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Letter From the Editor

Welcome to the 19th volume of *Lucerna*, the undergraduate research journal published by the University of Missouri – Kansas City Honors Program! This year, we are excited to bring you 11 outstanding articles written by authors from all around UMKC. These diverse articles include an analysis of Tik-Tok Advertisements, interviews with professional musicians about their composition processes, and many more! The authors and their faculty mentors invested many hours into their projects to create the excellent research presented in this volume. The 11 articles published in this volume join a collection of over 150 articles that have been published in *Lucerna* since the journal began in 2006.

I have been involved in *Lucerna* for three years now, starting out as a reviewer in 2022, and then becoming the managing editor under Lauren Ferguson. I am very grateful to Lauren for teaching me the responsibilities of being the editor-in-chief of the journal, and I hope that I can continue to help future staff members just as well. To any students reading this, I would encourage you to join the *Lucerna* staff, as I found it a great way to learn skills that I will use in my professional career.

We have continued to move past the effects of the pandemic, while taking in the lessons learned from it. This year, we were able to add a virtual component to our yearly symposium, allowing authors to present their work virtually if they were not able to come in person. This opportunity allowed us to have the largest symposium yet, with nearly all of the authors published in volume 18 presenting their work!

Additionally, we have undergone some changes with our *Lucerna* staff this year. At the end of last year, our longstanding faculty advisor, Dr. Henrietta Rix Wood, retired, and we were joined by Dr. Susanna Donaldson. I would like to thank both Dr. Wood and Dr. Donaldson for their help and support that allowed us to continue publishing the journal. Next year, we will welcome Dr. Marcus Meade to our team as the new faculty advisor for *Lucerna*.

This year was the first year that our book was entirely compiled and formatted by *Lucerna* staff, and I would like to thank Anna Shaw for her hard work putting the manuscript together. I would also like to thank Alex Unseth and Tami Ayegbo for their work as secretaries for *Lucerna*, as

well as Olivia Carlson, who led the effort to promote submissions for the upcoming volume as the public relations supervisor. Additionally, Dr. Gayle Levy and Mariah Ramos from the UMKC Honors Program have provided us with crucial funding, support, and promotion which is necessary to keep the journal up and running. Finally, I believe that Lilah Crum-Barnhill, the managing editor this year, will do an excellent job as editor-in-chief next year, and will welcome a new group of *Lucerna* staff members.

Lucerna is the Latin word for "lamp", and we strive to embody the meaning of the journal's name by continuously shining a light on the best undergraduate research coming out of UMKC. I feel that we have succeeded at this task, and that the research in this volume provides excellent interdisciplinary research on a number of important issues. At the same time, I hope this volume can shine a light on the importance of research as a whole and can inspire future research on any number of topics.

Sincerely,

Theodore Raitzer

2024 *Lucerna* Editor-in-Chief

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Theo Raitzer (he/him) is a senior in the BA/MA economics program. He began working for *Lucerna* as a reviewer two years ago. Theo is also the president of the Economics Club and is involved with other organizations at UMKC. His research interests include Post-Keynesian economic policy and Modern Monetary Theory. After graduation, Theo hopes to work at the Kansas City Federal Reserve or another government organization.

Managing Editor: Lilah Crum-Barnhill

Lilah Crum-Barnhill (she/her) is a third-year student double-majoring in Philosophy and French with a minor in English literature. She became involved with *Lucerna* as a student reviewer during her first year. She is also involved with the Philosophy Club and Phi Sigma Tau, the philosophy honors society.

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Social Sciences

Mending the Divide: Exploring the Relationship Between Christianity and Psychotherapy

Abbot Kidner

Abstract

While reluctance to seek mental healthcare has been improving across the board, a chasm still exists between highly religious populations and mental healthcare. To help rectify this divide, this paper explores the relationship between Christianity and psychotherapy, focusing on the barriers of entry for religious people in seeking professional care. It underlines the importance of reaching out to this population for myriad reasons, including a substantial need for services, the importance of faith to religious clients, and repairing opinions surrounding psychology based on the field's history of disrespect toward religion. Religious barriers are identified to fall under three main categories: (1) views on the role of prayer and faith, (2) stigma and ostracization, and (3) a mistrust of psychology. Causes for said barriers stem primarily from the influence of faith leaders who hold insufficient understandings surrounding professional counseling and psychology, beliefs that mental struggles are from a "lack of faith," and a lack of openness and incorporation regarding faith on the part of clinicians. As such, placing an emphasis on improving pastors' knowledge of psychological disorders, building community connections, and incorporating faith into clinical practice is recommended as paramount to mending the present divide.

Mending the Divide: Exploring the Relationship Between Christianity and Psychotherapy

Mental health does not discriminate based on personal beliefs, though a reluctance persists among religious populations in seeking professional care for psychological disorders (Burse et al., 2021). While religious attitudes toward mental health have been improving over time, a substantial divide remains (Burse et al., 2021; Schnall et al., 2014). In a study of over 240 Christian pastors and clergy, every participant agreed that there is a need for mental health services in their community; yet an

astounding 83% also stated there exist present barriers in meeting those needs (Burse et al., 2021). Among those who pursue professional help, nearly three-quarters do not bring up their religious affiliation with the clinician (Ayvaci, 2016) despite its importance in their lives and identity (Nakash et al., 2019). This was shown to be mirrored by clinicians, of which only one-third addressed religion at all, though 93% stated they would be willing to discuss the subject (Ayvaci, 2016).

Psychology also has a history of disrespect for certain populations, including religious groups (e.g., Ellis, 1965, cited in Nakash et al., 2019), so it is vital for modern mental healthcare providers to reach out to religious individuals in need. Working to repair the damage done is only a part of what is needed, as there can be a greater need for services among more religious Christian individuals (Pace & McGuire, 2020). Moreover, it was found that frequency of involvement in religious practices (e.g., attending services, Bible studies, and praying) was positively correlated with severity of depression and inhibition to seek professional help. The standing belief that Christianity and psychology are at odds with each other (Nakash et al., 2019) will only continue to persist if no action is taken. Including religious practices with treatment has been shown to promote health and reduce depressive symptoms in the chronically ill (Pearce & Koenig, 2013), and Christian doctrine often encourages sharing burdens and seeking help from peers (Breland-Noble et al., 2015). To effect any change, however, a focus on the betterment of understanding for both sides is of the foremost importance. For the side of psychology, this begins with identifying the causes of reluctance, created barriers, and what can be done about them.

Reluctance and Barriers

Throughout the literature, noted reasons for reluctance in seeking professional care were wide-reaching but generally fell under three broad categories: (1) the role of prayer and faith, (2) fear of stigma and ostracization, and (3) a mistrust of psychology. Breaking this down further, these categories were found to be perpetuated within religious communities primarily from pastors and clergy but may also include peer influences.

Prayer and Faith

Perhaps the most impactful category, the roles of prayer and faith are perhaps the most difficult to address from an empirical standpoint. Included in many Christian communities' beliefs is the idea that symptoms of depression, anxiety, etc. are merely a result of insufficient faith, said to be resolved through prayer (Ayvaci, 2016). With the encouragement of pastors to seek God first, often saying that prayer can fix any ailment, an overemphasis on self-responsibility and development of guilt should their troubles persist can be developed within an individual (Breland-Noble et al., 2015; Burse et al., 2021). The sometimes rigid or legalistic ideals of religion become hinderances to seeking help, with one adolescent reporting they were told "All you have to do is take your troubles to God and He'll deal with it" (Breland-Noble et al., 2015, p. 336). Faith was shown to have a major impact in whether teenagers within the church sought professional help as a result of the available teachings' pressure to rely solely on God.

Exploration of the contributing factors behind the sole reliance on faith uncovered a staggering confidence on the part of pastors and clergy regarding their knowledge of psychological disorders. Burse et al. (2021) found that 73% of pastors felt knowledgeable about a wide range of disorders, including complex ones such as attention deficit-hyperactivity disorder (95.5%), bipolar disorder (81.48%), schizophrenia (77.12%), and post-traumatic stress disorder (72.37%) (pp. 144-145). Furthermore, this is despite the fact that the majority of the most popular pastoral degrees have little to no requirements for psychology courses in seminary training (e.g., *College Consensus*; *Liberty University Online*; Suggs, 2023). Even among counseling degrees offered by seminaries, the majority had only a handful of courses on psychology, with the exception of a select few that were roughly equivalent to a Bachelor of Arts in psychology (e.g., *Nazarene Bible College*).

Stigma and Ostracization

The lack of education in psychology among clergy is a strong influence behind the stigma and ostracization experienced within Christian communities. Breland-Noble et al. (2011, 2015) found that chief among the experienced stigma among adolescents in the church was from the leadership they sought for help. Faith was listed as having a significant

role in whether teens sought a therapist, but when they spoke to their faith leaders they were met with disingenuous and condescending behaviors (Nakash et al., 2019). Especially with the common views and importance of faith, members of church communities commonly seek help from spiritual leaders as their first line of inquiry (Ayvaci, 2016; Burse et al., 2021). However, the clergy's emphasis on self-sufficiency can breed fear among congregants of all ages regarding how they will be perceived by their peers, even to the extent of having their faith questioned, simply for admitting having problems (Codjoe et al., 2021; Nakash et al., 2019). This culminates in less self-disclosure, a lack of confidence in their leaders' abilities, labeling, and even fearing expulsion from their community.

Mistrust of Psychology

To understand the current mistrust of psychology within many Christian communities, an understanding of the history between academic psychology and religion is required. As noted by Nakash et al. (2019), the present presumed conflict that has loomed over the two parties has persisted for decades, with religion being described by a prominent psychologist as "institutionalized irrationality that undermines psychological functioning and contributes to psychopathology" (Ellis, 1965, cited in Nakash et al., p. 447). This idea still affects how clinicians regard religion today, especially with their exposure to clients exhibiting truly pathological expressions of religious beliefs making it hard to tell the difference between religion and delusion (Ayvaci, 2016). It should be of no surprise, then, that nearly half of respondents in a study by Nakash et al. (2019) described mistrust for providers for a multitude of reasons.

This mistrust is further perpetuated by the assumption of churchgoers that their leaders have a sufficient understanding of psychology backing their discouraging statements of the field, as well as a belief that satisfactory counseling is already available through the church (Burse et al., 2021). In part of the findings from Nakash et al. (2019), 57.9% of Christian clients reported negative attitudes toward providers, citing reservations surrounding effectiveness, knowledge, and professionalism. Furthermore, over one-third mentioned poor experiences either first-hand or shared by a family member who attended therapy, leading them to doubt psychology's scientific basis and frequently believing mental disorders are not something that can be changed (p. 442). Even among

those who consider professional mental healthcare, many expressed concerns over the clinician's ability to understand or match their religiosity.

Facilitators of Change

The present divide between Christianity and psychology is not without hope of being mended. Change can already be seen in religious youth where 75% support the idea of the church playing a stronger, more active role in the congregation's mental health (Breland-Noble et al., 2011, 2015). Likewise, the young churchgoers frequently shared the belief that Christianity teaches similar ideals and can even encourage seeking counseling from qualified individuals. One adolescent stated, "...I do think God gives us people here to help us. And I don't think a lot of people realize that" (Breland-Noble et al., 2015, p. 334). Positive coping strategies from a religious framework are also strongly associated with better outcomes, something that is beginning to be adopted by more church leaders. Concerns over therapists' understanding of religion remain, but Burse et al. (2021) found that the vast majority of religious leadership would be willing to help grow clinicians' knowledge of what they believe Christianity uniquely brings to the table. One place to start bridging the gap is finding members of the Christian community who are clinicians and using their influence to gain support from their leadership (Codjoe et al., 2021).

Using these connections can help psychology's historical opinions regarding religion become less biased and view a client's beliefs as a vital part of their identity that can encourage growth and psychological well-being (e.g., Allport, 1950; Jung, 1933, cited in Nakash et al., 2019). A stronger acceptance of professional counseling within the church community is also important for the church's ability to provide safe environments that facilitate self-disclosure (Breland-Noble et al., 2015). Some faith leaders have already demonstrated support for psychological counseling practices and encouraged openness among their congregation to share their concerns by exemplifying self-disclosure. Similar efforts can be made in reference to clinicians' understanding and acceptance of religion in their practices. The creation of culturally relevant frameworks, two-way relationships with the religious communities and mental healthcare providers, and transparency of the involved processes in

therapy have all been found to be mediators for acceptance (Codjoe et al., 2021). Importantly, religion has the capability to provide a sense of control in a client's life, thus alleviating distress (Nakash et al., 2019) and acting as a tool for change that a clinician can take advantage of. Trust in both directions was underlined as critical for change, however, particularly on the side of the church that the professionals will incorporate their faith doctrine accurately and effectively (Codjoe et al., 2021).

Discussion

While progress is being made in regard to mental healthcare among and within religious communities (Burse et al., 2021; Schnall et al., 2014), its speed and efficacy can improve. Efforts so far have shown promising results in empowering members of these communities, giving them a greater sense of control and ability to help others. Furthermore, there has been an increase in exposure to psychological services among people experiencing mental distress (Codjoe et al., 2021), helping to increase understanding and decrease stigma. Regardless, more research is required to develop better interventions for religious populations in need and how to coordinate with relevant faith leadership (Ayvaci, 2016). Moreover, developments are necessary in blending empirical research with client-held beliefs to improve client engagement with mental health services. Incorporating lessons from mindfulness and cognitive-behavioral therapies (CBT) can have a variety of results, including normalizing and reframing therapy techniques in a culturally relevant format for better acceptance and use outside of sessions (Breland-Noble et al., 2015).

With approximately half of all clients expressing a desire for their religious beliefs to be a part of their treatment (Rose et al., 2001, cited in Pearce & Koenig, 2013), research has suggested that integrated interventions were as or more effective than their standard versions. There can be differing viewpoints within Christianity regarding the subject of counseling with many believing it is the role of the pastor to conduct it. However, one such integrated therapy, Religious-CBT (R-CBT), is differentiated from scriptural or biblical counseling with its focus on the client's mental health as opposed to their spiritual health. Because of this focus, the practice of religious forms of CBT are not limited to those within a single religion and do not require any additional seminary degree. In fact, non-religious clinicians were found to be more effective in their

practice than religious counterparts (Propst et al., 1992, cited in Pearce & Koenig, 2013). In a follow-up study, Pearce et al. (2016) found that while the qualities of religion associated with positivity and altruism can easily fall in line with and be used in standard practices, there was not a significant difference in outcome between standard and religious forms (p. 133). Despite this, R-CBT's likelihood of reducing the barrier of entry for the highly religious and the ability to refine the mechanisms of change make continued efforts worthwhile.

Making future efforts productive requires mutual education for religious institutions as well as secular clinicians. Establishing and strengthening community connections between religious organizations and mental health professionals is imperative, and would work toward this purpose (Codjoe et al., 2021). Training church leaders on basic empirical measures and assessments would provide clear indicators of distress for those on the front line (Burse et al., 2021) and reduce existing stigma (Codjoe et al., 2021). It is equally important for mental healthcare professionals to improve their understanding of the beliefs held by their clients. This can be done by opening relevant dialogue from session one, setting expectations, and practicing unconditional positive regard (Ayvaci, 2016; Nakash et al., 2019). Additionally, being self-aware of implicit biases for both sides is required for the benefit of all involved. Therapists should also address client concerns regarding matching clinician spirituality and gender preferences in a nonjudgmental manner, as they are common in religious clients.

Conclusion

The importance of meeting the mental healthcare needs of the religious and spiritual should be of no less importance than for any other demographic. Psychology's historical rejection of religion by some has done lasting damage in many Christian communities (Ayvaci, 2016; Codjoe et al., 2021; Nakash et al., 2019), leaving the most religious and at need not even considering seeking professional help (Pace & McGuire, 2020). Moreover, the reluctance or inaction on both sides to discuss religion and its importance in the client's life (Ayvaci, 2016; Breland-Noble, 2015; Codjoe et al., 2021) severely limits attempted progress and passively supports existing stigma. Education, self-awareness of biases, and

community connections are essential to combat these barriers (e.g., Burse et al., 2021; Codjoe et al., 2021).

Religious cognitive-behavioral therapies have been shown to reduce distressing symptoms, encourage counseling and back its practices, and provide clients with a sense of agency in their life (Nakash et al., 2019; Pearce & Koenig, 2013). Views about psychology are heavily influenced and propagated by the pastors and clergy (Ayvaci, 2016; Burse et al., 2021). However, pastors were found to frequently hold an astounding confidence in their ability to address psychological disorders (Burse et al., 2021) despite many popular pastoral degrees not including psychology courses at all (e.g., *College Consensus*; *Liberty University Online*; Suggs, 2023). Consequently, concentrating on improving the knowledge of pastors on psychological disorders and their criteria by building community connections and incorporating faith into clinical practices is recommended as a pivotal first step in mending the present divide.

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STEM

The Importance of Abū Kāmil on Algebra

Jessica Burkhart

Sometimes referred to as the “reckoner from Egypt” or the “calculator from Egypt,” Abū Kāmil was an Islamic mathematician born about 850 in Egypt. Although not much is known about his personal life, we can study his various works to better understand him as a mathematician. Abū Kāmil took it upon himself to further the work of al-Khwārizmī (c. 825), who was a famous mathematician considered to be the father of algebra.

Before al-Khwārizmī we have no information of how algebra developed in Arabic countries, but relatively recent work by a number of historians of mathematics has given a reasonable picture of how the subject developed after al-Khwārizmī. The role of Abū Kāmil is important here as he was one of al-Khwārizmī's immediate successors. In fact Abū Kāmil himself stresses al-Khwārizmī's role as the ‘inventor of algebra’ (O'Connor & Robertson, 1999).

Following al-Khwārizmī, Abū Kāmil's work was a key part of furthering the development of algebra.

Algebra is an essential part of mathematics. To go further in the study of mathematics, we must develop a good foundation in algebra first. After establishing a good understanding of the basic arithmetic operations, we can then use the algebraic version of these operations to solve more complicated problems and learn more difficult mathematics. Throughout this process, we continue to build upon the algebra we know to further our knowledge. Abū Kāmil provides us with many problems to learn from in his *Book on Algebra*. By looking at a few problems from this book, we can begin to understand the techniques and methods he used to solve them. The *Book on Algebra* is where he shares the work he did to build upon the work of al-Khwārizmī.

The content of the work is the application of algebra to geometrical problems... The algebra contains 69 problems which include many of the 40 problems considered by al-Khwārizmī,

but with a rather different approach to them (O'Connor & Robertson, 1999).

Of the 69 problems, I will look at three that show these methods.

The book was first written in Arabic by Abū Kāmil and later translated into Hebrew by Mordecai Finzi (c.1473). Not much is known about the translator other than that he found Abū Kāmil's work of significant importance. Martin Levey then translated Mordecai Finzi's Hebrew translation into English in 1966. In the Preface, Martin Levey explains his reason for wanting to translate the work of Abū Kāmil:

Abū Kāmil not only was original in his algebraic thinking but, perhaps more importantly, he was also instrumental in the ordering of a new philosophy of science which wedded theory to practice. His integrating of the practical Babylonian algebra with the more theoretical Greek approach was the first such detailed and sound attempt. I have endeavored in this volume to point out the significant elements in this fusion and to demonstrate the areas in which the Muslims were true innovators in medieval mathematics. In the translation I have, therefore, placed the primary emphasis on mathematical ideas, rather than on literary values, since this will be the most useful rendering for students of medieval mathematics (Abū Kāmil et al., 1966, p. xi).

Both Mordecai Finzi and Martin Levey believed that Abū Kāmil's work was important enough to mathematics that they took on the task of translating it. Martin Levey even praises Mordecai Finzi's translation and its thoroughness. "... I considered it most worthwhile to present the near-literal translation of the Hebrew text rather than of the Arabic or Latin. This is a tribute to the literary and mathematical abilities of the translator into Hebrew, Mordecai Finzi" (Abū Kāmil et al., 1966, p. 11). They gave people the ability to easily study the work of Abū Kāmil, and now we can learn from a great mathematician.

Abū Kāmil's influence extended beyond Egypt. He influenced a great many mathematicians. Looking at the work done by Leonardo Pisano (Fibonacci) (c. 1202):

Leonardo leaned heavily on Abū Kāmil, borrowing the latter's problems, directly and indirectly. He frequently changed the constant term in an equation to improve upon the practicalities of solution, but of Abū Kāmil's sixty-nine problems, many are to

be found in Leonardo, complete or in part (Abū Kāmil et al., 1966, p. 6).

Al-Karajī (c. 1010) also found inspiration from Abū Kāmil's work.

Al-Karajī owed much to Abū Kāmil. He took over intact the geometrical explanations of Abū Kāmil's quadratic equations and also the direct solutions for the square. Many of his problems came basically from Abū Kāmil (Abū Kāmil et al., 1966, p. 6).

Abū Kāmil's work benefited the mathematicians of the past, and his work will continue to influence mathematicians.

I have first explicated problem number seven from the translation in the book, *The Algebra of Abū Kāmil* (Abū Kāmil et al., 1966). In this problem, we can see where he employed methods from al-Khwārizmī and Diophantus. First, he shows the method in which al-Khwārizmī solved the problem. Then, he shows the method in which Diophantus solved the problem. Finally, he provides his own solution. All illustrations and comments in [square brackets] are mine. All comments in <angle brackets> are from the translator Martin Levey.

<No. 7> If one should ask that 10 be divided [as a sum] into two parts, multiply every part by itself and subtract the product of the smaller part from the product of the larger; there remains 80. [Find the "parts".]

[First Solution as al-Khwārizmī did (Abū Kāmil et al., 1966, p. 14)]

The procedure for this is that one lets the smaller part be a thing $[x]$, and the larger, 10 minus a thing $[10 - x]$. Multiply 10 minus a thing [the larger part] by itself to get 100 and a square minus 20 things.

$$[(10 - x)^2 = 100 + x^2 - 20x]$$

There remains 100 minus 20 things equal to 80. ["subtract the product of the smaller part from the product of the larger; there remains 80":

$$(100 + x^2 - 20x) - x^2 = 100 - 20x = 80]$$

Complete the 100 by adding 20 things to the 80; it gives 20 things plus 80 equal to 100.

$$[100 - 20x = 80]$$

$$100 = 20x + 80]$$

Subtract 80 from 100 to give 20 equal to 20 things.

$$[100 = 20x + 80$$

$$20 = 20x]$$

The thing $[x]$ is equal to 1, the smaller part.

$$[20x = 20$$

$$x = 1]$$

The larger, 9, is the remainder from 10.

$$[10 - x = 10 - 1 = 9]$$

[Second Solution as Diophantus did (Abū Kāmil et al., 1966, p. 14)]

If it is desired, the larger part is taken as the thing $[x]$, and the smaller, 10 minus a thing $[10 - x]$. Subtract 100 and a square minus 20 things [which is $(10 - x)^2$] from a square. There remains 20 things minus 100. ["subtract the product of the smaller part from the product of the larger; there remains 80":

$$x^2 - (100 + x^2 - 20x) = 20x - 100 = 80]$$

Complete the 20 things with 100 and add it $[100]$ to 80 to give 180. It is equal to 20 things.

$$[20x - 100 = 80$$

$$20x = 180]$$

The thing $[x]$, the larger part, is equal to 9.

$$[20x = 180$$

$$x = 9]$$

The remainder of the 10 is the smaller part, or 1.

$$[10 - x = 10 - 9 = 1]$$

[Third Solution by Abū Kāmil himself]

If it is desired, divide the 10 into two parts, divided according as arithmeticians divide the 10 [as a sum: $a + b = 10$]. Briefly, the procedure is that you differentiate simply the larger part from the smaller part, regarding questions that arise. This is as $\frac{1}{2}$ the roots [namely $\frac{1}{2} \cdot 10 = 5$]; make one part as a thing $[x]$ plus 5 [$b = x + 5$, the larger part], and the other part as 5 minus a <thing> [$a = 5 - x$, the smaller part]. Multiply each one by itself and subtract the result of the smaller part from the result of the larger; 20 things remain equal to 80.

$$\begin{aligned}
 & [(x+5)^2 - (5-x)^2] \\
 &= (x^2 + 5x + 5x + 25) - (25 - 5x - 5x + x^2) \\
 &= x^2 + 10x + 25 - 25 + 10x - x^2 \\
 &= 20x = 80
 \end{aligned}$$

A thing is equal to 4.

$$\begin{aligned}
 & [20x = 80 \\
 & \quad x = 4]
 \end{aligned}$$

Add the 4 [the thing] to the 5 to give 9 for the larger part.

$$[b = x + 5 = 4 + 5 = 9]$$

Subtract 4 [the thing] from 5 to give 1 as the smaller part.

$$[a = 5 - x = 5 - 4 = 1]$$

Here, he builds upon the methods of al-Khwārizmī and Diophantus by providing a third solution that shows yet another way of solving the problem. Al-Khwārizmī and Diophantus both use subtraction when separating the larger and the smaller parts from one another. However, Abū Kāmil uses division to divide the parts. Both methods produce the same result. We can see that one problem has many solution paths that all lead to the same answer.

I have next explicated problem ten from *The Algebra of Abū Kāmil* (Abū Kāmil et al., 1966). Again, all illustrations and comments in [square brackets] are mine. All comments in <angle brackets> are from the translator Martin Levey.

<No. 10> A problem is if one says that 50 was divided [equally] among a certain number [say x] of men [the share for each man is $\frac{50}{x}$]. Increase the number of men by 3 [to $x + 3$] and divide 50 [equally] among all of them [the share for each man is now $\frac{50}{x+3}$]. For every one of the last ones, it [their share $\frac{50}{x+3}$] comes out to less than what would come out for each of the first ones by $3 \frac{3}{4} [\frac{50}{x} - \frac{50}{x+3} = 3 \frac{3}{4}]$. [Find the "certain number of men" x .]

[Solution]

The method here is that you multiply the first number of men $[x]$ by the difference $[3\frac{3}{4}]$ between what comes out [as shares] for the former and the latter.

[The difference in shares is

$$\frac{50}{x} - \frac{50}{x+3} = 3\frac{3}{4}.$$

Multiply by x :

$$50 - \frac{50x}{x+3} = 3\frac{3}{4}x.]$$

Then <divide> the result of this product by the excess of the latter over the former men $[3]$ and then multiply the quotient by the number of latter men $[x + 3]$; what results is the share.

[Divide by 3:

$$\frac{50 - \frac{50x}{x+3}}{3} = 1\frac{1}{4}x.$$

Multiply by $x + 3$:

$$\frac{50(x+3) - 50x}{3} = 1\frac{1}{4}x(x+3)$$

$$50 = 1\frac{1}{4}x(x+3).$$

$$\text{The shares are therefore } \frac{50}{x} = 1\frac{1}{4}(x+3) \text{ and } \frac{50}{x+3} = 1\frac{1}{4}x.$$

It seems to be that from this quadratic equation we can solve for x .

Modern Solution:

$$50 = 1\frac{1}{4}x(x+3)$$

$$50 = 1\frac{1}{4}x^2 + 3\frac{3}{4}x$$

$$0 = 1\frac{1}{4}x^2 + 3\frac{3}{4}x - 50$$

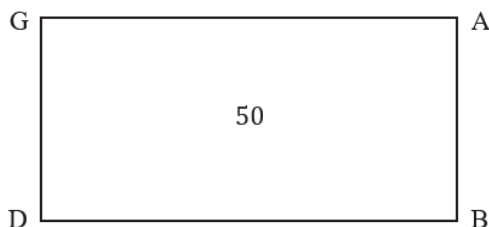
$$= 1\frac{1}{4}(x^2 + 3x - 40)$$

$$= 1\frac{1}{4}(x-5)(x+8).$$

So, the positive solution is $x = 5$ men.]

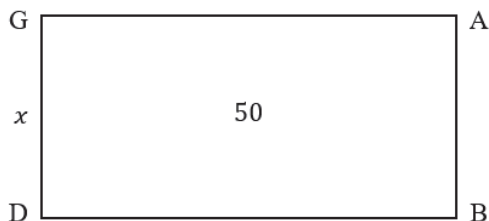
[First proof of “the method” by geometry]

I shall explain the rule for this method. Take the divided number, 50 as a surface $ABGD$:



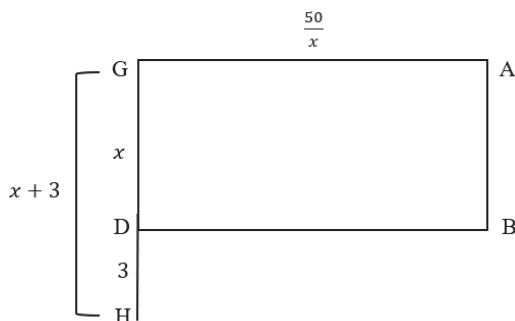
The former men $[x]$ equals line GD . There comes [as a share] to every one of the first men, line AG $[\frac{50}{x}]$, since the product of AG by line GD is [the area of] surface [also called] GB $[\frac{50}{x} \cdot x = 50]$.

$$\frac{50}{x}$$

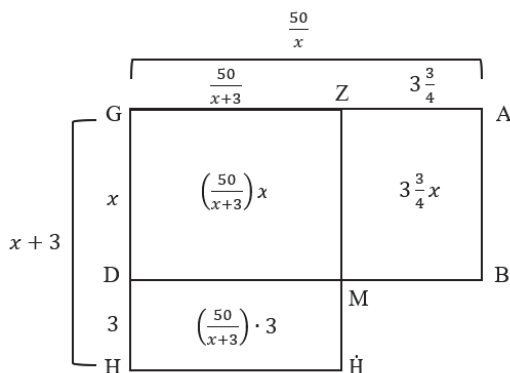


When [the area of] surface $ABGD$ is divided by GD , which is the number of former men $[x]$, there comes to every one of them, [the share] line AG . Add

line DH for the 3 men which were added to the former men denoted by line GD ; it will be line GH , equal to the latter men.



You make [the area of a new rectangle] $GZHH$ equal to 50 and divide it by line GH , the number of the latter men $[x + 3]$ to get [the share] line GZ . This is what is the share for every one of the second men $[\frac{50}{x+3} = GZ]$. Line AZ is $3\frac{3}{4}$ since it is the difference between what are the shares of the former and latter men.



Multiply the number of the former [men], line ZM , for it is equal to DG [$ZM = DG = x$], by line AZ [$= 3\frac{3}{4}$] which is the excess of the share of the former over that of the latter; it is [the area of] surface BZ [= $ABZM$].

$$[ZM \cdot AZ = \text{area } BZ]$$

[The area of] Surface $\langle BZ \rangle$ equals [the area of] surface $\langle DH \rangle$ since [the area of] surface AD equals [the area of] surface GH equals 50. [The area of] Surface GM is common [to surfaces AD and GH] and so there remains [the area of] surface ZB equal to [the area of] surface DH .

Divide [the area of] surface DH by line DH , or 3; its value [3] is the difference between the former and latter men; the quotient is line DM which is equal to line GZ [$= \frac{50}{x+3}$] or what is the share for each of the latter [a correction from "former"].

$$[\frac{\text{area } DH}{DH} = DM = GZ]$$

[The area of] Surface GH is 50.

[The area of surface ZB equals the area of surface DH which produces the equation

$$(\frac{50}{x+3}) 3 = 3\frac{3}{4}x.$$

Divide by 3:

$$\frac{50}{x+3} = 1\frac{1}{4}x.$$

Multiply by $x + 3$:

$$50 = 1\frac{1}{4}x(x + 3) \text{ just as the method claims.}]$$

This is what it was desired to prove.

[Second proof of "the method"]

After this explanation [the first proof], I shall explain the result in a method where the former men are taken as a thing $[x]$. Multiply it by the difference which is $3\frac{3}{4}$ to get $3\frac{3}{4}$ things [$3\frac{3}{4}x$]. Divide it by 3 which is the difference between the former and latter men; it comes to $1\frac{1}{4}$ things.

$$[\frac{3\frac{3}{4}x}{3} = 1\frac{1}{4}x.]$$

Multiply it by the latter men which is a thing plus 3 [$x + 3$] to get $1\frac{1}{4}$ squares plus $3\frac{3}{4}$ things – equal to 50.

$$[1\frac{1}{4}x(x + 3) = 1\frac{1}{4}x^2 + 3\frac{3}{4}x = 50.]$$

To see why this is 50, repeat these calculations beginning with $\frac{50}{x} - \frac{50}{x+3}$ in

$$\begin{aligned} & \text{place of } 3\frac{3}{4}: \\ & \frac{\left(\frac{50}{x} - \frac{50}{x+3}\right)x}{3}(x+3) \\ & = \frac{1}{3}(50(x+3) - 50x) \\ & = 50. \end{aligned}$$

Return everything to 1 square [divide both sides by $1\frac{1}{4}$] to get a square plus 3 things equal to 40.

$$\begin{aligned} & [1\frac{1}{4}x^2 + 3\frac{3}{4}x = 50 \\ & x^2 + 3x = 40.] \end{aligned}$$

Take $\frac{1}{2}$ the things [half of 3], or $1\frac{1}{2}$, and multiply it by itself and add the result to 40 to get $42\frac{1}{4}$.

$$[(1\frac{1}{2})(1\frac{1}{2}) + 40 = 42\frac{1}{4}]$$

Take its root to get $6\frac{1}{2}$ and subtract $1\frac{1}{2}$, which is $\frac{1}{2}$ the things [3], from it; there remains the number of the former men, 5.

$$\begin{aligned} & [\sqrt{42\frac{1}{4}} = 6\frac{1}{2} \\ & 6\frac{1}{2} - 1\frac{1}{2} = 5] \end{aligned}$$

[This process is completing the square on $x^2 + 3x = 40$:

$$\begin{aligned} x^2 + 3x + \left(1\frac{1}{2}\right)^2 &= 40 + \left(1\frac{1}{2}\right)^2 \\ \left(x + 1\frac{1}{2}\right)^2 &= 42\frac{1}{4} \\ x + 1\frac{1}{2} &= 6\frac{1}{2} \\ x &= 5. \end{aligned}$$

Martin Levey describes the differences in solving the problem from al-Khwārizmī and from Abū Kāmil:

The rule given by Abū Kāmil in problem 10 is the same as that given by al-Khwārizmī with a slight difference. The procedure in al-Khwārizmī is: take $c \cdot x$, then $cx(x+b)$, then $\frac{cx(x+b)}{b} = a$. In Abū

Kāmil, it is: take $c \cdot x$, then $\frac{cx}{b}$, then $\frac{cx(x+b)}{b} = a$. Both want to emphasize that the original number to be divided is equal to a (Abū Kāmil et al., 1966, p. 16).

In the explication here, $c = 3\frac{3}{4}$, $b = 3$, and $a = 50$.

Abū Kāmil builds upon the algebra we know and shows a proof of this rule with geometry. With the use of the Babylonian technique of completing the square, we see how his method is proven true and gives the desired solution. The algebra used allows us to understand the geometry within the problem. He has thus furthered our knowledge of mathematics with his use of geometry and algebra.

Finally, I have explicated problem number nineteen from *The Algebra of Abū Kāmil* (Abū Kāmil et al., 1966). In this problem, Abū Kāmil gives three solutions. Once again, all illustrations and comments in [square brackets] are mine. All comments in <angle brackets> are from the translator Martin Levey.

<No. 19> One says: 3 [square] roots of a magnitude $[x]$ plus 4 roots of the difference between the magnitude and the 3 roots equals 20. [Find the magnitude x .]

$$[3\sqrt{x} + 4\sqrt{x - 3\sqrt{x}} = 20]$$

[First Solution]

For this procedure, make the magnitude a square $[x = a^2]$. Say, 3 of its roots $[a]$ plus 4 roots of the magnitude $[a^2]$ less the 3 roots equals <20>.

$$[3a + 4\sqrt{a^2 - 3a} = 20]$$

Twenty less 3 roots $[a]$ equals 4 roots of the difference of the magnitude $[a^2]$ and 3 roots $[a]$.

$$[3a + 4\sqrt{a^2 - 3a} = 20]$$

$$20 - 3a = 4\sqrt{a^2 - 3a}$$

<Its $\frac{1}{4}$ equals the root of the difference of the magnitude $[a^2]$ and the 3 roots $[a]$ > and equals 5 minus $\frac{3}{4}$ a root $[a]$.

$$[20 - 3a = 4\sqrt{a^2 - 3a}]$$

$$\frac{1}{4}(20 - 3a) = \frac{1}{4}(4\sqrt{a^2 - 3a})$$

$$5 - \frac{3}{4}a = \sqrt{a^2 - 3a}$$

Multiply it by itself to give $\frac{1}{2}$ a magnitude $[a^2]$ plus $\frac{1}{2}$ of $\frac{1}{8}$ a magnitude $[a^2]$ plus 25 less $7\frac{1}{2}$ roots $[a]$ equal to a magnitude $[a^2]$ less 3 roots $[a]$.

$$\begin{aligned} [5 - \frac{3}{4}a] [5 - \frac{3}{4}a] &= (\sqrt{a^2 - 3a})(\sqrt{a^2 - 3a}) \\ 25 - \frac{15}{4}a - \frac{15}{4}a + \frac{9}{16}a^2 &= a^2 - 3a \\ 25 - 7\frac{1}{2}a + (\frac{1}{2} + \frac{1}{2} \cdot \frac{1}{8})a^2 &= a^2 - 3a \end{aligned}$$

Complete it with $7\frac{1}{2}$ roots and add it to the magnitude $[a^2]$ minus 3 roots to give the magnitude $[a^2]$ plus $4\frac{1}{2}$ roots equal to $\frac{1}{2}$ a magnitude $[a^2]$ plus $\frac{1}{2}$ of $\frac{1}{8}$ a magnitude $[a^2]$ plus 25.

$$\begin{aligned} [25 - 7\frac{1}{2}a + \frac{1}{2}a^2 + \frac{1}{2} \cdot \frac{1}{8}a^2] &= a^2 - 3a \\ \frac{1}{2}a^2 + \frac{1}{2} \cdot \frac{1}{8}a^2 + 25 &= a^2 - 3a + 7\frac{1}{2}a \\ \frac{1}{2}a^2 + \frac{1}{2} \cdot \frac{1}{8}a^2 + 25 &= a^2 + 4\frac{1}{2}a \end{aligned}$$

Subtract $\frac{1}{2}$ a magnitude $[a^2]$ and $\frac{1}{16}$ a magnitude $[a^2]$ from a whole magnitude $[a^2]$. There remains $\frac{3}{8}$ and $\frac{1}{16}$ a magnitude $[a^2]$ plus $4\frac{1}{2}$ roots $[a]$ equal to 25.

$$\begin{aligned} [\frac{1}{2}a^2 + \frac{1}{2} \cdot \frac{1}{8}a^2 + 25] &= a^2 + 4\frac{1}{2}a \\ 25 &= 4\frac{1}{2}a + a^2 - \frac{1}{2}a^2 - \frac{1}{16}a^2 \\ 25 &= \frac{3}{8}a^2 + \frac{1}{16}a^2 + 4\frac{1}{2}a \end{aligned}$$

You complete the magnitude ["complete the square"]; multiply by $2\frac{2}{7}$ to give a magnitude $[a^2]$ plus $10\frac{2}{7}$ things $[a]$ equal to $57\frac{1}{7}$.

$$\begin{aligned} [25 &= \frac{3}{8}a^2 + \frac{1}{16}a^2 + 4\frac{1}{2}a] \\ 2\frac{2}{7}(25) &= 2\frac{2}{7}(\frac{3}{8}a^2 + \frac{1}{16}a^2 + 4\frac{1}{2}a) \\ 57\frac{1}{7} &= a^2 + 10\frac{2}{7}a. \end{aligned}$$

<Multiply $\frac{1}{2}$ the roots $[10\frac{2}{7}]$ by itself to get $26\frac{3}{7}$ and $\frac{1}{7}$ of $\frac{1}{7}$.

$$\begin{aligned} [\frac{1}{2}(10\frac{2}{7}) \cdot \frac{1}{2}(10\frac{2}{7})] \\ = 5\frac{1}{7} \cdot 5\frac{1}{7} \end{aligned}$$

$$\begin{aligned}
&= \left(5 + \frac{1}{7}\right) \cdot \left(5 + \frac{1}{7}\right) \\
&= 25 + \frac{10}{7} + \frac{1}{7} \cdot \frac{1}{7} \\
&= 26\frac{3}{7} + \frac{1}{7} \cdot \frac{1}{7}
\end{aligned}$$

This is completing the square on the right of the earlier equation

$$57\frac{1}{7} = a^2 + 10\frac{2}{7}a.]$$

<Add it to $57\frac{1}{7}$ to get $83\frac{4}{7}$ and $\frac{1}{7}$ of $\frac{1}{7}$.>

$$[57\frac{1}{7} + 26\frac{3}{7} + \frac{1}{7} \cdot \frac{1}{7} = 83\frac{4}{7} + \frac{1}{7} \cdot \frac{1}{7}]$$

Take its root to give $9\frac{1}{7}$.

$$[\sqrt{83\frac{4}{7} + \frac{1}{7} \cdot \frac{1}{7}} = 9\frac{1}{7} \text{ since } \left(9 + \frac{1}{7}\right)\left(9 + \frac{1}{7}\right) = 81 + \frac{18}{7} + \frac{1}{7} \cdot \frac{1}{7} = 83\frac{4}{7} + \frac{1}{7} \cdot \frac{1}{7}]$$

Subtract $\frac{1}{2}$ the roots, $5\frac{1}{7}$, from it; there remains 4; it is the root of the magnitude. [So, the magnitude $x = 16$.]

[Second Solution]

If you wish, you say, 3 roots of a square plus 4 roots of the difference of the square less 3 roots, equals 20.

$$\begin{aligned}
[3\sqrt{x^2} + 4\sqrt{x^2 - 3\sqrt{x^2}} &= 20 \\
3x + 4\sqrt{x^2 - 3x} &= 20]
\end{aligned}$$

Four roots of the difference of the square less 3 roots equals the root of the difference of 16 <squares> less 48 roots. [$4\sqrt{x^2 - 3x} = \sqrt{16x^2 - 48x}$]

Multiply 20 minus 3 roots by itself to get 16 squares less 48 roots.

$$\begin{aligned}
[3x + 4\sqrt{x^2 - 3x} &= 20 \\
20 - 3x &= 4\sqrt{x^2 - 3x} \\
20 - 3x &= \sqrt{16x^2 - 48x} \\
(20 - 3x)(20 - 3x) &= (\sqrt{16x^2 - 48x})(\sqrt{16x^2 - 48x}) \\
400 - 120x + 9x^2 &= 16x^2 - 48x]
\end{aligned}$$

Do as I have related [meaning "complete the square" as in the First Solution];

$$\begin{aligned}
[400 - 120x + 9x^2 &= 16x^2 - 48x \\
400 &= 7x^2 + 72x \\
\frac{1}{7}(400) &= \frac{1}{7}(7x^2 + 72x)
\end{aligned}$$

$$57\frac{1}{7} = x^2 + 10\frac{2}{7}x$$

Complete the square as in the First Solution:

$$\begin{aligned} & \frac{1}{2}\left(10\frac{2}{7}\right) \cdot \frac{1}{2}\left(10\frac{2}{7}\right) \\ &= 5\frac{1}{7} \cdot 5\frac{1}{7} \\ &= \left(5 + \frac{1}{7}\right) \cdot \left(5 + \frac{1}{7}\right) \\ &= 25 + \frac{10}{7} + \frac{1}{7} \cdot \frac{1}{7} \\ &= 26\frac{3}{7} + \frac{1}{7} \cdot \frac{1}{7} \end{aligned}$$

Add it to $57\frac{1}{7}$:

$$57\frac{1}{7} + 26\frac{3}{7} + \frac{1}{7} \cdot \frac{1}{7} = 83\frac{4}{7} + \frac{1}{7} \cdot \frac{1}{7}$$

Take the root:

$$\sqrt{83\frac{4}{7} + \frac{1}{7} \cdot \frac{1}{7}} = 9\frac{1}{7}$$

Subtract $5\frac{1}{7}$:

$$9\frac{1}{7} - 5\frac{1}{7} = 4]$$

the square [of 4] comes to 16.

[Third Solution]

If it is desired, make the remainder of the square [the magnitude as in the First Solution: $x = a^2$], from which is subtracted 3 roots of a square, equal to a square.

$$[a^2 - 3a = b^2]$$

Take 4 of its roots to give 4 roots.

$$[a^2 - 3a = b^2]$$

$$\sqrt{a^2 - 3a} = b$$

$$4\sqrt{a^2 - 3a} = 4b]$$

One knows that when one adds these 4 roots to 3 roots of a square, it is 20 [as stated in the First Solution: $3a + 4b = 20$]. But, 3 roots of the square is 20 minus 4 roots [$3a = 20 - 4b$]; a root of the square is $6\frac{2}{3}$ less $1\frac{1}{3}$ roots.

$$[\frac{1}{3}(3a) = \frac{1}{3}(20 - 4b)]$$

$$a = 6\frac{2}{3} - 1\frac{1}{3}b]$$

Multiply it by itself to give $1\frac{7}{9}$ a square plus $44\frac{4}{9}$ minus $17\frac{7}{9}$ things equal to the desired square.

$$[a^2 = (6\frac{2}{3} + 1\frac{1}{3}b)^2 \\ a^2 = 44\frac{4}{9} - 17\frac{7}{9} + 1\frac{7}{9}b^2]$$

Subtract 3 of its roots from it, equal to 20 less 4 roots, to give $24\frac{4}{9}$ plus $1\frac{7}{9}$ squares less <13> $\frac{7}{9}$ roots equal to a square.

$$[b^2 = a^2 - 3a \\ = a^2 - (20 - 4b) \\ = (44\frac{4}{9} - 17\frac{7}{9}b + 1\frac{7}{9}b^2) - (20 - 4b) \\ = 24\frac{4}{9} + 1\frac{7}{9}b^2 - 13\frac{7}{9}b]$$

Do as I have related. [Meaning "complete the square" as in the First and Second Solutions:

$$b^2 = 24\frac{4}{9} + 1\frac{7}{9}b^2 - 13\frac{7}{9}b \\ 0 = \frac{7}{9}b^2 - 13\frac{7}{9}b + 24\frac{4}{9} \\ 0 = b^2 - \frac{124}{7}b + \frac{220}{7}]$$

The thing comes to 2 [the other root is: $b = \frac{110}{7} = 15\frac{5}{7}$]; it is the root $[b]$ of what remains of the other square from which 3 of its roots were subtracted. Multiply it by itself to get 4 which is what $[b^2]$ remains of the square. Take 4 roots $[b]$ of 4, or 8, and subtract it from 20 to give 12, equal to 3 roots of the square.

$$[3a + 4b = 20 \\ 3a = 20 - 4b. \\ \text{Substituting } b = 2: \\ 3a = 12.]$$

Its $\frac{1}{3}$ is the root of the square, 4 [= a]; the square desired is 16.

Abū Kāmil's solutions to problems seven, ten, and nineteen show his way of using different techniques. In problem number seven, he makes use of al-Khwārizmī's method in the beginning. He then goes on to use Diophantus's method for solving the problem. He "stated that his second method can be easily used in the majority of problems" (Abū Kāmil et al.,

1966, p. 14). In problem number ten, he uses geometry to explain his work and prove why he got the answer he did. The Babylonian method of completing the square can be seen in this geometric proof of problem ten. He combines this method with the Greek method of using geometric shapes and lines labeled with letters to represent different variables. He then algebraically proves why his work is correct. By seeing how he applies various methods to find a solution, a better understanding is reached of how to apply and combine what you know to solve a problem. He demonstrates how there are more ways to solve a problem than only one way. In problem number nineteen, he works with roots and squares to get to his desired conclusion. Here, he expands upon al-Khwārizmī by providing three solutions to this problem. The entirety of his work shows how he furthers the development of algebra by using these various techniques. "The result of this approach [his work] was a welding of Babylonian and Greek algebra, the first time such a fusion had ever been attempted" (Abū Kāmil et al., 1966, p. 20).

After looking at these three problems, we can see why many mathematicians understood the importance of Abū Kāmil's work and the lasting influence he had on mathematics, especially in the field of algebra. After al-Khwārizmī, the father of algebra, there was Abū Kāmil. In his use and highly original combination of the known methods of the time, we can see the inspiration other mathematicians took from his work and how far his influence spread. Thanks to the translations of Mordecai Finzi and Martin Levey, his work is able to reach others. "Thus, by using the [Finzi] Hebrew text, Levey concluded that the reader would have a clearer idea of abū Kāmil's intentions. And indeed when one reads the translation together with the notes and Introduction he feels confident that he has penetrated the thought of this master Arabic algebraist" (Abū Kāmil et al., 1966, p. x).

Works Cited

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Abraham de Moivre's Examination of Chance in the Game of Bassette

Dalton Smith

Abraham de Moivre was a mathematician that lived from 1667 to 1754. During his life, he contributed greatly to the fields of analytical geometry and probability theory. He published *The Doctrine of Chances* in 1718, which would be his most famous book. This text deals with problems involving chance, popular games of the time, and also includes formulas for annuities. This essay will examine the mathematics for a popular game of the eighteenth century known as Bassette by explicating Problem XII of *The Doctrine of Chances*. The explication of Bassette will give insight to the losses of gamblers during this time period. We will then conclude by comparing those losses against those of modern popular games in order to see the cultural differences and similarities between the past and present.

Although Abraham de Moivre spent most of his life in England, he was born in France. His family was not wealthy, yet no expense was spared towards his education [Bellhouse and Genest]. He attended a Catholic School until he was eleven. This was notable, as he was from a Protestant family at a time when religious tolerance in France was especially poor. Eventually, de Moivre would enroll at the Protestant Academy in Sedan following an incident when one of his Catholic tutors boxed his ears after he asked for clarification on a problem [Bellhouse and Genest]. When the Academy was suppressed by the Roman Catholic clergy, de Moivre found tutors in Paris until religious persecution forced him to flee to England in 1686. During his time in England, he was forced to work as a private tutor. De Moivre's status as a foreigner would not allow him to hold a university position despite his friendship with many famous mathematicians, including Isaac Newton. In 1712, he was appointed to the Commission set up by the Royal Society to review the rival claims of Newton and Leibniz to be the discoverers of the calculus, likely because of his friendship with Newton [O'Connor and Robertson]. de Moivre published *The Doctrine of Chances* first in Latin in 1718 and later published the second edition in English in 1738. *The Doctrine of Chances*

contains insightful analyses of particular games played at the time, such as Pharaon and Bassette [Bellhouse and Genest]. Despite his mathematical success, his main income source as a tutor left him impoverished and his health waned in 1754. It is claimed that he calculated the day of his death by finding he was sleeping fifteen minutes longer each night and he predicted he would die on the day he slept for 24 hours [O'Connor and Robertson]. While he was sleeping for 20 hours a day, there is no primary source which corroborates this claim. De Moivre would pass in his sleep in 1754.

The origin of the game of Bassette is uncertain; however, there are claims that it was invented by a noble Venetian who was sentenced to exile because of its existence [Steinmetz 305-311]. Bassette eventually made its way over to France where it was considered only fit for persons of the highest rank. This was due to the great sums of money that were lost by players and won by dealers. It was seen as a lottery where the dealer had a great advantage over the players. Eventually King Louis XIV ordered that only sons of noblemen could be dealers, as he thought whoever kept the bank would make a sizable fortune in a short time [Steinmetz 305-311]. Many families were undone by this game, so King Louis XIV issued edicts that entailed severe penalties for those who played. Every offender was to be fined 1000 livres for playing and 6000 livres for hosting a game [Steinmetz 305-311]. (In 1750, a skilled laborer made around 1800 livres per year and a Governor made around 12000 livres per year [Lalonde].) King Louis XIV would ban Bassette in 1691. Eventually Bassette made its way to England, where it became a different game to how it was played in France. In England, there were no restrictions on the game, so commoners and those of court both participated. The wealthier patrons of the court tended to wager higher amounts, sometimes, though rarely, winning an amount more than the bankers had. This would cause the bankers to owe a sum they could not pay and put them in an uncomfortable situation. But generally the players, rich and poor alike, would lose vast amounts [Cotton 30-39]. After some time, commoners felt the negative financial effects of Bassette, so coffee-houses and other public places decided to set a two-penny or three-penny bank to play small games, rather than not play at all [Cotton 30-39]. This kept the thrill of gambling alive for the working class without giving them an overwhelming loss. Eventually, the game became subject to de Moivre's

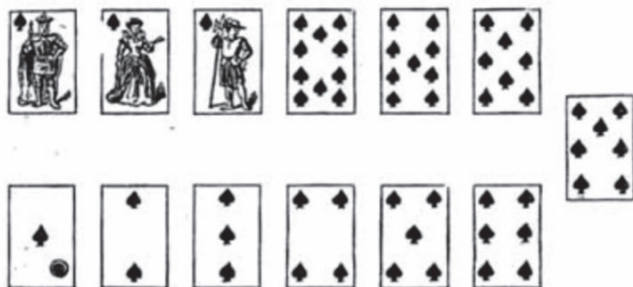
attention when he estimated the loss of the player. This analysis of the loss is contained in Problem XII of the 1738 second edition of *The Doctrine of Chances* which will be explicated below.

All illustrations and comments in [square brackets] are mine. I have changed the eighteenth century "long s" to the modern "s." The eighteenth century grouping symbol $n-1$ has been replaced by parentheses as " $(n-1)$." In de Moivre's calculations for the number one he uses Roman numeral "I" which I have replaced with "1." The Latin abbreviation "viz" means "namely," "which is" or "as follows." The term "&c" means et cetera which means "and so on" and the term "Unity" means the value "1." Notations such as " $n*n-1$ " have been replaced by " $n(n-1)$ " and the multiplication symbol "x" has been replaced by "*."

The Game of Bassette
Rules of the Play.

The Dealer, otherwise called the *Banker*, holds a pack of 52 Cards, and having shuffled them, he turns the whole pack at once, so as to discover [see] the last Card [the only Card in view]; after which he lays down by couples [two cards at a time] all the Cards.

The Setter, otherwise called the *Ponte* [player or gambler], has 13 Cards in his hand [not from the banker's pack], one of every [numerical] sort, from the King to the Ace [K(13), Q(12), J(11), 10, 9, 8, 7, 6, 5, 4, 3, 2, A(1)], which 13 Cards are called a *Book* [the card's suit is not relevant to the game]; out of this Book, the *Ponte* takes [chooses] one Card or more at pleasure, upon which he lays a Stake [bet]. [The *Ponte* places his bet onto a card from his book or upon a cutout (see fig. 1).]



[Figure 1. cutout upon which the Ponte may place his bet.; Nelson, Walter. *THE MERRY GAMESTER: A Practical Guide to the Most Popular Games from Ancient Times to 1901.*]

The Ponte may at his choice, either lay down his Stake before the pack is turned, or immediately after it is turned; [at which time he can see the last card in the pack now in view] or after any number of Couples are drawn.

The first case being particular, [in which the Ponte lays down his stake before the pack is turned] shall be calculated by itself [later after the solution of the fourth case]; but the other two [cases]; being comprehended under the same Rules, we shall begin with them.

Supposing the Ponte to lay down his Stake [immediately] after the Pack is turned, I call 1, 2, 3, 4, 5, &c. the places of those Cards which follow the Card in view [at the bottom of the pack], either immediately after the pack is turned or after any number of couples are drawn.

If the Card upon which the Ponte has laid a Stake comes out in any odd place, except the first, [namely places 3, 5,... which occurs after the first couple is drawn] he wins a Stake equal to his own.

If the Card upon which the Ponte has laid a Stake comes out in any even place, except the second, [namely 4, 6,...] he loses his Stake.

If the Card of the Ponte comes out in the first place, he neither wins nor loses, but takes his own Stake again.

If the Card of the Ponte comes out in the second place, he does not lose his whole Stake, but only a part of it, viz. one half, which to make the Calculation more general we will call y . In this case the Ponte is said to be Faced.

When the Ponte chuses [*sic*] to come in after any number of Couples are down ; if his [numerical] Card happens to be but once in the [remaining, not drawn] Pack, and is the very last of all [to appear], there is an exception from the general Rule ; for tho' it comes out in an odd place [because the "places" of cards are numbered as those which "follow" the initial "card in view", after "any number of couples are down" there are an odd number of cards in the remaining pack, so the "very last of all" card will have an odd place number], which should intitle him to win a Stake equal to his own, yet he neither wins nor loses from that circumstance, but takes back his own Stake.

PROBLEM XII

To estimate at Bassette the Loss of the Ponte under any circumstance of Cards remaining in the Stock [pack], when he lays his Stake, and of any number of times that his [numerical] Card is repeated in the [remaining] Stock.

[Solution]

The Solution of this Problem containing four cases, viz. of the Ponte's [numerical] Card being once, twice, three or four times in the Stock [Pack]; we shall give the Solution of all these cases severally.

SOLUTION of the first Case.

[The numerical card being wagered on only has one suit remaining in the pack of cards.]

The Ponte has the following chances to win or lose; according to the place his Card is in.

[The first column represents the "place his card is in". The last column is the multiplier of the stake as a win or a loss.]

1	1 chance for winning	0
2	1 chance for losing	y
3	1 chance for winning	1
4	1 chance for losing	1
5	1 chance for winning	1
6	1 chance for losing	1
*	1 chance for winning	0

[Figure 2.]

It appears by this Scheme that he has as many Chances to win 1 as to lose 1, and that there are two Chances for neither winning or losing, viz. the first and the last and therefore [what remains is] that his only [net] Loss is upon account of his being *Faced* [row 2]: from which it is plain that the number of Cards [remaining in the pack] covered by that [card] which is in view being called n , [for example, at the start of the game $n=48$] his Loss will be $\frac{y}{n}$, or $\frac{1}{2n}$, supposing $y = \frac{1}{2}$. [He will lose half his stake if he is faced, but the chance he is faced will be $\frac{1}{n}$, so the expected amount he will lose of his stake will be $\frac{y}{n}$, because he will not be faced every game.] [End of the first case.]

SOLUTION of the second Case.

[The numerical card being wagered on has two suits remaining in the deck of cards.]

By the first Remark belonging to the x^{th} [tenth] Problem [which will be discussed later] it appears that the Chances which the Ponte has to win or lose are proportional to the numbers $n-1$, $n-2$, $n-3$, &c. Wherefore his Chances for winning and losing may be expressed by the following Scheme.

1		n – 1 chances for winning	0
2		n – 2 chances for losing	y
3		n – 3 chances for winning	1
4		n – 4 chances for losing	1
5		n – 5 chances for winning	1
6		n – 6 chances for losing	1
7		n – 7 chances for winning	1
8		n – 8 chances for losing	1
9		n – 9 chances for winning	1
*		1 chance for losing	1

[Figure 3.]

Now setting aside the first and second number of Chances, it will be found that the difference between the 3^d and 4th is =1, $[(n - 3) - (n - 4) = 1]$ that the difference between the 5th and 6th is also =1, $[(n - 5) - (n - 6) = 1]$ and that the difference between the 7th and 8th is also =1, $[(n - 7) - (n - 8) = 1]$ and so on. But the number of differences is $\frac{n-3}{2}$ [explained below in claim 1], and the Sum of All the Chances is $\frac{n}{1} * \frac{(n-1)}{2}$ [explained below in claim 2.]

$$\begin{aligned} \text{Wherefore the Gain of the Ponte is } & \frac{\frac{n-3}{n(n-1)}}{\frac{n-3}{2}}; \left[\frac{\text{number of differences}}{\text{sum of all the chances}} = \right. \\ & = \frac{\frac{n}{1} * \frac{(n-1)}{2}}{n(n-1)}. \end{aligned}$$

but his Loss upon account of the Face [row 2] is $y(n - 2)$ divided by $\frac{n(n-1)}{2}$ that is $\frac{y(2n-4)}{n(n-1)}$; hence it is to be concluded that his Loss upon the whole is $\frac{y(2n-4)-(n-3)}{n(n-1)}$ ["loss upon account of the Face" – "Gain"] or $\frac{1}{n(n-1)}$ supposing $y = \frac{1}{2}$.

[Claim 1]

That the number of differences is $\frac{n-3}{2}$ will be made evident from two considerations.

[Proof of Claim 1]

First, the series $n - 3, n - 4, n - 5, \&c.$ decreases in Arithmetic Progression [decreases by 1] the difference of its Terms being Unity, and the last Term also Unity, therefore the number of its Terms is equal to the first Term $n - 3$: but the number of differences is one half the number of Terms; therefore the number of differences is $\frac{n-3}{2}$.

Secondly, it appears by the x^{th} [tenth] problem that the number of all the Terms including the two first is always $b + 1$ [where b represents the number of cards in the pack that do not result in a win], but a in this case $= 2$, [a represents the number of cards in the pack that result in a win] therefore the number of all the Terms is $n - 1$ [where n is the number of cards remaining in the deck and

$$a + b = n$$

$$2 + b = n$$

$$b = n - 2$$

$$b + 1 = n - 1];$$

from which excluding the two first [the first card cannot be won and the second card is excluded because its value of a loss is y instead of 1], the number of remaining terms will be $n - 3$ and consequently the number of differences $\frac{n-3}{2}$.

[End of Proof of Claim 1]

[Claim 2]

That the Sum of all the Terms is $\frac{n(n-1)}{2}$, is evident also from two different considerations.

[Proof of Claim 2]

First in any Arithmetic Progression whereof the first Term is $n - 1$, the difference Unity, and the last term also Unity, the Sum of the Progression will be $\frac{n(n-1)}{2} [(n - 1) + (n - 2) + \dots + 2 + 1]$

Secondly, the series $\frac{2}{n(n-1)} * [(n - 1) + (n - 2) + (n - 3) + \dots]$

mentioned in the first Remark upon the tenth Problem, expresses the Sum of the Probabilities of winning which belong to the several Gamesters in the case of two white Counters [representing the two chances of winning], when the number of all the Counters in n . It therefore expresses likewise the Sum of the Probabilities of winning which belong to the Ponte and

Banker in the present case: but this Sum must always be equal to Unity, it being a certainty that the Ponte or Banker must win; supposing therefore that $n - 1 + n - 2 + n - 3, \&c.$ is S [= the sum of all the terms], we shall have the Equation $\frac{2S}{n(n-1)} = 1$, and therefore $S = \frac{n(n-1)}{2}$ [Since $(n - 1) + (n - 2) + \dots + 2 + 1 = S$, by the series from the tenth problem which must equal 1, we have

$$\frac{2}{n(n-1)} * S = 1$$

$$S = \frac{n(n-1)}{2}.]$$

[End of Proof of Claim 2]

[End of the Second Case]

SOLUTION of the third Case.

[The numerical card being wagered on has three suits remaining in the pack of cards.]

By the first Remark of the tenth Problem [discussed below], it appears that the Chances which the Ponte has to win and lose, may be expressed by the following Scheme.

1		$n - 1 \times n - 2$ for winning	0
2		$n - 2 \times n - 3$ for losing	y
3		$n - 3 \times n - 4$ for winning	1
4		$n - 4 \times n - 5$ for losing	1
5		$n - 5 \times n - 6$ for winning	1
6		$n - 6 \times n - 7$ for losing	1
7		$n - 7 \times n - 8$ for winning	1
8		$n - 8 \times n - 9$ for losing	1
*		2×1 for winning	1

[Figure 4.]

Setting aside the first, second and last number of Chances, it will be found that the difference between the 3^d and 4th is $2n - 8$; [$3^{\text{rd}} - 4^{\text{th}}$

$$= (n - 3)(n - 4) - (n - 4)(n - 5)$$

$$= n^2 - 7n + 12 - (n^2 - 9n + 20)$$

$$= 2n - 8.]$$

the difference between 5th and 6th, $2n - 12$; [$5^{\text{th}} - 6^{\text{th}}$

$$\begin{aligned}
&= (n-5)(n-6) - (n-6)(n-7) \\
&= n^2 - 11n + 30 - (n^2 - 13n + 42) \\
&= 2n - 12.]
\end{aligned}$$

the difference between the 7th and 8th, $2n - 16$, &c. [7th - 8th

$$\begin{aligned}
&= (n-7)(n-8) - (n-8)(n-9) \\
&= n^2 - 15n + 56 - (n^2 - 17n + 72) \\
&= 2n - 16.]
\end{aligned}$$

Now these differences constitute an Arithmetic Progression, whereof the first Term is $2n - 8$, the common difference 4, and the last Term 6, being the difference between $4 * 3$ and $3 * 2$. [The last term is $(n-4)^{th} - (n-3)^{rd}$

$$\begin{aligned}
&= [n - (n-4)] * [n - (n-3)] - [n - (n-3)] * [n - (n-2)] \\
&= 4 * 3 - 3 * 2 \\
&= 6.]
\end{aligned}$$

Wherefore the Sum of this [Arithmetic] Progression is $\frac{n-1}{1} * \frac{n-5}{2}$

[an Arithmetic Progression is of the form $a, a + d, a + 2d, \dots, a + (m-1)d$ where m = number of terms, a = first term, and d = the common difference. Here $m = \frac{1}{2}(n-5)$, $a = 2n - 8$, $d = -4$.],

to which adding the last Term $2 * 1$, which is favourable to the Ponte, the Sum total will be $\frac{n-3}{1} * \frac{n-3}{2}$, but the Sum of all the Chances is $\frac{n}{1} * \frac{n-1}{1} * \frac{n-2}{3}$ as may be collected from the first Remark of the xth [tenth]

Problem, and the last paragraph of the second case of this Problem: [from the fact that the sum in that remark is 1, and we let S = the sum of all the chances, we have

$$\begin{aligned}
1 &= \frac{3}{n(n-1)(n-2)} * S \\
S &= \frac{n(n-1)(n-2)}{3} \\
&= \frac{n^3 - 3n^2 + 2n}{3}.]
\end{aligned}$$

therefore the Gain of the Ponte is $\frac{3(n-3)(n-3)}{2n(n-1)(n-2)}$.

$$\begin{aligned}
&= \frac{(n-3)(n-3)}{2} \\
&= \frac{2}{n(n-1)(n-2)} \\
&= \frac{2}{3}
\end{aligned}$$

$$= \frac{3(n-3)(n-3)}{2n(n-1)(n-2)}.]$$

But his Loss upon account of the Face is $\frac{6y(n-2)(n-3)}{2n(n-1)(n-2)}$ or $\frac{3y(n-3)}{n(n-1)}$,

$$\begin{aligned} & \left[\frac{y(n-2)(n-3)}{\left(\frac{n(n-1)(n-2)}{3} \right)} \right] \\ &= \frac{3y(n-2)(n-3)}{n(n-1)(n-2)} \\ &= \frac{6y(n-2)(n-3)}{2n(n-1)(n-2)} \\ &= \frac{3y(n-3)}{n(n-1)}.] \end{aligned}$$

therefore his Loss upon the whole is $\frac{3y(n-3)}{n(n-1)} - \frac{3(n-3)(n-3)}{2n(n-1)(n-2)}$ or $\frac{3n-9}{2n(n-1)(n-2)}$
supposing $y = \frac{1}{2}$.

$$\begin{aligned} & \frac{3y(n-3)}{n(n-1)} - \frac{3(n-3)(n-3)}{2n(n-1)(n-2)} \\ &= \frac{3(n-3)(n-2)}{2n(n-1)(n-2)} - \frac{3(n-3)(n-3)}{2n(n-1)(n-2)} \\ &= \frac{3(n-3)[(n-2) - (n-3)]}{2n(n-1)(n-2)} \\ &= \frac{3n-9}{2n(n-1)(n-2)}.] \end{aligned}$$

[End of the Third Case.]

SOLUTION of the fourth Case.

[The numerical card being wagered on has four suits remaining in the pack of cards.]

The Chances of the Ponte may be expressed by the following Scheme.

1		$n - 1 \times n - 2 \times n - 3$ for winning	0
2		$n - 2 \times n - 3 \times n - 4$ for losing	y
3		$n - 3 \times n - 4 \times n - 5$ for winning	1
4		$n - 4 \times n - 5 \times n - 6$ for losing	1
5		$n - 5 \times n - 6 \times n - 7$ for winning	1
6		$n - 6 \times n - 7 \times n - 8$ for losing	1
7		$n - 7 \times n - 8 \times n - 9$ for winning	1
*		$3 \times 2 \times 1$ for losing	1

[Figure 5.]

Setting aside the first and second numbers of Chances, and taking the differences between the 3^d and 4th, 5th and 6th, 7th and 8th, the last of these differences will be found to be 18

$$[4 * 3 * 2 - 3 * 2 * 1 = 24 - 6 = 18].$$

[We omit the explication of all further calculations here since they are similar to the third case.]

Now if the number of those differences be p , and we begin from the last 18, their Sum, from the second Remark of the x^{th} [tenth] Problem, will be found to be $p * (p + 1) * (4p + 5)$, but p in this case $= \frac{n-5}{2}$, and

therefore the Sum of these differences will easily appear to be, $\frac{(n-5)(n-3)(2n-5)}{4}$, but the Sum of all the Chances is $\frac{n(n-1)(n-2)(n-3)}{4}$; wherefore

the Gain of the Ponte is $\frac{(n-5)(n-3)(2n-5)}{n(n-1)(n-2)(n-3)}$, now his Loss upon account of the

Face is $\frac{4y(n-2)(n-3)(n-4)}{n(n-1)(n-2)(n-3)}$, and therefore his Loss upon the whole will be

$$\frac{4y(n-4)}{n(n-1)} - \frac{(n-5)(2n-5)}{n(n-1)(n-2)} \text{ or } \frac{3n-9}{n(n-1)(n-2)} \text{ supposing } y = \frac{1}{2}.$$

[End of the Fourth Case].

There still remains one single case to be consider'd, viz. what the Loss of the Ponte is, when he lays a Stake before the Pack is turned up: but there will be no difficulty in it, after what we have said, the difference between this case and the rest being only, that he is liable to be faced by the first Card discovered [in view], which will make his Loss [upon the whole] to be

$\frac{3n-6}{n(n-1)(n-3)}$, that is, interpreting n by [as] the number of all the Cards in the Pack, viz. 52, about $\frac{1}{866}$ part of his Stake.

$$\begin{aligned}
 & \frac{3 * 52 - 6}{52 * 51 * 49} \\
 & \frac{150}{150} \\
 & = \frac{2 * 26 * 3 * 17 * 49}{25} \\
 & = \frac{26 * 17 * 49}{1} \\
 & = \frac{866.32}{1} \\
 & \approx \frac{1}{866} .]
 \end{aligned}$$

[End of Solution of Problem XII.]

From what has been said, a Table may easily be composed, [showing] the several Losses of the Ponte in whatever circumstance he may happen to be.

[In the following table, in the first column N = number of Cards remaining in the pack, while the columns numbered 1, 2, 3, 4 represent the number of times his Card remains in the pack.]

A Table for Bassette

N	1	2	3	4
52	866
51	1735	867
49	98	2352	1602	801
47	94	2162	1474	737
45	90	1980	1351	675
43	86	1806	1234	617
41	82	1640	1122	561
39	78	1482	1015	507
37	74	1332	914	457
35	70	1190	818	409
33	66	1056	727	363
31	62	930	642	321
29	58	812	562	281
27	54	702	487	243
25	50	600	418	209
23	46	506	354	177
21	42	420	295	147
19	38	243	242	121
17	34	272	194	97
15	30	210	151	75
13	26	156	114	57
11	22	110	82	41
9	18	72	56	28
7	14	42	35	17

[Figure 6.]

The use of this Table will be best explained by some Examples.

Example 1.

Let it be proposed to find the Loss of the Ponte, when there are 26 Cards remaining in the Stock [Pack], and his Card is twice in it.

In the Column N find the number 25, which is less by 1 than the number of Cards remaining in the Stock: over-against it [to the right], and under the number 2, which is at the head of the second Column, you will find 600; which is the Denominator of a fraction whose Numerator is Unity,

and which shews [*sic*] that his Loss in that circumstance is one part in six hundred of his Stake.

Example 2.

To find the Loss of the Ponte when there are eight Cards remaining in the Stock [Pack], and his Card is three times in it.

In the Column N find the number 7, less by one than the number of Cards remaining in the Stock: over-against 7 [to the right], and under the number 3, written on the top of one of the Columns, you will find 35, which denotes that his Loss is one part in thirty-five of his Stake.

Corollary 1.

'Tis plain from the construction of the Table, that the fewer Cards in the Stock, [Pack] the greater is the Loss of the Ponte.

Corollary 2.

The least Loss of the Ponte, under the same circumstances of Cards remaining in the Stock, is when his Card is but twice in it; the next greater but three times; still greater when four times; and the greatest when but once. If the Loss upon the Face were varied, 'tis plain that in all the like circumstances, the Loss of the Ponte would vary accordingly; but it would be easy to compose other Tables to answer that variation, since the quantity y , which has been assumed to represent that Loss, has been preserv'd in the general expression of the Losses, if it be interpreted by $\frac{2}{3}$ instead of $\frac{1}{2}$, the Loss, in that case, would be easily determined as in the other:

thus [for example] supposing that 8 Cards are remaining in the Stock, and that the Card of the Ponte is twice in it, and also that y should be interpreted by $\frac{2}{3}$, the Loss [which has a factor of $y = \frac{1}{2}$ in the table] of the Ponte would be found to be $\frac{4}{63}$ instead of $\frac{1}{42}$. [Since $\frac{1}{42} * 2 * \frac{2}{3} = \frac{4}{63}$.]

From Problem XII, the losses of gamblers can easily be found based on the table provided. It shows that the loss of the Ponte's stake range from .04% to 7.14% at any given time while playing. In order to get a

better understanding of this, I will compare Bassette with popular modern games of gambling. First, in the game of Baccarat, which is a banking game similar to Bassette and could be considered a successor, the player can lose 1.1%-1.2% of their stake on average [American Gaming Association]. Second, in the game Blackjack, players can be expected to lose 0.5%-1.5% of their stake [American Gaming Association]. Finally, slot machines, which may be the most common method of gambling, have expected player loss ranging from 2.5%-12% [American Gaming Association]. This shows that gambling inherently has an advantage for the house or banker. The largest change between when Bassette was played and now is that games like Bassette were played in a coffee house or similar public venues [Cotton 30-39]. Now, these coffee houses have been transformed into mega resorts designed with the sole purpose of taking as much money from players as they can [Fenich]. If we compare the lowest amount lost by gamblers of Bassette, .04%, and those of gamblers in modern games, 0.5%, it can be seen the loss has increased more than ten times. This is not a surprising result, as it would be expected for the bankers to get better at pocketing the money of gamblers. The shocking result is that the banking card games similar to Bassette, such as Baccarat and Blackjack, have seen their house advantage decrease from 7.14% to ~1%. The reason for this is that nearly half of the people visiting casinos stay at least one night [Fenich]. Rather than trying to make money as quick as possible and then leaving town afterwards, as the bankers of Bassette would do, casinos offer an experience. This is because gambling is a normalized practice from de Moivre's lifetime and still is today where people chase the thrill of winning big. The difference is that casino owners today have different practices to make vast fortunes without being scrutinized. They do this by letting the player slowly give up their money over the duration of their stay rather than trying to win gamblers' money all at once, as well as providing food, entertainment, and other things like alcohol to create an experience. Just as in de Moivre's time, these owners know that people don't care about their odds of winning as long as they think they have a chance. This is especially relevant given that people have known the odds, whether through the work of *The Doctrine of Chances* or through modern sources. Even though people can lose huge amounts of money, the practice of gambling has become more popular and normalized, considering the legalization of sports betting and other forms

of gambling across the country today. Whether it is Bassette or slot machines, one thing that has not changed is that people love to take risks, even if they are not in their favor.

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Humanities

TikTok's Influence on Consumer Habits

Judy Batts

Abstract

Even eight years since its creation, TikTok is still the fastest growing social media platform in the world with more than one billion daily users (Barta et al., 2022). Unsurprisingly, people turn to the app for entertainment, advice, recipes, and so much more. However, what is even more staggering is that reliance on TikTok branches far into consumer financial decisions. From influencers creating their own advertisements to those created by companies themselves, this type of media infiltrates the pages of most TikTok users. In 2022, more than 42% of US consumers turned to TikTok for influencer marketing (Barta et al., 2022). The purpose of this study is to understand how the rhetoric of promotional TikToks influences young American consumers. A brief survey sent to young adults on TikTok to identify the key characteristics of advertisements posted by TikTok brand influencers that cause the promotion to be more enticing. After identifying these attributes, posts by some of the top brand influencers on the application will be analyzed for the same attributes. The goal of this research project is to improve understanding of consumer habits, reliance of young users on TikTok for product information, and unveil what makes these videos appealing.

Description

Young adults spend hours each day consuming media that encroaches on nearly every aspect of their lives. 84% of TikTok users consider TikTok to be a product and resource discovery tool, not just an app for entertainment. Moreover, products presented on the app are 1.5 times more likely to be immediately purchased compared to those that are not (Thomas, 2022). This study focuses on how this growing media platform affects the financial decisions of young adults. A brief survey was sent out to young TikTok users inquiring about the types of advertisements and promotional content they consume through TikTok. The TikTok handles and ages of participants were recorded and verified to ensure the validity of provided responses. This survey will encourage participants to reflect

on how promotions have encouraged or deterred them from making specific purchases through linguistic analysis and viewer perception of the rhetoric used. A section will also be included that encourages participants to link specific examples of promotional TikToks that have influenced their purchases for further analysis.

Using information derived from the survey, the rhetoric of videos will be analyzed to understand the aspects consumers find most compelling. Developing a more informed and comprehensive review of how rhetoric affects the perceptions of products possesses benefits that are twofold. Foremost, marketers will be able to more effectively assess the efficacy of an advertisement before putting it on TikTok by analyzing their use of language. A more comprehensive understanding of how language used in advertisements can influence sales, profit margins, financial losses and gains, and determine the overall success of a product will benefit companies in a wide variety of ways. Upon collection of this information, advertisers will make more informed decisions to boost product sales. Secondly, consumers will be more conscious of how their financial decisions are influenced by verbiage in a way that they may not consciously recognize. Recognizing how language influences daily consumer habits may have extreme impacts on spending power and state of financial stability.

The strong influence TikTok has on individuals is undeniable. From viral internet trends to spending habits, this media platform encroaches on nearly every aspect of life and is incredibly effective in doing so. According to Rezek in 2022, the average conversion rate on TikTok is nearly triple that of Facebook advertisements. This statistic is particularly impactful as it indicates that platform users are three times more likely to make purchases based on TikTok Ads compared to Ads on Facebook. This trend is the same for other media platforms.

Background

It is well known that social media impacts the lives of individuals in a multitude of ways, but there is little research regarding how promotional TikToks impact the financial decisions of young adults. As addressed by Akbari, Jastacia, Setiawan, and Ningsih in "The Marketing Power of TikTok" (2022), TikTok is known to be a marketing medium for a variety of industries and their products, but there has been no analysis of

content to evaluate why some of the most influential promotions are effective to begin with (160). *Navigating the New Era of Influencer Marketing: How to be Successful on Instagram, TikTok, & Co.* by Haenlein, Anadol, Farnsworth, Hugo, Hunichen, and Welte focuses on how influencer marketing and other promotional tactics explain that TikTok is the prime method of attracting young consumers because of the app's versatility (10). The app is so popular that most young adults engage with it more than 10 times per day (Halim, 2022). TikTok's growing popularity and frequency of use makes the application an ideal mechanism to distribute persuasive information and advertisements.

For companies, the rise of TikTok and its influential power could not have come at a better time. TikTok's perfectly curated algorithms allow advertisements to reach their target audience hassle-free. These algorithms are based on interest, interactions with media, and common likes and dislikes. Interacting with advertisements for specific products and brands will increase the frequency of similar advertisements that will recur on their media accounts. This has the power to remove concerns about creating an advertisement that is both effective and versatile in order to capture the attention of a very broad audience and narrow the audience to a niche group of people who are already predisposed to having a positive interpretation of the brand or product. Many struggles faced by marketing teams for companies that primarily advertise on television or announcements on the radio are eliminated using TikTok's algorithms. Rather than wasting resources by airing advertisements to the general population, companies can distribute promotional information via TikTok. The advantage of using TikTok to distribute advertisements is that promotional content is shown directly to users most likely interested in the advertisement's content. The application allows companies to create videos and advertisements specific to the demographics of their target consumer group because that is who is nearly guaranteed to see the curated media.

Despite the many analyses of the efficacy of marketing on TikTok, there is a gap in knowledge of what makes promotions on the application effective. Katar, a company that conducts research on media marketing, completed a study on TikTok advertisements which concluded that they were more inspirational and enjoyable than advertisements on other platforms (Nelson, 2022). While this study does provide an idea of

what makes advertisements effective, it is only from the perspective of advertisers, not consumers. It's important to keep in mind that perception is inherently subjective, so what a company intends for their advertisement to cause consumers to think or feel, isn't always how potential customers perceive TikTok advertising.

Methodology

This research project seeks to understand the characteristics of advertisements that make them effective in influencing financial decisions. Objective analysis of both visual and aural characteristics of advertisements will work to identify features that attract consumers.

For the purposes of this research project, a survey was posted online seeking participants to provide information regarding the frequency and duration of their TikTok consumption, the amount of promotional content within their feed, and their typical engagement with advertisements. In addition to this, respondents were asked to describe the characteristics of advertisements that they found most persuasive in the application. They were also asked to indicate characteristics of advertisements that deterred them from engaging with content. This survey also encouraged participants to reflect on how promotional content has influenced their financial decisions. More specifically, respondents were asked to indicate how many times they have purchased or chosen not to purchase a product because of TikTok advertising. Participants also indicated the types of products in question and provided a brief analysis of the advertisements that have influenced them the most. These variables are key to understanding the characteristics of effective advertising across a wide variety of product types and services.

In total, this survey was completed by 28 respondents between 17 and 25. This study focuses on the spending habits of young adults induced by TikTok, so the participants included in the study were all members of Gen Z, the generation said to be the highest consumers of TikTok content.

This format of data collection increased the number of potential responses to improve validity of results and made participating more accessible and simplistic for respondents. Rather than conducting in-person interviews, respondents had a surplus of time to reflect and think back on advertisements they have found impactful, and even had time to

re-watch some of them before describing the characteristics they had been most influenced by. The flexibility of an online survey permitted more thoughtful and quality feedback.

The study method aimed to maintain integrity of results by both analyzing some of the most successful promotions on TikTok and by recording the preferences of respondents. (Noting characteristics of popular advertisements on the application account for the preference of TikTok users, not participants in this survey.) The first comparison analyzed videos for content overlap and common characteristics in the video. The second comparison addressed the characteristics of TikTok advertisements that the respondents generally agreed upon as the most important attributes of promotional content on the platform. In this essay, the terms "top performing" and "most successful" in reference to TikTok content are based on the video's conversion rate. The conversion rate is the rate viewers are "converted" into buyers of the product, this information is accessible for all TikTok videos that are designed to promote the sale of a product or brand.

Results

It is crucial that promotional videos quickly capture the attention of viewers. According to Hobbs in 2016, a mere 9% of digital ads are viewed for more than one second when they appear on the screens of viewers. When survey participants were asked how they typically respond when an advertisement appears on TikTok, their responses supported this idea. Only one participant indicated that they watch the promotional video in totality and the rest indicated that they typically skip content without knowing what it is about. Survey participants said they are more likely to engage with TikTok promotions when formatted as product reviews and influencers marketing products to viewers. Within this sub-genre of TikTok content, participants stated they were more likely to be influenced by the advertisement when they feel the creator is transparent and honest. After reaching out to the participants who indicated transparency and honesty are one of the most important video characteristics, respondents explained that the best way for companies to achieve this is through authentic and "unscripted," or transparent promotional videos. Perceived honesty and transparency build the idea of trust between viewers and the

advertisements that they see, hence increasing their likelihood of purchasing a product or service.

Capturing viewer attention isn't the only challenge faced by TikTok advertisers, maintaining it is too. Participants indicated that the typical duration of promotions they view on the application is less than thirty seconds, and on rare instances, up to one minute, but no longer. For exactly half of the respondents this ring true. Based on these findings, it is crucial that advertisements capture and hold viewer attention in a timely manner.

Product Reviews	50%
Influencer Marketing	26.9%
Advertisements from Companies	11.5%
No Promotional Content Consumed	11.5%

Figure 1. Types of Promotional Videos with the Most Engagement

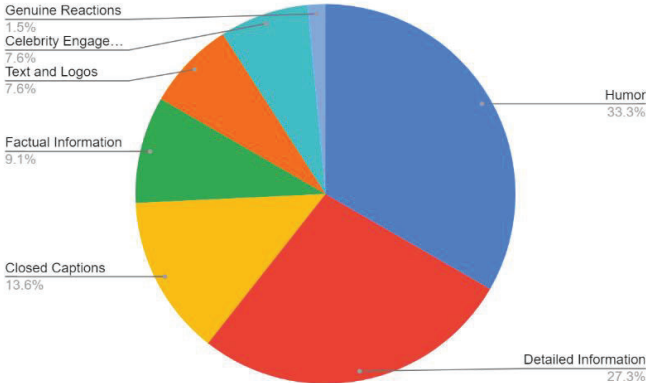


Figure 2. Typical Attributes of Most Engaging Videos

Captivating viewers can be executed in a wide variety of ways, some of which are more effective than others. Half of the respondents indicated that videos styled as product reviews are the most enjoyed type of promotional content on the application. Participants indicated they are most engaged in advertisements with a direct appeal to humor, 33.3%, and detailed information about a product or service, 27.3%. These results indicate viewers prefer content that is perceived as authentic and original, likely where a more personal connection is established. When advertisers and creators appeal to viewers' emotions by expressing what seems to be an authentic thought or opinion, it helps build trust and a positive association with what is being advertised. These results of young adults preferring product reviews are further supported when TikTok users were asked to describe in their own words what they find most influential in a promotion on the app. The most common responses included humor and entertainment, honesty, and presenters who fit similar demographics of the viewer.

The culmination of a product captivating and maintaining viewer attention is crucial to not only promoting a brand or product, but to generating sales. Most survey participants explained that the promotions they are most attracted to influence them to purchase products they would not purchase in store. Only 7.4% of participants said that they would make the same purchase in store. Advertisements that are truly effective can influence consumers to make financial decisions that they otherwise would not.

Analysis of TikTok Content

Based on the characteristics of participants indicated were most effective, some of the top advertisements across various industries were analyzed to see the recurrence of the same attributes, including, humor, duration of video, appeal to authenticity, text or subtitles, and honesty. These characteristics are shown in Figure 3. The success of advertisements that were analyzed is based on their conversion rate, which is the rate at which viewers are "converted" into buyers of the product. Conversion rate is crucial to this study because the success of a video is being measured by its ability to increase the purchasing of a specific product. Therefore, the higher percentile a video ranks on its conversion rate, the more effective it has been to increase product sales.

All the videos were less than 60 seconds long, with 5 seconds being the shortest and the longest being 56 seconds.

Example of Product Application	100%
Text/Subtitles	100%
Humor	60.0%
Appeal to Authenticity	90.0%

Figure 3. Common Features of Top Performing Promotional TikTok Content

All of the advertisements taken into consideration and analyzed ranked in the top 5% of industry conversions, meaning they are the videos that have resulted in the greatest consumer purchasing and support of the brand. This trend remained consistent across the industries most frequently mentioned by survey participants with the most influential ads. These industries include food and beverage, home goods, beauty and cosmetics, clothing, and athletics. One finding that differs from survey responses is the importance of humor in ad efficacy. Based on participants' responses, it was agreed that humor was of the utmost importance for a successful advertisement, but only 60% of the analyzed media tried to invoke viewer amusement.

One of the categories of the least importance to respondents was the use of an influencer and celebrity in the promotional video. This perspective was further supported by analyzed content, where none of the selected videos included an influencer. While it is true that celebrities are the face of many products, and quite obviously have the ability to increase potential sales, it may not be as important to the Gen Z audience as it has been to other generations.

In a follow-up question-and answer session with one participant, they explained that when they look for authenticity in advertisements, celebrities can sometimes "feel polished or out of touch with regular people" and in some cases, even deter them from purchasing a product. In fact, when participants were asked to list aspects of advertisements on TikTok that they are least receptive to, 23% wrote that the use of a celebrity or influencer causes them to be less engaged, less

receptive, or even skip the advertisement altogether. When participants were asked to do the opposite and explain the aspects of TikTok advertisements they are most receptive to, only one respondent wrote that influencers increase their video engagement. This participant also noted that the use of a celebrity was conditional, and that they are only receptive to influencers matching minority backgrounds and demographics.

Overall, the results of the survey and of analyzed content are fairly consistent with one another. The selection of TikToks for analysis was based on the inverse of study methodology. Rather than seeking out characteristics of advertisements that appealed to readers, the top TikTok advertisements were analyzed to see what characteristics each possessed. Companies that have successful promotional content tend to produce media with the criteria young adults who participated in the survey indicated was important to them. The most frequently showcased characteristics in alignment with participants' responses were text and written information, transparency, humor, and detailed information for product use and application.

Conclusion

Based on the survey results and further analysis of top performing TikTok promotional content, it can reasonably be concluded that there are several characteristics that enhance the performance of an advertisement on the application. Those that are most important and effective include short video duration, appeal to authenticity, closed captions, examples of product application, and sometimes humor. Both collected data and survey responses indicated that when the advertisement is less than one minute, it is short enough to captivate and maintain viewer attention, but long enough to convey the important features of the product. During this time frame, viewers find it especially important to have a demonstration or examples of how the product can be used and packed with informational content. They tend to prefer content to be presented in an original and authentic manner, often with humor, but these factors do not totally determine if viewers will buy the product presented by an advertisement. Finally, closed captions improve video accessibility and are preferred by most viewers and were included in

every top performing promotional video that was analyzed in this research.

Future studies with more generalizable results could be relevant for both companies and individual consumers. Increasing consumers awareness of the many ways they can be manipulated by marketing tactics may cultivate more mindful spending habits and product analysis prior to making purchases. Viewers will always be influenced by the media that they consume and are exposed to, the factor that is most important in analyzing the success of an advertisement is how viewers respond. As well as this, more Consumer awareness of how a viewer may be more inclined to purchase a product may reduce expenditures motivated by TikTok content. Previous research has left a gap in knowledge regarding what makes TikTok marketing unique and successful; but studies similar to this research project could fill the void of information by concisely explaining promotional attributes most desired by consumers.

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Robert Morris's Two Intentions Behind the Glass Labyrinth

AnnMarie Bucksbee

In 2014, the Nelson-Atkins Museum of Art introduced a new artwork into their outdoor statue garden. This artwork was much larger than almost all the other statues and takes the shape of a six-foot-tall, 60-foot-long equilateral triangle. Within the triangle, walkers experience a winding path with sharp angles, made to cause them to lose themselves and their place within the unicursal pathway. This artwork, called *The Glass Labyrinth*, was created by Robert Morris, a Kansas City native artist.

The concept of the labyrinth has been used for centuries in mythology, Christian cathedrals, and in many paintings and sculptures. When creating the *Glass Labyrinth*, Robert Morris drew upon the historical uses of labyrinths, his career as an artist, and inspiration from other artists' depictions of labyrinths to create an artwork that could foster two separate experiences. This article will argue that the *Glass Labyrinth* causes dual experiences of spiritualism or anxiety that can be seen in different peoples' reflections on their experiences in the labyrinth.

The History of the Labyrinth

The concept of a labyrinth can be found as far back as ancient Greece. In Greek mythology, the story of Theseus and the Minotaur involves a labyrinth that King Minos built to keep the Minotaur, his wife's son, trapped in the middle. Every year, the king sent in a group of twelve sacrifices to enter the maze. These sacrifices were meant to be eaten by the Minotaur, a fate that none of the sacrifices believed they were able to escape (World History Edu). This piece of the story highlights the emotions of the captives, and the helplessness they felt within the labyrinth. The labyrinth became a place where the sacrifices could only surrender to fate as it led them to an ending that they had no control over.

Christians also have used labyrinths in many of their cathedrals, where the labyrinth is often used to represent the path one takes on their way to salvation. Labyrinths can also act as a metaphor for a sacred pilgrimage taken by Christians to Jerusalem in Christian imagery. The way

Christians use labyrinths shows that a journey through a labyrinth can act as a journey of spirituality, and a way of self-discovery through losing oneself.

This way of viewing a labyrinth differs greatly from the conception presented in Greek mythology, as it is a much more serene view. In the book *A Labyrinth for the Park: Celebrating the Twenty-fifth Anniversary of the Donald J. Hall Sculpture Park*, the *Glass Labyrinth* shows an acknowledgment of these historical uses of labyrinths in its creation, meaning that it “transcends time and space to remind us of the power of deeply felt archetypes” (created by the Nelson-Atkins Museum of Art 39). These archetypes may be those often presented in Greek mythology and Christian texts, such as the archetype of the hero who takes on a challenge.

These historical usages of labyrinths have been seen in artworks throughout the years. These artworks usually focus on only one of the meanings behind labyrinths: either salvation or helplessness. Robert Morris, the creator of *The Glass Labyrinth* created multiple artworks portraying labyrinths which reflected one or both meanings.

Robert Morris as an Artist

Robert Morris began his art career as a painter, and his artworks were widely renowned. Some of Morris's artworks contain simple shapes with little to no metaphorical meanings and focus largely on the interactive aspect of art. He also wrote many philosophical papers, which contrasted greatly to his interactive artworks by focusing on the temporality of life and the idea of a higher consciousness (“Robert Morris”). These themes of temporality and higher consciousness are reflected in many of Morris's later statues and artworks. *A Labyrinth for the Park* states that Morris's art makes “recurrent references to memory, enigma, permutation, perception, blindness, and above all the body in motion” (“Labyrinth for the Park”, 79).

In his writings, Morris makes many references to labyrinths and their effect on the human perception of the world. In one case, he talks about the ability of labyrinths to cause metaphorical blindness and force the traveler to hand over control to the labyrinth. He states:

Within the labyrinth one becomes lost without a guide... The labyrinth disables vision, renders it helpless to aid one's

cognitive capacities to map one's place and seize one's critical responses. The body, too, is in some sense disabled as it must submit to following or being led through spaces foreclosed to mental navigation. (qtd. in Nelson-Atkins Museum of Art 72)

This quote highlights Morris's appeal to the sinister intentions of labyrinths. Here, he views the labyrinth as a place of hopelessness and feeling lost, where one loses control and instead must hand over control to the labyrinth's path, trusting that it will eventually guide them to the final destination. However, Morris also wrote about his view on the more spiritual side of labyrinths, saying, "The labyrinth form is perhaps a metonym of the search for the self, for it demands a continuous wandering, a relinquishing of the knowledge of where one is" (Nelson-Atkins Museum of Art 89). In this quote, Morris refers to labyrinths as figurative artwork in self-discovery, where people lose their knowledge of their location in order to find themselves spiritually.

With Morris referencing both meanings of a labyrinth in his past writings, it is easier to understand how he held two intentions when creating the *Glass Labyrinth* and used this artwork to incorporate both the spiritual and sinister meanings of the labyrinths. Drawing upon inspiration from multiple artworks that highlighted these dual intentions of a labyrinth, Morris created an artwork that could allow for either a spiritual journey or a sense of hopelessness.

Inspirations for Morris's Glass Labyrinth

The artistic influences that Morris had while creating the *Glass Labyrinth* also reinforce the fact that he was aware of the different uses of a labyrinth. These influences can point to the idea that the glass labyrinth was intended to allow for both of these intentions to shine through as two separate experiences. Two influences that focused more on the spirituality of the labyrinth are the poem *A Labyrinth of Solitude* by Octavio Paz and artist Paul Cezanne, who focused on consciousness and the relation between our perception of the world and our body. Paz's poem relates the human experience to a labyrinth, a one-way journey in which we often seek solitude, while at times we may look to connect with others and temporarily end the solitude.

However, other influences highlight the darker psychological aspect of a labyrinth, including Giovanni Piranesi's prison etchings, which

depicted a prison as a labyrinth in which one is trapped, and a depiction of labyrinths as a form of prison from Michel Foucault's book *Discipline and Punishment*. Morris also drew upon the idea of Marcel Duchamp's twine maze, which created a labyrinth where the walls and boundaries were able to be seen through (Nelson-Atkins Museum of Art).

A Labyrinth of Solitude was written by Paz and is based on Paz's belief that solitude is an abstract and important part of the human experience. According to *A Labyrinth for the Park*, Paz describes solitude as "the dichotomous longing for both self-awareness and for escape from the self" (134). This is reflected in his poem, as the labyrinth was a way for one to achieve solitude, and highlights the belief that labyrinths are a spiritual journey. Yet when read closely, the idea of labyrinths bringing on a feeling of being trapped is also discussed in this poem. Morris's second spiritual influence was the works of Paul Cezanne. In his works, Cezanne highlights perception, with the ambition to "render perspective only through colour" (Huyghe). The concept of perception is something that greatly influenced many of Morris's artworks, including the *Glass Labyrinth*, as he wanted his artworks to be an interactive experience for the viewer. This needs the involvement of the mind, body, and eye, and allows for the full perception of his artworks.

The darker psychological influences from Piranesi and Foucault both depict a connection between labyrinths and prisons. Piranesi's etchings show a labyrinthine prison, with paths leading in seemingly random directions. This can create a very ominous feeling for the viewer of the etchings. French philosopher Foucault's book *Discipline and Punishment* (1975) discusses the penal system and uses many labyrinthine descriptions such as "confining repetitious corridors" to describe the interior of prisons and other large-scale facilities (Nelson-Atkins Museum of Art 77). These works describe how labyrinths can be confining and cause one to feel trapped, appealing to the malevolent use of labyrinths in art. The combination of these influences with the influences from Paz and Cezanne can be seen in *The Garden Labyrinth* through the two kinds of experiences that one has while walking the path of the *Glass Labyrinth*.

The Two Experiences Inside the Labyrinth

When walking the labyrinth, visitors have reported two different kinds of journeys. Both of these experiences can allow for deep thought on

topics and issues relevant to our lives today and can leave a lasting effect on the labyrinth walker. It is the experience of the walker while inside the labyrinth and how the labyrinth leaves its impression that changes. The first experience is a calming, serene, spiritual experience where the user can let the labyrinth take them where it leads and be guided in deep thought and meditation. The other is one of anxiety and helplessness, where the viewer is in fear of the loss of control created by the walls of the labyrinth, and experiences a wave of claustrophobia while inside the glass walls.

The experience that the viewer has depends on their course of action when entering the labyrinth. If one goes in and attempts to rush through the labyrinth, they may begin to feel the anxiety of being lost in the glass triangle. According to Stephanie Fox Knappe, Senior Curator at the Nelson-Atkins, "the *Glass Labyrinth* with its angles and turns can make someone feel ill at ease if one tries to go too fast or attempts to predict which way the path will go." Glenn North, the host of the Nelson-Atkins' podcast *A Frame of Mind*, was able to experience the *Glass Labyrinth* firsthand when he walked its path. In his account of his experience, he states that he often felt as though there was a wall right in front of him when there was not. North claims "Being in that labyrinth, it's disorienting and uncomfortable... you gotta keep inching forward, even when it feels dangerous, if you ever want to get anywhere."

The disorientation and anxiety that North experienced during his time in the labyrinth of some labyrinth goers, who may fear the inability to see the path. However, the labyrinth can also allow for a more lighthearted and spiritual journey by letting it guide patrons to the center and back and embracing the sudden turns and unpredictable pathing. Knappe states that she believes this is how the labyrinth is meant to be experienced: "The *Glass Labyrinth* is about taking a breath, slowing down, and doing so with intention" When asked about the intention behind the labyrinth, Knappe responded by stating that she believes the labyrinth can be used as a lesson in patience, taking things slowly, and savoring the experience.

How Does the Architecture of the Glass Labyrinth Allow for these Two Experiences?

The architecture's influence on a person's experience in the *Glass Labyrinth* is something that should not be overlooked. This shows how Morris used his artistic mediums to create a labyrinth that would be able to allow for two completely different journeys to occur within its walls. The first, and largest, part of the architecture that allows for these two experiences is in the title of the artwork: the glass. The see-through artistic medium can provide a lightness and modern elegance to the design of the labyrinth, which when taken in can be very meditative and beautiful. In the words of Knappe, "Rather than being constructed out of heavy stone, a labyrinth made of glass offers a feeling of lightness that echoes a spiritual journey."

On the other hand, walking too fast may cause patrons to run into one of these glass walls, and they may eventually begin to feel claustrophobic. The ability to see outside of the labyrinth, but not being able to walk straight out of the labyrinth, may bring up feelings of being trapped. North reports feeling as though there was a wall right in front of you at times, even when there is not. This ability to bring a sense of lightness and anxiety-inducing invisibility is a large part of the duality of the labyrinth and one of the reasons the *Glass Labyrinth* can do its job in provoking deep thought so well.

The other architectural decision that Morris made when creating this labyrinth is the sharp, sudden angles within the labyrinth, causing one to have to change direction suddenly without a pattern. This differs from other labyrinths, which may use more curved angles to allow for a smooth journey without sudden blocks and turns. One reason Morris may have chosen to do this is to build on the feelings of being lost within the labyrinth and to cause labyrinth-goers to take their time and walk the path slowly, to avoid the risk of running into a glass wall. For some, these sharp turns add to their sense of anxiety within the labyrinth, as the sudden change in direction may lead to them running into a wall and can be very disorienting; for others, the sharp turns give the ability to reflect more deeply on the labyrinth as a metaphor to life, in which anything could happen at any given time, and it is something people must accept and learn to move on from.

The Labyrinth in the Museum

The Nelson-Atkins Museum of Art commissioned Robert Morris to create the *Glass Labyrinth*, which was then installed in the Nelson-Atkins Museum in 2014. You can find the labyrinth in the Donald J. Hall Outdoor Sculpture Park between the artworks *Ferment* and *Sheep Piece*. According to Knappe, the museum hoped for the labyrinth to “offer an interactive experience that is both exploratory and meditative.” During its grand opening at the Nelson-Atkins, many visitors could walk its path and participate in this experience. Knappe states that she believes everyone experiences the labyrinth differently, and the unicursal maze affects everyone in a unique way each time they enter the labyrinth.

The labyrinth's impact on people who walk its path can change constantly based on what is happening in the person's personal life and public happenings. For example, a person starting college soon could walk the path and think about their process of becoming a university student, and all the steps they had to go through. They could then walk the labyrinth again the next month after losing a loved one and think about unpredictability of life and the suddenness in which things can change. In the Nelson-Atkins's podcast, *A Frame of Mind*, North talks about the meaning that the labyrinth held to him, and how it allowed him to reflect on the similarities between the experience of walking in the glass walls and discussing difficult topics, such as race, gender, and sexuality. This was based on his experience; however, others who walk the path of the *Glass Labyrinth* may come out with a completely different train of thought that could regard topics such as family, friends, school, employment, and other personal or social issues that they may be facing.

The Importance of the Experience

The minimalistic nature of Morris's artwork can make it difficult to see both intentions by simply looking at the labyrinth. From visual appearance alone, the labyrinth looks like an elegant, modern-style labyrinth, and the psychological interpretations of the labyrinth cannot be as easily realized without the ability to step foot into the labyrinth and make it a truly engaging experience. Since the COVID-19 pandemic, the labyrinth has been closed to the public, and visitors of the Nelson-Atkins Museum of Art cannot currently enter the glass triangle and walk its path. However, this inability to experience the interactive aspect of the labyrinth

does not fully inhibit a viewer's ability to understand the two intentions behind the creation of this labyrinth. According to Paul Benson, Conservator of Objects at the Nelson-Atkins, "The artists' thoughts and intentions can be read in how the artwork was modeled, physically produced, assembled, and finished." (Nelson-Atkins Museum of Art 58)

This once again brings up the idea of the architecture and its influence on the labyrinth as an artwork. The use of glass in the labyrinth can tell the viewer about the ability of the architecture to bring a sense of fragility. This is discussed in *A Labyrinth for the Park*: "Glass is a fragile material... its transparency suggests lightness and fragility" (Nelson-Atkins Museum of Art 79). However, knowledge of how the artwork was modeled and the influences on the labyrinth can allow the viewer to understand the dark psychological aspect of the labyrinth. While the inability to walk the path of the *Glass Labyrinth* takes away the ability to have the full psychological or religious experience of the interactive artwork, researching Robert Morris and his artworks can allow onlookers to understand his intentions and the meaning of the labyrinth.

Conclusion

Despite the seemingly simple and minimalist design that Morris incorporated into this artwork, the *Glass Labyrinth* holds a very complex and relevant meaning. While its effect on a person can vary greatly, the two experiences of spirituality or anxiety which the labyrinth can foster are the foundation of how the *Glass Labyrinth* can hold deep meaning. According to *A Labyrinth for the Park* "*Glass Labyrinth* offers a complex experience, which is visual, physical, and mental as the mind tries to interpret the space to inform the body how to remain stabilized in what is potentially a disorienting and puzzling environment" (Nelson-Atkins Museum of Art 79). The meaning behind both experiences is equally important and can allow for reflection on the current world we live in, and the work can hold personal meaning to each person who walks the path of the *Glass Labyrinth*.

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Liberty and Justice for Some: Examining the Rhetoric of Prison Zines

Lilah Crum-Barnhill

Anti-prison activist Anthony Rayson wrote: "Forcibly depriving people of their freedom is a crime, not it's solution!" Making this statement in a self-published work known as a zine, Rayson's quote represents one of the main arguments against the U.S. prison system and it advocates for its abolition. Like other prison activists who use zines, Rayson critiques the prison system, documents racial disparities, informs and unites incarcerated people, and promotes anarchist philosophy to justify prison abolition. State punishment has been described as a "total failure as a preventative means to control crime," (Rayson, 6) along with the belief that government and the law perpetuate crime rather than prevent it, and the conditions that breed crime are never dealt with. These zines push forward the argument that the government has committed crimes much more severe than any individual crime, presenting the American government as hypocritical and corrupt from its very beginnings. Prison activists and incarcerated people have protested the corrupted U.S. prison system through zines that incorporate personal anecdotes, arguments against the American government, and anarchist philosophy. Examining the rhetoric of prison zines exemplifies the corruption and racism that runs rampant in the prison system, while showing a new perspective that is not well-known to those on the outside.

What Are Zines and Why Is Studying Them Useful?

Before delving further into an analysis of the zines, it is first necessary to define exactly what they are and their significance in academia. Zines are defined as self-published, noncommercial, small-circulation magazines motivated by self-expression instead of profit that are often outside the mainstream. Zine creators often produce and distribute zines themselves, though some zines have multiple collaborators (Hays, 3). Prison zines are often political, though they often include poetry and other forms of creative expression. Zine scholarship is a relatively new academic field that has analyzed zines as artifacts from

different forms of activism, as well as political and cultural movements (Hays, 1). The creation and use of zines allows individuals to address and work against the isolation they experience as individuals and in society. This is particularly important for people who have been incarcerated as they often face discrimination and alienation during their imprisonment and following their release. John Gartrell, a scholar at Duke University, wrote a “resounding and unrelenting commitment to fight back against the systemic oppression seen in the carceral state” can be drawn from experiences recounted in different zine collections (Gartrell). Overall, the knowledge that is produced and shared by prison zines is a combination of political theories and lived experiences which combine to show what systemic oppression looks like.

The “End” of Slavery and the Emergence of the Prison System

To understand how the current prison system emerged in the United States, it is necessary to look at the history of slavery. The Thirteenth Amendment, which outlawed slavery, was codified after the end of the Civil War and outlawed involuntary servitude; however, it said that slavery could be allowed as criminal punishment. Following the abolition of slavery, former slave states also created legislation to regulate the behavior of free Black people as well as laws that were only enforced when the person was Black (Davis, 28).

Furthermore, in *Are Prisons Obsolete?*, Angela Davis, a well known civil rights activist, explains that white supremacy was still embraced by many and became ingrained in new institutions, such as the prison system. A similar line of thought is presented by Michelle Alexander, author of *The New Jim Crow*, who stated that “mass incarceration in the United States has emerged as a comprehensive and well-disguised system of racialized social control that functions in a manner strikingly similar to Jim Crow” (Alexander, 2). Jim Crow laws legalized and enforced racial segregation in many states following the end of the Civil War, and are thus racist institutions. Racist institutions, which include the prison system as a whole, are defined as policies and practices that exist throughout a whole society that result in and support continued unfair advantage to some and unfair or harmful treatment of others which is determined by racial group. Two studies of U.S. prison populations in 1990 and 1995 revealed that one in three Black men between the ages of

twenty and twenty-nine were imprisoned, along with one in ten Latino men in the same age range, respectively (Davis, 19). Currently, Black Americans make up about 13% of the general U.S. population and yet represent 38% of the prison population (Federal Bureau of Prisons, Prison Policy Initiative). Public conversation about the downfalls of the prison system has become increasingly prevalent since the late 1990s and early 2000s, the period represented by the zines discussed here. Angela Davis wrote that in the 1990s when the drive to build prisons reached its highest point, there was very little information or criticism available to the public (Davis, 18). Further, during this time, a new category of prison security was created: super-maximum security prison. The creation of the super-maximum security prison existed as a push to continue expanding the prison system and treat incarcerated people more severely; inmates in super-maximum security prisons are often subjected to much harsher restrictions compared to other levels of security, and they often face long periods of solitary confinement. This new, harsher type of prison caused different public-facing individuals and organizations to oppose the "growing reliance on prisons to solve social problems that are exacerbated by mass incarceration" (Davis, 19).

Who is a Criminal?

Discursive practices related to criminality have been used to justify the harsh treatment and frequent imprisonment of Black and brown people. There is a rather long history of myths related to Black criminality, and race has always played a central role in creating assumptions about criminality (Davis). For example, the use of the word "criminal" along with other harmful words such as "super-predator" draw on racist tropes that have dehumanized people of color. Michelle Alexander writes that the changes in language used to justify severe inequality is one of the only things that has changed since the Jim Crow era; living in an age of "colorblindness" has no longer afforded authorities the ability to use race as an explicit justification for discrimination (Alexander, 3). Ex-offenders face different forms of discrimination upon release and are often disenfranchised, meaning they are stripped of the right to vote. This shows how criminality is related to social control. Angela Davis argues that while different institutions and the dominant media pretend as if racism is an unfortunate part of history that has since been left behind, it continues to

have a significant impact on current structures, attitudes, and behaviors (Davis, 24). These arguments confront discursive practices around race and racism that lead to hegemonic ideas about racial inferiority. Ideas of prisons as racist systems are often addressed in prison zines, particularly ones created by people of color.

Methods

To investigate the question of how zine creators have protested and critiqued the prison system, archival research was done in the LaBudde Special Collections at Miller Nichols Library at UMKC and Kansas City Zine Collective to collect zines for analysis. UMKC sponsored Kansas City's first ZineCon in 2014. The mission of KC ZineCon is to create "safer spaces in Kansas City for people to connect with the DIY ethos and values inherent in zine-making" (KC Zine Con — the Midwest's DIY Publishing Fest). The convention empowers people as creators in the self-published medium by making underrepresented voices a priority and making it easier for different creators to connect and make their voices heard. The organizers of the convention envision a diverse and sustainable community of zine creators and readers that provides creative opportunities and sets a new standard for safe spaces in Kansas City. UMKC being a sponsor of this convention shows its commitment to the values ZineCon presents. Zine creators have donated zines to UMKC at KC ZineCon, either ones they have created or ones they just have. The Diva Haus Zine Collection, which was donated in September 2016, is one of the most significant contributions to the UMKC collection. It contains many of the prison zines, including "The Anarchist Rain," held in UMKC Special Collections, which will be examined later.

Following the collection of exhibit sources, a rhetorical analysis of the zines was done to examine the arguments being presented against the prison system. The period that was examined, (the late 1990s to the early 2000s) was significant to the emergence of the movement against the prison industrial complex (Goonan, 7). Secondary scholarship about the prison system and zines was then examined to provide more context for arguments being presented by zine creators, as well as to understand the differing perspectives of prison activists and abolitionists. A scholar significant to this conversation is Angela Davis, a longtime political activist

whose arguments have been employed by zine creators. The use of her arguments reinforces the radical perspective of the creators.

"Abolish All Prisons!"

The first zine to be examined is titled "Abolish All Prisons!" This zine was created by Anthony Rayson, a writer, political activist, and self-described "rabble-rouser," who runs the Chicago Anarchist Black Cross (ABC) Zine Distro. He works closely with prison writers, artists, and activists to "craft their work into zines and get these pubs back into the hands of their fellow captives" (Rayson). Rayson has been involved in political activism since the 1970s. In the 1990s, he was part of an antiracist activism group where he began to organize and collect the group's literature, including creating a library of original zines that he could reproduce and distribute. Rayson originally began writing to incarcerated people because he wanted to include their stories in his work. Eventually, they began requesting to see the zines Rayson had, especially political zines ("Why Anthony Rayson, Anarchist Grandpa, Sends Zines to Prison"). This was seen as an opportunity for Rayson to become involved in activism in a new way: by distributing them in prisons throughout the United States. Although Rayson is retired, he still works full-time, writing to incarcerated people and creating or sending zines that they request. Rayson's zines are often inspired by correspondence between himself and an inmate.

"Abolish All Prisons!" seems to have been created in the early 2000s, though it is unclear what year. This is made evident by page 13, where Rayson cites his source material and states that he drew information from a presentation done in collaboration with Gale Ahrens on "Prison Abolition" that was given on November 27, 1999. Further, he uses quotes from Angela Davis, but does not cite her book which was written in 2003, leading me to conclude that this zine was created between 2000 and 2003. The zine is also relatively brief, comprised of fifteen pages.

In "Abolish All Prisons!" Rayson frames his arguments for prison abolition as his larger argument for an anarchist society. He begins by explaining that prison abolition is a basic tenet of anarchist thought. Throughout the zine, he focuses on appeals to logic that explain the blatant racism and classism that is practiced by the government and the prison system. "The laws only really apply to poor people and are heavily weighted as to race, which is a phony non-existent category used to justify

slavery" (Rayson, 5). Throughout his zine, Rayson protests the way that the law functions in society at large due to its racist history. The "phony non-existent category," known as race, continues to influence the justice system today. Since it is no longer acceptable to be overtly racist, the use of different labels such as "criminal" makes it easier to justify the mass incarceration of people of color. He also employs statistics from Angela Davis, stating that "Blacks and Latinos are criminals, while other groups doing the same thing, are not. More than ½ of those in jail are nonviolent 'violators'" (Rayson, 5). Rayson's main arguments against the American government are based on its history of colonization and exploitation of different peoples. For example, he argues that laws in America are based on the "bogus legitimacy for the protection of private property, which was originally conquered from the Indians (...) in a long genocide" (Rayson, 4). This quotation critiques the prison system and the United States in general by identifying one of many crimes committed by the government. Essentially, Rayson is stating that our notion of private property is merely a manufactured idea that has been used to justify the undue theft of property and exploitation of native populations. This argument is used to show the hypocrisy of the government and the criminal justice system overall: "Governments have killed more people and stolen more land, goods, and labor (...) than all individuals combined, many, many many times over" (Rayson, 4). Rayson uses these logical appeals to history to persuade the reader to see the extent of the government's unjustified crimes against different groups and also asserts that it continues to perpetuate crime by continuing to imprison people of color.

Another common belief held by prison activists is that prisons and incarceration have no real effect on reducing crime. This idea is shared by Rayson, who states that "the real criminals are the super-predators who run the state-backed institutions" (Rayson, 14). Once again, Rayson implies that those who are considered to be criminals and end up incarcerated are often subjugated by social and economic conditions, while those who run the state-backed institutions are committing crimes against innocent people. The use of the word "super-predators" in this claim takes discursive practices used against people of color to criminalize them and flips it on its head by using the term against those who came up with it.

Rayson concludes by arguing that anarchy is the only way to achieve a just society, and that eliminating prisons is an essential step in reaching that goal. "We slave our lives away pursuing the almighty dollar instead of actually living our lives!" (Rayson, 12). Rayson speaks from an existentialist perspective here, stating that our lives in the capitalist United States are simply focused on seeking and amassing wealth, rather than living and experiencing life. This ties back to the promotion of prison abolition and, on a larger scale, anarchist philosophy. Anarchists believe that freedom is the overthrowing of oppression that allows humans to follow their natural instincts, which are to enjoy life and establish a purpose for oneself (Rayson, 7). This rhetoric confronts not only the prison system but also addresses the idea that the way we construct meaning of life in the United States is fundamentally flawed. Rayson further argued that a society motivated by altruism would be much more rewarding than our current metrics of success, such as wealth or fame. He stated that amassing wealth and status for an individual often happens to the detriment of many, an argument that furthers his larger purpose of promoting anarchism.

"The Anarchist Rain"

The second zine that will be examined is titled "The Anarchist Rain", created by Shaka N'Zinga. Shaka N'Zinga was born Arthur Wiggins in Baltimore, Maryland. This zine was created in January 1998 and is a compilation of writings from N'Zinga over time, including poetry. It is significantly longer than the previous zine examined at a length of about sixty pages. It also contains an introduction written by Marc Salotte, a fellow anarchist. Salotte outlines the story of Shaka's circumstances leading to his imprisonment. In 1989, when N'Zinga was only fifteen years old, he was arrested and convicted of the rape and murder of an eighteen-year-old woman, crimes he claims he did not commit (N'Zinga, 8). He was sentenced to forty years in prison in Maryland, which he is still serving today. N'Zinga's experiences give him credibility and authority to speak on life in prison, especially as a self-identified "New Afrikan" man. It is assumed that N'Zinga was around twenty-four or twenty-five when he created this zine.

"The Anarchist Rain" uses more emotional appeal than the previous zine; whereas Rayson focuses on logical arguments against the

government and even employs some statistics, N'Zinga focuses more on recording his experiences as a Black man brought up in a system where everything was set against him. He uses powerful language to evoke the way being incarcerated has changed his views on life and even himself: "I am able today to say I am not the beast that this judicial system of injustice has placed on my humanity" (N'Zinga, 14). This statement is very moving for many reasons; we live in a society where people are not even given a chance to fight for themselves simply because of who they are. For N'Zinga, to rise above what you have seen and experienced your entire life is an expression of freedom.

Before being incarcerated, N'Zinga stated he wasn't expecting to reach twenty years of age, and had realized to some degree that "amerikkka, society, the system wasn't promising our kind of human beings anything except drug dealing, drug addiction, hopelessness, powerlessness, humiliation, poverty, and certain death." The use of the satiric misspelling "amerikkka" is a reference to racist and fascist ideas that undermine the liberty in the United States. It should be no surprise then that someone who can see this reality would be apathetic towards not only life but also themselves. N'Zinga uses his experience of becoming conscious of the way people of color are exploited their entire lives, whether directly through capitalism or through prison, to help others do the same, to realize their potential and dignity in a world that has tried to strip them of everything: "And at the end of the day, you're not a 'criminal' cause of what you do, you're a criminal cause of who you are, and where you happen to be" (8). This statement is similar to Rayson's statement about the law being enforced differently according to race or class. Thus, they are able to form an argument against the American notion of criminality that has associated crime with people of color. N'Zinga doubles down on this point by stating that those who are aware of the painful reality they are subject to are compelled to "struggle in a purposeful and directed drive to educate, agitate, and organize the masses of people... Consequently, we must live life being seen as "trouble-makers," criminals, outlaws, etc" (40). Even though they are fighting for social change that would benefit many, the combined fear of crime and change causes activists to be seen as menaces rather than revolutionaries.

N'Zinga's purpose for creating zines is to create representation for others who have been unjustly imprisoned and were able to flourish

despite their situation: "In prison, behind bars, in the belly of the beast, in a situation of extreme and traumatic repression, this conscious human being must daily do battle with an insanity filled environment..." (40). N'Zinga illustrates how life in prison is a daily battle because prisoners are subject to different forms of sensory deprivation and are stripped of their fundamental human rights. Accepting his reality was one part of his battle while living through it is a different one.

Conclusion

The creators of prison zines help those who have not been incarcerated to realize the truth about the prison system: it is corrupt, harmful, and demoralizing. Some zine creators have shared their experiences or the experiences of others to make those on the outside understand the reality of being incarcerated in the United States, particularly the realities of people of color who have been marginalized in many ways. Perhaps most importantly, these zines also allow incarcerated people to connect and relate with each other and at the same time open their eyes to the reality of the prison system and its exploitation. They are empowered through education and social awareness.

The purpose and audience of prison zines can vary, from zines meant to entertain fellow incarcerated people or those meant to inform those on the outside. The main driving force, however, that continues to motivate the creation and distribution of zines is to unite activists with one another, both inside and outside of prisons. Furthermore, these creators also grant incarcerated people a chance to realize their humanity, to realize that the label of the immoral criminal that has been set upon them is a result of things outside of their own control, as showed by N'Zinga. Finally, creators have employed the use of anarchist philosophy to justify prison abolition, stating that "the system must be abolished for any hope of realizing a just and free society" (Rayson, 2).

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Making Sense of a Post-Minimalist World: The Development of John Adams's Postminimal Style through his Early Operas

Dalton Hartsfield

For a word that is applied so often to pieces of music written since the 1970s, the descriptor “postminimal” tells us very little about the music it is used to describe. It offers shockingly few parameters or stylistic ideals that descriptors of other eras of musical history convey. Even its one inherent parameter has its flaw, as the end point of minimalism and the beginning of post-minimalism is not always clear. Should we accept under the label of minimalism any works composed with the minimalist aesthetic? Only works composed by foundational minimalist composers? Or, narrower still, only works composed within a narrow time frame surrounding the genre's genesis in the “Downtown” New York scene? Frustratingly, these styles tend to resemble their component pieces of music, with sections gradually transforming into each other so seamlessly that one can only recognize a change has occurred long after it began.

There are some misconceptions about minimalist and postminimalist music that could make matters more confusing for uninformed listeners trying to distinguish between the two. The first is the belief that postminimalist music involves “adding complexity” to the basic principles of minimalism. This statement robs minimalism of its identity as “the most important and influential movement in avant-garde music of the late twentieth century” (O'Brien and Robin 2). Early minimalist composers such as John Cage and Steve Reich were deeply concerned with creating music that was just as revolutionary to the musical world as Schoenberg's first etudes with twelve-tone rows. Cage made such a connection explicit when he wrote that his ideal future of music would bear “a definite relation to Schoenberg's twelve-tone system” (Cage 5), and in “Music as a Gradual Process,” Reich explained a strong desire to reframe how music could be composed and listened to by having the sound of the finalized composition reflect the process by which it was composed, “focusing in on the musical process” to direct a listener's attention away from themselves and towards the music (Reich). A second misconception is that postminimalism

reintroduced the concept of tonality to the minimalist technique. Pitch centricity and the presence of diatonic scales can be found in both minimalist and postminimalist works, but the tonal framework of common practice music is virtually incompatible with much postminimal music. Jonathan Bernard calls the harmony in postminimalist works “tonal-sounding,” “generally ‘harmonic’ but not common-practice,” and at times emulative or subversive of functional tonal harmony depending on the composer, but correctly stops short of allowing a label of true tonality to be placed on this music (130). A move away from extremely harsh dissonance might make this music more accessible for many listeners, but one wouldn’t be able to fully say that *In C* is actually in the key of C major, nor would one be able to apply other tonal labels to the works of many later postminimalist composers.

In order to create a boundary between minimalism and postminimalism for the aid of defining both of these movements, I am accepting Bernard’s definition of minimalism as a genre that must be confined to the music of its founders and collaborators in the Downtown New York music scene during the 1960s and, in the most generous definition, the early 1970s. This means that any works created by Cage, Reich, Philip Glass, and other accepted minimalists composed after this time period would instead be attributed to the postminimalist period. Additionally, any composers from outside New York who employed the minimalist style, any composers who came to be active after 1970 and did not participate in the earlier beginnings of minimalism, and, most broadly, any composers who were experimenting with or responding to the aesthetics of minimalism without using them strictly in conversation with the original minimalists are postminimalist in their entirety. In this way, as Kyle Gann writes, minimalism was a “common root” of much musical output to follow (“A Forest”).

When we define minimalism and postminimalism in these ways, few composers before John Adams come to mind when considering how to analyze and follow the evolution of a composer’s journey into postminimalism and what that meant for their musical output. He meets none of the necessary qualifications for minimalism: his time, geographic location, and even broader musical style all do not quite line up with the given parameters. Yet, with his first mature music being an open response to minimalism, and his use of the minimalist style evolving and developing

as he found a way to include it in his own musical language, he is a perfect candidate to start with in an attempt to make sense of what the postminimalist label entails, and the factors that make such a work a success. Through an examination of the expositions of his early operas *Nixon in China* and *The Death of Klinghoffer*, I will explore how Adams recontextualizes the theoretical values of those styles of music as he creates his own unique postminimal style, one that is well equipped to match the complexities and nuance of the bold topics of these works.

An Introduction to John Adams

Adams, born in 1947, was about 10 years too young to be in active conversation with the early minimalist pioneers of New York during the mid-1960s. His musical background was rich and diverse: his father was a classically trained clarinetist (Adams 3), his mother was a big band singer (Adams 4), his Harvard professors were some of the leading voices in modernist music (Adams 33), and in his free time he enjoyed listening to jazz and rock-and-roll (Adams 40-41). Along with this diverse background came a respect for many different forms of music, which led to some conflicting feelings on the development of contemporary music during his education. On one hand, he had an adverse reaction to “arrogance” he perceived from the lectures of Pierre Boulez and Milton Babbitt’s infamous article “The Composer as Specialist” (Adams 30-31). However, he also felt such a need to prove himself as a modern, forward-thinking composer that as an undergraduate he wrote a letter to Leonard Bernstein criticizing *Chichester Psalms* for not being stylistically contemporary enough, lambasting his “swooning sentimentality and bland tonal language” (Adams 32).

His conflicting feelings regarding the direction of contemporary music may have heightened the appeal of minimalism, a new genre that offered some respite in its radical differences from much music that came before it. After graduating from Harvard in 1969, he received a copy of John Cage’s *Silence* and found himself deeply affected by Cage’s bold and “radical and illuminating” proclamations about the future of music (Adams 56). While he would later come to move away from an uncritical admiration of Cage before even arriving to *Phrygian Gates* in 1977, it’s clear that the minimalist principles and challenging new ideals set forth in

Silence had a profound impact on Adams as he continued to struggle with finding his unique voice as a composer during this period.

Phrygian Gates would be the first piece that Adams wrote that he considered to be a mature, full-fledged work in his developed musical voice (Adams 88). Finally settling into a style he found suitable, Adams's career fell into a period of exponential growth. Once his pieces started seeing some success, he found himself in demand for projects that put him outside of his comfort zone, including several larger ensemble commissions, a film score, and an electronic music and dance collaboration to celebrate the opening of the MOCA's temporary home in Los Angeles that Adams credits with establishing a theme of a "large-canvas landscape," the concept of his music depicting a massive scene that changed slowly over time, reflecting minimalist influence on his developing style (Adams 123).

It was around this era of experimenting with multiple collaborative mediums that he was introduced to Peter Sellars. In their very first meeting in 1983, the topic of *Nixon in China* was proposed. It took Adams two years before agreeing to write such an opera, afraid of glorifying Nixon, whose administration he strongly disliked (Adams 125–128). The team that produced *Nixon* (Adams as composer, Sellars as director, and Alice Goodman as librettist) would later return just a few years later with *The Death of Klinghoffer*, detailing the scandalous murder of an American Jewish man on board a cruise ship hijacked by Palestinian militants in the Mediterranean. For Adams, who was brand new to composing for opera at the time he agreed to compose *Nixon*, these were two very ambitious topics to tackle in his first two operatic works. Yet, equipped with both the aesthetics of minimalism he had adapted to his style as well as a quasi-tonal understanding of consonance and dissonance for the harmonic structure, Adams was able to create two works of considerable dramatic and musical value.

Nixon in China, Act I Scene I ***"Chinese" Music***

The scene for *Nixon in China* is set in a Chinese landscape not yet touched by any decidedly "American" sounds. Yet, Adams does not aim to imitate traditional Chinese music through any decidedly "Eastern" sounds either. The work opens with an extended instrumental section

based on scalar patterns in several stratified rhythmic values layered on top of each other. Running eighth notes propel the music forward in the strings, while winds are assigned the same scale in dotted quarter or half note values, occasionally blurring metric lines as they fall into periods of alignment and non-alignment with the motor below. Occasional bass notes and brass figures punctuate the music to give slight variance to the material.

Multiple minimalist and harmonic strategies are at play here. The repeated ostinatos in the instruments with scales are reminiscent of the minimalist aesthetic, while also nodding to minimalism's loose ties to temporality by having the pattern played simultaneously in multiple rhythms and by doing so obscuring the metric strength of a recurring eighth note pattern in the string line. These bits and pieces of the minimalist aesthetic reflect Adams's background with the genre, while working to establish a sound that suggests a sense of confusion or alienation from the pulse.

However, the harmonic implications of this opening section are possibly more interesting. The opening scales could be analyzed as A minor: every iteration of the scale starts on an A and ends on an A the octave higher, and the scale content is identical to the A natural minor scale. Already, the natural minor scale suggests to a 20th-century American listener an air of seriousness, along with a potential somber or otherwise unhappy color. Yet, Adams does not allow the music to be heard fully in A minor, as the bass drones orient the ear to A, C, and F when they come in. The scales do continue to center around A, but with the combination of the A natural minor scale set and the bass notes the implied harmonies could consist of A minor, C major, or even F Lydian. It is therefore impossible to give this section a certain tonal label, further disorienting the listener.

Beyond this, the scales also change at times without warning; in measure 31, the pattern begins on C-sharp and, if analyzed as C-sharp centric, would outline the notes of C-sharp Phrygian, while at times replacing the C or G-sharps with naturals in no apparent pattern. In measure 62, following a short transitional pattern established in measure 60, the pattern changes again, dropping a half-step and outlining what would be C Phrygian over an F drone in the bass, implying F minor. The inability to decisively declare pitch centers during this section is possibly

the biggest device Adams uses for narrative purpose, as it definitively establishes this music as foreign and unsettling to his audience. The implied minor colors may give the music a slightly intimidating tone, but it is most important to understand that we are not at home in Adams's portrayal of China, making space for future contrast once Nixon arrives.

"American" Music

If China's music is harmonically unstable, unfamiliar, and dissonant, the music representing the American characters is anything but. After the conclusion of the chant section in measure 222, the accompaniment takes on an arpeggiated figure, and brass and saxophone eventually enter to signify the arrival and landing of Air Force One. Reflecting minimalist influence, a running sixteenth note arpeggio holds steady under the pressure of many seemingly random metric changes, only occasionally being interspersed with a syncopated triplet figure to prevent the music from falling into monotony. Harmonically, by the time Nixon first sings a note in measure 328, the music is and has for some time been sitting comfortably on a C major chord, the "metaphorical representation" of the United States throughout the opera (Johnson 38). There is even a notable presence of the flat seventh scale degree treated as a consonant chord tone, a possible reference to jazz, another American tradition.

Arriving to Nixon's famous "News" aria at measure 374, Adams amplifies the contrast between the bright American sound and the unfriendlier Chinese sound by advancing even brighter than a major triad. Beginning over an A-flat major chord presented by the accompaniment, Nixon's melody features several D naturals, implying an A-flat Lydian harmony as Nixon sings of such iconic American symbols as the nightly news. When his line highlights making history, the chord triumphantly changes upward to C major, long regarded as the purest and brightest of the keys, and again Adams introduces the raised fourth in the vocal line to imply the music is in Lydian mode. Throughout this entire section, while there are some changes of harmony, the harmonic rhythm is extremely slow, and once a new chord is arrived at the music holds on it for a long time, another minimalist quality.

However, in a short contrasting middle section, when Nixon even utters the words "Eastern Hemisphere" the harmonic rhythm suddenly

speeds up and more dissonant chord tones are added, highlighting the deep contrast between the two countries's representative harmonic gestures – even an American character singing about China is made less pure and bright by the mere words coming out of his mouth.

Nearing the conclusion of the scene, the music changes once again. The lyrics shift to the present tense, and after listing off idyllic aspects of life in the American suburbs, Nixon begins to consider that not everything is as perfect in the world. While optimistic, he recognizes that the world's future is uncertain with political tensions in the state that they are. After singing the rather disturbing line "The rats begin to chew the sheets," the male chorus members are instructed to speak the line at random intervals underneath, creating an unsettling mass of whispers that further subtracts from the bright and triumphant aria heard moments ago. Adams would certainly be familiar with the early work of Reich, so it's very plausible that this abstraction of the human voice takes direct inspiration from such works, recreating the texture of the voice repeated over itself to the point of obscuring the spoken words manually with a large amount of speakers as opposed to just one tape loop. This sound is certainly the most strange and out of place for any audiences expecting a traditional opera, and Adams's use of this technique certainly highlights the dramatic shift in tone, before the music returns to something closely resembling its original state and the scene transitions into Nixon's meeting with the Chairman.

Overall, this opening scene for the opera accomplishes its rhetorical goals thanks to Adams's incorporation of both the minimalist compositional aesthetics and elements of tonality into his musical language. The music is ultimately coherent, and the singers on stage are not needed to understand which moments correspond to which players in the opera, a testament to the strong and effective musical language that Adams curated. In a broader sense, the music is both recognizably minimalist-influenced but undeniably unique, and with his next opera, Adams's style would only continue to develop in his unique postminimalist direction.

The Death of Klinghoffer, Prologue

Adams would not shy away from controversy in his second opera, *The Death of Klinghoffer*, lending his style and much of his methodology from *Nixon in China* to a new source of political tension in

the Israel-Palestine conflict. Following the events of September 11th, 2001, the Boston Symphony Orchestra canceled a planned performance of music from the opera. In a New York Times column covering the decision and the ensuing debate surrounding the controversy, critic Richard Taruskin wrote that the opera "commits many notorious breaches of evenhandedness," acknowledging the libretto in his complaints but adding that "the greatest one is to be found in Mr. Adams's music" (Taruskin). He compares music underscoring the Palestinians to that which underscores Jesus in Bach's *St. Matthew Passion*, arguing that the effect of "mythic timelessness" romanticized terrorism and was only bestowed upon a single Jewish character: Klinghoffer himself, only after he had been killed in the action (Taruskin). It is safe to say that, if nothing else, Adams successfully captured the highly controversial and emotionally stirring nature of this conflict through his music. Yet, there is more to this music than a single-sided interpretation could convey, and duality is unsurprisingly an important theme to the work.

Unusual for most operas, *Klinghoffer* begins not with the first scene, but with a prologue consisting of two choruses sung without any accompanying dramatic action. In fact, there are a total of seven choruses present throughout the opera. Between the first and second scene of each act, choruses symbolizing the opposing natural forces of the ocean and desert, respectively, serve as a transition between the scenes. After the second scenes, two more choruses symbolizing night and day respectively are also presented. This closes Act I, while in Act II, a final scene where Marilyn Klinghoffer is informed of her husband's death closes the opera. Act II is preceded by one large chorus, the chorus of Hagar and the Angel, a story present in both Jewish and Muslim traditions that symbolizes the beginning of Muslim Arab and Jewish Israeli tensions. Before all of this, the choruses preceding Act I in the prologue simply portray the "Exiled Palestinians" and "Exiled Jews" as they are in the modern world, setting up the conflict that is central to the rest of the opera, and giving both sides a chance to be heard before the narrative begins.

Chorus of the Exiled Palestinians

The Chorus of the Exiled Palestinians, of the two, is slightly more complex in form. Opening the opera, a soft polyphonic texture underlies the sopranos and altos singing lines that are initially quite short and

syllabic before breaking into long melismas at the ends of thoughts. The text in this section sings of a memory of a house that had existed but been destroyed by the Israeli military, specific enough to conjure a mental image but vague enough that, when paired with the multiple singers of the chorus, could be applied to many Palestinians as opposed to a specific narrator. The accompaniment in this section is much more advanced than the accompanimental figures Adams used in *Nixon*, and the dense layering strays more into contrapuntal territory than minimalism at times, but through all the clutter an eighth note pulse is still constant throughout this section, providing a minimalist-inspired heartbeat underneath the rest of the music Adams composed. This obfuscation of the pulse with all the extra accompaniment surely comes with a meaning relevant to the text; as the chorus sings about losing their homes, it is easy to see the music as lost and wandering, constantly in motion but unsure as to where, moving forward but not always allowing the listener to hear the path ahead of them as it progresses.

The harmony in this section is also deeply complex and hard to label, but Adams's treatment of dissonance is once again very important. The opening chords resemble F minor, with bass notes coming in providing the alternating context of F minor and D-flat major before planing obscures the harmony beyond recognition as centric to any particular key. The use of chromatic planing also ties in minimalist value; the chords are mostly created by individual lines employing chromatic voice leading and do not resemble a functional series of harmonies, showing independence of these lines from each other and, together, the pantonal range of accepted sonorities in early minimalist music. The use of alternating bass notes to imply a major seventh or minor triad also occurs more frequently throughout this section, making even moments of clearer harmony ambiguous as to the nature of what that harmony is implying.

The constant motion and accompanimental action in this section creates a smoother treatment of dissonances, much like the opening of *Nixon*. It is here where one might find an explanation as to the perceived "mythical timelessness" and therefore comparative beauty of this chorus, because the pitches are constantly moving and fleeting moments of dissonance resolving to consonance can be found in individual lines throughout this section. It may be easier on a listener's ear to process dissonance in this way than in the harsher, staccato chords that Adams

uses later in this chorus; this could also reflect minimalist influence, as Gann notes that the “delicately gorgeous dissonances” in the music of Morton Feldman helped de-charge the connotation of dissonance with anxiety or other negative emotions (Gann). All of this works together to convey the image of a people who are weary, disoriented, and unable to call home the land they once considered it to be.

As the chorus continues, the texture changes drastically in both the vocal parts and accompaniment. At measure 148, a prayer begins, offering thanks to God in a homophonic setting. The harmonic language here has shifted, offering at first just open octaves, fifths, and fourths before slowly adding some more intervals through each subsequent vocal entrance, including some seconds and thirds. This offers a break from the dissonance of the dense opening, presenting more sparse, yet consonant, harmonies. The accompanimental ostinatos in this section also thin out to a simpler moving line oscillating between just a few notes, and a regular quarter note bass figure. By removing some of the non-minimalist texture and more dissonant layers of harmony, a moment of clarity is found as the chorus turns to prayer.

However, after a short instrumental interlude, the prayer returns in measure 211 and takes on a more advanced harmonic pallet. Picking up where it left off, the vocal parts start singing chords based on pitch clusters with still fairly consonant intervals, including thirds and major seconds, but the text quickly builds to singing “break his teeth” which features the occasional minor sevenths and seconds. On “teeth,” a minor second is further emphasized in the soprano, tenor, and lower divisions of the bass lines as they fall a half step at the end of the word. The accompaniment is relatively unchanged: scales have been added every few bars to break up the ostinatos for the purposes of building intensity, but “we” are still in a mostly clear texture compared to all the moving lines of the beginning. By the end of this passage, a clear shift has taken place, and the comfort provided by a reprieve from the dissonance earlier in the prayer is no longer felt.

Chorus of the Exiled Jews

Compared to the chorus written for the Palestinians, the Chorus of the Exiled Jews is a lot simpler in overall form. The texture is a lot more uniform throughout; there is no strong narrative shift as there is in the

Palestinian chorus from the lament to the prayer. While every vocal part sings in homophony in the beginning and end of the chorus, the middle features different subsections of one or more vocal parts portraying different characters interacting with each other. Like in the previous chorus, the first-person text here is specific enough to allow one to imagine a specific person singing it, but abstract enough that with the multiple vocalists delivering each line it can also be easily understood as applicable to a broader Jewish population. The textural interplay between the full ensemble and smaller component groups is certainly not a unique minimalist feature, as it appears as an important aspect in many eras; however, it is a feature that minimalism clearly values, as with limited means of accompaniment and counterpoint the presence or absence of instruments takes on a greater value as an orchestrational tool.

In the harmony and text, the chorus can be seen as somewhat of an inversion of the form of the prayer section of the Palestinian chorus. While the ensemble sings that their "empty hands shall signify this passion" in reference to a memory of having no money or belongings to their name, the opening accompaniment is extremely sparse. Initial drones on just the note G are expanded upon with B-flats in the vocal parts, implying a despairing minor harmony. Through many of the episodes featuring different groupings of the vocal parts, the accompaniment maintains this sparse quality, adding in octaves and fifths as the chorus progresses but mostly leaving the vocal to harmonize itself with triads and diatonic clusters.

The overall minor emphasis eases up slightly at the end; as they sing of a neighbor who was "brought up on stories of our love," the accompaniment once again restrains itself to a single drone note, and the presence of the note E-flat in the choir whenever a B-flat is presented allows some ambiguity to interpret the sound as evocative of an E-flat major harmony as well. "Love" is treated particularly delicately, with only G, C, D and being present, removing any tie to a particularly major or minor sound with more open intervals. The chorus ends on a particularly light note following all of the music that has preceded it in the opera: the text shifts to positive imagery in contrast with the bleak beginning, the harmony eases up on particularly dissonant or minor tonal implications, and the signature minimalist pulse even slows to give the audience a moment to breathe. Excluding the opening part of the Palestinian chorus

that has no real equivalent in the Jewish chorus, where the Palestinians begin with praise and end with calls for destruction, the Jews begin with sorrow but end with a quaint moment of happiness found in the midst of suffering. The feelings of both groups – as well as the music Adams created to represent them – are similar but come just short of aligning.

In both *Nixon* and *Klinghoffer*, Adams is clearly setting up a duality between the major opposing forces in the events he is covering. While *Nixon* features a bold, heroic America against an uncertain, mysterious China, the music for both the Palestinians and Jews is remarkably similar sounding and does not give one side the rhetorical “edge” over the other in the narrative, contrary to Taruskin’s implications. The Palestinian chorus does feature the additional opening section with moving harmonies and obscured dissonance that may trigger the reaction that they are being preferred by the music, but when considering its placement in the opera, Adams faces the challenge of opening the entire work with this chorus, an element that is not present in the Jewish chorus. The quasi-tonal content is relatively equal in both choruses, and may even be slightly more accessible in the Jewish chorus, given its clearer moments implying major and minor harmonies and the end on a fairly consonant, light note when compared to the violent ending of the Palestinian chorus.

The minimalist content is a little more blended in this exposition than that of *Nixon*, but there are still recognizable elements. A minimalist pulse is present in both choruses, whether it be carried by the accompaniment or the chorus itself, and the mostly homophonic chant-like setting avoids much rhythmic counterpoint and pre-minimalist development between the vocal lines. Scales, arpeggios, and other ostinato patterns that are present in *Nixon* are still present here, but with much more variance and fluidity. The music seems to show that Adams feels much more confident with the operatic genre by the time of composing *Klinghoffer*, given he feels at liberty to employ many more complex rhythmic tools without fear of eclipsing the drama on stage.

Adams’s Developing Style

Given that these works are operas, it is impossible not to account for some of the reasoning behind Adams’s compositional decisions as dramatic in intent. When presenting works for any

collaborative medium, composers must take many elements into consideration that aren't present in more abstract genres. However, in comparing both of the operas, we can see some parallels and developments within Adams's style.

The minimalist influence on Adams is certainly clear in both of these works, but even more so in *Nixon*. It features more of the repeating ostinato cells that are more directly reminiscent of the material in minimalist chamber works, a more unified texture, and even touches on some of minimalism's more avant garde properties with a possible reference to tape music. However, just because *Nixon*'s minimalist influence carries itself more obviously does not mean *Klinghoffer* represents a step away. Some key minimalist elements, including a regular pulse, are still present, and even with a texture that changes more frequently than *Nixon* some regular patterns of pitch and rhythm can be identified, more in some places than others. Knowing that *Nixon* was Adams's first attempt at writing for the opera stage – and that it wasn't entirely successful at its premiere, with the music occasionally overpowering the vocalists – *Klinghoffer* shows a side of Adams that is more confident and fluent at this style of writing. Both operas owe much to the minimalist tradition, but with more practice under his belt, Adams is better at adapting those aesthetics to the stage and his own voice.

The development of his harmonic language plays a role in this as well. *Nixon* features more extensive passages of harmony that are more obvious in their tonal or modal influence, but the characters of the opera play a large role in this, with Adams describing his approach to writing the American music as "emphatically triadic" (Adams 144). *Klinghoffer*'s chords feature more clusters, quartal or quintal relations, and larger overarching sections of ambiguous tonal leaning while still relying on some key quasi-tonal reliance on concepts of consonance and dissonance to provide moments of tension and relief in broad form as the patterns of accompaniment change. This treatment of consonance and dissonance is probably the most compelling part of Adams's harmonic language, resting on the tonal implications of some intervals but not ultimately relying on the functional motion of dominant topic to create the harmonic sense of stress and release.

Therefore, for Adams, it's clear that his postminimalist aesthetic is not a more complex treatment of minimalism, or a use of minimalism

with tonal properties, but a unique musical language. As Bernard writes, Adams's use of tonal elements are "an appropriation of harmony for purposes that are essentially new" (284), and his use of strict minimalist technique mirrors this, taking minimalist ideas and applying them to other conventions in opera composition. He blends elements of many previous musical eras and styles, with minimalism's place in most recent history perhaps explaining its more obvious appearance compared to older genres. This creates music that is accessible yet contemporary, challenging yet somewhat familiar. In a way, all of Adams's conflicting concerns about the music of his time are reconciled in his own, fluent language.

Conclusions

Adams is just one of many postminimalist composers, working in one of many styles of postminimalism that have emerged in the postminimal time period. With an immense number of contemporary composers being granted this label, it is easy to see why the word "postminimal" means so little, and why any attempt to give it meaning can create such a challenge. However, based on this study of Adams's stylistic development, some potential paths to a future of a more clearly defined postminimalism come to light.

With *Klinghoffer* premiering in 1991, these early Adams works are enlightening about potential futures of postminimalism, but not the most contemporary. Since then, Adams has written a "song play" inspired by more popular genres of music, two opera-oratorios, and four more full operas, as recently as 2022. These early operas may reveal more about Adams's ties to the preceding minimalist era, but a more thorough examination of all of his staged works could draw more complete conclusions about the full development of his style as more time has passed. Thus, the understanding of Adams's style as influenced by minimalist aesthetic and an adaptation of the tonal understanding of consonance and dissonance should be understood as a starting point and not a final conclusion on his output.

The world events Adams portrayed in his operas are complex, nuanced, and hard to understand. Through his music, Adams aimed to make sense of this world, portraying nations, world leaders, religions, wars, global tension, and disagreement through musical concepts. In a

way, the postminimal world of music is the same, with a nearly unlimited catalog of musical techniques available but complicated perspectives on what does or does not make an effective piece of contemporary music. Adams and other composers have, and will continue to, make sense of this musical world as well, and for the time being, hopefully this framing of the postminimalist label will allow sense to be made of their music in turn.

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Second Skulls: The Steel Helmet in World War One

Daniel Jones

In late 1914, Private Brown, a British soldier on sentry duty, stood within the safety of a makeshift trench (Ashurst, Reel 3, 27:20). In the distance he heard an officer's scornful reprimands to a neglectful sentry. As this officer approached Private Brown's section, Brown got on the step and peeked above the parapet just a moment too long. He was dead when the officer arrived, a bullet having pierced his skull. A stronger skull was needed.

In *Pandora's Box*, historian Jörn Leonhard argued that in the years preceding the First World War Germany prepared to win a war against France and Russia by conducting a lightning campaign against France before Russia could mobilize (42). After war broke out in Fall 1914, Germany outflanked France's defensive position by marching through Belgium. Despite initial success, Germany's assault was marred by logistic issues and eventually halted at the Battle of the Marne (156-157). Germany had failed to knock France out of the war while suffering catastrophic casualties. During the months of August and September, the German army's casualty rates on the Western Front were the highest they would ever reach; 12.4 and 16.8 percent respectively (303). With the mass injury suffered by both sides precluding another major offensive, a "war of position" ensued in which both sides needed to protect their own troops through the creation of defensive trenches along the solidifying frontline (158-159). While soldiers were better protected within networks of trenches, the persistent threat of injury posed by snipers and long range artillery towards their heads necessitated the creation of steel helmets.

In *The Body in Pain*, philosopher Elaine Scarry analyzed the relationship between the body, war, which is a contest of injury, and civilization. She claimed that objects of civilization are simply an extension of some function of the human body (39). For example, a bed supports the body's need to sleep, while a car supports the body's need for movement (39). Scarry also claimed that war is a contest of injury which arises when cultural realities become cultural fictions, i.e., when a people's collective belief is called into doubt by the existence of a contrary collective belief

held by another (128). As an example, Scarry wrote that prior to World War One:

France may perceive Alsace-Lorraine as a deep and abiding part of her national integrity temporarily separated from her at Versailles in 1871, while Germany may see France's yearning toward Alsace-Lorraine as territorial lust for land that has long and rightfully been part of Germany, and as a dangerous extension of French presence toward the German heartland. (129)

To resolve these mutually exclusive ideas, one side's belief is exposed as unreal through a contest of injury (88). To win the contest is to out-injure the opponent; to inflict an intolerable amount of injury to the opposition before an intolerable amount of injury is inflicted upon one's own (96). Scarry argues: the activity of war must be injury because it is the only activity that can carry the power of its own enforcement (96). The trauma of non-fatal injury causes the mind's world to be destroyed and rebuilt often compelling a population to assume the belief that it cannot contest the victor's demands (54-55, 110). Through this framework, the two most important objectives in war become clear: to injure the opposition and prevent injury among one's own. During World War One, countries responded to mass head injuries inflicted by the opposition by creating a furthering of the human skull, the steel helmet. This allowed the warring nations to extend the period until their own injury became intolerable thus losing the war. Using photographs, soldier's interviews, and painted helmets, I will apply Scarry's theories to demonstrate that as the war continued, soldiers developed a deep affinity towards their helmets as both a tool for survival in war and as an object of civilization that precipitated the reclamation of self-expression in anonymous industrial war through memorialized art.

Helmets as Objects of War

With the transition to trench warfare on the Western front, the dangers posed to soldiers shifted. Leonhard argued that the use of long-range artillery, too heavy to be used on the quick offensive, dominated soldier's experiences in the static trenches, causing injury to be impersonal, ever present, and random (293-294). British Lance Corporal Frederick William Holmes described this randomness in a 1985 interview:

On one occasion, we were coming out the dugout steps and the guard, who I was going to appoint, was in front of me and as he got to the top of the dugout to the entrance, a shell burst overhead and took half his face off. Well, his cheek anyways.... I thought at the time, really selfishly, how lucky it was that I was behind him and not in front of him. (Reel 5, 11:28, 12:54)

Because soldiers did not have head protection, other measures were implemented to keep soldiers safe. Leonard Gordon Davies, a British private, explained that some scouts would be trained to hear incoming shells and signal their firing locations to their comrades with flags (Reel 2, 28:00). Despite these measures, shelling remained a constant threat which required soldier's minds to adjust to the constant danger zone. As British Private Walter Spencer said in a 1987 interview: "You coped with [artillery fire] after a certain time. You see, you got used to all these dangers really. Your body seemed to acclimatize itself to it and when you've been in the trenches a few times" (Reel 5, 20:00). Soldiers were also trained to stay safe from small arms fire. Davies remembered how soon after arriving at the front, "We were told to move up and down the trench to get used to sort of walking in a trench and to keep our heads down so the Germans wouldn't have anything to fire at" (Reel 2, 25:53). Leonhard argued that this ever-present threat of injury caused soldiers to experience "a permanent stress situation and a huge psychological burden" (294).

Countries quickly recognized the need to protect their soldier's heads. In 1915, French medical statistics showed that among its army "13 percent of all wounds were to the head, 57 percent of which were fatal" (Leonhard, 249). By the fall, French soldiers were issued light steel helmets for the first time and were required to keep their hair short to allow easier treatment of head wounds (249). While France was the first country to introduce mass-produced, steel helmets, their light weight partially impaired their protection against shrapnel (394). In contrast, Britain's design, the MK1, which utilized a wide brim and heavier steel and Germany's design, the 1.3 kilo M16, were vast improvements in protecting soldiers' heads (394). Initiatives like steel helmets were successful in lowering the amount of injury received by the warring armies. Germany's monthly casualty rate from 1915 till the spring of 1918 was on average nearly five times lower than its losses in September of 1914 (303). By lowering their rate of injury, all countries extended the period in which the

mass amount of injury suffered by their people was still tolerable, which directly advanced their war efforts.

In the British army, initial reactions to the MK1 helmet, commonly called a tin helmet, were mixed. Lance Corporal George Ashurst described widespread dislike of the new helmets they were forced to wear in a 1987 interview: "Nobody liked [the helmets]. They were damned heavy things to put on your head" (Reel 14, 29:10). When asked about receiving steel helmets Davies said: "First of all, they were horribly heavy things, and it sort of tended to bore you down a bit" (Reel 5 25:22). After being asked if the helmets were initially uncomfortable, Spencer said: "Yes, [the helmets] were a bit uncomfortable" (Reel 4 13:48). Ashurst also described a widespread superstition among soldiers: "They was spoiling the hair and all sorts of things. They thought it would very soon rub them bald, one of them [helmets]. I thought the same" (Reel 14 29:26). It is possible that soldiers feared this because their hair was one of the last vestiges of individuality they still possessed. Unlike in past wars, the ever-present threat of injury on the Western front meant that soldiers needed to remain at the ready to prevent injury. Spencer said: "It was a crime to enter the frontline without your tin helmet on you'd get fourteen days 'CV'" (Reel 4 12:56). The discomfort inflicted upon British soldiers by their helmets showcases an important distinction between objects of civilization and of war. Scarry argues that the comfort provided by created objects is central to the function of civilization as it allows the mind's perception to expand beyond our bodily needs (39). The utilitarian construction of steel helmets somewhat impaired this function in order to increase its protective nature.

Despite their complaints of discomfort, British soldiers also recognized their steel helmet's effectiveness at preventing injury. As Spencer recalled:

They were good protection, no doubt about that ... We all found them very useful ... There wasn't much lining to them, but it was just sufficient to withstand the shock of a bullet or something like that. You didn't get the banging down your head. They were quite a good thing. (Reel 4, 13:27)

For the first time, soldiers could perform certain duties more safely. Davies said that since the helmets could withstand being hit by a bullet, soldiers could safely peer over the top of the trench, leaving just a slit

between the ground and the brim of their helmet to look through (Reel 5 25:38). The helmets also excelled in their initial purpose, protecting against shrapnel. Wing Commander Duce, who was a platoon leader in the Battle of the Somme, described his experiences in an interview after the war:

I was in the frontline there and suddenly there were two things happening. First of all, the Germans starting shellings for all their worth and shelling that line and something came down and it hit my tin helmet with such a clang it knocked it off. And I picked up my helmet, put it on again and then one second after another piece hit and knocked it off again. You can be sure I put it on quickly after that. . . that showed the value of the steel helmets. (Reel 2 13:45)

When asked what he would do under heavy shelling, Holmes responded, "Duck mainly and pray that your tin helmet protected you from it," (Reel 6, 19:45). The utility of the helmets succeeded in outright preventing what would have been lethal injury before.

As the war continued, soldiers began to trust their helmets to protect them, which alleviated their mental burden on the front. Holmes explained: "In the trenches, especially when you had a tin helmet on you felt comparatively safe, but it's a peculiar thing if for any reason you hadn't got your tin helmet on you felt vulnerable. The tin helmet was a wonderful thing really" (Reel 5, 17:24). In spite of the physical discomfort, soldiers began to experience increased mental comfort when wearing steel helmets, which contributed to their use as a conduit for self-expression. Because of this, steel helmets became emblematic of both the industrial mass production that facilitated World War One and the reclamation of individual expression by soldiers.

Helmets as Objects of Civilization

A country's level of industrialization played an increasingly important role in its overall strength in the decades preceding the First World War (Leonhard, 30). New industrial methods, especially long range artillery, greatly increased the potential rate of injury countries could inflict. Just months after the war started, all combatant countries faced difficulties supplying their military (311). In the Battle of Neuve Chapelle in March 1915, Britain successfully captured the town while taking only five

percent more casualties when compared to German losses (247-248). Two months later, Britain's shell shortages caused just twenty percent of the amount used at Neuve Chapelle to be available for an assault at Aubers Ridge (311). The result was a resounding defeat where British troops took over one thousand percent more casualties compared to Germany (312). Leonhard asserted that as the war continued a country's military front became increasingly reliant on its industrial capacity (380). The introduction of steel helmets mid-war tested all countries' industrial capacity for mass production. While German troops first started to receive the new steel M16 helmet in February of 1916, it was not until late 1917 that all frontline troops were issued one (393-394).

When the United States entered the war in 1917, it adopted Britain's steel helmet design with minor alterations. Despite their late entry, the United States successfully mobilized their industry to quickly produce steel helmets for their soldiers. The Sparks-Withington Company was contracted by the U.S. government to stamp the steel shell (Jackson). The photo taken in December 1918 by the Sparks-Withington Company

shows the five stages of helmet shell production. The corners of the rectangular steel sheets were cut, making an octagon. A bowl was then stamped in the center of the sheet. After the sharp corners of the brim were smoothed into a circle, a dull metal lining covered the sharp brim that completed the shell. These shells were

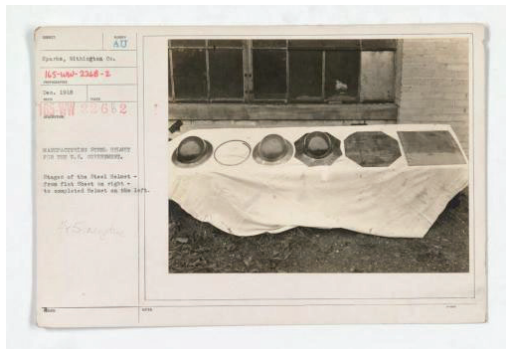


Figure 1: Sparks-Withington Company showcases helmet production. The National Archives Catalog.

NAID: 45489711

then shipped to Pennsylvania to be completed (Jackson). Just as warfare on the front was impersonal, domestic industrial production also

suppressed the individual by alienating laborers from their work. Whereas before, an artisan might have crafted a single helmet from its inception to completion, now entire factories represented nothing more than a cog in modern industrial production. The benefits of this style of production were apparent in the results: the Sparks-Withington Company alone made 473,469 identical helmet shells in less than two years.

As the war continued, soldiers used their steel helmets as a tool to reclaim their individuality. Prior to World War One, the development of smokeless gunpowder increased the importance of camouflage causing colorful uniforms to become impractical (Leonhard, 129). While some nations, like France, did not adapt their uniforms until after the war started, Leonhard claimed that the camouflage efforts conducted by 1916 caused 'field gray' to become a byword for the ordinary soldier" (386).

While the creation of steel helmets was emblematic of impersonal industrial production, this was subverted in the field where they quickly became a canvas for personalization. With uniforms being largely identical during the war, many nations made augmentations to their steel helmets to display regimental information (386).

In the American Expeditionary Forces, regiments often painted their insignia on their helmets, which imbued their mass-produced helmets with artistry. Some soldiers went even further and captured their service onto their helmets, which Scarry argued is "the flowering of civilization:" when the greater characteristics of a space become encapsulated in an object (39-



Figure 2: Col. Luther Peterson's Helmet. The National WWI Museum and Memorial. Object ID 1938.160.0.

40). One example of this phenomenon is Colonel Luther Peterson's helmet, on which he painted the places he served and other insignia using vivid colors that contrast the dark green of his helmet. Another example is Sergeant Sam Pruett's helmet that showcases the places Pruett served in a colorful, geometric design that covers the bowl of the helmet with the seal of the United States on the top. Both pieces represent the zenith of civilization: art.

Figure 3: Sgt. Sam Pruett's Helmet. The National WWI Museum and Memorial. Object ID 2004.3.0.

Conclusion

their respective militaries realize the need for increased protection. The second skulls, provided to soldiers in the form of steel helmets, were successful in advancing the war effort. Beyond this, steel helmets became emblematic of a greater motif of World War One: the struggle between mass-produced total war and the suppressed individuals caught up in it. In the future I would like to expand my research by analyzing the use of steel helmets in political propaganda as a national symbol during and after the war, and by researching the experiences that soldiers in countries other than the United Kingdom and the United States had with their helmets in order to better understand all the uses these second skulls had in the largest contest of injury Europe had ever fought.

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Confederate Monument Removal in Relation to a City's History

Marisa McKay

On May 26th, 2020, Minneapolis police officer Derek Chauvin apprehended and arrested George Floyd, a Black man, on suspicion of using a counterfeit \$20 bill. The white officer knelt on Floyd's neck for several minutes until Floyd died. This encounter was recorded and posted to the internet, sparking worldwide protests. Subsequently, demonstrations against police brutality and institutionalized racism spread across the United States. As Americans took to the streets to protest, people also began to question monuments to the Confederacy and their connections to white supremacy. As soon as May 31st, protesters in Birmingham took down a statue of Charles Linn, a Confederate Navy captain.¹ Attempts to remove monuments were not unique to Birmingham; The Southern Poverty Law Center (SPLC) reported that 94 Confederate monuments were removed in 2020, almost double the 54 taken down between 2014-2019.² These figures show how the 2020 wave of Black Lives Matter protests may have brought forward major discussions about the Confederacy, its symbols, and its role in upholding white supremacy in the United States.

While these dialogues reached a boiling point in 2020, debates and controversies surrounding the removal of statues have long existed. Since 2015, Charleston, New Orleans, and Charlottesville have been at the center of the contested discussions. In the aftermath of violent events, these cities contended with the legacies of Confederate monuments. Exploring the histories of Confederate monuments across the United States reveals that cities rarely follow the same progression or reach a similar consensus in their approach to preserving or removing these statues. This essay explores the question: How do demographics and a city's historical connection to the Civil War shape its decisions regarding Confederate monuments, especially in the past decade? Additionally, this paper discusses the distinct connection between violence in Charleston, New Orleans, and Charlottesville and their decisions regarding the removal of Confederate symbols through a comparative lens. Although

these cities have different histories in relation to the Civil War, local efforts to remove monuments began after they each experienced large-scale violence such as mass shootings and police brutality. Furthermore, each city's dialogue regarding monument removal faced backlash and violence, especially from Confederate defenders. Though Charleston, New Orleans, and Charlottesville have different demographics and histories, various patterns of violence reveal the level to which defenders of the Confederacy devote their identity to the cause. In today's elevated political climate, it is important now more than ever to understand how a city's public history impacts the lives of its people.

Established Scholarship

Historians and social justice activists have well explored the topic of Confederate monuments. These groups have had a long-standing discussion on the history of these monuments, whether or not they have a place in today's society, and if they were ever necessary in the first place. Among the Black community, it is widely agreed upon that the Confederacy and its symbols represent harmful and racist ideals. For many, Confederate monuments serve as reminders of a time when slavery dominated the country and embodied physical representations of white power and supremacy. Although these discussions are critical and relevant in the modern age, the proliferation of nationwide debates calls for scholars to explore the complexities of monument removal processes. This essay takes a deeper look into the role of violence and the varying historical and political dynamics that shape local removal dialogues.

Recognizing that monuments are superficial representations of history, not history itself, is essential. Thus, monuments illustrate the political biases of those who erect them and are meant to elicit a social or emotional effect. Most Confederate monuments are located in Southern states, within the boundaries of the Confederacy (See Figure 1).³ These monuments often celebrate and honor Confederate generals and include a limited amount of information about the individual's story.

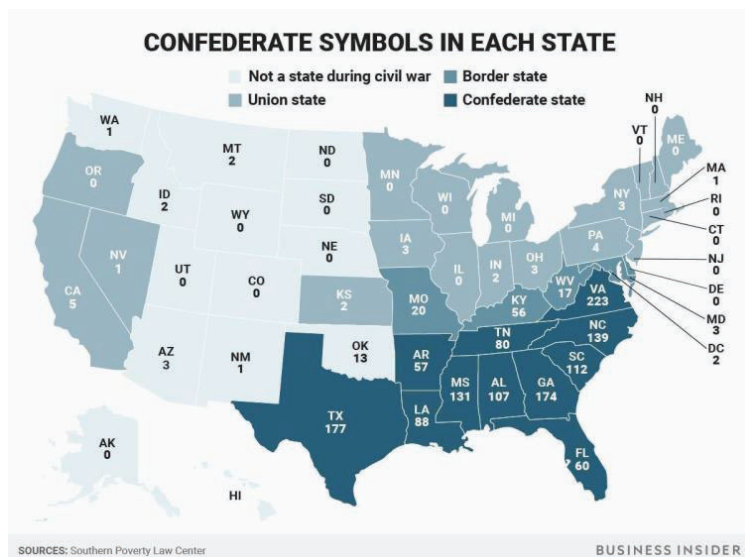


Figure 1. Number of Confederate Symbols in Each State, 2017

Standing Soldiers, Kneeling Slaves by Kirk Savage sheds light on the realities of an America that was founded on the institution of slavery. Savage argues that commemorating emancipation through monuments is more difficult than commemorating the Confederacy because of its public format; “the impulse to commemorate dates and heroes defined by the orthodox narrative histories of the dominant culture remained strong, even when those definitions worked to marginalize the very people doing the commemoration.”⁴ Essentially, it was popular among southern cities to create statues that celebrated local soldiers for their heroism in the war, rather than acknowledge the shifting social climate that came with the end of slavery. This underscores the challenges of commemorating emancipation through public monuments and symbols. Savage's insights into the complexities of monument-making expose

the deeply ingrained resistance to acknowledging the true historical context of America's foundation and the ongoing struggle for freedom and equality. In *No Common Ground: Confederate Monuments and the Ongoing Fight for Racial Justice*, Karen Cox explores the history of how the Civil War has been taught and remembered across the United States, particularly in the South. She brings forward the original narrative from Edward E. Pollard, a pro-slavery Reconstruction Era lawyer and journalist. His "narrative allowed Confederate soldiers to be understood as defenders not of slavery but of the region and their race," justifying the Confederates' actions even after their defeat in the Civil War.⁵ This laid the groundwork for the Lost Cause phenomenon, which refers to the belief that the heroic Confederacy fought for many just reasons outside of the issue of slavery. Many historians classify the Lost Cause as pseudohistory because of how it twists the historical narrative surrounding the Civil War.

Cox establishes the difference between memorials and monuments by defining memorials solely as ways to commemorate a deceased person. Monuments, while also commemorative, serve a deeper purpose of displaying a person or group's values and modes of thinking. Recognizing that monuments are superficial representations of history, not history itself, is essential to her argument. Thus, monuments illustrate the political biases of those who erect them and are meant to elicit a social or emotional effect. Most Confederate monuments are located in Southern states, within the boundaries of the Confederacy (See Figure 1). These monuments often celebrate and honor Confederate generals and include a limited amount of information about the individual's story. The Civil War monuments on state grounds "were placed there by white southerners whose intentions were not to preserve history but to glorify a heritage that did not resemble historical facts."⁶ This means that there is significance to the location of Confederate monuments. The very first Confederate monuments were constructed for deceased soldiers and were placed in cemeteries immediately following the conclusion of the Civil War. It could be argued that these locations are much less problematic because they are private property and directly honor the deceased individual where they reside. This, however, is not always the case. In the following decades, more monuments were placed around Southern cities, mostly on government land such as courthouses or capitol building lawns. Cox notes that these locations are significant on their own but are

especially poignant when considering they overlap with the locations in which lynchings took place. Many public lynchings of Black individuals took place on courthouse grounds, and the white crowd that attended them were likely to also attend unveilings and events for the monuments themselves.⁷ So, placing Confederate monuments at these locations only adds insult to injury for the Black community.

The Confederacy

The Civil War and its aftermath are imperative to understanding the memory of the Confederacy and the myth of the Lost Cause. The Confederacy fought for the preservation of the institution of slavery along with other issues related to states' rights. Given that slavery in early America was a racially based system that emphasized white power over the livelihoods and freedoms of people of color, the Confederacy's political and economic frameworks were rooted in white supremacy. Despite the Confederacy's loss in the Civil War in 1865, organizations such as the United Daughters of the Confederacy (UDC) kept the war and the South's memory alive through historical education and by erecting monuments honoring prominent Confederate soldiers. Over a century later, the UDC and 21st-century supporters of the Confederacy, known as Neo-Confederates, have shaped the image of the Confederacy that remains in modern American society. The Neo-Confederate mission has morphed over time, but the general principles and motivations are undeniably similar to the original Confederacy.

Established immediately following the Civil War and legally recognized in 1919, The United Daughters of the Confederacy's main purpose is to preserve and honor the Confederacy.⁸ Membership is limited to women over the age of sixteen who are blood descendants of those who served in the Confederacy or aided their cause in the Civil War. While the UDC is most well-known for erecting memorials and monuments, the organization also provides scholarships and relief funds for members in need. Additionally, UDC preserves "rare books, documents, diaries, letters, personal records, and other papers of historical importance relating to the period 1861 to 1865." These materials are archived at a library in Richmond, Virginia.⁹

The UDC and other organizations have mythologized the Civil War through the Lost Cause. The Lost Cause is not a group, but rather a historical

interpretation that has shaped the public memory of the Southern past. The name derives from Pollard's 1866 essay "The Lost Cause: A New Southern History of the War of the Confederates." Following the Civil War, many white Southerners twisted the South's role in the conflict to fit a specific narrative. The Lost Cause narrative established that the Civil War was solely fought over states' rights and ignored the institution of slavery altogether. While the Civil War has a multifaceted and complex story, undermining the role slavery played in its origin justified Southern defeat and helped recast a racial order post-emancipation.

In 1861, Alexander H. Stephens, Vice President of the Confederate States of America spoke to the public in what is known as his "Cornerstone Speech": "the negro is not equal to the white man; that slavery — subordination to the superior race — is his natural and normal condition."¹⁰ Though one man's beliefs certainly do not represent an entire group, leaders should be held accountable for the messages they advocate for and the influence they have on their followers. In spite of Stephens' clear indications that slavery was the cause of the war, proponents of the Lost Cause reject slavery as a contributing element. Even though the Union won the Civil War in 1865 with the support of President Abraham Lincoln and his issuing of the Emancipation Proclamation, Lost Cause followers believed Confederates were "rightful heirs" of the war. They work to prove they were defenders of the 10th Amendment, which gives states the right to determine matters not listed in the Constitution.¹¹ Unlike the United Daughters of the Confederacy, the Lost Cause is not an organization; believers in it are an example of public memory, and a useful framework for historians to understand how many Southern Americans relate to their past.

Charleston

Charleston, South Carolina is a popular tourist destination on the lower East Coast and is most well-known for its significance in early American history, especially the Civil War. Referred to as the "Cradle of the Confederacy," South Carolina was the first state to advocate for the preservation and expansion of the institution of slavery in the United States and its Western territories. In the 1860 South Carolina Convention, representatives "voted unanimously 169-0 in favor of seceding from the Union."¹² As the first state to secede, South Carolina's history is deeply

entangled with the Confederacy. South Carolina proudly showcased this as part of their state identity for decades. Residents and Visitors witnessed this through their numerous Confederate symbols, including the Confederate flag flown at the state capitol since 1962 (See Figure 2).¹³



Figure 2. South Carolina's state grounds in 2008

While Charleston is not the capital of South Carolina, the city has a substantial population and is known for its long history as a US state, originating as one of America's first thirteen colonies. Charleston County was established in 1670 and is "the oldest and largest city in South Carolina."¹⁴ In 2015, 70.5% of Charleston's population was white. Black or African American residents comprised the second largest ethnic group at 23.5%.¹⁵ Since the early 2000s, the majority of South Carolina's elected representatives have been Republican, though South Carolina has historically been relatively split between the Democratic and Republican parties. In the end, they have voted in favor of the Republican party in the last few presidential elections.¹⁶

In 2015, the city experienced a violent tragedy. Dylann Roof, a white man, attempted to start a "race war" by murdering nine members of the Emanuel African Methodist Episcopal Church congregation and injuring others. All of the victims of this tragedy were Black. Before the event, Roof had actively posted pictures of himself with the Confederate flag and other Civil War memorabilia on social media.¹⁷ During his trial, Roof "insisted on denying any psychological incapacity, called no witnesses, presented no evidence in his defense, and mostly sidelined his court-appointed lawyers," earning him a death sentence in January 2017.¹⁸ In April of the same year, this was changed to nine consecutive life sentences without parole. The city was still reeling from the murder of "an unarmed Black man by a white police officer in North Charleston" two months before the massacre at the church. These two instances of violence provoked many of the city's residents to analyze the treatment of Black people by local authorities as well as their fellow community members.¹⁹ Because of Charleston's historical presence and significance in the Civil War, residents questioned the presence and strength of Confederate ideals still present in the city, extending to the high number of Confederate monuments. Days after the church shooting, a Confederate monument with the inscription "To the Confederate Defenders of Charleston" was spray painted with the message "Black Lives Matter" and "THIS IS THE PROBLEM. #RACIST."²⁰ The statue was then roped off with police tape pending an investigation.

The violent incidents against the Black community in Charleston struck a chord, forcing residents to reckon with the city's past. Many concluded that Confederate ideologies of white supremacy still manifested themselves through the presence of modern Confederate statues and iconography. By allowing Confederate memory to be publicly and physically celebrated in the modern day, the same racist behavior as existed in the Confederacy would be continually endorsed.

Notably, "following the Charleston shooting, South Carolina officials acted first, passing legislation to remove the Confederate flag from the State House grounds, where it had flown since 1962."²¹ Nikki Haley, South Carolina's governor at the time, gave a speech regarding this decision. First, she spoke about the character of the state, stating that South Carolina was overwhelmingly good. Haley remarked on the State electing a female governor and reminded the public that one of their two

US Senators, Tim Scott, was Black. The governor painted Roof as an exception, and described him as an example of someone with “a sick and twisted view of the flag.” She explained:

In no way does [Roof] reflect the people in our state who respect and, in many ways, revere it. They see it as a memorial... That is not hate, nor is it racism. At the same time, for many others in South Carolina, the flag is a deeply offensive symbol of a brutally oppressive past... The fact that [the Confederate flag] causes pain to so many is enough to move it from the Capitol grounds. It is, after all, a Capitol that belongs to all of us... It will be fitting that our state Capitol will soon fly the flags of our country and of our state, and no others.²²

Governor Haley’s decision to remove the Confederate flag from Capitol grounds was a direct response to violence from those associated with the Lost Cause and Neo-Confederacy, which Roof was. Her decision was politically significant. Haley reinstated the state’s traditional view of the Confederate flag while condemning Roof’s racially motivated attack. Additionally, while many may deem these actions as “woke” or liberal, the rhetoric in Haley’s speech challenges the notions of monument removal being bipartisan. As a Republican, she took action to remove the Confederate flag from the Capitol, but she still tacitly endorsed those who still honored the Confederacy.

As a political representative, it is understandable for her to appeal to both sides. The Confederate flag had flown at the state capitol for decades before this and has been symbolic of the city’s identity until recently. In a white-majority city with such strong ties to the Confederacy, it would be easy for them to quietly uphold white supremacy. It took a tragic event for residents and the governor to take a stand and remove the hate symbol from their state grounds.

New Orleans

In similar fashion to Charleston, New Orleans’ then-mayor, Mitch Landrieu, made public statements on his stance regarding Confederate monuments. Unlike Governor Haley’s mediation between pro and anti-Confederate arguments, Landrieu was largely in support of removing the

city's Confederate monuments, opposing the public consensus. He cited the city's longstanding history of violence against African Americans as his rationale for the historic decision.

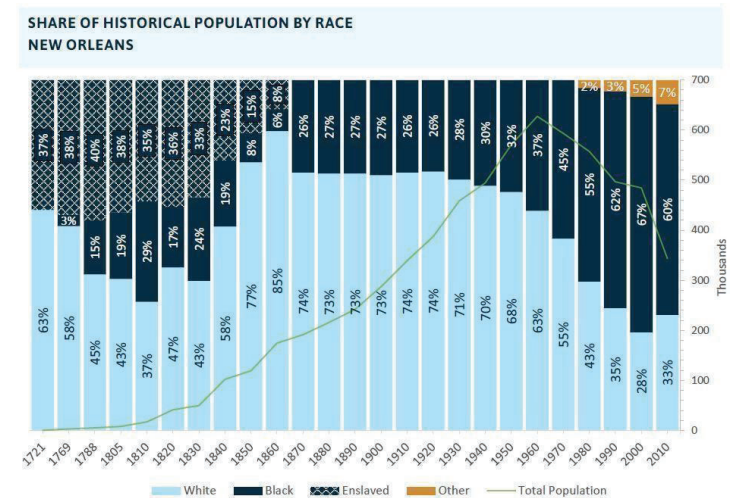


Figure 3. Racial demographics in New Orleans²³

New Orleans also differs from Charleston in its demographics. When it was still a new city in 1721, the census reported “237 Europeans, 171 enslaved Africans, and 21 enslaved Native Americans.” The number of free African residents grew until 1820 when the white population began to overtake any other group at 85% in 1860.²⁴ Around the turn of the century, the historic *Plessy v Ferguson* case came out of New Orleans. In this case, the US Supreme Court ruled racial segregation legal under the US Constitution, as long as the segregated facilities had equal quality.²⁵ The results of this case would impact the entire country for years to come, but its origin city likely experienced an exacerbated version with more lasting effects.

After Plessy v Ferguson, the white majority leveled out at around 73% for the next 90 years. As a major city, New Orleans became a center for the Civil Rights Movement in the 1950s and 60s, inspiring more people of color to move there.²⁶ By 2000, the Black population had grown to 67%.²⁷ While it is common for large cities to be more diverse than their rural counterparts, it is important to note that New Orleans has had a Black majority for several decades, something unheard of in Charleston or Charlottesville. In August of 2005, Hurricane Katrina dealt devastating destruction to the city, contributing to another demographic shift in the city: the Black population shrunk to 60% with the white population at 33%. As of 2022, close to 55% of the city's residents were Black, while white residents comprised 31% of the population.²⁸ Following the demographic trends in the city reveals that what happens in the city impacts who lives there. While other socioeconomic factors are certainly at play, one could conclude that the New Orleans Black population is related to their treatment and ability to sustain a healthy life. Proper representation and consideration from the city's political leader is thus needed to encourage black residents from leaving altogether.

New Orleans' Robert E. Lee statue stood in the center of Tivoli Circle, also called Lee Circle, for almost 150 years, and served as a backdrop to many Civil War reunions, celebrations, and other public events. It certainly represented the demographics of the city when it was first unveiled. The Civil War was still so fresh in the public's mind with surviving Confederate soldiers returning home that it made sense for the city to create the Lee monument at the time. As the years progressed and the city became more diverse, the public perception of the Lee statue also changed. In contrast, the histories of African Americans became more well-known throughout the city, which is especially shown by Mayor Landrieu. In an interview with Oprah Winfrey, Landrieu provided insight into his political beliefs: "I'm the duly elected mayor of New Orleans, a continuous body of government that's existed in this country since 1718, thank you very much. More people were sold as slaves in New Orleans than anywhere else in America."²⁹

Landrieu understands the historical context of his city, especially the darker parts. He confessed in the rest of the interview that he was not fully aware of the history of the Lee statue until a conversation with his acquaintance Wynton Marsalis, a Black jazz musician. In this

discussion, Marsalis encouraged him to consider removing the Lee statue. Landrieu did not immediately agree, but as he continued opening his perspective, he saw how much the statue's existence impacted the lives of African Americans today. As he was contemplating the removal of the statue, he overheard a conversation between an African American mother and daughter in which the daughter was confused as to why there was a monument for the side that defended slavery. Neither the mother nor Landrieu could answer why the statue remained. While this conversation was not the only reason for his decision to remove the statue, it emphasized its moral significance. The inability to validate the statue's existence certainly played a part in his decision to remove the statue. In 2015, the New Orleans City Council voted 6-1 for its removal. The public reacted with a great mix of celebration and protest before the statue was removed and moved to an undisclosed location on May 19, 2017.³⁰

On the day of the statue's removal, Mayor Landrieu gave a speech to New Orleans residents regarding the removal of four Confederate monuments. Landrieu saw disapproval over the removal of the Lee statue from many members of the public and used this opportunity to provide a convincing argument as to why it should be removed. He began his speech by acknowledging the city's diversity, mentioning the history of Native tribes, the city's cosmopolitan identity and how it historically housed immigrants from all over the world. He also did not shy away from the city's brutal history of lynching and the violence that took place during the Civil Rights Movement in the 1960s. Given the historical diversity of the city, he posed the question: "why there are no slave ship monuments, no prominent markers on public land to remember the lynchings or slave blocks."³¹ Landrieu made it clear that his position came from a place without judgment before specifically mentioning the Robert E. Lee statue.

Another friend asked me to consider these four monuments from the perspective of an African American mother or father trying to explain to their fifth-grade daughter who Robert E. Lee is and why he stands atop of our beautiful city. Can you do it? Can you look into that young girl's eyes and convince her that Robert E. Lee is there to encourage her? Do you think she will feel inspired and hopeful by that story? Do these monuments help her see a future with limitless potential?

Have you ever thought that if her potential is limited, yours and mine are too? We all know the answer to these very simple questions. When you look into this child's eyes is the moment when the searing truth comes into focus for us. This is the moment when we know what is right and what we must do. We can't walk away from this truth... This is not just about statues, this is about our attitudes and behavior as well.³²

Mayor Landrieu questioned the purpose of these monuments and the longstanding effects these symbols have had on New Orleans' diverse population. He did not belittle or demean Confederate monuments supporters but tried to get them to understand another perspective. However, he did not go as far as Governor Haley in her 2015 speech, wherein she empathized with the Confederate perspective. New Orleans, as Landrieu discussed in this speech, has a long rich history that spans before and after the existence of the Confederacy. For the majority of his speech, he attempted to get Confederate sympathizers to understand his reasons for wanting the Robert E. Lee statue to come down. The conclusion of his speech, however, clearly stated his position that "the Confederacy was on the wrong side of history and humanity. It sought to tear apart our nation and subjugate our fellow Americans to slavery. This is the history we should never forget and one that we should never again put on a pedestal to be revered."³³

Though there were protests against Mayor Landrieu's decision to remove the Robert E. Lee statue, it was through his experience listening to members of the Black community, understanding of New Orleans' history of violence, and the original violence from the Civil War era Mayor Landrieu decided to remove the statue. Unjust violence against African Americans was tied to the creation of the Lee statue and it has been a site for many events that carried on the Confederate message after the demise of the Confederacy. Landrieu's speech conveys this story particularly well. His call out to painful history and desire to make a change shows that it is possible to break out of the beliefs of the past. Though the Lee statue was revered by much of the population since its creation, the outstanding voice of modern New Orleans citizens has changed. In a city that has experienced shifting demographics, it is only natural for the widely agreed-upon perspective of the past to shift as well.

Charlottesville

Another side of violence surrounding Confederate monuments can be seen in Charlottesville, Virginia. Instead of violence being most prevalent before the removal of a Confederate monument, mass amounts of violence from Confederate defenders grew as a result of the movement to remove the statue.

Commissioned by Paul G. McIntire, a local benefactor, Charlottesville's Robert E. Lee statue was erected in 1926. McIntire also funded the "Stonewall" Jackson monument in 1921, a statue of Lewis and Clark, and other similar projects.³⁴ The Lee Monument was located in Market Street Park (formerly Emancipation Park and Lee Park). When the city faced the proposal to remove the Lee statue, far-right groups organized large-scale protests, leading to injuries and a few deaths in 2017. The city stalled the statue's removal as a reaction to this incident.

The removal process began in 2016, when Zyahna Bryant, a Black high school student, organized and submitted a petition to remove the Robert E. Lee statue.³⁵ Upon receiving the petition, the city council established the Blue Ribbon Commission on Race, Memorials, and Public Spaces (BRC). By December, the BRC advised the city to either remove, relocate, or contextualize the statue in its place. With this advice, the city publicly announced the statue's removal on February 6, 2017. Only weeks after the announcement, a group of Charlottesville residents brought a lawsuit against the city to protect the statue. The Virginia Supreme Court ruled in favor of the city's ability to remove it in April. At this point, the statue still stood in its place, unobstructed, despite the city's clear intention to remove it in the near future.³⁶

Immediately following the news of its removal, the Ku Klux Klan (KKK) organized multiple rallies in Charlottesville. Regarding a rally on July 8th, Charlottesville's Police Chief Al Thomas shared "When Klan members arrived, the atmosphere quickly became emotionally charged. Several outside groups made it clear they would become confrontational; however, we were prepared for the unrest that occurred near the conclusion of the event which unfortunately resulted in several arrests. Order was quickly restored and our community remains safe."³⁷ A Washington Post article from July 9th, 2017 reports that following this protest, "22 people were arrested... three people were hospitalized; two for heat-related issues and one for an alcohol-related issue."³⁸

The KKK rallies stirred up a lot of counter-protests, bringing further attention to the Lee statue and the call for its removal. A University of Virginia professor, Jalane Schmidt, spoke to this issue: "It is important for me to be here because the Klan was ignored in the 1920s, and they metastasized... They need to know that their ideology is not acceptable."³⁹ But efforts to keep the Lee statue standing did not slow down. On August 12, 2017, far-right group Unite the Right held a rally at the statue to protest its removal. In support of Unite the Right, Ku Klux Klan and Neo-Nazi members joined the protest. It is important to note that the KKK and the Nazi party are known for committing violence in the name of white supremacy since their beginnings in 1865 and 1920 respectively. Because of the controversial beliefs of these groups, it is difficult to pin down their comprehensive demographics. Given they are white supremacist groups, however, it can be assumed that the majority of members are white. Even if their modern embodiments have evolved with time, it is impossible to deny the racial undertones in their Lee monument protests. The rally escalated into full-blown chaos when a member of these groups drove their car through the crowd of counter-protesters, killing one person and injuring nineteen others; fourteen others were injured from conflict in the street.⁴⁰

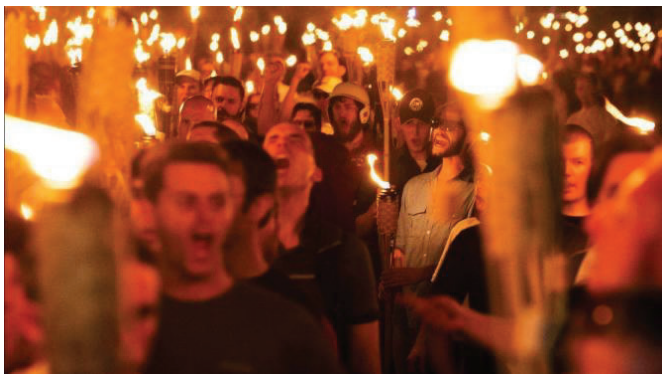


Figure 4. White nationalists gathered on the University of Virginia campus, August 11, 2017⁴¹

That same weekend, protesters and counter-protesters met in the streets, fighting with “chemical irritants and hurl[ing] plastic bottles through the air,” leaving dozens injured on both sides. Witnesses also reported very little police presence.⁴² David Duke, former KKK leader, spoke to the crowd, telling them: “European Americans are ‘being ethnically cleansed within our own nation’ and called Saturday’s events ‘the first step toward taking America back.’”⁴³ While the protests were initially sparked by the plan to remove the Lee statue, the involvement of these extremist groups pushed antisemitism, homophobia, and other forms of xenophobia to center stage, causing further violence. With 22,000 students attending the University of Virginia, Charlottesville is sometimes referred to as a college town. No city was set up to accommodate large groups such as the KKK, Unite the Right, and neo-Nazis to organize in such a capacity, but especially not Charlottesville. With such high numbers of people at each protest and the widespread media coverage, it is more than likely that some group members and anti-protesters were not Charlottesville residents. The days of violence grew larger than what the city could handle, and things got out of control. There were not enough security personnel to ensure people stayed safe once the protests escalated beyond peaceful protesting- if it ever even started there.

In response to the violent weekend, the city halted the removal process of the Lee statue, and a black veil covered the statue. The city chose to reevaluate its decision and its process of removal while honoring the lives lost. The statue remained in place for another four years.⁴⁴

Despite Charlottesville’s reaction to the far-right groups’ protests, in 2021, Integrity First for America brought a civil suit against multiple Unite the Right members for the August 2017 rally. The trial reignited tension between the groups, where slurs and other hateful language were used in the courtroom.⁴⁵ The case concluded that at least one of the defendants was guilty of the following: Civil Conspiracy, Racial, Religious, or Ethnic Harassment or Violence, Assault or Battery, and Intentional Infliction of Emotional Distress. These results cost them each hundreds of thousands to millions of dollars.⁴⁶ These rally-goers’ lives were changed forever by being involved in such a highly public court case. They were not anonymous faces in a crowd, but personally called out in the public eye for their immoral and illegal actions. The city condemned

the actions of violent Unite the Right members but continued in its consideration of their reaction as the prospect of removal lingered.

In the summer of 2021, at the request of the Charlottesville City Council, the Board of Architectural Review reviewed the City Council's renewed announcement to remove, relocate, contextualize, or cover the Lee statue as well as the General Thomas J. "Stonewall" Jackson statue. The City Council also "held a public hearing to receive public comment" on the issue. In the end, on July 7, 2021, \$1 million was allocated "for removal, storage, and/or covering of the Lee and Jackson statues, and the statue depicting Sacajawea, Meriwether Lewis, and William Clark."⁴⁷ The Lee statue was moved to a storage facility until December 2021 when it was announced that the Lee monument was to be melted down and reused into an art piece. As of July 2023, the Lee statue remains in storage under the ownership of the Jefferson School African American Heritage Center.⁴⁸

The decision to melt the statue is a unique and effective solution. The argument against the removal of statues was rooted in the idea of historic preservation and artistic integrity- by removing these monuments, the American public is throwing away important moments in history. Some Americans worry about losing the memory of the subject and the monument as a work of art. Melting the monument, however, adds a symbolic element, pointing towards rebirth. The Lee monument was associated with decades of distress culminating in a violent and chaotic weekend before its removal. By melting and reconfiguring the metal, the new piece of art can potentially provide closure and create an avenue for healing. The violent weekend forced the city to carefully assess their decision and avoid further upheaval.

Just as Mayor Landrieu decided to remove their confederate monument after input from the Black community, Charlottesville residents were receptive to making a change. Unique to Charlottesville, however, was the immediate deadly protests. Despite the city's attempt at appeasing both sides, it took years to solidify action on the Lee Monument's removal. The creation of the BRC is also unique to the city of Charlottesville. Rather than requiring the head political leader to make the decision, Charlottesville established an entire committee to handling such a delicate issue.

This committee took their time, allowing them to avoid a potentially impulsive solution. The stalling of the monument's removal

reflects the city's contemplation of multiple perspectives. While they initially decided to remove the statue based on a petition started by a young Black girl, the city was forced to reevaluate after an outcry from the opposing side. Such violence requires ample thought and consideration to avoid inciting more violence.

While the Robert E. Lee statue did get removed, it took several years with a lot of violence and civil unrest. The protests and counterprotests weren't simply about the preservation of monuments. They revealed the power that the Confederate ideals still have on many modern Americans. Members of the KKK, Unite the Right, and Neo-Nazis identify with the Confederacy so strongly they were willing to gather and commit violence to be heard. This violence is triggered by a type of defense mechanism as they defend their white supremacist ideology.

In Retrospect and Going Forward

It should also be noted that both Landrieu and Haley are white politicians. Their decisions to remove Confederate symbols came from a collaborative understanding of diverse perspectives. It's essential to recognize that while both political figures are white, their commitment to dismantling symbols associated with the Confederacy reflects a shared recognition of the diverse perspectives within their communities. Their decisions underscore the importance for politicians to actively listen to the voices and concerns of their communities, demonstrating a responsiveness to the evolving social standard. It could also be argued that a Black politician in their place would have a much more difficult time passing the same legislation. The American government carries historical baggage; the historical legacy of racism and discrimination in the United States can create resistance to change. Some individuals may be resistant to acknowledge the need for legislation aimed at rectifying historical injustices. The complexities surrounding issues of race and historical symbolism necessitate a nuanced and empathetic understanding. This emphasizes the imperative for politicians, regardless of their racial background, to engage in genuine dialogue and address the systemic issues embedded in the nation's history.

It has been a couple of years since the incidents in each of these cities. While they have their own unique stories, patterns emerge. For

Charleston, recent violence against the Black community was a catalyst for change. In New Orleans, the diversity of the city and the mayor's open mind led to the decision of removal. Charlottesville experienced mass violence in response to the proposal of change, effectively stalling its progress. The decision to repurpose the monument's material reflects their consideration of the personal significance to people of all perspectives. Through each of these stories, it is evident that violence is often used by pro-Confederate people to establish and retain their superiority. The violence from modern Confederate defenders echoes the Confederacy's dangerous and harmful mission. These examples provide many lessons as other cities continue the debate of the future of Confederate monuments. Confederate monuments are a sensitive topic for many Americans, and perspectives often differ based on the person's race and family history. Research on groups such as the Lost Cause, United Daughters of the Confederacy, Unite the Right, the Klu Klux Klan, and Neo-Nazis provides insight into how some modern Americans identify very deeply with the Confederacy, either through lineage or ideals. Violence, at times, may seem to explode randomly, but when analyzed closely, the triggers become clearer. As cities continue to navigate these discussions, it is crucial to approach the issue with a nuanced understanding of historical ties, ideological perspectives, and the potential for violence rooted in defending a controversial heritage. Professional conversations surrounding Confederate symbols should be handled delicately and with precision. Each city has a unique history and community, and the emotional involvement from every side should not be underestimated.

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Tell Me a Story: Analyzing the Self-Perception of Composers as Musical Storytellers

Ebele Mgbemena

Introduction

Musical composers are storytellers who do not follow the traditional story arc but insist on their audience to interpret their message by bringing in their subjective experiences. A composer's main goal is to not construct a rigid narrative for the audience. Instead, their goal is to build a landscape for their audience to walk through. Composers act as interactive storytellers who lead this way by sharing for the purpose of learning. Learning is a dynamic activity that often occurs in relationship with our differing environments. Music, as a landscape to walk through, can also be an environment where learning can undergo.

To understand music as a constructed environment disposed at the service of learning means to understand proactive participation listeners embark on in musical communication. The dynamic role that communication has in the human experience is not excluded to rhetorical means exercised in the spoken languages. This reality is also exercised within music because it is also a means of communication. This project aims to highlight the interconnectedness between the storytelling that composers undergo and how they invite listeners to assist in the story production. My hope for this project is for people to understand the interactive nature of music storytelling by studying how composers view themselves as storytellers and how that effects their attachment to how their music is received.

To this end, this case study serves to analyze the self-perception of composers as storytellers. I interviewed three contemporary composers of the University of Missouri-Kansas City (UMKC) conservatory: classical musician Dr. Chen Yi, percussionist Victor Caccese of Sandbox Percussion, and electronic musician Dr. Paul Rudy. During the interviews, I asked questions that inquired about their perspective on narrative control, audience perception, and interpretation. This allowed me to understand their view on musical storytelling and what role the audience has in interpretation.

Victor Caccese: Narrative, Connection, and Musical Abstractness

Victor Caccese is a percussionist that values his role as a performer as well as a composer in curating music for his audience. His self-perception as a storyteller revolves around his main goal of optimizing the opportunity for his audience to receive the most out of his music. For him narrative creation bases itself on the choice of the composer. Nevertheless, storytelling is a central part of his craft. "[Narrative] is subjective. It is unique to each listener, that's like the great thing about finding your own narrative" (Caccese).

The Abstract Nature of Musical Narrative

For Victor Caccese, narrative can mean various things, but primarily it refers to the enjoyment one has with exploring the sound world of a piece constructed by the composer.

With a lot of the music I've written it has been a lot of setting up a sound world and kind of living in that sound and having the piece just occupy that sound world for its entire existence...But for me narrative is really about hearing what are the first little contents of what the piece is going to be, like motives or certain instruments we're going to hear like being introduced to those, and then just enjoying the process of hearing things spin out over time (Caccese).

The conclusions an audience may arrive at when exploring sound worlds may differ. Based on Caccese's definition, one can have various narratives for one piece of music. These varying possibilities of a narrative explains the difficulty in curating such a thing for an audience. The narrative itself, like the definition, does not need to be clearly defined to qualify as a valid narrative. The composer must introduce the sound world that the audience will enter without contriving it in a way that imposes a fixed narrative for the listener because there needs to be room for subjectivity. This is what makes it abstract by nature. By its nature it depends on the subjective experiences of the receiver for it to be expressed to the world. Caccese's job as a composer is to introduce the sound world of the piece; but the audience must ask themselves what they learned from this piece based on the subjective journey they took with the music. By taking this abstract

journey with the music, the musical narrative becomes the product of someone's personal encounter with a presented sound world.

This then begs the question of whether the narrative of a piece can be controlled. For Caccese it depends on what definition of narrative is being considered in the question. "For me narrative doesn't necessarily need to be protagonist, good guy bad guy, conflict, resolution, ending. It doesn't necessarily have to be laid out in that clear of a way" (Caccese). Rather, narrative can be accessed by the initial motivation a composer had when curating their piece. Caccese continues,

Many composers work in different ways...one composer might have a narrative already in their mind from the start and their goal is not necessarily to control the narrative but they are controlling everything else to achieve that narrative... But maybe the idea of composing is not knowing what it is and not having a clear idea for compositions and start writing maybe that comes organically to you...You don't have a clear idea of what that narrative is, but eventually as you start writing you get a clearer idea of what that narrative is and you just allow that to happen, I would say in that sense you're not controlling the narrative and you're just letting the music control the narrative which is a perfectly valid way of composing as well, I think both are...but I think what's important is that the narrative is there entirely [that's] still the main bedrock for the piece (Caccese).

But, foundationally, what's important is that there is a narrative present. It's paramount for a narrative to be present, however curated it may be, for the audience to go through that story for the piece because it is still "the main bedrock for the piece." There *is* a journey, it is only a matter of how the composer chooses to make that journey go: in a particular way guided by the instruments in his control or in an open-ended way guided by the composition process itself.

Program Curation and Audience Perception

Additionally, because of the abstract nature of musical narrative, audience perception plays an integral part in music composition. Audience perception depends a lot on the composer's ability to curate programs that provide the space that allows the audience to form a narrative about the piece. As a composer and especially as a performer, audience appeal

is everything. Caccese's compositions flow from his experience as an audience member. When he thinks about his experience as an audience member, he values how included he feels when watching a performance. Because of this enjoyable experience, Caccese strives to provide that same kind of experience during his concerts. It all boils down to knowing who his audience is to know how he can include them in the musical experience. For him, inclusion is the appeal and the primary goal that composers have when curating programs.

When asked about his opinions about audience appeal, Caccese replies that the focus should primarily be on how the audience can enjoy the played material. "That's kind of everything" he continues, "I studied performance and just through enjoying performing and listening to other people perform, I started composing my own pieces. So, it really comes back to being an audience member myself" (Caccese). For him the main reason he enjoys going to concerts is because of the connection that the performer builds with the audience. In our interview, Caccese shares, "I feel very included [when attending concerts]. I think that's the key for when we write our own music, when we program and curate our own concerts. We're always thinking about how we are going to connect to an audience. And that goes back to asking the question: who is our audience?" It is important for Caccese to know his audience in order to know how to curate a concert that can connect to them. Connection is the main appeal.

However, this appeal does not aim at persuading the audience to agree with a particular point about the music; rather, the appeal is to connect with the audience by creating a program that gives them the best opportunity to perceive the music. When asked what importance he places on how his work is perceived, Caccese answers,

I guess I don't worry too much about the way pieces are received but I try to think more about, am I setting up the audience to get the best opportunity to get the most that a piece has to offer?. And I think the best way to do that is to think really carefully about how you curate a concert (Caccese).

The problem is not about how the piece is being perceived, the problem is whether the composer is optimizing the opportunity for the piece to be perceived the best way it can. The goal here focuses on not getting the audience's way by the musical decisions of the composer.

...I don't think that we necessarily are concerned with things being perceived a certain way but we mostly just want to give the opportunity for them to perceive it in their own way but not get in their way... They have the opportunity in the moment to appreciate it for everything it has to offer. I think that that's the goal that we have in playing concerts. It's really more about the curation process; I think that helps with how music is perceived (Caccese).

This goes back to the abstract nature of music. Because of its abstract nature, one cannot codify the narrative of a piece of music for an audience. The audience must curate it for themselves, go on that journey, and understand what it is they learned from the music. That process, generally speaking, will look different for each receiver and for each composer. But this opportunity to go on this journey can be optimized when the composer undergoes that story-telling role and curates that sound world in a way that can be perceived well by the audience.

Paul Rudy: Navigating the Landscape of a Musical Universe

Dr. Paul Rudy is a professor, performer, and composer of music. He is the Curator's Distinguished Professor of Composition at UMKC Conservatory. He works mostly with electronic music and explores sound healing in his work. Rudy views himself as a storyteller who does not use words. He curates narratives based on the belief that audience participation plays an integral part to the finished product of a piece. Rudy does not view his narratives as fixed arguments, but as invitations into a sound world. He does not approach his music with the expectation for his listeners to listen for a specific story. Instead he approaches his work with an open disposition that's willing to accept the various conclusions his listeners may arrive to. Throughout our interview, Rudy refers to this notion of claiming one's experience while consuming art and that this experience does not need to subject itself to a homogenized or a formulaic listening experience. "The more we can go into a listening experience without expectations, the more we can actually receive from the music...Listen *to* things not *for* things" (Rudy).

Role as Storyteller: Building the Landscape in the Universe

It all starts with an idea, some kind of indication of what the piece will be about. This is the starting point for Dr. Paul Rudy's construction process. This starting point begins to be an interest for what Rudy would like to communicate with his audience and it sometimes involves sounds or inspirations of commonly heard objects. Whatever it is, it must be presented in a way that is non-intrusive. Rudy's storytelling process follows from his belief that the narrative of music should not be controlled. Control of things like interpretation impedes on the audience's opportunity to experience the music organically. For Rudy, this is the only way that he can effectively communicate with his listeners. That is the goal to fulfill. When asked how he appeals to his audience members he says,

I'm never interested in communicating specific things, like a specific narrative. One of the things that I like to say is that I write stories without a narrative. Because I use a lot of recognizable sounds, sounds that you might know and have heard, I'm sort of relying on you to bring your own experience with those sounds to your listening of the piece (Rudy).

It's all about curating the best opportunity for the listener to participate in the narrative building of the journey. "[T]here's specificity to the story that the individual listener gets to supply the narrative to," he continues saying, "If I've done my job right, you get to put yourself into the music. It's like I write a landscape and you get to choose how you want to walk through it." Rudy recognizes that the crux/heart of the music listening experience of his work relies on the audience to bring in their personal experiences to the listening experience. The listener cannot divorce themselves from their own complex histories and biases—these personal elements influence the listening experience. Instead of controlling the narrative of his pieces, Rudy supports his listeners by approaching his musical compositions as a landscape.

This is unusual for storytelling development because it breaks the fourth wall. Rather than being swept away into a fictional story that separates the audience's world from the actor's world, the story development present in his compositions becomes interactive. It invokes the audience's participation throughout the program. Instead of performing a song as a finished piece, the composition becomes unfinished until the audience fulfills their duty of relating what they heard

to their experiences and from that process finish the narrative. Each listening experience, or landscape journey, will look different because everyone's experience is unique. Rudy does not build to direct: for him this is impossible. He builds to guide.

The Codification of Art

Each audience experience of a piece must be uninterrupted by the composer's attempt to control a narrative. When Rudy communicates to his audience, he gives over some responsibility to the audience in the interpretation process. This way, they may bring in their stories to understand the composed piece. By giving over this responsibility, the composer releases his control. This maxim of music composition unmasks the problem we have with assumed narratives. In the middle part of our interview, Rudy and I analyzed his composition "Degrees of Separation: Grandchild of Tree" by sharing the stories that were taken away from the piece. When I asked him to tell me what he intended for me to know, he first turned it around on me and asked what landscape I walked through. I concluded that his composition told a story about searching for identity. He thanked me for listening to his piece, and in particular for listening through the discomfort of the piece saying:

As a composer that's what we hope for our children, our piece is our children, that people will give them the benefit of the doubt and give them more than just the superficial listening. So, you got a really wonderful story out of it, does it matter what my story is? [My] story is interesting to me, but your story 20 years later is really interesting to me! It had a lot of specific details to it that I couldn't compose into the piece, only you could have composed that into the piece (Rudy).

This response begs the question, how important is the initial motivation for the piece? Rudy's motivation is not necessarily instructive; he acts more like a guide that presents a path through the landscape, but I have the freedom to maneuver through it how I please. The composer's intentions get sidelined in order for my subjective journey to exist. The instrumentation and tempo introduced in the beginning of his piece served as the key for the piece. It gave me the background for what world I am entering in, but it did not give me instruction on how to listen to it. Rudy's interest in my interpretation of the piece over his initial motivations for the

piece reveals his primary focus as a composer. He advocates for uncoded art, or for art with an undefined agenda. Art at its foundation intends to be subjective: that is why it's always changing. To codify that medium into a fixed way of analyzing it loses its original artistic mission. Rudy questions this attitude towards artforms like music saying that "everything loses its color, its uniqueness, its life." So, for him to share his intentions for his composition prior to hearing mine compromises his role as the landscaper. It would have subordinated his mission to the codification of art.

Have your own journey with it, have your own story with it. If you invest enough into listening to my piece that you experience a beautiful story like that, I'm like I can't do any better than that as a composer. There's no more that I can do than that experience. It's a very postmodern idea. It's not the composer that creates meaning, it's the listener that does that. In fact, it's the listener that creates the piece of music because before that it doesn't exist. It's just sound (Rudy).

Chen Yi: Musical Language is a Universal Language

Dr. Chen Yi is a classical composer and professor at the UMKC Conservatory. She has been the Lorena Cravens/Millsap/Missouri Distinguished Professor at the UMKC Conservatory of Music and Dance. Dr. Chen is a composer who works to blend her Chinese culture and Western traditions throughout her music. Her hope is to "bridge different cultural traditions, to improve understanding between people in the world for the peace of our society" (Chen) through her music. Chen does not explicitly refer to herself as a storyteller, however she does refer to her compositions as a reflection of her "cultural and psychological makeup" (HSU music). Her compositions are a hybrid of her Chinese music language and Western music language. "I am happy when people get inspiration from my music, even if it might be different from what I could have thought about. It might be appreciated by them aesthetically or psychologically. I would be satisfied then and feel honored, because I could create something that could touch people's hearts" (Chen).

Communicating to The Heart of Her Audience

Chen believes that music is a universal language that reflects the subjective experience of a person. Because of the various backgrounds and cultures of people throughout the world, each experience that we have can curate a unique vehicle for how we interact with creation. This includes created endeavors like music.

Modern society is like a great network of complex latitudes and attitudes -- and despite their differences, all cultures, environments and conditions have something valuable to contribute to the whole...each experience that we come across can become the source and exciting medium for our creation. In this sense, a composition reflects a composer's cultural and psychological makeup. For example, I believe that language can be translated into music. Since I speak naturally in my mother tongue, in my music there is Chinese blood, Chinese philosophy and customs. However, music is a language. Although I have studied Western music extensively and deeply since my childhood, and I write for all available instruments and voices, I think that my musical language is a unique combination and a natural hybrid of all influences from my background. (HSU Music)

Because of this subjective relationship one may have with music, Chen aspires to communicate to the hearts of those in her audience. When asked if she believes that music follows a logical structure that people aren't aware of, Chen replied

...My dream is to write music that touches people's minds as well as their hearts. The heart means passion, and music needs passion: if you don't love what you write, your musicians won't enjoy playing it and the audience won't share it with you. That's where the heart comes in. The mind responds to the work's logical structure (Yuan).

Chen keeps in mind the relationship between the head and the heart. It is almost as if the head carries the psychological history of the receiver while the heart carries the audience's cultural history. Both are needed for one's work to be perceived in its musical language and translated into the audience's own primary language.

Chen, like the other composers within this case study, does not concern herself with a detailed interpretation from her audience. "Since aesthetic concepts have many layers according to one's background, strict control of response of music appreciation is not important for me" (Chen). Her appeal to an audience is the hope of openness. Composition in this study serves to be a lot like slam poetry. An artist walks up to the stage and shares their creation, embraces the courage and vulnerable state of opening up to a sea of people, and awaits their response. There is no subjugation over the audience. The piece is not "catered" in the sense of altering it for an audience, rather it is simply presented and accompanied with a key that a person may or may not hold with them as they experience the music. There are no fixed expectations on one's final interpretation. The narrative gets released, received, observed, and repurposed for personal reflection or returned with a different interpretation.

Conclusion

There is a flexible imagination unique to musical language that written language cannot access. This uniqueness breathes the beauty found within music. Storytelling within music roots itself in this flexible imagination within the communication process between the composer and the audience. The composers in this case study insist on their audience to participate in the creation and resolution of the story in a way that is both personal and communal, evolving throughout time. Because there is an ambiguous medium between the composer and audience, it becomes a requirement for the composer to embrace the possibility of various interpretations.

In this way, these three composers—Victor Caccese, Dr. Paul Rudy, and Dr. Chen Yi—take up the role of a storyteller who are detached from the resolution of their story. They provide us the information that tells us what this song entails; however, the concluding remarks lie with the listener. The goal is reached when this allowance is present, furthering the evolution of the song with the listener's experience. That is where satisfaction and expertise is found. It is not merely found in the composer's calculated intentions for a piece, but rather in the unstable exploration process of performing the piece.

The composer's decisions override traditional practices of storytelling. They are not making an argument; they are presenting narratives subjected to audience revision. That is what's unique about and particularly embraced in musical compositions. Because musicians must be open to the possibility of differing perspectives, the story they tell becomes interactive, begetting a narrative that's subjected to change. This reveals the interactive nature of the communicator-receiver relationship between composers and their listeners. They welcome their audience to appropriate the piece to tell their own stories. As a result, the product of these appropriated pieces become enriched with new meaning influenced by personal experience.

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A Critical Assessment of Gender Dichotomy within Vedic Literature

Shirin Saha

I. Introduction & Background

Themes embedded throughout rhetorical devices within post-Vedic Hindu texts are highly influential in contemporary Indian society. Such literature features pedagogy on many aspects of life, including spiritual, domestic, and public. Societal constraints in South Asia established by religious ideals have historically excluded women from fair educational and career opportunities, which are necessary for increasing generational literacy, wealth, and status. According to Robert W. Blum M.D., "Education increases girls' knowledge of, and exposure to, the outside world; it strengthens their decision-making power within the family, promotes their social and physical mobility, and increases their economic independence and control over resources, all of which enhance their autonomy" (Blum, 2004). Education is just as much a tool for social mobility as it is a means for defense against injustices committed towards women and girls. A study done by the International Journal of Child Abuse and Neglect found that a significant factor associated with child marriage was the level of the mother's education, followed by the level of the girl's level of education (Binu, V.S. 2022). Child marriage is an infringement on basic human rights. "When a girl gets married before she is mature enough for it physically and mentally, she faces immense consequences that extend to her family and society" (Bhanji & Punjani, 2014). Withholding education makes way for susceptibility towards the male narrative because it leaves women lacking the ability to critically assess male-dominated religious literature, without the imposition of an external perspective. Illiteracy leaves people without the ability to think for themselves, which is a notable problem within the discussion of women's empowerment. This study will investigate the roles and depictions of women within Vedic texts to see if there is any correlation between them and the current literacy rates in India.

II. Argument

To foster dynamic growth of families and societies in South Asia, we must first address the theoretical role of a woman. Where do societal perceptions and norms, especially regarding gender roles, originate from? Religious literature outlines many aspects of day-to-day life for South Asians; it is embedded in our history, culture, and social structure. To gauge the extent at which Vedic literature impacts popular ideology in India, we must understand the author's purpose for it. The true meaning of a text, as intended by the author, may differ from the reader's interpretation of the text. Factors such as setting, context, rhetorical devices and author's purpose are all contributing to the reader's interpretation. This study discusses how the authors of the Vedas are unknown, which means that literary critics do not have a solidified idea of the text's purpose (Chari 330). This is one of the main barriers for Vedic textual analysis. Due to the complexity of the Sanskrit language, as well as the labyrinthine nature of Hindu epics, one might argue that certain teachings have been taken out of context, and even misinterpreted. Social science researcher Igor Grbić speaks to the imaginative distortion of reality portrayed in Indian literature; he believes that the author used "hyperbole taken to such extremes" (Grbić 2) to artistically communicate "something defying human speech" (5). Such rhetorical devices set up a story that transcends the "world as we know it" (8), so how do we interpret and apply the message in the context of modern-day? How have Ancient Indian thinkers approached this, and how would their interpretations differ from ours? Many notable figures in Hindu epics are *hyperbolic* representations of humans, and their characteristics are not easily applied to individuals in a contemporary, scientifically evolved society. Misrepresentation of Vedic teachings have historically resulted in repercussions, such as the enactment of a divinely granted moral code that socially stratified the Indian population. I will delve further into this concept, as well as the Law Code of Manu, in later sections. Ancient Hindu texts may be characterized as figurative or literal, and it is important to differentiate between the two because many of these teachings set societal standards for the treatment and inclusion of women.

Political and social regulations, cultural traditions, and gender roles within developed nations are often inspired by written codes of morality, i.e., books of faith, and so their depictions of women will be the

focus of my study. Certain mythological stories found in Sanskrit texts, such as the Puranas or the Mahabharata, are thought to be written by "male Brahmins to propagate their conception of women and their ideology of female sexuality" (Chaulagain, 329). Common themes include: the confinement of women to the domestic sphere, exclusion of women from leadership positions, and the commodification of women. Ancient Indian thinkers have debated the role of the authors' intention in pertinence to a reader's or speaker's comprehension of the texts. The school of thought known as Mimamsa, or Vedic exegesis, focused on the texts themselves, since the authors were no longer around. The Vedas have a myriad of unknown authors and originated as oral poetry passed down over many generations. Interpreters of the Vedas are from a different time and social climate than the authors which leaves a possibility of miscommunication. Scholar V.K. Chari states that "the purport of a sentence is not determined by a particular person using a particular set of words, but by long convention associated with words" (Chari, 330). In other words, the understanding of Vedic pedagogy is highly ambiguous and may vary depending on who is reading them and when they are being read. Chari speaks to the biases inherent to human nature, which often cloud our perception of not only literature, but reality itself (331). Without the authors' textual purpose clearly stated, "there is no clear sense of such intention," and these "utterances will be liable to fanciful interpretation" (331). Religious teachings may fall into the wrong hands and be weaponized or used to control certain groups. The historical continuation of male domination across most sectors of life is due to the promotion of specific texts in the Vedas which support gendered hegemony. It would be a mistake to assume that all Vedic texts are catered to men, and this study only accounts for a select few which portray women's roles in the domestic and religious sectors. That being said, perceived meanings and interpretations of ambiguous religious teachings are driving factors for the systemic oppression of certain social classes. According to Cass R. Sunstein, "A systemic disadvantage is one that operates along standard and predictable lines in multiple important spheres of life, and that applies in realms that relate to basic participation as a citizen in a democracy" (Sunstein, 1995). Realms may be defined as education, healthcare, public policy, and protection from violence. The

legal subordination of certain groups is morally justified within the historical context in which Vedic texts originate from.

The major societal effect of Hindu pedagogy calls for an in-depth analysis of what it is implying. With textual analysis and literary criticism, I will investigate female archetypes commonly seen throughout Vedic literature, and the rhetorical techniques used to convey them. I will discuss the implications of misinterpreting these archetypes, as well as techniques for further assessment of how these teachings are adopted by the public. In addition, close observation of day-to-day life in India will help reveal whether religious themes are significant in practical application. Although some Hindu pedagogy has feminist undertones, uplifting the status of women and creating space for them in the divine sector, certain prominent texts do the opposite and demote women in society. To address gender disparities, we must first acknowledge that contemporary attitudes towards women are established by historical and religious convention. By adapting a method of rhetorical analysis, I will critically assess texts from the *Manusmriti* and *The Teachings of Queen Kunti* and examine the connection between religious pedagogy and beliefs that perpetuate gender discrimination in South Asia.

III. Method

Scholar Vernon Robbins developed a method to interpret biblical texts as if they were intricately woven tapestries, with several layers of textures, patterns, and designs. His approach to socio-rhetorical criticism featured "five different angles to explore multiple textures within texts: (a) inner texture; (b) intertexture; (c) social and cultural texture; (d) ideological texture; (e) sacred texture" (Robbins, 3). This method of analysis combines multiple forms of written discourse to derive a multifaceted interpretation of religious texts. "As an interpretive program that moves toward broad-based interpretive analytics, it invites investigations that enact integrated interdisciplinary analysis and interpretation" (13). Innertexture refers to repetitive patterns within the text, i.e., narrational, sensory, grammatical, or argumentative patterns. It is used as observation, as opposed to interpretation, to understand the literal meaning of the text. Intertexture refers to how a text references other texts; this may include oral-scribal, artistic, popular, and historical literature. Social and cultural texture explores the worldly conditions that may have evoked certain

texts. This includes looking at theories from multiple fields of study, major events occurring at the time a text was written, and the beliefs of the people who wrote it. Furthermore, 'ideology' may be considered as a symbolic worldview, or a complete set of beliefs (not necessarily true or false) encompassing one's present reality. As stated by Robbins, "the spectrum of ideology for socio-rhetorical criticism occurs in four special locations: (a) in texts; (b) in authoritative traditions of interpretation; (c) in intellectual discourse; and (d) in individuals and groups" (193). Ideology determines the overall message of sacred texts, and given so, "the task is to explore the manner in which the discourse of a text presents comprehensive patterns of cognitive and moral beliefs about humans, society and the universe that are intended to function in the social order" (193). I will be adapting Robbins's method of textual analysis to fit the Vedic sphere. The authors' purpose for the Vedas is not definitive, and the sociocultural conditions in which the texts were devised is vast since they were developed over the course of many centuries. Due to this, we must separate our analysis into two sections: an inquiry into what the text is *literally* implying, with the help of Robbins's methodology, and a discussion over how these themes have been *interpreted* and adopted by the public.

IV. Analysis

As mentioned earlier, the Vedas have no single founder. They are a collection of beliefs and foundations from Buddhist-Monastic faiths which have been passed down orally as *shrutis*, amongst generations. The Shrutis were spoken and preceded the Smritis, which were written. *Shruti* means "something (revealed to) and heard" (Flood, 68) and is believed to be the origin of all Hindu law (Shandilya, 1). They were orally passed down between teacher and student. *Smriti* is something "learned by heart" (68) and is composed by mankind in the post-Vedic period. The Smritis were created to record the Shrutis. In other words, the Shrutis gave rise to the Smritis. The Shrutis, composed of ritual and philosophy, were eventually transcribed before the start of the Common Era (Witzel 2015) into The Four Vedas, The Upanishads, and the Vedanta Sutras. *Veda* refers to sacred knowledge (Flood, 68). Tenets dominating in East and South Asia between 1400-400 BCE (Witzel 2015) revolved around transcendentalism which originated as a male-centered practice; division between the

genders has been a continuity continued since the establishment of civilized society and organized ritualistic practice. The two components of the divine field include *Prakriti*, pertaining to the material world, nature and femininity, and *Purusha*, to male, mind, and divinity. These concepts fall under *Samkhya* (dualistic) philosophy, which was adopted by Hinduism. Women were excluded from monasteries because they were believed to be inherently impure and further from God than men. This view of women as being less Godly than men prevailed into post-Vedic times with the written *Smritis*, which include the *Bhagavad Gita*, *Mahabharata*, *Ramayana*, *Puranas*, and *Manusmriti*. Due to the sheer depth of content in Vedic literature, it would be quite difficult to do a comprehensive analysis, so I will focus on the *Smritis*, which may be looked at as what the populus in 5th century BCE 'learned' from the preceding *Shrutis*, or divine teachings.

The *Manusmriti*, also known as The Law Code of Manu, is an authoritative Hindu document that outlines the specifics of creation, prayer, and living piously. There is no distinction made between religious and secular law (Olivelle XXVI). Related is the separation of church and state in Western culture which is primarily done to keep the chaos and impurity of government out of one's spiritual affairs. This prevents the contamination of religion (Ravitch 2022). When human affairs such as social class and gender discrimination enter religion, in conjunction with the complex, hyperbolic nature of Sanskrit text, the true meaning may be misinterpreted. The *Manusmriti* perpetuates a belief in the God-given hierarchy of man, in which social class is dependent on karma from previous lives. Each gender and social class have its own *dharma*. *Dharma* is a code of conduct for achieving spiritual growth; some believe *dharma* is our purpose on this Earth. Interestingly, *dharma* differs for individuals of different castes or genders, meaning that there are multiple paths to enlightenment. This sets a precedent in which the dominating caste (the priests) has the power to influence religious hegemony in favor of their agenda.

To preface, the *Manusmriti* or *The Law Code of Manu* is highly contested in India and was publicly burned in 1927 to protest the book's blatant support of the caste system. That said, it is still an influential text in Hinduism and its effects should be studied. *The Law Code of Manu* describes the creation of males and females as the Lord splitting 'himself'

into a male counterpart and then into a female one. Ganganath Jha adds his view on the translation of the code being that “the Female form was separated from His own male form” (32). This portrayal of genesis (women being birthed from men) sets a precedent that men have an inherent, God-given superiority over women because He himself is a man. This conception of a male God is categorized as an **ideological texture**; it is one of the author’s insinuated beliefs that sets a basis for future thematic progressions. Though not explicitly stated, the rhetoric used to describe God himself is male-centric. Pronouns associated with God, and other Godly duties, rituals, or tasks, are explicitly stated as he/him. Take for example the hymns from the *Rigveda*: “That excellent glory of Satvir, the god, we meditate, that he may stimulate our thoughts” (Olivelle 1996). Another example is as follows: “...Wise lord, ruler king, loosen from us the sins we have committed” (1996). A Hindu ritual termed Vedic initiation, or *upanayana*, is conducted to accept an individual’s “entrance into Hindu society” (Olson 1977). However, this ritual is restricted to young boys. This is an example of repeating, symbolic **innertexture**. One might infer from *The Law Code of Manu* that men have a proclivity towards leadership and order since the supreme Godhead is portrayed as a man; it also supports the notion that men should take the lead in religious duties, especially those in public. Take for example Hindu priests and gurus: Priests are religious leaders (of public ceremonies, rituals and prayer) and gurus are spiritual teachers who instill Vedic knowledge unto their pupils. Both positions are almost exclusively filled by men and the pupils of gurus are usually boys (Olson 1977). A dichotomy between the public and private sectors of spiritual life exists within many Vedic texts; men rule over public matters while women take care of the home. Though women are seen as vessels of *dharma* and piety, they are not able to achieve spiritual supremacy on their own; they must be led or guided. There is also a surprising dearth of discourse on unmarried women; they are always portrayed under the care of a male figure. In Patrick Olivelle’s translated version of *The Law Code of Manu*, a warning made against women is as follows:

They pay no attention to beauty, they pay no heed to age; whether he is handsome or ugly, they make love to him with the single thought, ‘He’s a man!’ Lechery, fickleness of mind, and hard-heartedness are innate in them; even when they are

carefully guarded in this world, therefore, they may become hostile towards their husbands (Intro, 35).

This text claims that women are inherently hypersexual. A possible interpretation would be due to impure instincts, women cannot be trusted to make their own decisions, and so they need to be "guarded" (35) by a man. They are also thought to be instinctual, as seen by the statement "they make love to him with the single thought, 'He's a man!'" (35), which is not a desirable characteristic for capable workers or leaders. These **ideological textures** contribute to the vilification of women who are often written as wretched, defenseless creatures in need of saving, also known as the 'damsel in distress' archetype. In Western culture, popular media often features sexist archetypes for the sake of a plot; the "damsel in distress" theme "[reinforces] the idea that men are the more capable sex, and women need to be rescued" (Solis 2017). How does this archetype contribute to the systematic disadvantage of womankind, especially when presented through a much more influential medium, such as scripture? A reader might assume that women are not capable of being autonomous due to their impure and instinctual thought patterns, which they use to justify the exclusion of women from public office. We can only speculate on the authors' purposes for portraying women in a certain light; we cannot say for certain if they are for storytelling purposes or due to a certain bias. Regardless, there will be an undeniable impact on the audience's psyche. Carl Jung attests to the perception of women in society: "This image fundamentally unconscious, a hereditary factor of primordial origin... an imprint or 'archetype' of all the ancestral experiences of the female... of all the impressions ever made by a woman" (Jung 1981). He is arguing that the female archetype roots from the collective actions of women throughout history, but what he does not account for is societal cofactors such as expectation, opportunity, ability, and custom. These archetypes are more reminiscent of the beholder than of the women; this means that society's personal prejudices play a role in the development of feminine archetypes. Furthermore, the overuse and subsequent normalization of certain female archetypes (such as the good mother, the evil mother, and the maiden) (Murugusu et. Al 2023) create a false perception of reality because the other archetypes are going unnoticed (such as the warrior and sage).

Section XV of the *Manusmriti*, 'Sacraments for Females,' Verse 2.67 states that "For females the Rites of marriage have been ordained to be their 'Vedic Sacrament,' the serving of the husbands their 'residence with the Teacher,' and the household-duties their 'tending of fire'" (67). The 'teacher' of the household is the husband, who is to guide the woman through spiritual and earthly matters. Marriage is seen as the holy duty of a woman since she is only able to achieve *dharma* when guided by the teachings of her husband. There is a lack of collaboration between husband and wife: only one is expected to learn from the other instead of both parties learning and growing together. Furthermore, the wife's dharmic duty is to take care of her husband and household. This insinuates that one party is more capable of imparting knowledge than the other, especially regarding faith.

To expand on this idea of unequal interdependence, I will be assessing pedagogy from *The Teachings of Queen Kunti*, a Hindu book descending from the Indian classic Mahabharata during the early Vedic period. Oral-scribal **intertexture** characterizes how a text utilizes other texts; *The Teachings of Queen Kunti* includes references to not only the *Mahabharata*, but also the *Puranas* and *Bhagavad Gita*. Stories and myths begin to bleed together; pedagogy from each piece of literature converges into a uniform message received by the public. This is why it is crucial to study how intertextual references build upon one another.

The dichotomy between spiritual and material life is a **sacred texture** reverberated across most Hindu religious texts. It descends from Buddhist-Monastic transcendentalism and is inherently oppressive due to the characterization of the two natures: "...this material world is made up of two natures- the inferior nature and the superior nature. The superior nature means spiritual life, and the inferior nature is material life" (Kunti, 11). Hindu spiritual life is dominated by male hegemony. Men are given superiority over women, specifically regarding the public religious sector, since they have historically been the ones to lead sacred rites. Women are associated with the material world; they are deemed as more susceptible to lust and greed. Maya, "the material energy of illusion" (10), is described as a woman. "Maya will test us to see how firmly we are fixed in Krishna consciousness. Because she is also an agent of Krishna..." (10). The feminine serves as an agent to the superior male entity (Krishna). Women

are rarely defined on their own terms, but more commonly referred to as someone's mother, wife, daughter, or sister.

Queen Kunti is deemed a "great and saintly woman devotee" (5) whose illuminating philosophies have been recited throughout India for many years. Despite her great achievements, the author of the book, *The Teachings of Queen Kunti*, introduces Kunti as "the wife of King Pandu" (5). Women are associated with, primarily, their male counterparts. Her identity remains inferior to that of her husband's. Furthermore, the Mahabharata states that Kunti "was gifted with beauty and character" (5); she possessed unwavering devotion and benediction (6) and through which she came to be known as "The Most Intelligent Woman." Women were believed to be "unable to speculate like philosophers" (6), however, Kunti was "blessed by the Lord" (6) because she "[offered] her obeisances without reservation" (7). The text goes on to say that "Although Kunti had the body of a woman, she was a devotee. Therefore, she was not like an ordinary unintelligent woman. Rather, she was the most intelligent, for she recognized Krishna to be the Supreme Godhead" (9). 'Ordinary' women are seen as generally unintelligent unless they choose to submit themselves to the male 'Supreme Godhead.' There is a consistent **sacred texture** showing up within the pedagogy of Queen Kunti and that is the theme of submission. Women are expected to be unwaveringly submissive to a Godhead, their father, brother, husband, or some other male figure in power. This is how they achieve "consciousness". They are even expected to stay loyal and devoted to their husbands after his death. This theme is repeated throughout most prominent Hindu texts and reflected in societal attitudes; it is incredibly rare for Indian widows to remarry. In South Asia, women are often treated as commodities being transferred from one male guardian to the next. Their right to autonomy is overshadowed by religious and societal norms calling for the submission and undying loyalty of women to their male handlers.

In numerous Hindu texts, including *The Teachings of Queen Kunti* and the *Mahabharata*, men can freely marry as many wives as they please, even though women are instructed to stay unwaveringly loyal. King Pandu had wives other than Kunti; Lord Krishna had over 16,000 wives! Conversely, assessments of virtue were given to several of the female figures in Hindu Epics: Sita, wife of King Rama from the epic *Ramayana* was captured and imprisoned by Ravana for fourteen years. After he saved

her, Rama subjected Sita to an 'Agni Pariksha' or an ordeal of fire to prove her chastity (Murphy 2024). This contrast between the normalization of polygamy for men and the expectation of full submission from women illustrates the polarization of gender roles within post-Vedic society. The intrinsic properties of a specific region's social and cultural practices affect the literature produced. In India, religion and societal practices are deeply intertwined; one affects the other and vice versa. Polygamy and child marriage were common in many regions of India, especially rural areas, and the causes behind these practices can be traced back to Hindu pedagogy from the post-Vedic Era.

V. Discussion

Gender disparities found in Hindu pedagogy are translated through public mindset. The archetypes seen in Vedic literature are ambiguous and created during a time that was quite different from the modern day. This may distort the beholder's interpretation of certain sacred messages, especially without access to the authors' clear intentions. Furthermore, without a definite idea of the authors' purposes, we can only speculate on the objective meaning by focusing on "what is strictly in the text" (Chari 333). Were they simply defining the dualistic properties of the masculine and feminine, or stating they should be separate? Is there any evidence to suggest that both men and women express characteristics of the male and female archetypes? The Epics reflect the most prominent attitudes and values of the society they were written in, and surprisingly, there is evidence supporting the dualistic synergy of the masculine and feminine. However, the stories are often cherry-picked to support a certain agenda. Societal roles are reflective of the roles played by the *prominent* feminine and masculine archetypes in religious literature, and historically, they have been kept separate from one another. Throughout history, people have been hesitant towards reconciling the duties of the feminine and masculine archetypes; however, in the present there have been international breakthroughs in the introduction of women to the workforce and public office. More people nowadays believe that domestic duties, i.e., childcare and cooking, should be equally divided amongst wife and husband. Conservative religious and societal beliefs from the past continue to plague several regions of the world, including India. Some believe that the feminine archetype is solely

attributed to women, and the masculine archetype to men. This leads to a belief that women should adhere to their *dharmic* duties, which include motherhood, wifely duties, and devotion to God, and they are often looked down upon if they stray from the norm. When religious pedagogy is used to dictate the level of autonomy given to a certain group of people, while being used to instate other groups in places of power and leadership, there is a creation of an impenetrable social hierarchy.

A notable societal expectation descending from religious teachings was for women to marry and bear children, a persistent and historic convention. "The cycle of disadvantage starts before birth and continues from neglect of female children through to widowhood. The problem is exacerbated further when gender disadvantage is compounded by class, caste, and religious discrimination" (Wazir, 19). Gender disparities within cultural and religious practices are major factors affecting these same disparities within education. Attitudes towards women overall, along with regional infrastructure capabilities, affect enrollment and retainment rates for girls in school. "...the female literacy levels according to the Literacy Rate 2011 census are 65.46% whereas the male literacy rate is over 80%" (Pokhriyal, 11523). These numbers are much higher than census data from the 1990's primarily due to the Right to Education Act passed in 2009. Male literacy has jumped to approximately 85% in 2023, while female literacy lingers behind at 71% (Pratidin, 2023). This discrepancy is due to low enrollment and even lower retainment rates for girls in school. Drop-out rates for girls in secondary school and up remain notably high (11524). Women make up over half of India's population, so the ratio of literate females to males should be much higher. Literacy and education levels are two important indicators of development throughout a population; "They actually determine the quality of life for the population" (Maity, 475). For the improvement of health of any society, the quality of education for women must first improve.

VI. Conclusion

To sum up, women's autonomy and free will have been institutionally restricted due to religious pedagogy. Through the dichotomization of male and female gender roles, men were promoted to the top of society while women served as household accessories. Some believe that men have a God-given superiority over women because one,

most stories of genesis begin with the man, and two, women are seen as inherently vile and impure. Due to this, the objectification of women became normalized, and their societal worth diminished. Societal practices of child marriage and polygamy can be traced back to Hindu pedagogy. All these portrayals of women contribute to the systematic oppression of women, keeping them out of schools, temples, and public office. To reiterate, a society's overall health relies upon the education of its women. Without this, we cannot create generational success. To uplift the global socioeconomic status of Indians, it is imperative to first uplift the women.

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Author Biographies

Abbot Kidner (he/him) is currently a senior at UMKC completing a bachelor's degree in psychology. His paper, "Mending the Divide: Exploring the Relationship Between Christianity and Psychotherapy," was originally written for Dr. Johanna Nilsson's *Becoming a Therapist* capstone course. His undergraduate research interests are in reducing stigma and encouraging help-seeking behavior surrounding mental health in religious communities. He hopes that bringing awareness to the specifics of the divide between mental health and religion will help both church leaders and clinicians to come together to better address community mental health needs. He would like to thank Dr. Johanna Nilsson, Professor Shantai McCray, the research librarians at Miller Nichols Library, and his family for their support and encouragement in the creation of this project. Abbot now works as a Behavioral Interventionist serving foster and adopted children with behavior and emotion management. He plans on continuing his education in counseling psychology to become a licensed professional counselor focusing on adolescent trauma.

Jessica Burkhart (she/her) completed her final semester at UMKC in December 2024, graduating with a Bachelor of Science in Mathematics and Statistics and with a minor in Computer Science. She was selected by the faculty in her program to be awarded with Discipline Distinction for her outstanding GPA and for distinguishing herself in her academic career.

Dalton L. Smith (he/him) graduated in December of 2024 with a B.S. in Mathematics and Statistics, and a Minor in Actuarial Science.

Judy Batts (she/her) is a junior pursuing dual degrees in Spanish and Health Sciences with a minor in Exercise Science. She is in the Honors Program and is also a Trustees' Scholar. Her areas of academic focus are Physiology and Public Health. She studies tenocyte growth, replication, repair and stress response at Abreu Tenocyte Lab. Additionally, she is currently involved in a Healthy ME study with Dean Mei Fu. This study examines exercise-based interventions to treat lymphedema from breast cancer treatment in Black and Hispanic populations and additionally

researches protocol development for healthy housing.

AnnMarie Bucksbee (she/her) is a first-year nursing school student. Additionally, she is a First-Gen Roo and is part of the UMKC honors program. In high school, she also wrote a research paper using quantitative data from a survey to determine if there was a possibility of senioritis being a real phenomenon. While she is currently not working on a research project, there are many more topics she would like to write about in the future.

Dalton Hartsfield (he/him) graduated from UMKC in the Spring of 2024 with a B.M. in Composition and Theory.

Daniel Christopher Jones (he/him) is a Junior pursuing a B.A. in History with minors in Philosophy and Medieval and Early Modern Studies. His main historical interest is late Antiquity in the Mediterranean. Last Spring, his paper "Second Skulls: The Steel Helmet in World War One" won first place for undergraduate research at UMKC's History Department Research Symposium. This semester, he conducted research on portrayals of knighthood in medieval and contemporary fiction.

Marisa McKay (she/her) graduated in December 2023 with a B.A. in History, as well as Anthropology and Art History minors. Upon graduation, she was one of fifteen students recognized in the Dean of Students Honor Recipient Program for her commitment to leadership and service to the University community while maintaining high academic achievements. She currently works at the Kansas City Automotive Museum as the Collections and Exhibits Specialist, managing the library and archives, contributing to the curatorial team, and performing other necessary tasks to keep the museum running efficiently. While at UMKC, she focused on Modern American history. She has continued her research in this subject area by helping her colleague build five high school lesson plans on local automotive history spanning from the late 1800s to today. She also spends much of her time researching automotive history to create reference material for museum displays.

Ebele Mgbemena (she/her) is a Philosophy and English student at the

University of Missouri-Kansas City. Her academic interests include metaphysics, ethics, and creative nonfiction. Outside of academics, Ebele enjoys writing poetry. In both her academic and creative writing, Ebele aims to express different facets of the human experience through incorporating the beauty of nature into her work.

Shirin Saha (she/her) is a senior at UMKC. She will be graduating with a Biology B.S., as well as a B.A. in Chemistry. She is on the Pre-Medical route with plans to complete a master's degree after graduation. This was her first time completing formal research, and she feels that it was daunting at times, but overall, an amazing experience. She hopes to expand her work by completing an ethnographic section. Additionally, she is the treasurer for the Pre-Medical society and a retina technician at Discover Vision.

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We accept submissions from currently enrolled UMKC undergraduates. Your submission must have been completed during your undergraduate career at UMKC. You may submit one essay per year. Previously published or simultaneously submitted work will not be considered for publication in *Lucerna*. For more information, contact Editor-in-Chief Lilah Crum-Barnhill at umkclucerna@umkc.edu.

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