three guilders if the sale is 120 guilders or more, not even if it is over a thousand guilders.”⁵⁸ One guilder was worth about \$14.92 and a penny was roughly equal to six cents in 2019 currency.⁵⁹ These small amounts were called “wine money,”⁶⁰ which was used to “...pay for tobacco, beer, wine, fuel, light, and make contributions to the poor and to the girls [barmaids?], too.”⁶¹

It is important to note that in these gatherings the agreed-upon large sums of money were not paid, nor were bulbs present. A person interested in tulip futures and speculation needed only a small amount of real money to participate, and that was for the most part the “wine money.” Agreements on a sale would be written down by notaries who would attach a wax seal to the paper. These “*coopcedullen*” were a form of I.O.U. Anne Goldgar cites one of these dated 30 January 1637 between Wouter Tullekens from the city of Alkmaar, and Pieter Willemsz van Rosven, a seller from Haarlem. The two men have agreed on a price of 2,200 guilders for half a pound of “Coornhart” tulip bulbs.⁶² Sometimes these documents would be sold to another for a higher price than what the owner had “paid” when he first made the agreement with the tulip seller. In the case of a resale, the document thus referred to bulbs that neither of the persons involved actually had.

Separated from physical flower specimens, this buying and selling became known as *windhandel* or “trading in wind.” Dash writes that “To a stockbroker it was a reminder that both the tulip traders’ stock and their profits were so much paper in the wind. To the florists, however, the *windhandel* meant trading pure and simple, unregulated and unconfined.”⁶³ The paper notes of agreement to buy, the *coopcedullen* described earlier, ended up being the items traded and

sold repeatedly. While the Dutch had started the trading of stocks and bonds with the Bourse, it was not the experienced businessmen who then took to the tulip futures, but the comfortable middle and working classes. In 1635 and 1636 the prices of bulbs continued to increase, with few or no actual plants changing hands. Garber attributes some of the speculation energy to a growing market for tulips in France.⁶⁴ In the summer of 1636 the “colleges” described by Gaergoedt in the 1637 pamphlet were organized in taverns. This was where the speculators would gather and where deals for future large sums of money could be made for a small fee. The tulips themselves had been lifted in June to be replanted in the fall. But none of the owners of the flowers likely ever saw them. The prices of the agreement notes grew with each exchange so that by January 1637 the prices of fairly ordinary tulips were doubling by the week or the day.⁶⁵ All of it was wind. It could not last.

The tulip bubble ended in a matter of days. An auction of tulip bulbs at the end of January in Alkmaar had raised a large amount of money to support the deceased owner’s children. But at another sale in Haarlem a few days later, there were no bids at the expected high prices. The auctioneer repeatedly reduced the minimum bid without success. Suddenly, the tulip futures market collapsed. News of the failed sale spread across the Netherlands, leading to the tavern colleges ending all dealings, as well. One theory is that it occurred due to the sight of the tulip fields visible in the flat land surrounding the town; the buyers could see that there would be a large crop for that year because of the mass of green shoots: thus it would be a case of supply exceeding demand.⁶⁶ But there had been some uneasiness in the tulip trade in the previous months.⁶⁷ With the selling and re-selling of the agreement notes for increasingly higher prices, some dealers were concerned the market had expanded beyond supportable limits. The failure of the Haarlem auction was the pin that popped the bubble. By the spring, sellers were taking cases to the courts in hopes of being paid the large agreed-upon prices from prior to the first week of February. Instead, the various provincial governments and the States-General “decided to suspend all contracts, giving the seller the right to sell contracted bulbs at market prices during the suspension.”⁶⁸ Tulip prices were not publicly recorded for some years. Tulipmania was over.

TULIPMANIA: THE ROLE OF ART

How did knowledge of tulips become widely known to all levels of Dutch society including the working class? In addition to word of mouth and the network of *bloemists* and professional nurserymen, knowledge of the tulips was spread visually. The seventeenth century is often called the “Golden Age of Dutch Art.” It was in the Netherlands that the medium of oil paint had become established

from the time of Jan van Eyck (before 1330-1441). While Rembrandt and Hals may be the most well-known at the time, there were hundreds of other artists in the Republic. Every city had a local *Guild of St. Luke* which kept records of those apprenticed to artists and gave permission for individuals and workshops to sell paintings.⁶⁹ Existing records show that in Amsterdam alone the number of painters increased from about 50 in the late sixteenth century to over 150 in the 1620s. It would seem very unlikely that there was little market in art works with so many artists in the city since “Art likes to be near wealth so as to be maintained with rich rewards.”⁷⁰ As the numbers of artists grew, it was common for them to specialize in a particular genre. Portraits and landscapes were popular subjects. For the collectors of the rare and exotic, still life paintings were another way to display their shells, minerals, and other treasures. Since flowers were ephemeral, a painting would preserve their beauty all year round; floral still life pictures became very popular.⁷¹ As tulips became grown more widely they were often a subject in still life paintings, sometimes as a single example, in a bouquet, or in multiples. One such artist was Ambrosius Bosschaert, a resident of Middelburg and one of the “pioneers of the Netherlandish flower piece.”⁷² He specialized in flower still life paintings (with the occasional butterfly or other insect), as did his three sons.⁷³ Painters were not the only artists who worked in this genre. Printers also depicted tulips, often representing the ephemerality of life, as in a picture illustrating widowhood in a book by Jacob Cats, *Houwelijk* (“Marriage”). It shows a skeletal hand about to take a tulip from a vase with a woman and an old dog in the background. Thanks to the Dutch economy, prints, paintings, and books were available not just for nobility and the wealthy but also for the middle class. These media were another way for the flowers to be seen.⁷⁴

Collections of drawings of flowers and plants that were published as catalogues were another way to spread knowledge of tulips. Since the tulips would only flower for a short time each spring, all a potential customer might look at for the rest of the year were small brown bulbs, and even then they were mostly planted and unavailable for inspection. To more effectively market tulips and other plants, the illustrated gardener’s catalogue was created. The earlier versions of these catalogues were produced with engravings and then printed by such artists as Crispjan van de Passe (father and son), and Emanuel Sweerts. Thanks to the printing press, such books could be produced in quantity and reprinted if they sold well. Some publications had clear statements that they were nursery catalogues and that the pictures were of items available for sale.

The earliest catalogue was the *Florilegium* prepared by Emanuel Sweerts, who was both an artist and a nurseryman. He also was a collector and dealer in rare and exotic merchandise of the sort that wealthy and discerning persons were interested in buying, including minerals, stuffed animals, crystals, and plants.⁷⁵ He compiled a collection of pictures in 1612 to advertise the stock that he had

for sale at a great fair in Frankfurt, Germany. While he was an artist, he hired others to work on the engraving and also used a number of images that had been created by others and previously published. That this was a garden catalogue is plainly stated in the author's introduction: "If anyone wishes to purchase this book or the flowers, plants and bulbs that are contained in it, let him come to the Fair in Frankfurt to the author's shop..." with the location given.⁷⁶ He also writes that he has been asked about the best way to grow bulbs and gives advice about preparing good soil for the purpose.⁷⁷ This was the first notable gardening catalogue that was apparently intended for a wide audience, as there is information included in Dutch, German, French, and Latin, the common language for scholars and other educated persons in Europe at the time. This made the catalogue accessible to a wider audience. Further, it seems to have been important enough that Sweerts was able to have its production funded by the Holy Roman Emperor, Rudolph II. The book has 110 plates of engravings with multiple specimens on each one. While there are only three pages of tulips in the *Florilegium*, there are a total of thirty-three different flowers and one drawing of a bulb with leaves. Figure 1 shows plate 10 from *Florilegium*. Each flower has a short description of the colors and patterns, and a name if there is one. Though Sweerts died shortly after the book's publication, it was reprinted several times, at first as a catalogue, and then as a collection of pictures. The final edition was in 1655, more than forty years after Sweerts' death.⁷⁸

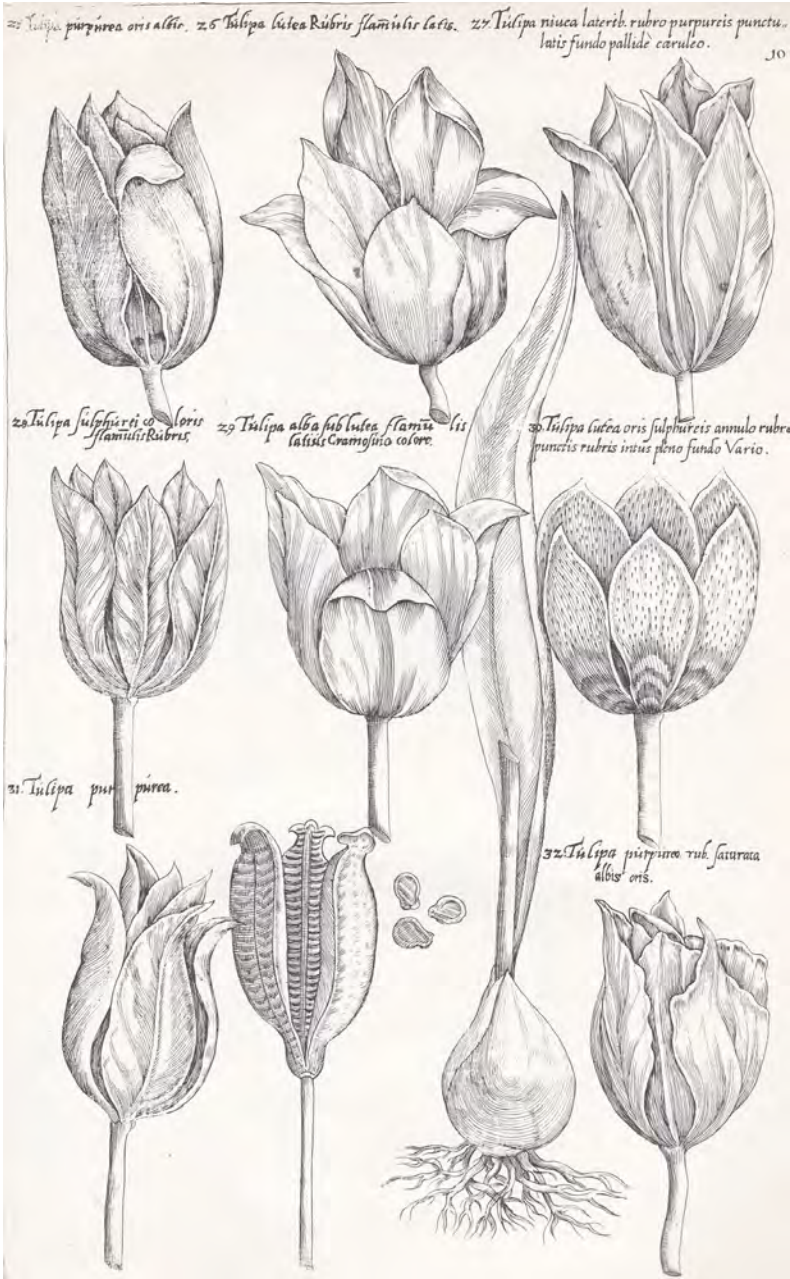


Figure 1: Plate 10 from Florilegium

Two years later, in 1614, Crispijn van de Passe the Younger created the *Hortus Floridus*, a collection of prints of plants and flowers categorized by season. While

the prints were black and white, this was a much more elaborate book that was very quickly translated into English, Latin, and French. The contents are divided into four sections named for the seasons, with the appropriate plants described and pictured in each one. Tulips are found in the first part “Spring.” There are also short descriptions of the flowers’ colors, and for some specimens, what colors should be used to paint images of the blossoms. The description for one image is:

“HEre [sic] are presented three sortes of Tulip flowers, the first is like unto cloth of golde, and may be painted with faire yellow, topt with masticot and shadowed with lack, the roote is of a pale soet colour, topt with white, and shadowed with browne. The other is of a straw colour, topt with a little white, and shadowed with a little black.”^{79,80}

With both seasonal information and clearly stated color instructions, *Hortus Floridus* was a book published both for information about the plants for potential growers and as a guide for those who might want to paint images of them.

Created in 1637, probably after the tulip crash, the “Tulip Book of P. Cos” was a catalogue somewhat out of the ordinary. It has 75 plates showing images of flowers, mostly tulips, and one per page so they might be akin to portraits. After the tulips there are seven paintings of carnations, one “chrysanthemum” and a *malva sylvestris* or Common Mallow. Considering that the work is titled as “Tulip Book”, why these nine other flowers are included is not explained; it may have been done to fill extra pages in a folio. The images are done in gouache paints on vellum (“a fine-grained unsplit lambskin, kidskin, or calfskin prepared especially for writing”)⁸¹ which was more expensive than paper. The book was made for Pieter Cos, of whom little is known other than that he was a bloemist, a grower and connoisseur of flowers, and, it would seem, a seller. The painters were Pieter Holsteijn the Younger and Pieter Schagen.⁸² Notes on the name of the flower, and a price and weight of the bulb were added to each page after the paintings were complete. Information for seventeen of the flowers, including “Viceroy,” which was the most prized at the height of the Tulipmania, match the sizes and prices of bulbs that were sold at an auction in Alkmaar shortly before prices plummeted in the first week of February 1637. This seems to indicate that each portrait was of a real bulb that had been bought or sold. Unlike the printed catalogues, this book was not mass produced, but it was preserved as another example of art and tulips.

In addition to prints and paintings, tulips became part of home decoration. When blue and white Chinese ceramics arrived in the Netherlands, local potters imitated the style. Along with vases and other vessels, tiles were made and decorated in other colors besides just blue and white. As the tiles became more common, they were used to cover walls of some rooms. This was a practical way to protect the buildings against damp conditions, which was common

in the Netherlands. Tiles are also easy to clean, and tiled fireplaces and stoves retain heat and keep rooms warm. Examples from the 1620s show tulips, both in blue on white and in multiple colors. While still a craft that demanded some artistic skill, tiles were produced in great numbers for use in buildings. The inclusion of tulips in the 1620s would seem to indicate that the flowers had become fairly common, since they were included with other tile motifs such as people, birds, and ships. Tulips were part of the Dutch art tradition from at least the beginning of the seventeenth century. Through paintings and drawings, catalogues and book illustrations, and even in decorated tiles, the tulip had become part of Dutch culture before the crucial years of 1636-37 when the speculation expanded and then collapsed.⁸³

Even when Tulipmania was essentially over, however, that did not mean that it had completely vanished. Art was again used to illustrate allegorically the course of the tulip boom and its folly. Crispijn van de Passe, who 20 years earlier had made *Hortus Floridus*, created *Flora's Mallewagen* or "Flora's Wagon of Fools," showing a wheeled cart with a mast and sail like a ship. This "wind trade" driven vehicle carries Flora, the goddess of flowers, and a number of *bloemists* inside with other persons following (Figure 2).⁸⁴ The wagon's path is strewn with cut named tulips, and Flora holds three flowers including the historically most valued, *Semper Augustus*. The plaques on the side of the cart indicate various taverns where the trading colleges were located. In the right background is a similar vehicle that may be in the process of sinking, emblematic of wrecked fortunes. So many prints and songs about Tulipmania were made and available to the general public that the Haarlem officials banned them and ordered bailiffs to confiscate them.⁸⁵



Figure 2 Flora's Mallewagen Crispijn de Passe Source: source: Rijksmuseum, Amsterdam.

One of the most famous Dutch artists of the time, Jan Brueghel the Younger, addressed the matter in his 1640 painting *Satire on Tulip Mania* (Figure 3)⁸⁶ which depicts the *bloemists* and speculators as monkeys symbolizing foolishness and impulsiveness. The painting shows various activities of the tulip speculators during the course of the mania. On the left, figures are being served a fine meal and a well-dressed monkey wearing a sword, indicating higher status, points to a bed of tulips in full bloom as another monkey studies a document about the flowers. These may represent the *bloemists* and the collectors who first appreciated the flowers, or perhaps the florists who got into the trading early. In the middle are scenes of less prosperous speculators with few or no clothes and

what could be a tavern setting such as where the colleges met for trading. In the background a fight breaks out, possibly due to a deal going sour. The right side of the picture has scenes of monkeys brought to the court for lawsuits and another who is holding a notarized agreement with a hanging wax seal and relieving himself on some tulips. In the distant background, a funeral may be seen, as the final end of reckless greed.



Figure 3. Satire on Tulip Mania, Jan Brueghel (II) Frans Hals Museum, Haarlem, acquired with support of the Rembrandt Society Photo: René Gerritsen

CONCLUSION

In the end, was Tulipmania really an economic disaster? The national economy was not disrupted but continued to thrive for some decades. Anne Goldgar has not found any city records that show a bankruptcy clearly related to dealing in tulips. She writes that it is possible that “...some bankruptcies of poorer people, less likely to turn up in these records, might well have occurred, if there was a rash of financial disasters among artisans, it was never discussed by the magistrates of Haarlem.”⁸⁷ There are records of cases being brought in order to be paid for bulbs, but they were relatively few, and in any case the courts ruled that the debts should be reduced or eliminated. Professional nurserymen still did business and sold tulips. Artisans and artists followed their callings. The country remained a global power until overtaken by Great Britain in the eighteenth century. The Dutch Republic was not left in dire straits because of flowers.

Later accounts of Tulipmania were not based on historic records and primary documents from the period. Instead, small parts of older stories, mistakes in translations,⁸⁸ misunderstandings and outright fabrications (cf. MacKay and

Barnum) have been combined to create the idea of a nation in crisis, multitudes financially ruined, and an economic bubble that destroyed a society all because of a foolish fixation on an ordinary flower. But none of that is true. Tulips were not the common garden denizen that they had become in the nineteenth century when MacKay and Barnum wrote their books. They had been growing in Europe for less than a century. The tavern colleges were visited by a small portion of the population. The Dutch Republic was on a sound financial footing for the most part and remained the major trade and financial center of Europe for decades. Tulips grown for bulbs are still a significant product of the Netherlands without any breaking. The Tulipmania crisis affected some of the people, but for the most part Dutch society recovered.

Perhaps because the bubble did not have such a catastrophic result in the overall economy, there was little remembered or learned from it. Disaster memory, a concept described in *Disasters and History* where after a disaster “learning and memory can help to mitigate the effects of the shock and enable a much faster recovery or adaptation...”⁸⁹ does not appear to have happened in this case. About 100 years later double hyacinths were in vogue and bulb prices rose to a high level before crashing. After a century, even with art works and pamphlets about it, the tulip bubble was small enough that it did not have any effect when a new flower seized the attention. It was forgotten for the most part until an English scholar and then an American showman revived it with embellishments and fabrications from uncited sources and, I suspect, some ornaments and opinions of their own devising, particularly in Barnum’s case.

Tulipmania is famous for being the first economic “bubble;” something that could not have happened prior to the new economic and political structure of the first republic in early modern Europe. Compared to other bubbles that wrought national havoc like the South Sea Bubble in eighteenth century England, it was not an all-consuming economic disaster. Sometimes being the first makes the fame.

- [1] Thanks go to Dr. Amy Froide, Dr. Kathleen Carroll, Dr. Elaine MacDougall, Payton Tibbo, Misha Patel, and Charles Wingate for reviewing parts or all of this paper and their helpful comments.
- [2] Andrew Marvell, "The Mower Against Gardens" "The tulip white did for complexion seek,/ And learned to interline its cheek ;/ Its onion root they then so high did hold,/ That one was for a meadow sold..." <https://www.poetry-foundation.org/poems/48333/the-mower-against-gardens>
- [3] Tulipmania and Tulipomania have been used when referring to this event. "Tulipmania" will be used throughout this paper.
- [4] Marco Quiroz-Gutierrez, "Is GameStop a Bubble? History's Spectacular Crashes, From Tulips to Beanie Babies.", Wall Street Journal, February 6, 2021, <https://www.wsj.com/articles/is-gamestop-a-bubble-history-spectacular-crashes-from-tulips-to-beanie-babies-11612607400>.
- [5] Both books have the same stories of bulbs being eaten or dissected and include the same lists of items that were supposedly paid for one "Viceroy" tulip bulb. To help his readers understand the large sum spent for the flower, Barnum changed the values from Dutch florins to American dollars and the measures of grain from "lasts" to bushels, though how he calculated these numbers is not clear. Barnum's total of "Exactly \$1,000.00" is a conveniently impressive sum that is dubious at best and likely not in the least accurate. The list in question can be traced to a 1636 pamphlet that also includes "a ship" which both Barnum and Mackay omit. According to the popular historian Mike Dash this list is not what was actually paid for a single bulb but is rather an example of what the total amount of money would have meant in goods.
- [6] Charles MacKay, *Memoirs of Extraordinary Popular Delusions and the Madness of Crowds* (London: OFFICE OF THE NATIONAL ILLUSTRATED LIBRARY, 1852), <http://www.gutenberg.org/files/24518/24518-h/24518-h.htm#tulipomania>.
- [7] P.T. Barnum, *The Humbugs of the World, an Account of Humbugs, Delusions, Impositions, Quackeries, Deceits and Deceivers Generally and in All Ages*, 210.
- [8] Peter M. Garber, *Famous First Bubbles : The Fundamentals of Early Manias*, The MIT Press, 17.
- [9] *Ibid.* 7. Garber is quoting Palgrave's *Dictionary of Political Economy* (1926).
- [10] Mike Dash, *Tulipomania : The Story of the World's Most Coveted Flower and the Extraordinary Passions It Aroused. 1st American ed.* (Crown Publishers, 1999), 48.
- [11] Anne Goldgar, *Tulipmania : Money, Honor, and Knowledge in the Dutch Golden Age*, (University of Chicago Press, 2007), 7.
- [12] Wim Klooster, *The Dutch Moment : War, Trade, and Settlement in the Seventeenth-Century Atlantic World*, 2016, Cornell University Press, Ithaca, NY, 45.
- [13] Doug French, "The Dutch Monetary Environment During Tulipmania," *Quarterly Journal of Austrian Economics* 9, no. 1 (Spring 2006): <https://doi.org/10.1007/s12113-006-1000-6>. "Specie" refers to money in coin form rather than notes or bullion.
- [14] *Ibid.*
- [15] Herbert H. Rowen, Editor, "A Conversation Between Waermond and Gaer-goedt about the Rise and Decline of Flora," *The Low Countries in Early Modern Times A Documentary History* (New York City: Harper and Row, 1972). 166.
- [16] *Ibid.*
- [17] The names Waermond and Gaer-goedt are descriptive of the men's characters. Anne Goldgar translated them as the friend "True Mouth" being importuned by the florist "Greedy-Goods" Goldgar, *Tulipmania*. p.6.

- [18] Anna Pavord, *The Tulip* (Bloomsbury, 2001), 28.
- [19] Dash, 5-6.
- [20] Pavord, *The Tulip*. 56.
- [21] Pavord, 28.
- [22] Dash, 6-7.
- [23] Pavord. 30-31.
- [24] Dash, 19-20.
- [25] Dash, 21.
- [26] Dash, 29.
- [27] Pavord, 56.
- [28] Dash, 30.
- [29] Dash, 32-33.
- [30] Goldgar, 32.
- [31] Ibid.
- [32] Dash, 56.
- [33] Wingate, Charles, private conversation, February 2021.
- [34] Goldgar, 38.
- [35] Goldgar, 81.
- [36] "Cinnabar: A Toxic Ore of Mercury, Once Used as a Pigment," accessed May 18, 2021, <https://geology.com/minerals/cinnabar.shtml>.
- [37] "Definition of KERMES," accessed May 18, 2021, <https://www.merriam-webster.com/dictionary/kermes>.
- [38] Peter M. Garber, *Famous First Bubbles : The Fundamentals of Early Manias*, The MIT Press, 92, 109.
- [39] Charles Wingate, private conversation February 2021.
- [40] Garber, 110.
- [41] Ibid. 92.
- [42] Goldgar, 23.
- [43] Goldgar, 34.
- [44] Goldgar, 35.
- [45] Goldgar, 33.
- [46] Dash, 60.
- [47] Dash, 67.
- [48] Dash, 84.
- [49] Dash, 94-95.
- [50] It was not until the 20th century when an English mycologist, Dorothy Caley, discovered the Tulip Break Virus, which is carried by aphids.
- [51] Goldgar, 203.
- [52] Goldgar, 225.
- [53] 53 Goldgar. 200.
- [54] Dash, 59.
- [55] Rowen. 166-167.
- [56] Goldgar, 323. There were twelve pennies in a stuiver and twenty stuivers in a guilder. Anne Goldgar notes on page 225 that a master carpenter earned about one guilder 4 stuivers a day. In 2019 currency that was an annual wage of about 333 Guilders or 5000 dollars.
- [57] One Guilder in 1636 was equivalent to 13.33 Euros in 2019. <https://iisg.amsterdam/en/research/projects/hpw/calculate.php>.
- [58] Rowen, 167.
- [59] This was calculated using a currency calculator of 1636 guilders to 2019 euros then changing to 2019 US dollars.
- [60] Peter M. Garber, "Tulipmania", *Journal of Political Economy* 97, no. 3 (1989): 535-60, <http://www.jstor.org/stable/1830454>, 543.
- [61] Rowen, 167.
- [62] Goldgar, *Tulipmania*, 206. The document is in the Regionaal Archief Alkmaar.
- [63] Dash, 115.
- [64] Garber, 543.
- [65] Dash, 141.

- [66] James E. McClure and David Chandler Thomas, "Explaining the Timing of Tulipmania's Boom and Bust: Historical Context, Sequestered Capital and Market Signals," *Financial History Review* 24, no. 2 (August 2017): 121–41, <http://proxy-bc.researchport.umd.edu/login?url=http://search.ebscohost.com/login.aspx?direct=true&AuthType=ip,url,uid&db=cn&AN=1680906&site=eds-live&scope=site>.
- [67] Dash, 165.
- [68] Garber, 548.
- [69] Federico Etro and Elena Stepanova, "Entry of Painters in the Amsterdam Market of the Golden Age," *Journal of Evolutionary Economics* 26, no. 2 (May 2016): 317–48, <https://doi.org/10.1007/s00191-016-0456-6>.
Quoting Karel van Mander, *Lives of the Illustrious Netherlandish and German Painters* (1604), 322.
- [70] *Ibid.* 318.
- [71] Goldgar, 90.
- [72] Karolien De Clippel and David van der Linden, "The Genesis of the Netherlandish Flower Piece: Jan Brueghel, Ambrosius Bosschaert and Middelburg," *Simiolus: Netherlands Quarterly for the History of Art* 38, no. 1/2 (2015): 73–86, <http://www.jstor.org/stable/26382420>.
- [73] "Ambrosius Bosschaert Explained," https://everything.explained.today/Ambrosius_Bosschaert/.
- [74] Etro and Stepanova, 330.
- [75] Emanuel Sweerts and E.F. Bleiler, ed., *Emanuel Sweerts Early Floral Engravings*, (New York City: Dover, 1976).
- [76] Sweerts and E.F. Bleiler, xi. Note: This was the Frankfurt Book Fair which is still in existence.
- [77] Sweerts and E.F. Bleiler, xii–xiii.
- [78] Sweerts and E.F. Bleiler, ed., *Florilegium*, v.
- [79] Crispijn Passe, van de, *A Garden of Flovvers Vvherein Very Liuely Is Contained a True and Perfect Discription of Al the Flovvers Contained in These Foure Following Bookes. as Also the Perfect True Manner of Colouringe the Same Vvith Their Natuall Coloures ... All Vvibich to the Great Charges, and Almost Incredible Laboure and Paine, the Diligent Authore by Foure Yeares Experience, Hath Very Laboriously Compiled, and Most Excellently Performed, Both in Their Perfect Lineaments in Representing Them in Their Coper Plates: As Also After a Most Exquisite Manner and Methode in Teachinge the Practitioner Te [Sic] Painte Them Even to the Liffè. Faithfully and Truely Translated Out of the Netherlandish Original into English for the Comon Benefite of Those That Vnderstand No Other Languages, and Also for the Benefite of Others Nevly Printed Both in the Latine and French Tongues All at the Charges of the Author Utrecht, By Salomon de Roy, for Crispian de Passe.*, 1614, p. 29 <http://proxy-bc.researchport.umd.edu/login?url=https://www-proquest-com.proxy-bc.researchport.umd.edu/books/garden-flovvers-vvherein-very-liuely-is-contained/docview/2264201468/se-2?accountid=14577b>.
- [80] "Masticot" or massicot is a color derived from lead oxide which can be a darker yellow orange. What "lack" referred to is not clear.
- [81] "Vellum | Definition of Vellum by Merriam-Webster," accessed April 26, 2021, <https://www.merriam-webster.com/dictionary/vellum>.
- [82] *The Tulip Book of P. Cos*, 1637, <https://www.wur.nl/en/Library/Special-Collections/Books-journals/Tulip-book.html>.
- [83] Examples of both 17th century and Modern Tiles with Tulip motifs may be found at <https://www.dutchtile.com/s-54-series-tulips/>.
- [84] *Flora's Mallewagen* Crispijn van de Passe (1637) Courtesy of the Rijksmuseum, Amsterdam, Netherlands, <https://rijks-web.azurewebsites.net/en/collection/RP-P-OB-77.710>.
- [85] Goldgar, 238.

- [86] Jan Brueghel (II) *Satire of Tulipomania*, c. 1640, Courtesy of the Frans Hals Museum, Haarlem, acquired with support of the Rembrandt Society, Photo: René Gerritsen.
- [87] Goldgar, 247-248.
- [88] Goldgar, 328-329, addresses some of this including mistakes made by N. W. Postumus in transcriptions of documents and errors in numbers including translating “vier hondert” i.e., 400 guilders as 4,000.
- [89] Van Bavel, B., Curtis, D., Dijkman, J., Hannaford, M., De Keyzer, M., Van Onacker, E., & Soens, T., *Disasters and History The Vulnerability and Resilience of Past Societies*, (Cambridge: Cambridge University Press, 2020) 110.

BIBLIOGRAPHY

PRIMARY SOURCES

- Barnum, P.T. *The Humbugs of the World, an Account of Humbugs, Delusions, Impositions, Quackeries. Deceits and Deceivers Generally and in All Ages*, p. 208 (New York City: CARLETON., 1866), https://www.gutenberg.org/files/26640/26640-h/26640-h.htm#CHAPTER_XXV.
- MacKay, Charles. *Memoirs of Extraordinary Popular Delusions and the Madness of Crowds*. London: OFFICE OF THE NATIONAL ILLUSTRATED LIBRARY, 1852. <http://www.gutenberg.org/files/24518/24518-h/24518-h.htm#tulipomania>.
- Passe, van de, Crispijn. *A Garden of Flovers Vwherein Very Liuely Is Contained a True and Perfect Discription of Al the Flovers Contained in These Foure Followinge Bookes. as Also the Perfect True Manner of Colouringe the Same Vwith Their Naturall Coloures ... All Vbich to the Great Charges, and Almost Incredible Laboure and Paine, the Diligent Authore by Foure Yeares Experience, Hath Very Laboriously Compiled, and Most Excellently Performed, Both in Their Perfect Lineaments in Representing Them in Their Coper Plates: As Also After a Most Exquisite Manner and Methode in Teachinge the Practitioner Te [Sic] Painte Them Even to the Liffe. Faithfully and Truly Translated Out of the Netherlandish Originall into English for the Comon Benifite of Those That Vnderstand No Other Languages, and Also for the Benifite of Others Nevvly Printed Both in the Latine and French Tongues All at the Charges of the Author Utrecht, By Salomon de Roy, for Crispian de Passe., 1614. <http://proxy-bc-researchport.umd.edu/login?url=https://www-proquest-com.proxy-bc-researchport.umd.edu/books/garden-flovers-vwherein-very-liuely-is-contained/docview/2264201468/sc-2?accountid=14577>.*

Rowen, Herbert H., editor. "A Conversation Between Waermond and Gaergoedt about the Rise and Decline of Flora." *The Low Countries in Early Modern Times A Documentary History*. New York City: Harper and Row, 1972.

Sweerts, Emanuel, and E.F. Bleiler, ed. *Emanuel Sweerts Early Floral Engravings*. New York City: Dover, 1976.

The Tulip Book of P. Cos, 1637. <https://www.wur.nl/en/Library/Special-Collections/Books-journals/Tulip-book.html>.

SECONDARY SOURCES

"Ambrosius Bosscheart," n.d. <https://web.archive.org/web/20160305130947/https://tkd.nl/en/explore/artists/11147>.

"Cinnabar: A Toxic Ore of Mercury, Once Used as a Pigment." Accessed May 18, 2021. <https://geology.com/minerals/cinnabar.shtml>.

Dash, Mike. *Tulipomania: The Story of the World's Most Coveted Flower and the Extraordinary Passions It Aroused*. 1st American ed. Crown Publishers, 1999.

De Clippel, Karolien, and David van der Linden. "The Genesis of the Netherlandish Flower Piece: Jan Brueghel, Ambrosius Bosschaert and Middelburg." *Simiolus: Netherlands Quarterly for the History of Art* 38, no. 1/2 (2015): 73–86. <http://www.jstor.org/stable/26382420>.

Etro, Federico, and Elena Stepanova. "Entry of Painters in the Amsterdam Market of the Golden Age." *Journal of Evolutionary Economics* 26, no. 2 (May 2016): 317–48. <https://doi.org/10.1007/s00191-016-0456-6>.

French, Doug. "The Dutch Monetary Environment During Tulipmania." *Quarterly Journal of Austrian Economics* 9, no. 1 (Spring 2006): 3–14. <https://doi.org/10.1007/s12113-006-1000-6>.

Garber, Peter M. "Tulipmania." *Journal of Political Economy* 97, no. 3 (1989): 535–60. <http://www.jstor.org/stable/1830454>.

Goldgar, Anne. *Tulipmania: Money, Honor, and Knowledge in the Dutch Golden Age*. University of Chicago Press, 2007.

Kermes, Definition Accessed May 18, 2021. <https://www.merriam-webster.com/dictionary/kermes>.

Klooster, Wim. *The Dutch Moment: War, Trade, and Settlement in the Seventeenth-Century Atlantic World*, p. 45, 2016, Cornell University Press, Ithaca, NY.

McClure, James E., and David Chandler Thomas. "Explaining the Timing of

Tulipmania's Boom and Bust: Historical Context, Sequestered Capital and Market Signals." *Financial History Review* 24, no. 2 (August 2017): 121–41. <https://doi.org/10.1017/S0968565017000154>.

Natural Pigments. "Litharge (Massicot) Pigment." Accessed May 18, 2021. <https://www.naturalpigments.com/litharge-massicot-pigment.html>.

Pavord, Anna. *The Tulip*. Bloomsbury, 2001.

"Vellum | Definition of Vellum by Merriam-Webster." Accessed April 26, 2021. <https://www.merriam-webster.com/dictionary/vellum>.



09

At the Birth of Modern Socialism: A Comparative Study of the Ideas of Thomas Paine and Thomas Spence

Yoni Isaacs

Department of History

Dr. Daniel Ritschel

Image: "Thomas Paine. Copy of Engraving after George Romney." *The National Archives Catalog*. National Archives 530488.

BIOGRAPHY

Yoni Isaacs is a history major at UMBC and will graduate in December 2022. As a UMBC student, he is affiliated with a variety of student organizations. Yoni is currently planning to seek at least a master's degree in history, with a focus on intellectual history. After that, he will either seek a job in the federal government or continue with his studies. Yoni expresses his gratitude to his faculty mentor, Dr. Daniel Ritschel, for all the help he provided in researching and crafting this paper. He also sincerely thanks the Undergraduate Research Award (URA) program for providing funding for his research.

RESEARCH JOURNEY

I was first introduced to my area of research through a course on the Industrial Revolution. As this class focused on the material and intellectual changes going through Britain during the late 18th and early 19th century, one of the central topics was the emergence of early working-class radicalism. On that subject, I wrote a short paper that analyzed the progression of British socialist thought during this period. Two of the central figures that were examined in this paper were Thomas Spence and Thomas Paine. While studying their respective economic schemes, I was struck by the resemblance of their proposals to the ones put forth by the modern left. This interest was compounded by the revival of socialism in contemporary American society. I was thus motivated to conduct a more in-depth analysis into Spence and Paine's respective visions through examining both men's pamphlets, along with Spence's newspaper articles. Though their divergent attitudes on topics such as the role of the state and how far reform should go were made clear to me, so was Spence and Paine's shared commitment to social justice. From this, I realized that commitment to social justice was the attribute that all varieties of socialism shared.



ABSTRACT

Toward the end of the 18th century in Britain, early harbingers of socialism began to emerge from the radical milieu. Two of the most influential forebearers of socialism were Thomas Paine and Thomas Spence. Despite sharing similar philosophical and religious frameworks, both men embraced differing proto-socialist philosophies. Spence, a forerunner of anarcho-socialism, supported the democratic ownership of land and related utilities through local government. Paine pioneered an early version of social democracy, and thus called for the creation of a broad welfare state to care for the nation's citizens. Using these men's pamphlets, along with articles from Spence's newsletters, I seek to compare how their contradictory visions of societal restructuring affected Spence and Paine's ideas relating to equality, the power of the national government, and the nature of social justice. Finally, I will seek to use the differences between Spence and Paine to define what exactly constitutes socialism. My conclusion is that a definition of socialism is comparatively vague and includes all movements which seek to implement some level of equality in the socio-economic sphere as part of an objective to remake society on a more democratic and socially just line.

INTRODUCTION

The question of what exactly constitutes socialism is an often debated subject. Is socialism broadly synonymous with anti-capitalism? Does it cover a wide variety of reformist economic and political philosophies? Or does socialism have a more precise definition, and thus should only be identified with certain policies, such as the ownership and operation of the means of production by the state? The salience of this question is especially pronounced at this point in American history, when diverse strains of socialism, ranging from the reformist social democracy advocated by progressive Democrats in Congress to the anarchism embraced by anti-fascist protesters, are experiencing a revival.

The fact that such a startling range of approaches falls under the banner of socialism is a stark reminder of the wide span of the ideology and serves as a clear warning for anyone seeking an uncomplicated definition. The fact that John Stuart Mill, the classical liberal luminary of 19th century Britain, happily declared himself to be a socialist revealed just how broad of a term socialism is, as did the fact that the very same label has been applied to Thomas Carlyle, a conservative paternalist.¹ There has existed a multitude of types of socialism, each with its own unique views on the role of the state, the extent to which popular control should rule the polity, and how the economic system should function.

Yet every variant of socialism shares one thing in common: they are all, to a different extent, levelling systems in search of social justice. Though socialism does not require complete and total equality for all people, all forms of socialism, from anarchism to liberal socialism to Marxism-Leninism, include as a central component the desire to diminish social and economic inequality – especially the degradation of the poor – as part of a broader desire to create a more socially just and democratic society.² Only such a broad definition can include the complex array of ideologies contained in the socialist family.

The multi-faceted nature of socialism is on clear display in the visions of two of the most important 18th century forebearers of modern British socialism: Thomas Spence and Thomas Paine. Though both died before the word “socialist” first entered parlance in the 1820s, Spence and Paine foreshadowed two opposite poles of the emerging ideology.³ Despite drawing from similar intellectual sources and arguments, they presented two radically different visions of how Britain should be restructured. Spence called for democratic ownership of land and associated utilities through the authority of local parish-based government. He offered a clear example of what would be later known as anarcho-socialism, calling for class distinctions to be lessened and individual autonomy and local self-government fostered. Paine, on the other hand, proposed a state-run welfare system based on universal payments by a democratic state, one which would be operated within the context of the capitalist market economy. In that way, Paine was the forerunner of modern social democracy, a reformist variety of socialism

concerned with using the power of the state to make life more bearable for the poor. However, both Spence and Paine proposed the creation of a new kind of society, where poverty would be abolished, differences in wealth lessened, and popular sovereignty ensured. In that way, both men anticipated the socialist thoughts to come.

THE TUMULTUOUS LIVES OF THOMAS SPENCE AND THOMAS PAINE

To understand the economic and political reforms proposed by Spence and Paine, one must first begin with a brief sketch of their lives. Only then does the basis of their philosophies make sense. Though the exact details of Thomas Spence's life remain murky, the general direction of his life is known. He was born sometime in the 1750s to a very large, working-class Scottish family in Newcastle-upon-Tyne, in Northern England. Growing up, Spence was deeply influenced by both his Calvinist upbringing and the poverty that was endemic in Newcastle. It was in Newcastle where he would become both a schoolmaster and a social reformer.⁴

Most important to the development of Spence's economic thought was an incident that occurred during his time living in Newcastle. There, Spence witnessed the resolution of a conflict over land use between the local administration, who wished to enclose previously "common" or public land for private use, and the residents whose livelihoods depended on their shared use of this land. This conflict was settled by an agreement that all the residents would be given a stipend to make up for their lost access to land. This resolution would provide the framework used by Spence in developing his own later plan to radically restructure both the British economic and political structures.⁵

From Newcastle, Spence moved to London sometime in the 1790s, where he became a bookseller. London is also where Spence truly joined the ranks of the radical milieu, becoming a member of the London Corresponding Society, one of the leading radical organizations of the time, and an associate of the Lambeth Loyal Association, a leftist militant organization. London was also where Spence came into his own as a propagandist, utilizing a mix of graffiti, songs, tokens, and a newsletter with the striking name of *Pigs' Meat* to disseminate his proposals for land and political reform.⁶ His time in London was marked by repeated arrests, primarily for his connections to the radical groups and the fact that he sold seditious literature. In 1801, Spence was convicted on one charge of what the authorities deemed to be seditious libel, spending a year in prison. He died in 1814, mourned by a small but loyal group of fervent disciples.⁷ Though Spence remained relatively obscure for most of his life, his thought played an important role in British radical history, including as an inspiration for the land reform

plan proposed by Chartists, a later working-class movement that pushed for economic and political reform.⁸ More infamously, his legacy came to be linked to a posthumous plot by some of his followers to assassinate the prime minister.⁹

As for Thomas Paine, far more of his life was recorded. The son of a Quaker corset maker, Paine had multiple vocations in his life. Besides an early effort to continue his father's craft, Paine would also serve as a tax collector, preacher, grocer, tobacco seller, newspaper editor, and privateer. It was his time as a tax collector that sparked his interest in radical politics, as the low wages and widespread corruption in the profession left him disenchanted with the nature of the aristocratic state. It also provided him with a greater knowledge of tax policy, which became invaluable to his later career as an economic reformer. After losing this position, he would move to Philadelphia in 1774.¹⁰

Paine is best known, of course, for his role as a propagandist in the American Revolution. In 1775, he wrote *Common Sense*, the first important work of progressive advocacy in what was to become his long career as a radical writer and thinker. Yet, in a move that demonstrated the poor economic returns of his political radicalism, Paine soon returned to England, where he worked for a time as a builder in London. It was in London that Paine fell head first into the debate about the French Revolution. He was a partisan supporter of the French uprising, defending it against the critiques of British conservatives in a series of pamphlets, including perhaps his most famous publication, *Rights of Man*, in 1791. In return, he was awarded an honorary French citizenship, along with an elected position in the French legislature. Fearing prosecution by the British government if he stayed, Paine left Britain for France in 1792.¹¹

Events in France would not be kind to Paine, however. Paine's affiliation with the Girondins, a more moderate republican faction, nearly cost him his life when the French Revolution took an ultra-radical turn. By sheer luck, he managed to survive the Reign of Terror long enough for a coup to topple the Jacobins in favor of a more conservative faction. He would finally return to the United States in 1802, where he found himself deeply unpopular due to his open deism. Though Paine's reputation would be revived posthumously, his funeral in New York in 1809 was attended by only a handful of mourners.¹²

THOMAS SPENCE AND EARLY ANARCHO-SOCIALISM

Spence gave early articulation to what came to be known as "anarcho-socialism," a version of the ideology that stressed the importance of individual rights and independence within the context of a socialist society.¹³ He had a deep distrust of both economic and governmental forms of hierarchy and was critical of any plan to centralize authority in the hands of the state. He made this sentiment

clear in a letter to fellow proto-socialist Charles Hall, in which he critiqued Hall's proposal for a powerful central government and the creation of taxes on commerce. To Spence, such a plan would only replace the tyranny of the landlord with the tyranny of the state.¹⁴

The prevailing tyranny of the British land-owning class, however, was Spence's primary concern. As early as his first known enunciation of his ideas, in a lecture at the Newcastle Philosophical Society in 1775, Spence provided a sarcastic critique of landlords as a class: "Thus the title of Gods seems suitably enough applied to such great beings; nor is it to be wondered at that no services could be thought too great by poor, dependent, needy wretches to such mighty and all-sufficient lords, in whom they seemed to live and move and have their being."¹⁵

Spence's central argument about why land reform was a necessity was one based on his interpretation of the popular theory of natural rights. To him, access to the land was a natural right shared originally by all people. Basing his claim on the writings of John Locke, Spence argued that land had been divided equally between all people in the original state of nature. He celebrated that original state, as he claimed that when there had been equitable access to land, everyone was able to live freely in whatever way they wished. Unfortunately, when the aristocracy unjustly seized possession of land, they did grievous harm to these fundamental rights, and the new system of private property destroyed the autonomy that had previously belonged to everyone.¹⁶

Spence, however, never proposed a restoration of this system, as he believed that any attempt to forcefully redistribute land by the central state would, at some point or another, only lead to a new round of consolidation of land. Instead, he proposed the collectivization of land at the level of the parish, the small administrative entity that formed the bedrock of British local government.¹⁷ He envisioned that the process would be relatively painless. On an agreed date, all the parishes in Britain would simply take legal possession of all the land within their boundaries. This included, as he explained in 1793, "all its appurtenances, as structures, buildings, and fixtures, and mines, woods, waters, etc., contained within itself."¹⁸ Each parish would then lease its lands and all associated properties on it to those who wished to use them. Though he equivocated about how long exactly he desired the leases to last, in his proposed constitution for "Spensonia," his rather egotistically named utopia, Spence explicitly called for limiting a person's land lease to 21 years, which he probably thought was the span of the average working life. Though the tenants would have nearly full autonomy, they were forbidden from sub-leasing their land to others.¹⁹ As for the size of the parcels, Spence declared that the parishes should only rent out small amounts of land for cultivation by individuals or families to prevent the restoration of the previous agricultural system.

The revenue gained from this system of common landownership would

serve as the single source of revenue for the parish, as no other forms of taxation would exist besides the rent paid by those who leased land from the parish. As early as his original *Property in Land* lecture in 1775, Spence proposed a great variety of priorities that this public income would fund. These included relief for the poor, infrastructure projects, salaries of local officials, the parish defense forces, public education, contributions to the national government—and whatever else parishioners desired. The one prohibition he proposed was on the selling of parish land to an individual or another parish.²⁰

Spence expanded his proposal for the parish policy-agenda over time, and by 1801 he added parish-owned hospitals, granaries, and public baths as means to ensure the people's health and happiness. In an early example of the idea of universal basic income, the remainder of this income from land was to be divided equally between every single member of the parish, regardless of sex, status, or wealth. Taken together, these services and payments represented everyone's compensation for their previous loss of land.²¹

Each parish in "Spensonia" would be governed, not by hereditary rulers, but through a form of direct democracy. In his earlier writings especially, Spence suggested absolute democratic sovereignty for various facets of civic life. Spence went as far as to suggest that a student's place at the national university would be decided by a secret ballot.²² Furthermore, as early as his *Property in Land* lecture, Spence called for the parish to only fund the religious building for the largest religious sect in the area, implying that the parish-funded official religion would be decided democratically.²³ Though he dropped these schemes in his later writings, he remained a defender of direct and universal democracy. Crucially, his version of democracy included women's suffrage, as Spence proposed that the parishes would be governed through democratic elections by all residents who were at least 21 years old, regardless of sex.²⁴ He also insisted on the principle of local self-government and community control. The parishes would for the most part be autonomous, though they would be limited somewhat by the laws passed by the national legislature. Even in that regard, however, the parishes would retain a significant amount of power. National legislators would be elected directly from each parish or group of parishes, and if 10% of the parishes in a majority of counties objected to a law, a conference between parish and parliamentary representatives would be convened to discuss the measure.²⁵ Furthermore, the Spensonian constitution was to enshrine a variety of civil liberties for individuals, including that actions could not be barred if they were not explicitly illegal, along with various protections for the accused such as the right to be deemed innocent until proven guilty.²⁶

Among the foremost benefits of this parish-based democracy would be the abolition of poverty. The mix of the availability of land, public works, and parish-provided economic benefits was designed to prevent anyone from falling

into indigence.²⁷ The abolition of poverty, Spence asserted, would also increase social mobility. Freedom from poverty would give security to the working class, thus they would have the opportunity to engage in innovative projects that would allow them to strive for higher economic stations without risk of penury in cases of failure.²⁸

The new system would also end the corrosive moral effect that the present economic system had on the rich and middle class. Even as the poor suffered materially, the rich risked their own spiritual corruption through the sins involved in the acquisition and holding of their wealth. At the same time, Spence argued that private ownership of land also “effects even the middling Classes with Ambition and Avarice, as well as it afflicts them with the Fears of falling into the ever yawning Gulf of Poverty.”²⁹ In that way, the present economic system harmed not only the poor, but also the better off. Therefore, it was in everyone’s interest to replace the private ownership of land with the far more ethical parish system of ownership.

Finally, Spence’s system was designed to ensure individual independence and autonomy. No longer would there be the tyranny of the landowners; the poor would instead be granted a liberty not seen by them since the seizure of land by the aristocracy. This was because Spence believed that the monopolization of land by a few wealthy aristocrats forced the rest of the people into subjection and dependency. On the other hand, access to publicly owned land would grant individuals a degree of independence and prosperity. For this reason, his proposed society was not particularly anti-capitalist, as he assumed that individuals could grow rich through hard work without exploiting others.³⁰ Spence was not an opponent of greater individual wealth and enterprise; rather it was the dispossession and subjugation of the people by a small elite of monopolistic landowners that were the problem.

PAINÉ AND PROTO-SOCIAL DEMOCRACY

If Spence’s works were a milestone in the development of anarcho-socialism, then Paine’s ideas represented the birth of a proto-typical social democracy. Instead of recommending the complete upending of the economic system, Paine issued a comparatively more modest, yet even today quite radical, proposal. Though the traditional system of landownership would remain the same, he sought the creation of a state that was willing and able to care for all its citizens.

Paine enunciated his welfarist vision in two works: *Rights of Man*, specifically the second part published in 1792, and *Agrarian Justice* in 1797. Though *Rights of Man* is widely remembered for providing stirring defense of representative democracy and a harsh denunciation of monarchism, it also provided his initial proposal for economic reform. These two things were in fact intimately

related, as the key to his economic plans was the belief that by creating a democratic republic, the money being currently used to fund courtly and military excess could be redirected to alleviate the condition of the English laboring class and bring an end to poverty.³¹ This would be done through the creation of a welfare system, implemented through a state investment fund.³² Paine designed his scheme with both children and the elderly in mind, specifically those living in poverty. Though he did not define a specific income bracket for those he deemed to be living in poverty, the clear implication was that all those who were potentially in need would receive the new benefits.³³

Regarding children, Paine proposed that poor families be given £4 per year for each child under 14. This stipend was meant to ensure that every child would be well fed and educated. Education was an especially important priority, which he viewed as a weapon against the two most common social ills: ignorance and indigence. As for the elderly poor, he proposed sending six pounds per year to people from 50 years of age until they turned 60. Thereafter and for the rest of their life, they would be ensured £10 on a yearly basis. This money was likely meant to be used to fund their care.³⁴

Besides these benefits for impoverished children and the aged, there would also be an array of other payments for a variety of other priorities. One such cause was the payment of ten shillings and half-a-crown for children from families too well off to qualify for the child stipend, but too poor to afford schooling during the six years they were considered school-aged. Paine also proposed 20 shillings to any new mother and newlyweds who requested it, though he was convinced that only the desperate would be willing to claim this money. A national budget of £20,000 was earmarked for funeral expenses for people who died outside of their parishes and hence would not receive parish-funded funerals under the existing Poor Laws. Besides these various spending schemes, Paine proposed the creation of a minimum of two workhouses in Westminster and London to temporarily house the poor there. These workhouses would provide food, shelter, and wages for the work that its residents did there, though half of said wages would go back to the workhouse in exchange for the other benefits that it provided to the poor lodged there.³⁵

However, these schemes were not the only part of Paine's economic plans. Because he thought taxes were the central causes of indigence in modern Britain, Paine believed that reform of the tax system was a necessity. Thus, he proposed the outright abolition of some taxes, such as the poor rates, the tax used to fund the existing system of poor relief in Britain, and the hated tax on windows and houses.³⁶ In their place, Paine proposed a slew of progressive taxes which, combined with the existing sales taxes that were traditionally levied by the British government, would fund his welfare programs. Most notably, he called for the creation of an income tax, which had never existed in Britain before.³⁷ He also

called for a tax to be levied on the interest of investors who held the national debt, writing that “There will then remain only the national debt as a subject of discontent; and in order to remove, or rather to prevent this, it would be good policy in the stockholders themselves to consider it as property, subject like all other property, to bear some portion of the taxes.”³⁸ By replacing regressive taxes with these new, progressive taxes levied on investment capital and income, Paine sought to shift the tax burden onto those who could afford it the most to fund the care of those who had the least.

Paine’s proposed foreign policy was intrinsically linked to the economic side of his plan. One reason that he proposed an alliance between the United States, Britain, and France was that a link between these countries would create peaceful conditions that would allow the British state to slash its military spending so that revenue could be diverted to the new welfare programs by placing the excess money into the public investment fund that would issue the payments. Paine was conscious that this would lead to members of the army and navy losing their positions, and thus called for them to receive pensions of three shillings per week in compensation.³⁹

Also related to Paine’s plan for a welfare state was his positive view of free trade and the new industrial economy. He was optimistic that growth in industry and international commerce would ward off future wars and conflicts, writing that “I have been an advocate for commerce, because I am a friend to its effects. It is a pacific system, operating to cordialise mankind, by rendering nations, as well as individuals, useful to each other.”⁴⁰ This new liberal world order would thus lessen the military commitments that required Britain to spend so much on defense. In that way, rather than capitalism being a threat to the creation of a welfare state, the growing market economy represented a new opportunity for Britain to gain the revenue it needed to successfully wage a war on poverty.

The publication of *Agrarian Justice* in 1797 revealed notable shifts in both Paine’s economic proposals and their philosophical underpinnings that had been expressed in *Rights of Man*. *Agrarian Justice* must first be understood as a reaction to two positions that Paine found extreme. One was by Richard Watson, the Bishop of Llandaff who claimed that poverty was divinely ordained; the other by François-Noël Babeuf, a French communist whose attempt to stage a revolution had been wildly unsuccessful.⁴¹

Paine was deeply critical of both extremes. He obviously disagreed with Watson’s claim that God desired for some men to be rich and others to be poor. Such a claim was anathema to his belief that the natural rights of individuals were meant originally to guarantee a relative equality between all people. Poverty, on the other hand, was an invention of man, one unique to the “civilized” world. Paine argued that, in the original state of nature, all land had been commonly owned. However, the equality that defined the hunter-gatherer period of human

history ceased to exist with the birth of agriculture, as land began to be developed by individuals. The system of settled farming led to the consolidation of landownership among a few privileged families. He also revised his claim that poverty was a result of taxation. Instead, it was the process of consolidation of land in the hands of the few that was directly responsible for poverty of the many. Without the support provided by the land that was once commonly held, people fell into indigence. To Paine, this was the greatest transgression against the rights of man.⁴²

Even as Paine criticized private ownership of land, however, he was still disturbed by the solutions proposed by communists like Babeuf to the problem of poverty. He condemned attempts to seize private property in land as “agrarian law,” and claimed it was tantamount to theft. This was because even though the aristocracy had done great harm to the people of the “civilized” world, Paine credited them for adding value to the land that it previously did not have by clearing the land, laying roads, draining marshland, and making other improvements.⁴³ Such an admission is notable, given his previous assertion in *Rights of Man* that the aristocracy was an inherently slothful class that relied solely on collecting rent from hard-working farmers.⁴⁴

This apparent reversal in Paine’s critique of the aristocracy may be attributed to his mistreatment at the hands of the Jacobins during the French Revolution. However, though Paine’s near-death experience during the Reign of Terror almost certainly gave him a deep distrust of ultra-radicalism, there were also tactical issues he likely considered. In France, the excesses of the Revolution prompted a shift to the right after the conservative republican faction known as the Thermidorians took power in a coup. Once in power, the Thermidorians promptly ended the welfare laws created by the previous regime.⁴⁵ The radicals were hardly any more successful in Britain, where loyalist forces cracked down on the British left, with many radicals imprisoned for sedition.⁴⁶ Confrontation with the full force of aristocratic power was clearly not going particularly well for the left. Paine’s proposals in *Agrarian Justice* can perhaps be best viewed as an attempt to compromise on his desire for reform while acknowledging that the aristocracy would not be easily dispossessed. Instead of proposing the nationalization or redistribution of land, Paine proposed a 10% inheritance tax on all landed estates.⁴⁷ Such a plan meant that aristocratic wealth would be slowly transferred to the community, while not being radical enough to ignite a violent, counter-revolutionary struggle.

At the same time, while Paine appeared to moderate his views on the aristocracy, *Agrarian Justice* also moved away from his previous position that benefits should be means-tested. Instead, he called for the implementation of a universal welfare system. His pension plan now included all people over 50. Furthermore, Paine lowered his proposed age threshold to qualify for the full £10 per year

to 50 years of age. Outside of pensions, everyone would receive £15 when they turned 21. All those whose disabilities prevented them from working would also receive a £10 stipend. This money, to be raised from taxation of property and inheritance taxes, was represented as a way for the aristocracy to repay their debt to society for the wealth they had unjustly appropriated, while upholding the people's natural rights to the property in land that was originally theirs.⁴⁸

SPENCE AND PAINE: A COMPARISON

Despite the radically different solutions put forth by Paine and Spence to address the problems of economic inequality and poverty, their plans shared some remarkable similarities regarding their respective intellectual frameworks and the creation of their preferred vision of society. Both men had similar views regarding poverty, as neither concurred with the doctrine that poverty represented a divine judgement on the poor. Nor did they endorse the prevalent contemporary view that indigence was a natural consequence of the impoverished person's lack of character. Rather, they concurred that poverty was ultimately a consequence of the destruction of the original egalitarian state of human society by the consolidation of private ownership of land by the aristocracy. Thus, both agreed that poverty was born of the unjust dispossession of the community and a denial of the natural rights of all men.

Furthermore, while both men embraced anticlericalism in political matters, their arguments rested on certain religious appeals. Spence, for example, was a fierce critic of organized religion, to the point that he proclaimed "Superstition undoubtedly contributed very much to render the people a willing prey to Kings and Priests, therefore it is not surprising to see Church and State so inseparably united from the beginning."⁴⁹ Yet he still held close to him a belief in a Christianity rooted in the social gospel, which instilled within him a vision of a more egalitarian community free of the hierarchies that existed in both the religious and social spheres.⁵⁰ Paine shared Spence's disdain of governments built on superstition.⁵¹ At the same time, his argument for economic reform was rooted in his own interpretation of the Bible.⁵² Their use of religious language was combined with Enlightenment-based ideas related to the existence of natural rights to form a powerful ethical case for radically altering the British social system.

Besides sharing a similar intellectual framework, the methods both Paine and Spence expounded for implementing their ideological preferences were remarkably similar. For one, both supported using revolutionary violence to achieve their ideological ends if they could not achieve their goals peacefully. Paine was an active participant in both the French and American Revolutions and called for revolutions to be waged across Europe if hereditary governments refused to reform themselves.⁵³ Though Paine believed reason to be the most

potent tool in reforming society, he refused to renounce violence if free debate was not allowed even after his near-execution during the Reign of Terror.⁵⁴ As for Spence, he originally suggested a more reformist strategy and endorsed the attempt to convince people the follies of the private ownership of land.⁵⁵ However, during his later years he explicitly endorsed violent insurrection. Spence would go as far as to enshrine insurrection as a right in his proposed constitution: “When the Government violates the rights of the people, Insurrection becomes to the people, and to every portion of the people, the most sacred and the most indispensable of duties.”⁵⁶

This endorsement of insurrection led both men to embrace revolutionary internationalism. Spence endorsed the exporting of his system of land reform through military force, proclaiming that “the people in the conquered countries shall rejoice, and shall say, We only pay our rents, but aforetime we paid both rent and taxes: We now have everythin [sic.] duty-free and cheap, and live much happier.”⁵⁷ Paine, despite being far more moderate than Spence on many issues, shared with him the belief that military force was a potent tool to export the revolution. Such a view led Paine to propose in 1798 sending in a small French military force to overthrow the English government.⁵⁸

The similarities in both Spence and Paine’s intellectual rationales and the means to obtain their aims made it even more notable when the two diverged. Much of what divided them was litigated by Spence as part of his one-sided rivalry with Paine. His critique of Paine can be partially attributed to his jealousy of Paine’s success. Whether loved or hated, Paine’s thought had been the focal point of the political debates toward the end of the 18th century Britain, while Spence was far less known for most of his career.⁵⁹ This theory is supported by just how bitter Spence was about the lack of attention, along with the general negative reception his writings received. As he complained in his account of his own trial for seditious libel: “For in the first Place the People without, treat me either with Neglect, or with the Contempt due to a Lunatic.”⁶⁰

Whatever bitterness Spence held towards Paine, however, does not change the fact that their visions for societal reform were fundamentally different. Spence made these disagreements clear with his criticisms in *The End of Oppression*, which attacked Paine’s *Rights of Man*, and in *The Rights of Infants*, which lambasted *Agrarian Justice*. Spence’s critique of *Rights of Man* was that Paine focused too much on the monarchy, rather than what Spence viewed as the true oppressor of humanity: the landlord.⁶¹

It must be understood that this complaint was not aimed at Paine as an individual thinker, but instead at British democrats more generally. Though Spence, like Paine, was a committed proponent of democracy, he viewed the radical democrats in Britain as little better than the conservative monarchists. To him, the political reforms the British democrats proposed would do noth-

ing to challenge the system of landed property. It did not matter much to the poor if they lived under a monarchy or republic if land remained under private ownership. If the present system of landownership was retained, the poor would continue to serve as tenants on property that was rightfully theirs. The only true way to liberate the poor was common ownership of the land. This would be an especially effective way to transform society because Spence was convinced that “the Monopoly of Land which is the Mother of all other Monopolies. Other Monopolies cannot subsist after the fall of that.”⁶² Not only was land reform necessary for destroying the tyranny of the landlord, but indeed the tyranny of all other existing social and political hierarchies. Spence thus attacked the British democrats’ deference to property rights, since it meant that they refused to consider taking this vital step for the people’s liberation.

Paine’s revised views in *Agrarian Justice* did not do anything to lessen Spence’s disdain for Paine’s ideology. Spence made this clear in *The Rights of Infants*, where he rejected Paine’s proposed plan for a welfare state on several grounds. The first had to do with Spence’s libertarian view on the power of the nation state. His sharp distrust of central authority made him immediately wary of Paine’s call for a state-provided welfare system. After all, a welfare state requires a strong central government by its very nature, which was anathema to Spence’s desire for people to be unfettered from the influence of both the state and the wealthy. This was especially true given Spence’s distrust of bureaucracy, which he viewed as inherently corrupt and vice-ridden. As a welfare state requires a large bureaucracy to manage it, Spence was openly contemptuous of this proposal.⁶³

Spence was similarly critical of the lack of democratic management in Paine’s scheme. Unlike Spence’s plan for the common ownership of land by a direct parish-based democracy, a welfare state could most easily be implemented by an authoritarian regime.⁶⁴ The lack of any safeguards to ensure democracy was beyond the pale for Spence, who above all remained a partisan believer in localized democratic control.

This shows one of the most fundamental divisions between Spence and Paine’s versions of proto-socialism. Paine, as a proto-social democrat, viewed a powerful national government as the necessary instrument for aiding the masses.⁶⁵ Because of this, Paine was an opponent of decentralization, as he made clear in his critiques of the confederal system that existed in the United States prior to the adoption of the Constitution.⁶⁶ Though Paine could and did criticize aspects of central government, he was aware of the opportunities offered by state power, and therefore viewed the state as a potent tool to enact his anti-poverty programs.

Spence’s views on this subject could not have been more different. Though Spence was also suspicious of federalism, his suspicions ran the other way. Spence was against diffusing powers to provincial governments, as that would run the risk of these governments becoming too powerful and warring against each other.

Spence found the parish model to be far more suitable for his purposes, since each parish would be so small that none could possibly pose a threat to any other parish, and at the same time guarantee direct popular control of both the political and economic policies of the community.⁶⁷ This difference regarding their views of the scope of government is why Paine proposed a state-centered variant of what would later be termed socialism, while Spence's fear of the effects of state power led him to advance what would soon become the anarchist alternative of communal self-government.

Nowhere are the differences between Spence and Paine clearer than in their divide over the redistribution of land. Spence found Paine's argument that the aristocracy was responsible for adding value to land beyond insulting. As Spence wrote in *Rights of Infants*:

*But may we not ask who improved the land? Did the proprietors alone work and toll at this improvement? And did we labourers and our forefathers stand, like Indians and Hottentots, idle spectators of so much public-spirited industry? I suppose not. Nay, on the contrary, it is evident to the most superficial enquirer that the labouring classes ought principally to be thanked for every improvement.*⁶⁸

Because of this, merely taxing inheritance to pay for welfare stipends would be a meager compensation for the workers' lost property. Not only was land a natural right held by all people by virtue of their birth, but even the value added to the land by human labor was produced by the working class. In that way, Spence's argument for an early anarcho-socialism rested on a kind of labor theory of value, though only related to physical, immovable property.⁶⁹ Since all value added to land had been created by workers, they held an equal right to profit collectively from it.

This debate over economics related to perhaps the most crucial difference between Spence and Paine: how willing they were to embrace the label of "levelling;" that is the attempt to ensure a more equal distribution of property. Such a term was used as a pejorative against Paine by British loyalists, who charged him with threatening to destroy Britain's prosperity by attempting to impose upon the world a kind of primitive equality.⁷⁰ Paine fiercely contested this claim. Instead, he argued, monarchism was the true levelling system, as "Vice and virtue, ignorance and wisdom, in short, every quality good or bad, is put on the same level."⁷¹ Spence's response to the same charge could not be any more different. Spence not only embraced the term "levelling" but gave it a religious component. Citing Leviticus, Spence quipped that "God Almighty himself is a very notorious leveller."⁷²

The entire levelling controversy reveals a fundamental difference between Spence and Paine: that of the question of equality. It is true that both men

proposed a plan for a more equal social order, while neither wanted absolute equality. Yet the sorts of equality proposed by them differed significantly. Even though Spence never called for an equality of wealth, his reform proposals concentrated on blurring the lines of class distinction. Using the contemporary meaning of “mediocrity” as in the middle of things, Spence insisted that “mediocrity of Wealth has always been found to be the never failing source of knowledge, good taste, industry and happiness, and of all the virtues.”⁷³

Spence’s clear preference was to socialize land to build a society where there existed neither indigence nor extreme wealth. Spence believed that his plan could ensure this kind of “mediocrity” across society by ensuring equal access to land and prohibition of its purchase, as he believed that if people were barred from accumulating large estates, they would neither be able nor motivated to seek extreme wealth. For that same reason, Spence was convinced that his land reform would ensure an international kind of equality, as he believed that the lack of a private market in land would prevent the rich from attempting to profit through colonialism.⁷⁴ Because of this, Spence did not fear the accusation of levelling; even though he never sought pure equality, he was certainly planning to level existing hierarchies.

As for Paine, though his attempt to counter this charge of levelling was likely at least partially motivated by a desire to appear less extreme than his earlier reputation, Paine’s strong denials of the loyalists’ accusations was also motivated by the fact that Paine did not, in fact, support any equalization of property. Indeed, Paine agreed with the loyalists that private property had clearly benefited society by aiding the rise of the new industrial economy. Upholding commercial society, and the system of private property that allowed the formation of modern capitalist society, was central to Paine’s proto-social democratic schemes, as it created the prosperity that Paine believed to be the necessary foundation for his social welfare proposals.⁷⁵ Because of this, he considered levelling unethical and counterproductive to his plan to end poverty in Britain.

This is not to say that Paine did not propose policies that would diminish inequality. After all, central to his plan was taxing the property of the rich to benefit the poor. Yet that was justified not as a way of creating greater equality between the upper and lower classes, but because the wealthy had the resources to pay the taxes necessary to create a welfare state.⁷⁶ This perfectly relates to the core of Paine’s argument: social justice. Paine’s proposed welfare scheme is centered on what the rich owe to society and what society owes to the poor, based on the originally collective claim to all land, rather than an attempt to create the kind of general “mediocrity” that Spence desired.⁷⁷

The question of what society owed to the poor is tied to perhaps the most fundamental philosophical difference between Spence and Paine: the question of the exact meaning of social justice. To Paine, social justice meant ensuring

the equality of rights. This belief in the justice of equal rights explains why he supported both the continued aristocratic ownership of land and the creation of a welfare state. Paine believed that all people deserved to have their rights to property equally protected. He argued that landlords were entitled to the additional property and value created by the improvements they made on land originally held in common. If, for whatever reason, that added value could not be separated fairly from the original land, then the landowners have a just claim to retain their land. However, in turn, the rest of the people deserved the right to be compensated for their loss. For Spence, however, social justice did not simply require the equality of rights, but a greater equality in wealth. Therefore, private ownership of land was anathema to his concept of social justice, as it violated the people's natural right to the land and brought about the vast inequalities in wealth that existed in Britain. Because of this, common ownership of land was necessary for Spence's vision of social justice.

CONCLUSION

Spence and Paine are in many ways emblematic of two early contradictory impulses that foreshadowed splits in the later socialist movement. Their visions of society diverged on several fronts, such as on the power of the state, the question of whether land and all associated fixtures should be privately or publicly owned, and the nature of social justice. In many ways, they pioneered significant schools of later socialist thought in Britain. Paine's argument that the government should provide care for the people to ward off indigence served as a clear precursor to 20th century social democracy. Spence, on the other hand, pioneered an early anarcho-socialist approach, one that sought to limit economic inequality, protect the people's natural rights, and ensure the individual autonomy for all the citizens in the republic.

Spence and Paine foreshadowed the perennial question that would later divide the socialist movement: how far should the revolution go? Though they were both partisans of radical change, the way they wished to change society differed profoundly. Spence desired a thorough revolution in the entire economic and political system, where land would be expropriated from the landowners and held in common by the local community, and a decent standard of living would be assured for all. Though Paine shared Spence's desire to abolish poverty, his socialism would today be defined as distinctly liberal in character, as it combined concern for the poor with a deference to the rights of property. Paine's vision was one where both workers and the affluent would have their rights defended equally.

Besides their works serving as foundation in the development of future socialist thought, the stark differences between Spence and Paine anticipated the impressive breadth of values and strategies contained within modern social-

ism. This is because, despite all the differences between their economic theories, they were both clearly forerunners of socialism. Both Spence and Paine embraced the defining goals of socialism: a dedication to promoting social justice, greater economic and political equality, protection of the rights of labor, and the creation of a democratic society. Though they differed greatly on the degree to which social justice required the levelling of class distinctions, which natural rights existed and deserved protection, and whether democracy can be best safeguarded by concentrating power on the national or local level, their desire for a more fundamentally just society remained identical.

BIBLIOGRAPHY

PRIMARY SOURCES

- Paine, Thomas. *Rights of Man*. Edited by Hypatia Bradlaugh Bonner. London: Watts and Co., 1906).
- “Agrarian Justice.” In *The Pioneers of land reform: Thomas Spence, William Ogilvie, Thomas Paine*. Edited by M. Beer, 175-206. London: G. Bell. and Sons, LTD., 1920).
 - Spence, Thomas “Constitution of Spensonia.” In *Thomas Spence: The Poor Man’s Revolutionary*. Edited by Alastair Bonnett and Keith Armstrong, 145-61. London: Breviary Stuff Publications, 2014.
 - “The End of Oppression.” In *Thomas Spence: The Poor Man’s Revolutionary*. Edited by Alastair Bonnett and Keith Armstrong, 127-131. London: Breviary Stuff Publications, 2014.
 - “Fragment of an Ancient Prophecy.” Marxists Internet Archive. March 2018.
 - Thomas. “A Further Account of Spensonia (1794).” In *Pigs’ Meat: Selected Writings of Thomas Spence Radical and Pioneer Land Reformer*. Edited by G. I. Gallop, 80-90. Nottingham: Spokesman, 1982.
 - “The Marine Republic (1814).” Marxists Internet Archive. May 2018.
 - “The Meridian Sun of Liberty.” In *Burke, Paine, Godwin, and the Revolution Controversy*. Edited by Marilyn Butler, 189-194. Cambridge: Cambridge University Press, 1984.
 - “The Important Trial of Thomas Spence.” Marxists Internet Archive. June 2018.
 - “An Interesting Conversation, between a Gentleman and the Author, on the Subject of the foregoing Lecture.” In *Pigs’ Meat: Selected Writings of Thomas Spence Radical and Pioneer Land Reformer*. Edited by G. I. Gallop, 67-76. Nottingham: Spokesman, 1982.
 - “A Lesson for the Sheepish Multitude.” Marxists Internet Archive. May 2018.
 - “Property in Land: Every One’s Right.” In *Thomas Spence: The Poor Man’s Revolutionary*. Edited by Alastair Bonnett and Keith Armstrong, 7-11. London: Breviary Stuff Publications, 2014.
 - “The Reign of Felicity.” Marxists Internet Archive. April 2018.
 - “The Restorer of Society to its Natural State.” Marxists Internet Archive. July 2018.
 - “Rights of Infants (1797).” In *Pigs’ Meat: Selected Writings of Thomas Spence Radical and Pioneer Land Reformer*. Edited by G. I. Gallop, 111-126. Nottingham: Spokesman, 1982.
 - “A Supplement to the History of Robinson Crusoe: Being the History of Crusonia, or Robinson Crusoe’s Island.” In *Thomas Spence: The Poor Man’s Revolutionary*. Edited by Alastair Bonnett and Keith Armstrong, 133-144. London: Breviary Stuff Publications, 2014.

SECONDARY SOURCES

- Bestor, Arthur E. "The Evolution of the Socialist Vocabulary." *Journal of the History of Ideas* 9, no. 3 (1948): 259–302.
- Cazzola, Matilde. "Beyond the Public and the Private: Thomas Spence and the Current Debate on Common Property." *Miranda* 13 (2016).
- Chase, Malcolm. *The People's Farm: English Radical Agrarianism 1775-1840*. Oxford: Oxford University Press, 1988.
- . "The Real rights of Man": Thomas Spence, Paine and Chartism," *Miranda* 13 (2016).
- Clacys, Gregory. "Four Roads from 'Genesis': Spence, Paine and Rights to Property." In *Thomas Spence: The Poor Man's Revolutionary*. Editors Alastair Bonnett and Keith Armstrong, 27-34. London, Breviary Stuff Publications, 2014.
- . "The French Revolution Debate and British Political Thought." *History of Political Thought* 11, no. 1 (1990): 59-80.
- . *Thomas Paine: Social and Political Thought*. Winchester, MA: Unwyn Hyman Inc., 1989.
- . "Non-Marxian Socialism 1815–1914." In *The Cambridge History of Nineteenth-Century Political Thought*, edited by Gareth Stedman Jones and Gregory Clacys, 521–55. Cambridge: Cambridge University Press, 2011.
- . "The Origins of the Rights of Labor: Republicanism, Commerce, and the Construction of Modern Social Theory in Britain, 1796-1805." *The Journal of Modern History* 66, no. 2 (1994): 249-90.
- Dorrien, Gary. *Social Democracy in the Making: Political and Religious Roots of European Socialism*. New Haven: Yale University Press, 2019.
- King, J. E., and John Marangos. "Two Arguments for Basic Income: Thomas Paine (1737-1809) and Thomas Spence (1750-1814)." *History of Economic Ideas* 14, no. 1 (2006): 55-71.
- Parssinen, T. M. "Thomas Spence and the Origins of English Land Nationalization." *Journal of the History of Ideas* 34, no. 1 (1973): 135-41.
- Stedman Jones, Gareth. *An End to Poverty? A Historical Debate*. New York: Columbia University Press, 2004.
- Vrousalis, Nicholas. "Libertarian Socialism: A Better Reconciliation between Equality and Self Ownership." *Social Theory and Practice* 37, no. 2 (2011): 211–26.
- Walker, Thomas C. "Two Faces of Liberalism: Kant, Paine, and the Question of Intervention." *International Studies Quarterly* 52, no. 3 (2008): 449-68.

- [1] Gregory Claeys, "Non-Marxian Socialism 1815–1914," in *The Cambridge History of Nineteenth-Century Political Thought*, ed. Gareth Stedman Jones and Gregory Claeys (Cambridge: Cambridge University Press, 2011), 526.
- [2] See Gary Dorrien, *Social Democracy in the Making: Political and Religious Roots of European Socialism* (New Haven: Yale University Press, 2019), 4.
- [3] Arthur E. Bestor, "The Evolution of the Socialist Vocabulary," *Journal of the History of Ideas* 9, no. 3 (1948): 277.
- [4] Malcolm Chase, *The People's Farm: English Radical Agrarianism 1775–1840* (Oxford: Oxford University Press, 1988), 19–20.
- [5] Chase, *The People's Farm*, 27.
- [6] T. M. Parssinen, "Thomas Spence and the Origins of English Land Nationalization," *Journal of the History of Ideas* 34, no. 1 (1973): 140.
- [7] Malcolm Chase, *The People's Farm: English Radical Agrarianism 1775–1840* (Oxford: Oxford University Press, 1988), 20–23.
- [8] See Malcolm Chase, "The Real rights of Man": Thomas Spence, Paine and Chartism," *Miranda* 13 (2016).
- [9] See Gregory Claeys, "Four Roads from 'Genesis': Spence, Paine and Rights to Property," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London, Breviary Stuff Publications, 2014), 28.
- [10] Gregory Claeys, *Thomas Paine: Social and Political Thought* (Winchester, MA: Unwyn Hyman Inc., 1989), 21–22.
- [11] Claeys, 26–27.
- [12] Gregory Claeys, *Thomas Paine: Social and Political Thought* (Winchester, MA: Unwyn Hyman Inc., 1989), 30–36.
- [13] See Nicholas Vrousalis, "Libertarian Socialism: A Better Reconciliation between Equality and Self-Ownership," *Social Theory and Practice* 37, no. 2 (2011): 226, on the relation between anarchism and socialism in the 19th century
- [14] Gregory Claeys, "Four Roads from 'Genesis': Spence, Paine and Rights to Property," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London, Breviary Stuff Publications, 2014), 32.
- [15] Thomas Spence, "Property in Land: Every One's Right," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London: Breviary Stuff Publications, 2014), 8.
- [16] Thomas Spence, "Property in Land: Every One's Right," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London: Breviary Stuff Publications, 2014), 7–8.
- [17] Thomas Spence, "A Further Account of Spensonia (1794)," in *Pigs' Meat: Selected Writings of Thomas Spence Radical and Pioneer Land Reformer*, ed. G. I. Gallop (Nottingham: Spokesman, 1982), 89.
- [18] Thomas Spence, "An Interesting Conversation, between a Gentleman and the Author, on the Subject of the foregoing Lecture," in *Pigs' Meat: Selected Writings of Thomas Spence Radical and Pioneer Land Reformer*, ed. G. I. Gallop (Nottingham: Spokesman, 1982), 73.
- [19] Thomas Spence, "Constitution of Spensonia," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London: Breviary Stuff Publications, 2014), 150.
- [20] Thomas Spence, "Property in Land: Every One's Right," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London: Breviary Stuff Publications, 2014), 9.
- [21] Thomas Spence, "The Restorer of Society to its Natural State," Marxists Internet Archive, July 2018.
- [22] Thomas Spence, "A Supplement to the History of Robinson Crusoe: Being the History of Crusonia, or Robinson

- Crusoe's Island," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London: Breviary Stuff Publications, 2014), 142.
- [23] Thomas Spence, "Property in Land: Every One's Right," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London: Breviary Stuff Publications, 2014), 10.
- [24] Thomas Spence, "Constitution of Spensonia," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London: Breviary Stuff Publications, 2014), 148.
- [25] Spence, "Constitution of Spensonia," 155.
- [26] Spence, 146.
- [27] Spence, "The Marine Republic (1814)," Marxists Internet Archive, May 2018.
- [28] Matilde Cazzola, "Beyond the Public and the Private: Thomas Spence and the Current Debate on Common Property," *Miranda* 13 (2016).
- [29] Thomas Spence, "The Important Trial of Thomas Spence," Marxists Internet Archive, June 2018.
- [30] Thomas Spence, "A Lesson for the Sheepish Multitude," Marxists Internet Archive, May 2018.
- [31] Thomas Paine, *Rights of Man*, ed. Hypatia Bradlaugh Bonner (London: Watts and Co., 1906), 129.
- [32] Paine, *Rights of Man*, 135.
- [33] Paine, *Rights of Man*, 130.
- [34] Paine, *Rights of Man*, 132-3.
- [35] Paine, 134-5.
- [36] Paine, 131.
- [37] Paine, 136-7.
- [38] Paine, 143-4.
- [39] Paine, 136.
- [40] Paine, 113.
- [41] J. E. King and John Marangos, "Two Arguments for Basic Income: Thomas Paine (1737-1809) and Thomas Spence (1750-1814)." *History of Economic Ideas* 14, no. 1 (2006): 59-60.
- [42] Thomas Paine, "Agrarian Justice," in *The Pioneers of land reform: Thomas Spence, William Ogilvie, Thomas Paine, ed. M. Beer*, (London: G. Bell. and Sons, LTD., 1920), 185-6.
- [43] Paine, "Agrarian Justice," 185.
- [44] Thomas Paine, *Rights of Man*, ed. Hypatia Bradlaugh Bonner, (London: Watts and Co., 1906), 122.
- [45] See Gareth Stedman Jones, *An End to Poverty? A Historical Debate* (New York: Columbia University Press, 2004), 118.
- [46] See Stedman Jones, *An End to Poverty?*, 70.
- [47] Thomas Paine, "Agrarian Justice," in *The Pioneers of land reform: Thomas Spence, William Ogilvie, Thomas Paine*, ed. M. Beer, (London: G. Bell. and Sons, LTD., 1920), 204.
- [48] Paine, 194.
- [49] Thomas Spence, "The Reign of Felicity," Marxists Internet Archive, April 2018.
- [50] See Matilde Cazzola, "Beyond the Public and the Private: Thomas Spence and the Current Debate on Common Property," *Miranda* 13 (2016).
- [51] See Thomas Paine, *Rights of Man*, ed. Hypatia Bradlaugh Bonner, (London: Watts and Co., 1906), 28.
- [52] Thomas Paine, "Agrarian Justice," in *The Pioneers of land reform: Thomas Spence, William Ogilvie, Thomas Paine*, ed. M. Beer, (London: G. Bell. and Sons, LTD., 1920), 184.
- [53] Thomas Paine, *Rights of Man*, ed. Hypatia Bradlaugh Bonner, (London: Watts and Co., 1906), 75.
- [54] See Thomas C. Walker, "Two Faces of Liberalism: Kant, Paine, and the Question of Intervention," *International Studies Quarterly* 52, no. 3 (2008): 461.

- [55] Thomas Spence, "Property in Land: Every One's Right," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London: Breviary Stuff Publications, 2014), 9.
- [56] Thomas Spence, "Constitution of Spensonia," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Alastair Bonnett and Keith Armstrong (London: Breviary Stuff Publications, 2014), 148.
- [57] Thomas Spence, *A Fragment of an Ancient Prophecy*, Marxists Internet Archive, March 2018.
- [58] Thomas C. Walker, "Two Faces of Liberalism: Kant, Paine, and the Question of Intervention," *International Studies Quarterly* 52, no. 3 (2008): 461.
- [59] See Malcolm Chase, *The People's Farm: English Radical Agrarianism 1775-1840* (Oxford: Oxford University Press, 1988), 57.
- [60] Thomas Spence, "The Important Trial of Thomas Spence," Marxists Internet Archive, June 2018.
- [61] Thomas Spence, "The End of Oppression," in *Thomas Spence: The Poor Man's Revolutionary*, ed. Bonnett and Keith Armstrong, (London: Breviary Stuff Publications, 2014), 128.
- [62] Thomas Spence, "The Restorer of Society to its Natural State," Marxists Internet Archive, July 2018.
- [63] Thomas Spence, "Rights of Infants (1797)," in *Pigs' Meat: Selected Writings of Thomas Spence Radical and Pioneer Land Reformer*, ed. G. I. Gallop (Nottingham: Spokesman, 1982), 126.
- [64] Spence, "Rights of Infants (1797)," 123.
- [65] See Thomas Paine, *Rights of Man*, ed. Hypatia Bradlaugh Bonner, (London: Watts and Co., 1906), 92.
- [66] Gregory Claeys, *Thomas Paine: Social and Political Thought* (Winchester, MA: Unwyn Hyman Inc., 1989), 25.
- [67] Thomas Spence, "The Restorer of Society to its Natural State," Marxists Internet Archive, July 2018.
- [68] Spence, "Rights of Infants (1797)," 121.
- [69] See Gregory Claeys, "The Origins of the Rights of Labor: Republicanism, Commerce, and the Construction of Modern Social Theory in Britain, 1796-1805," *The Journal of Modern History* 66, no. 2 (1994): 271.
- [70] See Gregory Claeys, "The French Revolution Debate and British Political Thought," *History of Political Thought* 11, no. 1 (1990): 75.
- [71] Thomas Paine, *Rights of Man*, ed. Hypatia Bradlaugh Bonner, (London: Watts and Co., 1906), 89.
- [72] Thomas Spence, "An Interesting Conversation, between a Gentleman and the Author, on the Subject of the foregoing Lecture," in *Pigs' Meat: Selected Writings of Thomas Spence Radical and Pioneer Land Reformer*, ed. G. I. Gallop, (Nottingham: Spokesman, 1982), 69.
- [73] Thomas Spence, "The Restorer of Society to its Natural State," Marxists Internet Archive, July 2018.
- [74] Spence, "The Restorer of Society."
- [75] See Gareth Stedman Jones, *An End to Poverty? A Historical Debate* (New York: Columbia University Press, 2004), 36.
- [76] Thomas Paine, *Rights of Man*, ed. Hypatia Bradlaugh Bonner, (London: Watts and Co., 1906), 137.
- [77] See Gregory Claeys, "The Origins of the Rights of Labor: Republicanism, Commerce, and the Construction of Modern Social Theory in Britain, 1796-1805," *The Journal of Modern History* 66, no. 2 (1994): 261.



EDITORS & DESIGNER BIOGRAPHIES

Will Murphy is a senior Linehan Artist scholar finishing his degrees in Media and Communication Studies and Theatre, with a focus in dramaturgy and design. After graduation, he hopes to continue working in academic research and editing. His UMBC journey has been guided and made better by his dear friends and generous mentors, and he is honored to be the Culture, Arts, Humanities, and Social Sciences editor for this edition of the *UMBC Review*. He would like to thank his terrific co-editors Levi Lewis and Dariush Aligholizadeh for their incredible work, as well as Dr. Molly Jones-Lewis and Dr. April Householder for their guidance. He would also like to thank Amy Phan and Laura Schraven for designing everything you see in this beautiful volume. Working alongside this team has been a delight and an honor.

Dariush Aligholizadeh is a sophomore completing a Bachelor of Science in Biochemistry & Molecular Biology as well as Computer Science. He is a member of the Honors College and a past LSAMP recipient at UMBC. After graduating in May 2024, he intends to pursue an M.D./Ph.D. concentrating in Molecular Neuroscience, with the ultimate goal of becoming a researcher in academia. He would like to thank his co-editors Will Murphy and Levi Lewis for their thoughtful support and dedication. He would also like to thank Dr. Molly Jones-Lewis and Dr. April Householder for their mentorship and guidance, and Amy Phan and Laura Schraven for designing and compiling the works in this volume.

Levi Lewis is an English Communication and Technology Major, Media and Communication Studies Major, and Music Minor. He is a recipient of the Philip J. Landon award. After graduating, he plans to pursue his M.A. in Media Theory and Research. Levi is honored to have explored UMBC's wonderful research alongside its authors. He would like to thank his co-editors Will and Dariush for their dedicated and enthusiastic work, his advisors Dr. Molly Jones-Lewis and Dr. April Householder for their guidance, and the design team Laura Schraven and Amy Phan for bringing it all together. Working with this year's team of thinkers and inquirers has been an inspiring privilege.

Amy Phan is a 4th year Linehan Artist scholar who is majoring in Computer Science and Visual Arts: Concentration in Graphic Design at UMBC. She is expected to graduate in spring, 2023. As a UMBC student and a designer at commonvision, she has been actively involved in creating graphical materials for student organizations, departments, and external advertisement. Amy is planning to work in the design and/or web development industry after graduation. Amy would like to thank Laura Schraven, her supervisors, and coworkers at commonvision for the support, guidance, and encouragement she has received throughout her journey as a designer. She also wants to thank the editors, Will Murphy, Levi Lewis, and Dariush Aligholizadeh, for their hard work as well as the guidance of the advisors, Dr. Molly Jones-Lewis and Dr. April Householder. She is honored to be given the opportunity to design the *UMBC Review* for the year of 2022.



Image: Ford, Tim. "Leadership is Action, Not Position." *UMBC Review*. Volume II Number I Winter 1993.1.

As we enter the twenty-third year of the *UMBC Review*, it is a privilege to look back upon the early accomplishments of the writers, reviewers, and editors who contributed to 223 pieces of thoughtful and original research. From early beginnings to its current iteration, the journal has become a progressively more ambitious project, incorporating artists, academics, and researchers across disciplines. Throughout the journal's legacy, its chief supporter has invariably been UMBC President Freeman Hrabowski, whose leadership has brought UMBC to the nation's highest level as a research university.

Our journal has grown alongside our university under President Hrabowski's thirty-five years of dedication and generosity. Without his support we would not be able to showcase the hard work of our undergraduate researchers. His legacy will continue to guide the work of the journal, and the spirit of the university. Being able to read the incredible research conducted on our campus, we are reminded of his words: "There is something exciting about being in an environment in which it is really cool to be smart." Thank you for making that environment a reality for us, President Hrabowski.





Thank you for your support of the 23rd Volume of the *UMBC Review*!

This edition was possible because of the exciting and interdisciplinary work of student researchers.

If YOU are an **undergraduate writer, researcher, artist, or photographer** who is interested in being featured in next year's journal, you can contact us at umbcreview@umbc.edu and apply at:

ur.umbc.edu/umbc-review

We look forward to reading your work!





Office of Undergraduate Research and Prestigious Scholarships
UMBC Honors College
216 Library
1000 Hilltop Circle
Baltimore, MD 21250



ur.umbc.edu/umbc-review/