

ATOMIC

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ATTIC

SALT

2021

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ATTIC SALT

noun (Latin, Sal Atticum)

1. Graceful, piercing, Athenian wit.
2. An interdisciplinary journal which accepts submissions in any genre, format, or medium-essays, original research, creative writing, videos, artwork, etc. –from the entire LMU community the Honors programs of AJCU institutions nationwide.

Visit www.atticsaltlmu.com for full-length works, previous editions, and other information.

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FROM THE EDITORS

Dear readers,

First and foremost we would like to acknowledge that the COVID-19 pandemic has made the task of putting together this year's edition of Attic Salt a particularly formidable one. In any case, we are grateful for the opportunity to showcase the work of so many dedicated contributors who have been adaptable and committed to producing a journal of the highest quality possible in the present circumstances. It has been three years since we began accepting submissions from all Association of Jesuit Colleges and Universities (AJCU) institutions and we are proud to have published more work from students beyond the Bluff in this edition than ever before. For this reason, we would like to extend a special thanks to this year's contributors from Seattle University, Le Moyne College, Fordham University, and Santa Clara University. We hope that we will be able to continue to expand our reach in the coming years in the interest of producing a dynamic interdisciplinary journal that represents the best academic work across the AJCU community in all departments, disciplines, and fields of endeavor.

While each of the individual pieces presented in this year's edition of Attic Salt is illuminating in its own way, many of the pieces are alike in that they challenge conventional notions of the nature of intellectual inquiry. From a multimodal exploration of the relationship between physics and visual

art through acrobatic performance to an analysis of the sociocultural origins of the word "cuckold," the selected works printed here offer novel perspectives that we hope our readers will find engaging and thought-provoking.

We sincerely appreciate the many people who contributed to the creation of this journal, and we would especially like to thank Dr. Robin Miskolcze, who served as our faculty advisor this year and for whose help in editing the journal we are grateful. We would also like to thank the LMU Honors Program, Dr. Trevor Zink, Dr. John Dionisio, Nubia Valenzuela, Elizabeth Kalbers, and Dr. Andrew Dilts for their continued support. Without the invaluable contributions of Dr. Garland Kirkpatrick and our graphic designers Kadi Lawson, Sara Chang, and Paige Petersen, we could not have published this journal. And of course, without the submissions from our authors, there would be no work to display. Finally, our deepest gratitude goes out to our staff members, whose hard work has made all of this possible.

We hope you enjoy these works as much as we have.

Thank you for reading,

Zach Irving and Julia Horton
Co-Editors in Chief

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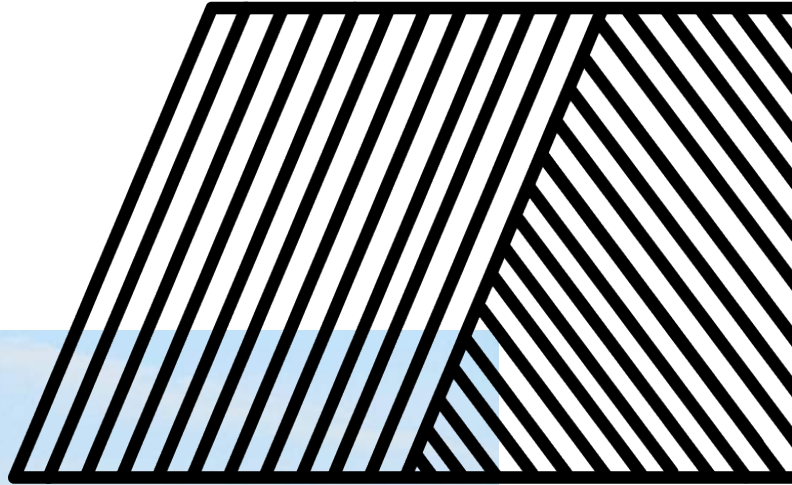
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MARENA TRUJILLO



Oktober in Berlin



MARENA TRUJILLO



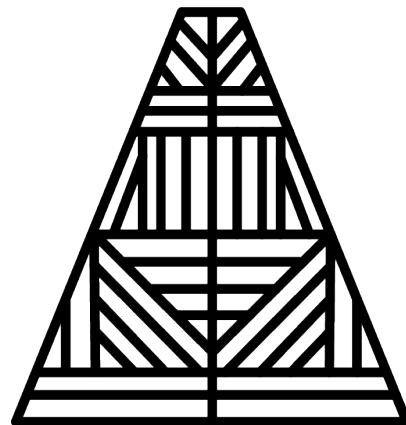
Cliffs



ELLA CAMPBELL

Ella Campbell is a third-year honors student at Seattle University double majoring in English Creative Writing and Spanish with a Writing Studies minor. She is a copyediting intern at Chin Music Press and has had the privilege of editing Christina Erteszek's *The First Lady of Underfashions* and Annie Connole's *The Spring*.

In addition, she has worked as an editor for Seattle University's Undergraduate Research Journal and had the opportunity to copyedit Isabeau J. Belisle Dempsey's paper "Framing the Center: Belize and Panamá within the Central American Imagined Community." Ella has also had her paper "Moor Than You Think; An Analysis of Othello's Contribution to the Negative Conception of Muslims in the Modern-day, accepted to the 2020 Northwest Undergraduate Conference of Literature. Ella plans on studying Spanish her senior year at Comillas Pontifical University in Madrid, Spain. She anticipates graduating in 2022 to travel and teach English abroad.



"Grab 'em by the Pussy:"

"Grab 'em by the Pussy:"

The Medieval Origin of "Cuckold" and its Reemergence into the 21st Century

The word "cuckold" has trended a few times in recent months. On July 10, 2020, Jada Pinkett Smith and Will Smith sat down for their infamous "Red Table Talk" to discuss Pinkett Smith's extramarital "entanglement" with the singer August Alsina while she and Smith were separated several years ago ("Jada Brings Herself to the Table"). This private revelation spurred a vehement public reaction. Gossip blogs obsessed over their relationship status; keyboard misogynists denounced Pinkett Smith (Bonner). Disturbingly, a new TikTok trend even emerged in which young men harassed women with the explicit goal of making "them" (i.e., women) pay for Pinkett Smith's transgression (Lopez). It was as if these TikTok users perceived a threat to their own masculinities because Will Smith's wife slept with someone else while the couple was separated. Interestingly, the loudest cries of outrage were aimed at Pinkett Smith's husband. Tweets that addressed Will Smith ranged from mocking schadenfreude to vitriol. Total strangers turned the image of him crying into a mockery of him, and they named him a "beta," "simp," and "cuck" (Bonner). It did not take long for social media to brand Smith, one of America's most self-assured leading men, a cuckold. The public response to his misfortune strikes me as the most concerning aspect of this event—

concerning, but not *surprising*. Within Western culture, there is a longstanding tradition of ridiculing cuckolds. If art offers a window into the cultural consciousness, an examination of the cuckold's appearance in literature reveals why it is stealthily one of history's most dangerous archetypes.

The *Oxford English Dictionary* defines cuckold as "a derisive name for the husband of an unfaithful wife," and ascribes the first use of "cuckold" to the Middle English poem "The Owl and the Nightingale." The poem recounts a comic debate between an owl and nightingale about a woman being cheated on and abused by her husband, who in turn cheats on him:

*Everything she does he objects to,
everything that she says irritates him,
and often, when she's not doing
anything wrong,
she gets a punch in the mouth.
There's no man who can't lead
his wife astray with this kind of behavior;
she can be ill-treated so often
that she resolves to satisfy her own needs.
God knows, she can't help it
if she makes him a cuckold.
(Atkins 152)*

Here, the Owl takes a surprisingly forward-thinking stance on gender relations and

surprise that she would cheat on him, too. However, when this view is examined through the lens of the Middle Ages' patriarchal masculinity, the Owl's message takes a dark turn. While men who were cuckolds might have only themselves to blame (as evidenced in the previous poem), he was scorned not because of his behavior but because of his wife's. Because one of the central aspects of being a man meant controlling the women in their lives, being a cuckold implied that a man was not "man enough." Worse were the homosocial implications that the cuckolded man secretly desired the cuckold that developed as the word gained widespread use. Compounded with the medieval idea that women were more sexual than men, the idea of cuckoldry generated intense anxiety in men.

Such anxiety is evidenced in a slew of other pieces of Western literature (*Sir Gawain and the Green Knight*, *Morte D'Arthur*, and several of Shakespeare's collected works, to name a few) and even in medieval court records.¹ However, for the purposes of this essay, I will be examining Chaucer's "The Miller's Tale." "The Miller's Tale" is one of Geoffrey Chaucer's more risqué stories in his 14th-century opus, *The Canterbury Tales*. "The Miller's Tale" is an example of fabliaux, a type of story characterized by sexual and scatological humor. It lives up to the genre with several fart jokes and what might be one of the earliest canonical vagina-to-mouth scenes. It also offers a satirical yet realistic take on the fear that might have consumed many medieval

¹ Derek Neal writes in the section "Cuckold," of the book *Women and Gender in Medieval Europe: An Encyclopedia*, "fights, wife-beatings and even homicides could originate in men's anxiety that their wives had made them cuckolds, or in the use of the word *cuckold* as an insult between men" (Schaus 185).

husbands. Thus, "The Miller's Tale" offers an ideal lens through which we can examine the early concept of cuckoldry and how it is irrefutably linked to our modern American social system that imbues misogynistic anxiety in men and objectifies women.

At the beginning of the tale, we meet a curmudgeonly carpenter named John and his new wife, Alisoun:

*This carpenter hadde newe a wyf,
Which that he lovede moore than his lyf;
Of eighteteene yeer she was of age.
Jalous he was, and heeld hire narwe
in cage,
For she was wylde and yong, and
he was old,
And demed hymself, been lik a cokewold.
He knew nat Catoun, for his wit was rude,
That bad man sholde wedde his simyllitude.
Men sholde wedden after hire estaat,
For youth and elde is often at debaat.
But sith that he was fallen in the snare,
Her moste endure, as oother folk, his care.
(Chaucer 3221-32)*

Here, we see exemplified the stereotypical *fabliaux*² cuckold laid out by Karma

² "Fabliau" is the singular, and "fabliaux" the plural, and a fabliau is clearly and simply defined by Larry Benson in his introduction to the *Riverside Chaucer*: "A fabliau is a brief comic tale in verse, usually scurrilous and often scatological or obscene. The style is simple, vigorous, and straightforward; the time is the present, and the settings real, familiar places; the characters are ordinary sorts... the plots are realistically motivated tricks and ruses. The fabliaux thus present a lively image of everyday life among the middle and lower classes. Yet that representation only seems real... the plots, convincing though they seem, frequently involve incredible degrees of gullibility in the victims and of ingenuity and sexual appetite in the trickster-heroes and -heroines. "The cuckoldings, beatings, and elaborate practical jokes that are the main concern of the fabliaux are distributed in accord with a code of "fabliau justice," which does not always coincide with conventional morality: greed, hypocrisy, and pride are invariably punished, but so too are old age, mere slow-wittedness, and, most frequently, the presumption of a husband, especially an old one, who attempts to guard his wife's chastity... The fabliau, in short, is delightfully subversive - a light-hearted thumbing of the nose at the dictates of religion, the solid virtues of the citizenry, and the idealistic pretensions of the aristocracy and its courtly literature, which the fabliaux frequently parody, though just as frequently they parody lower-class attempts to adopt courtly behavior" (*The Riverside Chaucer*, p. 7, 8).

Lochrie in her piece “Women’s ‘Pryvetees’ and Fabliau Politics in ‘The Miller’s Tale.’” According to Lochrie, “Old men with young wives *will* be cuckolded by younger men... The fabliau logic is so ineluctable that it operates with the deterministic force of an algebraic function: old man + young (wife + man) = cuckold” (Lochrie 288). John’s old age and jealousy, therefore, inevitably brand him a cuckold. Lochrie is right in that John’s paranoia ultimately becomes self-fulfilling. He treats Alisoun like a prisoner in her own home while, under the same roof, John rents a room to a clever Oxford scholar named Nicholas. Young Nicholas studies astrology, plays guitar, and is described as an expert in “secret love and its satisfaction” (Chaucer 3200). You will never guess what happens next.

After Nicholas seduces Alisoun, he concocts a plan to convince John of the second coming of Noah’s flood. We are presented with an image of John hanging three tubs in secret to protect himself, Alisoun, and Nicholas from the supposed flood. The Miller tells us that John “gooth and geteth hym a knedyng trogh / And after that a tubbe and a kymelyn” (Chaucer 3620–21). According to both the *Oxford English Dictionary* (OED) and a quick Google Images search, a tubbe³ and a kymelyn⁴ are both round, whereas a knedyng-trogh⁵ is a long oval or rectangular object. When you put the three together, as John does in his rafters, we get the image of male genitalia—a penis and scrotum.

³ An open wooden vessel, wide in proportion to its height, usually formed of staves and hoops, of cylindrical or slightly concave form, with a flat bottom. Often with defining word indicating its special use, as alms-tub, bath-tub, butter-tub, kneading-tub, wash-tub, etc. Also loosely applied to a butt, barrel, or cask (“Kymelyn” *Oxford English Dictionary*)

⁴ A tub used for brewing, kneading, salting meat, and other household purposes (“Tubbe” *Oxford English Dictionary*).

⁵ A wooden trough or tub in which to knead dough (“Kneading-trough” *Oxford English Dictionary*).

Moreover, the image of “pryvetee” has been used throughout the piece, offering us a *double entendre* meaning both “private affairs” and “privates, or genitals.” (“Pryvetee” *Oxford English Dictionary*)

When hanging the tubs, John says “and pryvely Jie [John] sent hem to his in / And heng hem in the roof in pryvetee” (Chaucer 3622–23). The “privy” words certainly pertain primarily to secrecy. However, by this point in the tale, a reader suspects any “pryvetee” of having a sexual connotation—as the tubs indeed do—since they comprise the chief device whereby John will be got out of the way so Nicholas and Alisoun can be at one “in pryvetee.” This image is supported when we consider the narrator’s portrait of John as a cuckold. The moment that the tub and John fall, John’s own “pryvette” is effectively castrated, and he is named a cuckold. John’s role as a cuckold is only furthered when he is found lying on the ground with a broken arm by his neighbors:

*The neighebores, bothe smale and grete,
In ronnen for to gauren on this man,
That yet aswowne lay, bothe pale and wan,
For with the fal he brosten hadde his arm.
(Chaucer 3826–29)*

As he lies on the ground in pain and tries fruitlessly to explain the flood, Nicholas and Alison arrive and tell everyone he is crazy: “With hende Nicholas and Alisoun/ They tolden every man that he was wood” (Chaucer 3832–33). An important thing to note is that all of John’s neighbors, regardless of caste, are united in mocking the cuckold. The town, emblematic of society, enjoys a collective laugh at John’s

"The cuckold is a stock comic figure of medieval ribaldry," write Mark Millington and Alison Sinclair in their 1992 essay "The Honorable Cuckold" (3). He is a man that we are invited to laugh at, and even ridicule, for the sole reason that his wife has found sexual satisfaction outside her marriage, and as exemplified in "The Miller's Tale," the cuckold always acts as a punchline. In "Social and Sexual Domination: Analyzing Cuckoldry in Medieval French Fabliaux," historian Maureen Smith writes:

The prevalence of the cuckold trope in fabliaux lends an interesting importance to the fear of marital infidelity [which] in turn suggests an interesting link between cuckolding and hegemonic masculinity. While all the cuckolds [in fabliaux] are used to comedic effect, they are also objects of scorn. No man would want to find himself in their position, and the subtle moral is that men should take great pains to make sure they do not end up cuckolds (Smith, 1).

With this kind of cultural conditioning it is no wonder Will Smith has faced so much derision.

While cuckoldry today compared to Chaucer's time is much more nuanced¹—likely due to changing gender and sexual norms—such a loaded word still carries weight and the role of such cultural inputs cannot be ignored. While the definitions of words like "cuck," "beta," and "simp" vary, they all bare the same connotation that we ascribe to the medieval understanding of "cuckold." They serve to emasculate

¹ While few people like being cheated on, the invention of reliable birth control meant that infidelity less often resulted in children and the rise of feminism and the sexual revolution meant that men and women saw each other increasingly as equal partners.

men who do not subscribe to hegemonic masculinity—men like Will Smith—and effectively condone a culture of misogyny.

According to Ruth Glenn, the CEO of the National Coalition Against Domestic Violence:

"Jealousy and imagined infidelity are huge tools for abusive partners, particularly abusive men," so, "when you use that type of language, you're positioning someone in a position that you find unfavorable. And particularly terms [like 'cuck' and 'simp'], they really are anti-woman... [I]f you're using that language against another man, it's really demonstrating how much you objectify women." (Grover)

Thus, it is worth taking seriously words like "cuck" and its derivative portmanteau "cuckservative," which have become frequently employed by not only gossip rags but by the American far-right to insult anyone who does not align with their ultra-reactionary ideologies.

The anxieties revealed by the word go a long way toward explaining current right-wing politics. One might notice how manhood issues are the common denominator, notably exemplified by the many sexual assault charges leveled against President Trump coupled with his dual emphasis on "law-and-order" and firearm deregulation. We must understand the coded language used by hate groups—and now, those in the halls of power—to attack those around them.

"The Miller's Tale," for instance, contains

"Grab 'em by the Pussy:"

various images of cuckoldry that we can see paralleled in our political media today. One such image is exceptionally overt. Nicholas wants to seduce Alisoun, so he grabs her:

*And prively he caughte hire by the queynte,
And seyde, "Ywis, but if ich have my wille,
For deerne love of thee, lemman, I spille."*

In Modern English, this means, more or less:

*And discretely he caught her by the
pleasing thing,
And said, "Oh, but if I have my will,
For secret love of you, darling, I'll die."
(Chaucer 3276–78)*

In context, "queynte" is literally a "pleasing thing" or "ingenious device" ("queynte" *Oxford English Dictionary*). However, it also sounds like "cunt." Alisoun's "cunt" is the "pleasing thing" in the context of her illicit union with Nicholas, as it is at the center of both of their pleasures. This dual connotation expands the meaning of "spille" from "death or destruction" to the connotation of orgasm. Where in the text, "spille" literally means "To destroy by depriving of life; to put (or bring) to death; to slay or kill," the image "spille" evokes a man spilling his own seed—orgasming (*Oxford English Dictionary*). One is reminded of Trump's remarks in 2005 on *Days of our Lives*: "You can do anything... when you're a star," Trump brags in the tape. "Grab 'em by the pussy" ("Transcript: Donald Trump's Taped Comments About Women"). Like in the "Owl and the Nightingale," what is portrayed as cuckoldry has a much darker implication; Nicholas is, like Trump, grabbing Alisoun by the pussy and glorifying his desire to cum.

As Drs. Sonja Drimmer and Damian Fleming point out in their article "Not Subtle; Not Quaint" published in their medieval studies group blog, *In the Middle*, this is precisely the kind of sexual assault men have used to try to dominate women's bodies since Chaucer's time and beyond. Not only do we still see these encounters today, but we even use them as cultural shorthand for men's violent dominance over women:

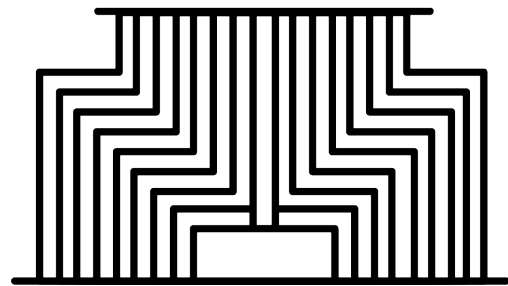
Nicholas grabbed her by the pussy. And then he said, "if I have my will." ... Donald Trump boasted that he "grab[s] 'em by the pussy. You can do anything." Never original, Trump was availing himself of a stock gesture of violence that expresses dominance over women via the route of women's bodies—arguably (arguably) even the body part that most defines a woman in biological terms." (Drimmer and Fleming)

Comedic representations of the cuckold are problematic in both Chaucer's time and modern-day for several reasons. When the cuckold is the butt of the joke, as in Chaucer's "Miller's Tale," as in the case of Will and Jada Smith, and as in the case of Donald Trump, the audience's laughter is an implicit approval, reinforcing an inherently misogynistic worldview. When an audience encounters an act of violence—verbal or otherwise—committed by men against other men, or men against women, it becomes much easier to rationalize or even condone the act. If Trump's words emerge, as Drimmer and Fleming argue, "from out of cultural legacy," then it is our responsibility to come to terms with that legacy (Drimmer and Fleming). It is our responsibility to call into question the acceptance of these acts

of violence. It is our responsibility to show the Nicholas's and Trumps of the world that their actions are reprehensible, if even through an analysis of the language that they use.

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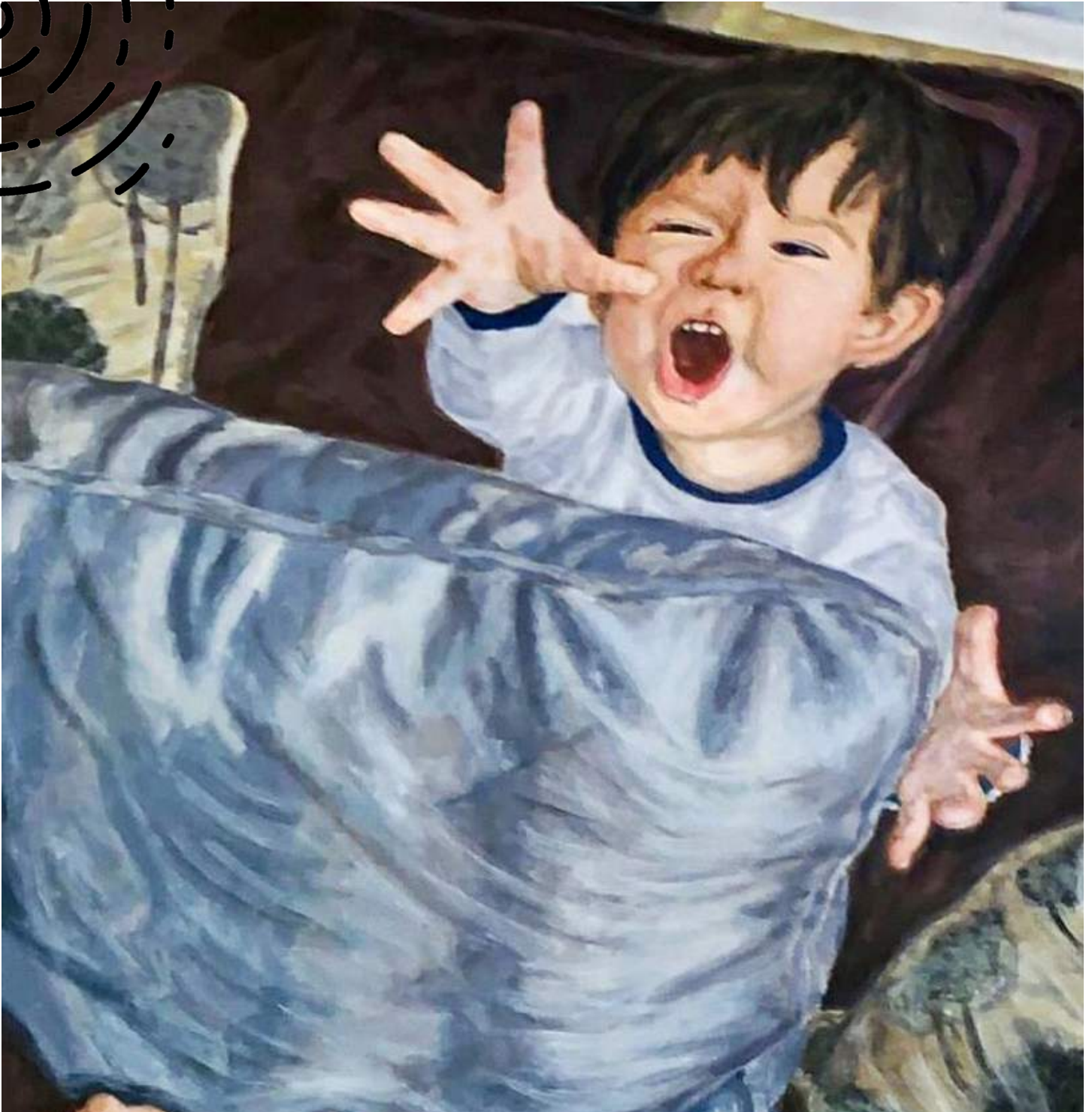
JOCELYNE PULIDO

Jocelyne is a Senior at Santa Clara University studying Studio Art and minoring in Innovation, Design Thinking, and Entrepreneurial Mindset.

She has taken up graphic designing, painting, and animating projects in the Bay Area throughout her undergrad. As a painter, she usually focuses on painting interpersonal relationships, as one genuinely gets to know the person they are painting. Doing this helps invoke a connection between viewers and the artwork when it is finally on display. Her first art show is set to go up this spring of 2021 at SCU.



Frustrated

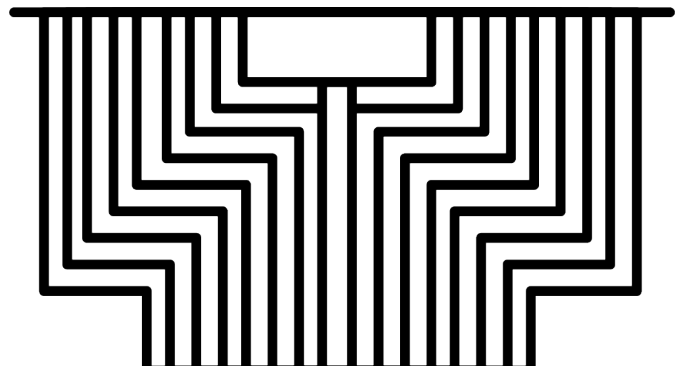


VERONICA BACKER-PERAL

Veronica Backer-Peral is a junior History, Computer Science and Applied Mathematics triple major at Loyola Marymount University. She has conducted extensive research at LMU, including two award winning independent research projects conducted for LMU's Independent Undergraduate Research Program with the support of faculty from the LMU History Department.

Veronica is the incoming managing editor at the LA Loyolan, LMU's student newspaper, and was one of the founding members of the Loyolan's Election 2020 team, which created political news coverage curated for college-aged students over the course of the last election cycle. She is also a student fellow at LMU's Global Policy Institute, where she is leading a research project on US-China relations and has moderated and assisted in multiple speaker events.

Outside of LMU, she is an intern at NASA's Jet Propulsion Laboratory, where she creates media content and visual aids to make NASA's accomplishments accessible to legislators and the general public. In her free time, Veronica plays piano and enjoys flying trapeze. She intends to utilize her technical and research-oriented skills to pursue a graduate degree in economics.



An International Civil War:

Russian Propaganda in 20th Century Spain

Introduction

When Sigmund Neumann coined the term “international civil war,” he never directly paid reference to the Spanish Civil War of 1936-1939. However, his discussion of a world-wide upheaval, marked by revolution, factionalism, and political extremism, cannot help but evoke memories of the conflict that played out in Spain a decade before Neumann wrote his thesis.¹ The year 1936 in Spain marked the start of a conflict that had been developing for decades and that in three short years would rip Spain apart. Within the conflict, the ideological, technological, and political forces of modernity worked together to prove the extent to which humanity is capable of horror.

Perhaps, then, Neumann’s conclusion that the twentieth century was in itself a revolution, one that was “totalitarian and institutionalized, operating from a powerful mass basis and militantly organized to play its role in the international civil war,” serves to solidify the long-held consensus amongst historians that the Spanish Civil War was the prelude for the events that would unfold in the ensuing decades. Beyond this, however, the conflict offers insight into the political, military, and economic tactics that the European powers had up to this point failed to fully exploit. Amongst the many European powers to have intervened in Spain, and amongst the many strategies they all used, I will focus on the Soviet Union’s use of propaganda in the Spanish Civil War — the first time the Soviet Union was able to display its power in a European conflict since the Russian Revolution. I argue that in the years leading

up to the Civil War, the Soviet Union was forced to make a choice: either to defend a revolutionary proletariat movement inspired by the October revolution, or to stand behind the Spanish Popular Front and, in a sense, betray the foundation upon which the Soviet Union had been created. By choosing the latter, the Soviet Union engaged in a multi-faceted propaganda campaign that revealed the very pragmatic, political values that were at the core of Stalin’s regime.

1921 - 1936 : The Road to the Civil War

Perhaps even more than the war years themselves, the decade and a half leading up to the Spanish Civil War saw a massive period of transformation in how the Soviet Union approached propaganda within Spain. If ideological differences were not enough to limit communications, both the declining Spanish monarchy and young Soviet Union were far too focused on internal instability at the end of the First World War to engage in any form of diplomatic relations with each other. However, within a couple decades, the Soviet Union’s relationship with Spain would change from having practically no contact to being, arguably, the most influential foreign power within the new democracy.

Years before the Soviet Union actually established official diplomatic relations with Spain, the Soviet presence in the Iberic Peninsula developed through mutual relations between the Communist International (Comintern) and the Spanish Communist Party.

¹ Neumann, Sigmund. “The International Civil War.” *World Politics* 1, no. 3 (1949): 333-50.

Established in 1919, the Communist International was created around one central goal: “to generalize the revolutionary experience of the working class ... and thereby facilitate and hasten the victory of the communist revolution throughout the world.”² Such an idealized vision of communism, written by Leon Trotsky in the “Manifesto of the Communist International” but inspired by the Leninist dedication to world-wide proletariat revolution, characterizes the optimistic, if not naive, nature of Comintern ideology in its early years. However, by Trotsky’s exile from the Soviet Union in 1929, the Comintern had begun its transition from representing an ideological to a far more pragmatic form of communism. A component of this shift can be seen in what became a primary function for the Comintern—the creation of an international cult of personality for Stalin and the Soviet Union, which was then promoted across the world. As Fridrikh, et al., argue,

*Acting on the international stage as an advocate for and champion of the Soviet system, encouraging acts of solidarity with Soviet policy, the Comintern played the role of the USSR’s foreign policy bulwark. It acted as an integral part of the ideological and political mechanism used by Stalin and his entourage to give a stamp of approval on behalf of the “world proletariat” to the policy conducted by this regime.*³

Although the Comintern claimed to belong to the proletariat of the world—not to any one nation—the fact that the Soviet Union served as the political and economic backbone of the Comintern made the organization inherently biased in the Soviets’

2 “Manifesto of the Communist International to the Proletariat of the Entire World.” 1919. In *1919–1922*, edited by Jane Degras, 38.
3 Firsov, Fridrikh I., Harvey Klehr, John Earl Haynes, and Lynn Visson. “Ciphred Communications and the History of the Communist International.” In *Secret Cables of the Comintern, 1933–1943*, 7–37. Yale University Press, 2014, 8.

favor, eventually becoming one of the most powerful propagandistic and political tools at the Soviets’ disposal. This is evident in the declaration that the Agitprop Department of the Comintern released on the thirteenth anniversary of the October Revolution, claiming that “defence of the Soviet Union coincides more than ever before with defence by the workers of their own vital interests. Defence of the Soviet Union means defence of the proletariat against the capitalist starvation offensive, against wage cuts and unemployment, against the terrorism of fascist dictatorship.”⁴ The highly political promotion of fear of fascist dictatorship, whether it be Hitler, Mussolini, or Franco, is one of the propagandistic tactics used by the Soviet Union to elevate itself as the champion of justice and will be analyzed in more detail in later sections. Even more so, however, this statement exemplifies the Comintern’s efforts to tie the Soviet Union and Communist ideology together as a single entity, making them for all intents and purposes one and the same.

The effort to idealize the Soviet Union as the universal symbol of Communism, however, was not limited to the Comintern or other Soviet institutions. Within Spain, the Spanish Communist Party, or *el Partido Comunista de España* (PCE), relied on elevating the Soviet Union to garner credibility for itself. The PCE was created in 1920 when a group of revolutionary leftists split from the Spanish Socialist Workers Party (PSOE). The result was a political party characterized by radical militancy, political weakness, and considerably little influence, with an estimated mere two thousand members.⁵

4 “The Material Issued by the Agitprop Department of the ECCI on the Thirteenth Anniversary of the Russian Revolution.” 1930. In *1929–1943*, edited by Jane Degras, 123
5 Statistics from Sebares, Francisco Erice. *Evolucion Historica del PCE: De Los Origenes a la Lucha Guerrillera*. Partido Comunista de España, 2012, 6.

Even though the Comintern was known for requiring strong and tight leadership amongst its various branches, the “Spanish communist organizers often fell short of meeting fully the Comintern’s leadership ideals, to the extent that they were sometimes admonished for their failings.”⁶ After the fall of the Spanish monarchy and the creation of the Second Spanish Republic in 1930, the political weakness of the PCE placed it at a severe disadvantage in the face of the socialist parties, which were more popular, and the anarchist parties, which were more extreme.

Fraught with instability, the young party had to turn to foreign support to develop a propaganda institution. In fact, the PCE reached out to communists across the world. In a letter to the Communists of New York, PCE leader Andres Nin wrote, “we need to issue manifestos, leaflets, weeklys, to have the possibility to react to all events which are unfolding here with extraordinary rapidity and to spread our point of view among the masses. This is a question of life or death for the Spanish revolution. The lack of funds prevents us from carrying out this work.”⁷ However, before long the Soviet Union became the primary and almost exclusive supporter of the PCE. The most plausible explanation for why is presented by Dan Richardson, who explains that the Soviet Union was unique in that it served as both a “source” and a “symbol” for Spanish propaganda.⁸ Although the Soviets allocated massive amounts of money and resources to creating propaganda campaigns across Spain, a large part of their success can be attributed to the fact that civilians saw

the Soviet Union as a symbol of success, progress and equality. In a letter written to Trotsky in 1930, Spanish socialist, Julián Gorkin, wrote that “under the influence of the October revolution, the Andalusian province was in a ferment of revolt. The workers burned the harvests of the large estates, ran through the streets crying ‘Long live Lenin! ‘Long live Trotsky!’”⁹ The enthusiasm and fervor that the October revolution and its icons created in workers across the globe could not have been created by any other nation.

In the midst of these growing revolutionary movements throughout Spain, negotiations between the Soviet Union and the Second Republic officially began in 1933. By the end of the same year, the first Soviet embassy and consulate were established in Madrid. Marcel Rosenberg, the newly appointed ambassador, wrote a letter to his Spanish counterpart expressing his good intentions by writing, “I am perfectly aware that the government of the Spanish Republic does not wish to impose on others its own political and social system, just as I do not wish to impose my goals on Spain.”¹⁰ However, Rosenberg’s actions sent a very different message than his words. Salvador de Madriaga, a Spanish representative within the embassy, reported that “[Rosenberg] used to invade the president’s office with a barrage of officers, generally to pressure him to place military communists in the most strategic state positions.”¹¹ In this way, the Soviet embassy used its influence and proximity to Spanish politicians to begin to infiltrate the government. Very aware of the importance of Soviet support, the

6 Rees, Tim. “Living Up to Lenin: Leadership Culture and the Spanish Communist Party, 1920–1939.” *History* 97, no. 2 (326) (2012): 233.

7 Nin, Andres. Letter, “Andres Nin Calls for the Spanish Opposition Press,” August 1931. *The Militant*. Marxists’ Internet Archive.

8 Richardson, R. Dan. “Comintern Propaganda Instrument.” In *Comintern Army*, 136–58. *The International Brigades and the Spanish Civil War*. University Press of Kentucky, 1982, 136.

9 Gorkin, Julián. Letter, “In Spain after the Fall of the Dictatorship,” April 1930. *Throughout the World of Labor, The Militant*. Encyclopedia of Trotskyism.

10 Quoted in Vásquez Liñán, Miguel. 2005. “Propaganda y Política de la Unión Soviética en la Guerra Civil Española (1936-1939).” Universidad Complutense de Madrid, 55.

11 *Ibid*, 57-58.

Second Republic's excessive willingness to collaborate with the Soviets helps to explain how the Soviets came to dominate the propaganda institution in Spain.

At the same time, the importance of soft power in Soviet relations with Spain cannot be underestimated. Not only was the embassy the intermediary between Russian propaganda and the Spanish people, it also actively contributed to the glorified perception of the Soviet Union as a symbol for all Communists to rally behind.¹² In a speech made by the embassy in 1936 to a collection of sailors headed to Moscow, there are records of the ambassador proclaiming:

*Sailor comrades, today you sail to our homeland. There, millions of workers build a new life with joy, enthusiasm, and hope. They already live in a socialist society and through their work, form a communist society where there exists true equality, brotherhood, and liberty. They create a society without social classes or state.*¹³

The presentation of such an idealized version of the Soviet Union served for at least two purposes: on the one hand, on an international scale, it was a show of Soviet sovereignty and power as a rising global force to be reckoned with. On the other hand, within Spain it encouraged communist groups to call for their own armed struggle against the government and bourgeois.

In fact, this strategy was perhaps too successful, as the growth of revolutionary sentiment in Spain soon became a

12 Kowalsky, Daniel. "Soviet Diplomacy and the Spanish Civil War." in *Stalin and the Spanish Civil War*. Columbia University Press, 2003.

13 Vásquez Liñán, Miguel. 2005. "Propaganda y Política de la Unión Soviética en la Guerra Civil Española (1936-1939)." Universidad Complutense de Madrid, 66.

14 Payne, Stanley G. "The Soviet Decision to Intervene Militarily: July–October 1936." p.128.

complication for the Soviet Union. Whereas the Comintern and PCE had spent years advocating for a communist revolt, by the mid-1930's, the Soviet Union had mostly turned its back on the goal of sparking an international communist revolution.¹⁴ Although historians debate as to when and to what extent this shift took place, there is a general consensus that for political and economic reasons, Stalin no longer found it profitable to back all communist revolutions, regardless of how well they abided by a purely Marxist ideal. Instead, by 1935, Moscow had actually embraced the goal of creating a "popular front," which in essence consisted of a democratically elected coalition of socialist parties that worked with the established government rather than against it. In 1936, Stalin wrote in a letter that:

*We should not, at the present stage, assign the task of creating soviets and try to establish a dictatorship of the proletariat in Spain. That would be a fatal mistake. Therefore we must say: act in the guise of defending the Republic... maintain unity with the petty bourgeoisie and the peasants and the radical intelligentsia, establishing and strengthening the democratic Republic at the present stage through the complete destruction of the fascist counterrevolutionary elements, and then we can proceed from there, resolving concrete questions.*¹⁵

Soon, the same attitude was reflected in Comintern and PCE propaganda, such as the PCE-sponsored poster (figure 1), which emphasized the need to survive and win

15 "1936." In *Spain Betrayed: The Soviet Union in the Spanish Civil War*, edited by Radosh Ronald, Habeck Mary R., and Sevostianov Grigory, 1-105. Yale University Press, 2001, 11.

16 Image from the Herbert R. Southworth Collection of Posters from the Spanish Civil War.

17 McDermott, Kevin, and Jeremy Agnew. *The Comintern : A History of International Communism from Lenin to Stalin*. Macmillan Education UK, 1996, 120-157.

against fascism before contemplating the possibility of proletarian revolution.¹⁶

Kevin McDermott and Jeremy Agnew argue that this shift was motivated by three developments: 1) in Germany, the Communist Party and fear of revolution had actually contributed to the rise of fascism, 2) Georgii Dimitrov, the new director of the Comintern, was a strong advocate of working within and with democracy, and 3) there was a new widespread Soviet movement to establish strong alliances with European democracies as opposed to small revolutionary groups.¹⁷ I would argue that all three narrow down to the same overarching factor — the Soviet Union under Stalin had undertaken a far more pragmatic vision for the future. Rather than seeing himself as the defender of the proletariat, Stalin had come to terms with the fact that he might have to sacrifice some of the basic pillars of Communism in order to maximize his power. However, whether or not the promotion was a short-term tactic, as McDermott and Agnew and PCE propaganda argue it was, the immediate result was the quick polarization of an already very divided political environment. Thus, Spain entered its Civil War with a fragmented Popular Front, making the country and the Republican side of the war even more susceptible and reliant on Soviet support and propaganda.

1936 - 1939 : The Spanish Civil War

Although it is easy to view the Spanish Civil War as a sudden historical break, where overnight the Soviet Union became fully invested in the Republican cause, recent historians have challenged this traditional notion by arguing that just like Soviet intervention before the war was a process, the same process continued after the start

of the war. Stanly Payne, in fact, argues that “foreign diplomats reported that Moscow’s initial response to outbreak of civil war in Spain was uncertainty. The conflict was a negative development from the Soviet viewpoint, since otherwise things had been moving along so well in Spain, and civil war could complicate all of Moscow’s West European policy.”¹⁸ Recent history did not promise positive results for democracies at the hands of fascist insurrections. The situation was further complicated by the fact that in 1936, twenty-seven nations, including Britain, France, Germany, Italy, and the Soviet Union, proceeded to sign a non-intervention agreement, agreeing not to become involved in the Spanish conflict, even if within days the latter three broke the accord. Due to the complexity of the situation, Moscow’s



Figure 1

18 Payne, Stanley G. “The Soviet Decision to Intervene Militarily: July–October 1936,” in *The Spanish Civil War, the Soviet Union, and Communism*, (Yale University Press, 2004), 128.

initial response to the war was a wave of humanitarian resources, followed by increasing military resources as the Soviet Union became more and more involved in the conflict. While Soviet support was key to the pro-democracy, henceforth addressed as the Republican, forces' survival in the conflict, evidence points to the fact that both humanitarian and military aid used propaganda and were later used as sources of propaganda to be spread across the world.

Humanitarian Intervention —

Politically divided, unorganized, and lacking military experience, most historians agree that without Soviet aid the Republican forces would have collapsed much sooner than they did. However, the Soviets were also very aware of the propagandistic potential of the humanitarian aid they provided to the Republican army. Both within and outside Spain, the Soviets were able to circulate news of their supposedly altruistic work as a way to bolster public perception of the Soviet Union on an international level—an activity that became central to Soviet propaganda in the Spanish Civil War. For instance, less than a month after the outbreak of war, the Soviet magazine, *Pravda*, released the news that a multitude of Soviet workers had decided to donate 0.5 percent of their salaries to the Republican cause; the next day, the magazine publicly announced its support

for humanitarian aid and released an article condemning Hitler and Mussolini's efforts to intervene in favor of fascism.¹⁹ Both articles reveal fundamental aspects of Russian propaganda in the Spanish Civil War. On one hand, the statistic on workers' donations has two clear messages — first, that communist workers were wealthy enough to afford to give money to the Spanish republic, and second, that despite being on the other side of Europe, Soviet workers stood in solidarity with their fellow Spanish proletariat. Although Stalin had long abandoned Lenin's hope for a worldwide proletariat revolution, these articles reveal that he was more than willing to outwardly present the Soviet Union as a symbol of uncorrupted communism, and thus bolster its international reputation.

The Soviet Union further justified intervention in Spanish affairs by painting the conflict as a war against fascism. Although Germany, Italy, and the Soviet Union had all signed the 1936 Non-Intervention Agreement, all three broke the agreement within weeks of signing it.²⁰ The Soviets, however, claimed that it was the fascists who had interfered in Spain first, and used this as a justification to import not only huge amounts of posters, newspapers, and film reels, amongst other forms of propaganda, but also increasingly greater shipments of military resources. Figure 2, a poster produced in Valencia within months of the start of the Civil War, depicts a message that was echoed throughout Soviet propaganda:²¹ the brave and muscular communist worker is intentionally depicted without any

19 Payne, Stanley G. "The Soviet Decision to Intervene Militarily: July–October 1936," in *The Spanish Civil War, the Soviet Union, and Communism*, (Yale University Press, 2004), 129-130.

20 Van Wynen Thomas, Ann, and A. J. Thomas. "Non-intervention and the Spanish Civil War." *Proceedings of the American Society of International Law at Its Annual Meeting (1921-1969)* 61 (1967): 2-6.
21 Image from the Herbert R. Southworth Collection of Posters from the Spanish Civil War.

identifying national symbol to make him representative of all proletariat worldwide; tall and strong, he stands unequivocally opposed to the viperous fascists. The exploitation of the ideological differences between communism and fascism allowed for the Soviets to uphold themselves and communism as the morally righteous theory of government. In fact, more, the film is an example of how even years after the end of the war, the Soviets were still able to extract propagandistic material out of their intervention in the Spanish Civil War.

In fact, the Spanish Civil War was amongst the first international conflicts to be largely documented by filmmakers, which added film to the repertoire of propagandistic tools available to the Soviets,²³ especially in their goal of promoting their humanitarian work in Spain. Perhaps the most obvious exploitation of Spanish suffering for the sake of Russian propaganda is evident in the collection of shorts and features about Spanish children. As the destruction and casualties of the war escalated, Spain began to see a mass evacuation of women, children, and the elderly to other parts of the world. Amongst the evacuees, approximately 3,000 children are estimated to have been sent to the Soviet Union.²⁴ A Soviet newsreel (figure 3) from 1937 highlights the arrival of Spanish children in Moscow, received by a full reception complete with cheering crowds, an orchestra, and a barrage of

flags and flowers to greet the likely terrified Spanish children.²⁵



Figure 2



Figure 3

22 The full reel of the film is available on the online film archive, Net-Film.

23 A great review of Soviet filmmaking as a form of propaganda is Kenez, Peter. *The Birth of the Propaganda State*. Cambridge University Press, 1985. 104-111.

24 Kowalsky, Daniel. "The Evacuation of Spanish Children to the Soviet Union," in *Stalin and the Spanish Civil War*. Columbia University Press, 2003.

25 Clips showing the arrival and reception of Spanish Children in Leningrad on 24 June 1937. *Ispanskie deti v SSSR* ("Spanish Children in the URSS") (Spain: Filmoteca Española), http://www.gutenberg-e.org/kod01/video/kod07fb_vid.html. *Ispanskie Deti v SSR*



Figure 4

Furthermore, the portrayal of Spanish children was not limited to film. Figure 4, a poster commissioned by the Asociación Intelectual para la Defensa de la Cultura (Intellectuals' Association for the Defense of Culture) for the International Red Aid in 1936 depicts a comforting, red, Soviet hand protecting the Spanish children from fascist planes, telling a poignant narrative about the Soviet's role in Spain. The use of children as a symbol reinforced the Soviet Union's desire to present itself as a 'parental' figure to Spaniards, and to further the claim that they were protecting Spain rather than contributing to the violence that every day tore more families apart.

However, Spanish children actually served a very different role in nationally as opposed to internationally distributed Soviet footage.

This point is best explained in Daniel Kowalsky's analysis of two films: *Spanish Children in the USSR* (1937) and *New Friends* (1937).²⁶ The first of the two, and according to Kowalsky, the more successful and polished, was originally distributed only within the Soviet Union. Within the film, we see a series of sequences from Franco's attack on Madrid, showcasing the devastation and destruction caused by the nationalist leader and warning Russians against the dangers of fascism. Like in previous Soviet films, montages that jump-cut between destruction and order, evil and good, murder and salvation, all serve to hammer in the idea that fascism and communism are mutually opposed, which paints communism in its most ideal form. On the other hand, *New Friends*, which was meant to be screened in Spain, differs from *Spanish Children* primarily in that it cuts out most Stalinist iconography and instead includes multiple references to Spanish culture, whether it be posters of the Republican Civil War hero Dolores Ibárruri or scenes of traditional Spanish cuisine within Russia. While clearly designed to reassure Spanish families that their children were being exposed to Spanish culture, these sequences are especially interesting in that they prioritize a pragmatic political agenda over strictly communist goals. Whereas Marxism and Leninism emphasized the death of nationalism in the face of a new, international proletariat identity, this Stalin-era film reveals the Soviets' understanding of the importance of culture within Spain and their willingness to use this culture to encourage support and solidarity—a theme which appears to be consistent with the majority of Stalin's policy within Spain.

²⁶ Kowalsky, Daniel. "The Soviet Cinematic Offensive in the Spanish Civil War." *Film History* 19, no. 1 (2007): 13.

Military Intervention—

Amongst all the scholarship reviewed for this project, one of the most-discussed issues is that of Soviet military intervention in the Spanish Civil War, and more specifically, the use of the International Brigades—an international paramilitary body of several tens of thousands of soldiers founded by the Comintern as a branch to fight fascism. Although much research has been done on the Brigades' military achievements—which most historians agree were unprecedented and worthy of serious analysis²⁷—Dan Richardson offers a new perspective by arguing that “the Brigades were much more than simply a military force. They were a significant political, ideological, and propagandistic instrument which could be—and was—used by the Comintern for its own purposes, not only inside Spain but on the larger world scale.”²⁸ In this section, I will explore this last point that Richardson makes: how the Brigades were used as an incredibly powerful and efficient propaganda instrument.

Rather than looking at the rise of the International Brigades as independent from the Soviet humanitarian aid campaign, the Brigades in many ways emerged from the anti-fascist ideology that had guided the previously discussed Soviet activity. After all, the Brigades were founded upon a “myth” that espoused the notion of young progressives uniting in the fight against fascism.²⁹ Although there is little doubt that the motivation for the Brigades was far less innocent than it presented itself to be, this does not change the fact that

such a glorified and idealistic presentation of the Brigades defined the way that the international public perceived them. Even in France and the United Kingdom, where the government refused to send troops to Spain, soldiers enlisted in the Brigades proudly, hoping to defend liberty and democracy. In a letter home from Spain, a Welsh volunteer in the Brigades seems to be overflowing with pride as he writes, “many brave Welsh miners have been killed ... they died to preserve democracy not only for Spain but also in Wales.”³⁰ In his biography, *Homage to Catalonia*, George Orwell expresses the similar sentiment that he and his fellow soldiers shared before going to Spain to fight on the side of the Republic; they entered the war with the firm conviction that they were fighting for a higher sense of justice and morality, only to be disappointed by a far more drab reality.³¹ Both men are examples of the power of the International Brigades' propaganda in inspiring and convincing recruits across the globe.

In part, the success of the Brigades' propaganda instrument can be attributed to the sheer amount of content it released. Dan Richardson provides an array of evidence on the Brigades' propaganda apparatus and how it evolved and expanded over the course of the Civil War. One example that stood out was the official news publication of the Brigades, the *Volunteers for Liberty*, which printed romanticized and highly optimistic news excerpts from the war front in over eight different languages.³² These publications, which would have then been

27 See, for example, Tremlett, Giles. *The International Brigades: Fascism, Freedom and the Spanish Civil War*. London: Bloomsbury Publishing, 2021

28 Richardson, R. Dan. *Comintern Army*, 2.

29 Richardson, R. Dan. *Comintern Army*, *ibid.* 1.

30 Jones, Tom. “Letter from the International Brigades in Spain.” International Brigade Memorial Trust.

31 Orwell, George, 1903-1950. *Homage To Catalonia*. London :Penguin, 2003.

32 Richardson, R. Dan. *Comintern Army*, 137-138.

distributed across the globe, illustrate the Comintern's efforts to make the Civil War an international conflict, and explain why men like Orwell might have arrived in Spain with an idealized expectation for what was in actuality a very violent and devastating war.

It is therefore, as Dan Richardson suggested, the combination of the quantity of propaganda that the Brigades produced with the idea that the Brigades symbolized that made them so compelling for supporters of the Republicans across the globe, and that to this day continue to guide the perception that the Spanish Civil War was a clash of democracy versus fascism, when history indicates that it was in fact a far more complex and politically contrived conflict.

Conclusion

In the years leading up to the Spanish Civil War and even after the outbreak of war, the Soviet Union saw a significant shift in how it approached international communism. In its early years, operating under a Marxist-Leninist ideology, the Soviet Union was driven by the objective to serve as a beacon of hope for other Communist revolutions across the globe. However, by the 1930s, the Soviet Union under the leadership of Joseph Stalin forwent this objective and replaced it with the far more pragmatic and political desire to become a world power, even if it meant sacrificing its Marxist foundation. In Spain, this was evident, as I have shown, in the massive humanitarian and military propaganda campaigns that used the rhetoric of communism and anti-fascism to uphold an inherently anti-Marxist entity, the Republican government.

The effect of Stalin's shift away from Leninism, however, is seen far beyond the Soviet Union's involvement in the Spanish Civil War. In his book, Duncan Hallas explores how the Comintern served as a vehicle for Soviet intervention in practically every region of the globe, but it also vividly depicts the slow transformation of international communism from an economic and philosophical ideology to a method through which the Soviet Union was able to join Britain and the United States as one of the strongest imperial powers of the twentieth century. By the dissolution of the Comintern, Hallas writes that "the wheel had come full circle. The Comintern had come to reject all that it had set out to fight for."³³ Thus, there are at least two angles from which the relationship between the Soviet Union and the Spanish Civil War can be placed in a broader context. On one hand, the Spanish Civil War occurred at such a vital time and place in world history that it can be studied as the first spoke on the wheel that turned the twentieth century world into what Neumann labelled the "international civil war." After all, this conflict was amongst the first to see the systematic propaganda system, industrialized violence, and factionalized ideology that would later shape the rest of the twentieth century. However, this line of reasoning reduces the Spanish Civil War to a mere prelude or spark for the remainder of the twentieth century. Instead, I suggested an alternative angle. Although the Spanish Civil War unarguably shaped future Soviet policy, my paper has shown that it is fully capable of standing alone as a unique example of how power and ideology can intersect with modernity to transform a civil war into an international civil war.

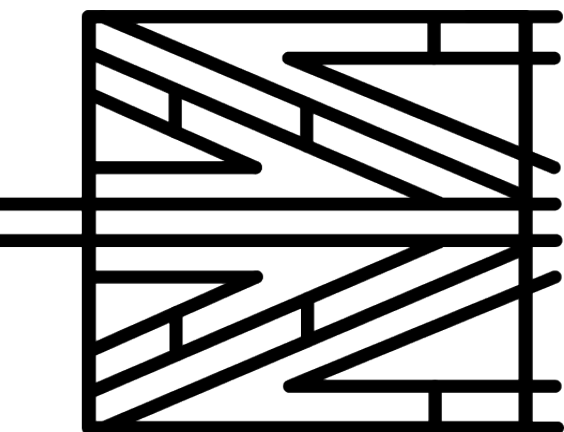
33 Hallas, Duncan. *The Comintern*. Haymarket Books, 2008. 166.

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Icy Lake



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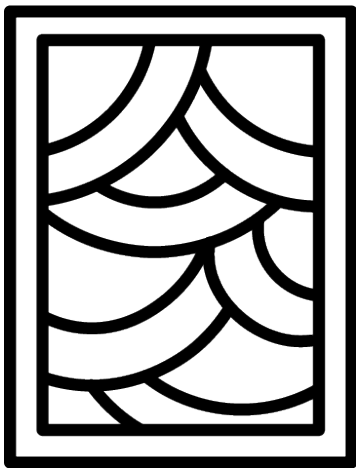
He hopes that someday he will actually be able to attend classes physically in the city again as he misses in-person learning, long walks down side streets in Greenwich Village, and Central Park.

Vincenzo plans to attend law school after college. In his spare time he enjoys reading, taking ballet classes, playing piano, and drinking coffee.

"Why don't you see it, why don't you feel it?":

Nina Simone's Transformations
and Adaptations

Nina Simone, the "true singer of the Civil Rights Movement" according to activist and organizer Stokely Carmichael, is well known for her protest songs, reinterpretations of spirituals, jazzy love ballads, musical theatre standards, and pop song covers. A singer, pianist, and composer, Simone wrote and performed songs throughout her career that spoke to the civil rights battles raging around her and the experiences of oppression and discrimination that plagued both her childhood and her journey on the road to becoming one of America's best known Black singers (Heard 1057). In her covers and adaptations of the songs of Kurt Weill and Bertolt Brecht, she transforms satirical songs commenting on European social classes into protest songs that explore racism and the Black experience in America. In this essay I analyze Simone's cover of "Pirate Jenny," which transforms the song into a dark fantasy of rage and revenge for Black oppression, and Simone's most well-known protest song "Mississippi Goddam," based on Brecht and Weill's "Alabama Song," which explores America's denial of racism and oppression and the country's insistence on holding onto racist Black stereotypes.



In "Pirate Jenny," recorded live at Carnegie Hall and released on her 1964 album *Nina Simone in Concert*, Simone transforms a musical theatre classic about class relations in London into a ballad about racial, class, and gender dynamics in the American South

(Brooks 180). The song describes a servant girl, who, despite scrubbing away daily at the floors of a “crummy old hotel” in a “crummy Southern town,” is in reality a feared pirate whose “Black Freighter” sails into the harbor and ransacks the town (“Pirate Jenny” n.p.). In the original German version of the song, sung by Lotte Lenya in Weill and Brecht’s play *The Threepenny Opera*, a more upbeat tempo and a lively orchestration are the backdrop for an English serving girl’s revenge fantasy against the unfeeling and abusive upper class men who frequent her hotel (Lenya 0:00-0:43). Simone’s transformation of this song into a bleak ballad evokes “fantasies of revenge sustained by Black female rage” in the words of Jasmine Mena and Khalil Saucier (257).

Nina Simone changes both the orchestration of the song and the Standard English lyrics, translated by Marc Blitzstein, in significant ways that transform the song into a stark statement on the Black experience in America, without once mentioning race. Her slower, jazzier cover of the song immediately takes a darker tone than Lenya’s upbeat version, as Simone opens with an ominous drum beat and a lively left-hand piano accompaniment (Simone, “Pirate Jenny” 0:00-0:27). Simone’s main lyrical change is one of setting; instead of the “shabby waterfront” of Lotte Lenya’s version, Simone, in the very first stanza, places the song specifically in a “crummy Southern town” (“Seeräuberjenny” n.p.). This change immediately places the song in a Southern setting, and, as the song is sung by a Black female singer, conjures up the history of slavery and Southern discrimination against African Americans.

Simone’s other main changes, although they initially might seem slight, are equally

important in defining the character she portrays in the song; rather than the standard German of Brecht and Weill’s original or the slightly affected English of Lenya’s version, Simone’s Jenny speaks in a distinctly African American vernacular. Her words feature repeatedly clipped final syllables and Southern terms of endearment (or perhaps disdain) such as “honey” are scattered throughout the song (“Pirate Jenny” n.p.). These important lyrical differences in Simone’s version, combined with the slower tempo of the song and Simone’s sharp, angry, and almost whispered delivery of the lyrics, serve to convey the song’s message of rage, violence, and empowerment (Feldstein 1363). Daphne Brooks, in her essay on Simone’s covers of Brecht and Weill’s songs, writes that

Simone’s cover of “Pirate Jenny” would, in the midst of evolving black enfranchisement struggles, generate all sorts of rich historical allusions to the trajectory of African American forced migration, with a “Black Freighter” coming and going, making a passage in the middle of the song toward our heroine who prophesies her own reversed stowage of escape on board the ship. (Brooks 181)

This passage, in which Brooks associates Jenny’s departure on the Black Freighter as a kind of reversal of the centuries of forced migration during the slave trade, shows the power of Simone’s version of the song, which she transforms into an anthem of revenge against oppression and discrimination through stylistic and small lyrical changes. That “Pirate Jenny” was meant as a comment on the Black experience in America can be implied not

only from the song itself but from context clues as well. On the *In Concert* album, "Jenny" is directly followed by "Old Jim Crow," an unambiguous protest song against Jim Crow laws, and the liner notes on the original album's sleeve say of "Pirate Jenny" simply (and somewhat threateningly) that "perhaps it is a masterpiece; certainly it is a warning" (Feldstein 1364). This warning of revenge against the long and brutal history of slavery and racism in the South is starkly evident in her transformation of the classic "Pirate Jenny."

"Jenny" sets the stage on the *In Concert* album for what is perhaps Simone's most famous protest song and another transformation of a classic German musical theatre standard, "Mississippi Goddam." "Mississippi" again borrows from Brecht and Weill, this time through indirect quotations and thematic similarities, to create a musical theatre-infused declamation against white supremacy and racism (Heard 1069). "Mississippi" quotes and references two Brecht and Weill songs: Simone herself discussed how the song was a kind of homage to "The Alabama Song" from the antiopera *The Rise and Fall of the City of Mahoganny* (1927), while lyrical and musical similarities tie "Mississippi" to "The Mandalay Song" from the comedy *Happy End: A Melodrama with Songs* (1929), which includes a repeated yell in the chorus of "Mother Goddam!"

Written immediately after the 1963 Birmingham, Alabama church bombing, during which four African American schoolgirls were murdered, "Mississippi Goddam," in its original recording live at Carnegie Hall, offered the audience a tenuous balance between enjoyment and discomfort (Brooks 182). In the opening bars

of the song, Simone tells the audience "The name of this tune is 'Mississippi Goddam,'" which is met with a wave of laughter and applause, yet she continues with the line "and I mean every word of it," eliciting from her audience just nervous chuckles. Similarly, when halfway through the song she again addresses the audience, saying, "This is a show tune / But the show hasn't been written for it, yet," the audience only responds with an apprehensive silence (Simone, "Mississippi Goddam" 0:00-0:18, 1:08-1:16). Brooks writes that "the crowd's laughter that punctuates the opening seconds of 'Mississippi Goddam' remains a remarkable sonic documentation of the kinds of tense (dis)connections with her audience that Simone maintained throughout her career" (182). The disconnect between the upper class Carnegie Hall audience and Simone's slyly threatening protest song ("Oh but this whole country is full of lies / You're all gonna die and die like flies" she sings in one stanza) highlights one of the main themes of "Mississippi": America's refusal to come to terms with the still-present existence of racism and oppression ("Mississippi Goddam" n.p.).

As Danielle Heard argues in her essay on the differences between different recordings of "Mississippi," the song's connection to Brecht and Weill's "Alabama Song" is one of denial: in the German song, women who have seemingly experienced the death of their mother seek out drink, money, and sex to erase their memory of the past (Heard 1069, Brooks 190-2). Similarly, in "Mississippi," Simone describes America as in denial about the existence of continued racial inequality, as the country insists on still imagining Black women as a stereotypical "Sister Sadie," "washing the windows" and "picking the cotton," and claiming that any

efforts at increased equality must "Go Slow!" ("Mississippi Goddam" n.p.). Simone transforms the "Alabama Song," about the refusal to recognize a mother's death into a protest ballad on the atrocities of racism in America, which, despite "everybody" knowing about, no one *does* anything about (Brooks 191-4). Towards the end of the song, Simone sings, "Why don't you see it / Why don't you feel it / I don't know / I don't know!" ("Mississippi Goddam" n.p.). Simone seems to say that one of America's fundamental problems is the refusal to acknowledge continued injustice and inequality.

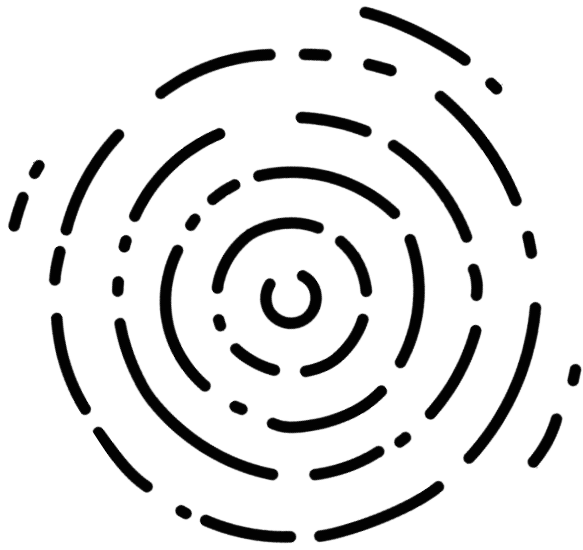
Simone's performances of "Mississippi Goddam" had a regular pattern of occurring at important junctures in her life and in the history of the Civil Rights movement in general. As previously mentioned, the song was originally written and performed directly after the 1963 Birmingham church bombings; additionally, Simone recorded another version in 1968 four days after Martin Luther King, Jr.'s assassination, and she gave a final live performance in a London jazz pub in 1984, several years into the Reagan presidency when she had abandoned America to live full-time in Europe (Tsuruta 57). This last performance can more accurately be described as a mashup of "Mississippi Goddam" and Brecht and Weill's "Alabama Song," in which Simone alternates verses from each (Brooks 188-90). It is in this version that the clearest connection between the two songs can be heard, and also the transformative way that Simone forms Brecht and Weill's song into a comment on the Civil Rights movement. Simone's "Everybody knows about Mississippi" is repeatedly juxtaposed with "Oh don't ask why! Oh don't ask why" from the "Alabama Song," leading to a climax as Simone sings "Show us the way to the

next whiskey bar, oh don't ask why! You know why!" (Simone, "Nina Simone" n.p.). This theme of denial and *knowing* shared between the two songs is Simone's clearest statement of the two songs' relationship as she uses the "Alabama Song" as a jumping off point to explore America's denial of African American racism and oppression.

To further the research of Simone's transformations and adaptations, it would be interesting to look at Simone's versions of traditional African American spirituals and hymns (such as "Sinnerman") and American musical theatre standards (especially works by Gershwin). Simone recorded classic jazz versions of these songs, and it would be valuable to examine the differences between them and the originals, and how (or if) Simone noticeably changed lyrics/phrasing/orchestration/etc. Additionally, very little research has been done as to why Simone specifically chose to transform and adapt the works of Brecht and Weill. Ruth Feldstein does mention how "Simone associated her own antiracism with Brecht's antifascism and evoked a historical alliance between African American musicians and an interwar political Left," yet broader research is needed on the connections between Black musicians and the Civil Rights movement and German composers and intellectuals living in a Germany quickly becoming rampant with fascism and antisemitism (1363). Yet despite these avenues for further study on the history of and reason for such transformations, this brief research narrative shows the innovative ways Simone covered and adapted Weill and Brecht's works to create protest songs that explore the Black experience in America, through rage, revenge, discrimination, and denial.

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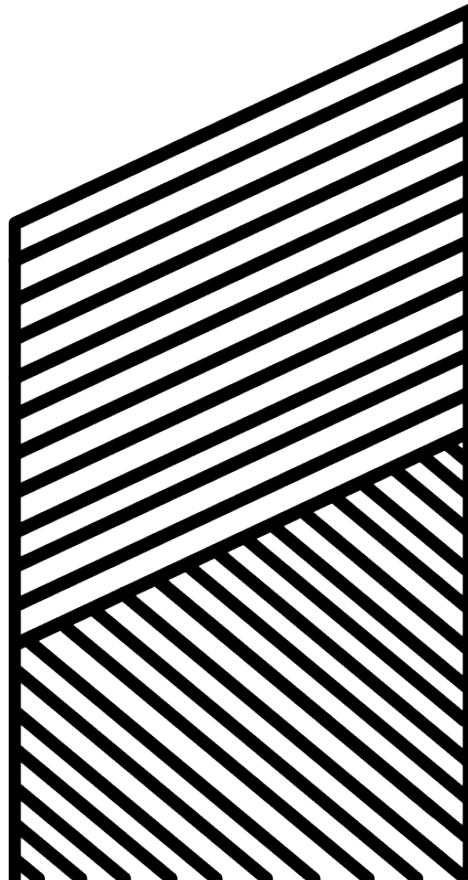
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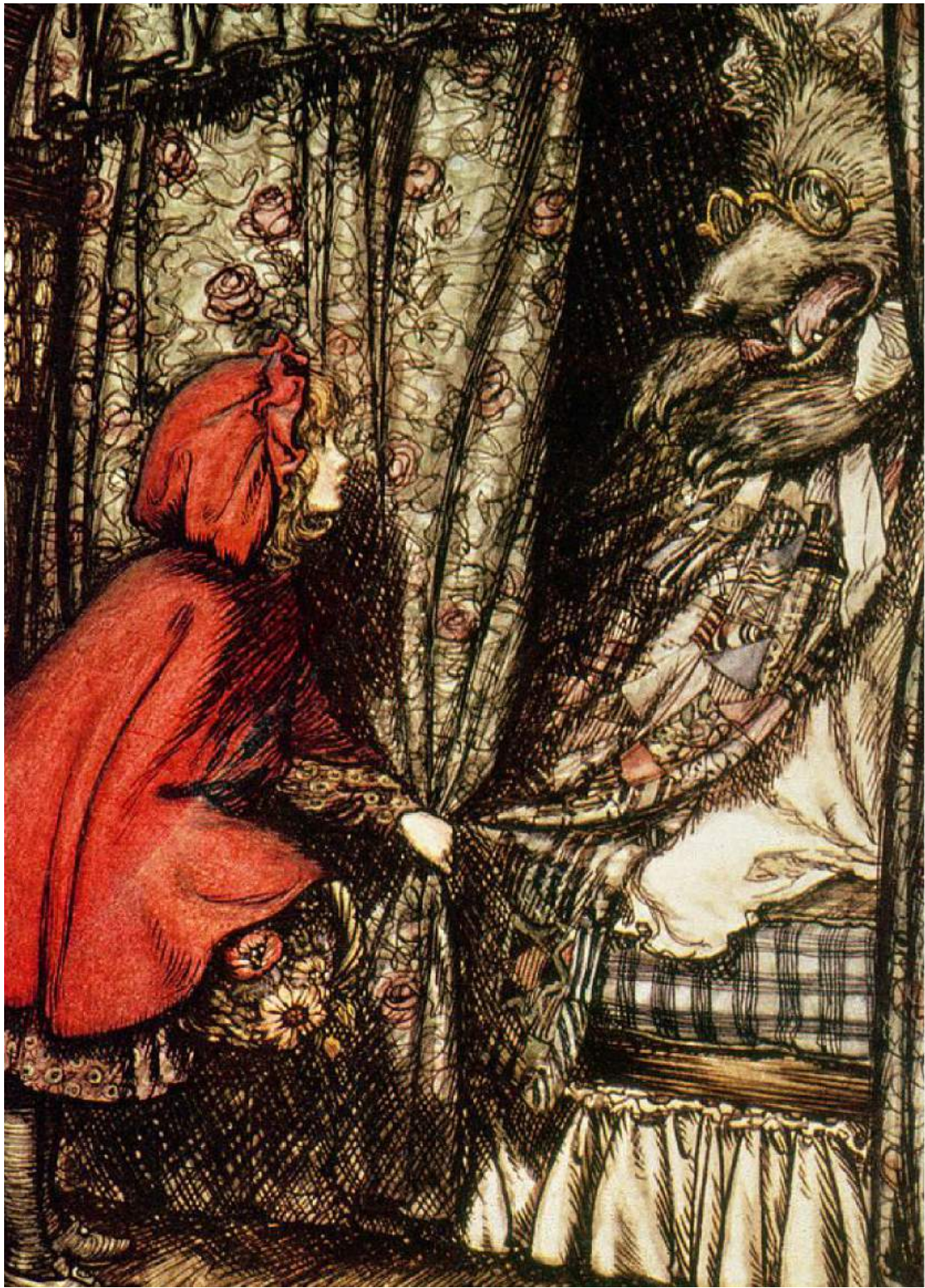


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A second generation American, Conner grew up in Southwest Missouri, and is currently residing there during the lockdown.





Telling the Story a Few Weeks Later with New Perspective

You know, I was waiting for her.
I tucked myself in, tight under the sheets,
Looking like an idiot in an old woman's old clothes.
I knew she was coming.
I was planning on it.
My chest ached for it.
But something still surprised me
When I saw her,
Bright-faced,
Smooth,
Her pink mouth just a little open,
Like she was going to ask a question...
She didn't look surprised.
She almost looked tired.
Why did she look tired?
Was I losing my edge?
...Look at me there.
I look ridiculous.
What the hell was this plan, anyway?
It's awful.
Demearing.
Even if it had worked.
It's demearing.
...
I hate this.

Reflections as She Dances By

When I looked back at you through your eyes,
And told you that you were not enough,
I did mean it.
You could never get your hair right,
It was always too loose.
You were awful at making the layers line up.
And the crown's all...wrong.
Too modern, not befitting royalty.
And your posture!
You honestly tried to sit up straight,
I'll give you that,
But you are *cursed* with a crooked spine.
And you always lean just a little to my right,
Which is funny,
Since the leg on my left is the one that splays out.
And one of your eyes has a tendency to wander,
Which is a shame,
Given the bend there already is in your nose.
And your mouth is just so...*small*,
And it only looks smaller when you purse your lips.
It might have helped if you had looked more comfortable,
More open to what I had to say.
If you had just fixed everything,
Maybe I'd still be looking at you,
And not her.

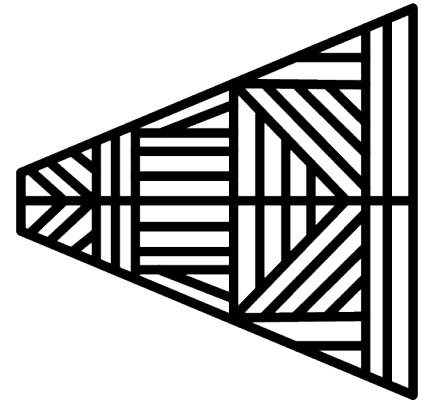


Original painting by Brian Woodward, *Mirror Mirror*, www.brian-woodward.com

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Roots of the Poppy: The Cultural Development of Opium Use in China



The Opium Wars (1839-1860) are among the best-known conflicts in Chinese history. Fought between the British Empire and the Chinese Qing dynasty, they are often regarded as a catalyst for the weakening and subsequent end of dynastic China in the early 20th century. As the name indicates, the central point of contention of the Opium Wars was the British-Chinese opium trade. The opium trade in China was booming during the Opium Wars, but the drug had a long history in the nation prior to the 19th century. It had been widely consumed by upper-class Chinese citizens for centuries and enjoyed great cultural significance in Chinese society. Just a few decades prior to the outbreak of the First Opium War, it became popular among the average urbanite. Though the Chinese government repeatedly issued prohibition edicts regarding the trafficking and consumption of opium, these edicts always proved ineffective. Most notably, Commissioner Lin Zexu's aggressive efforts to quash the opium trade after his 1838 appointment by the emperor were insufficient to reach his goal of complete suppression due to the widespread addiction of the Chinese populace and opium's integral position in every level of Chinese society.

In order to understand opium's centrality to Chinese society during the time of the Opium Wars, it is necessary to examine its earliest presence in China. The poppy flower, from which opium is derived, was first grown in Egypt, the Near East, and Mesopotamia, and appears in Mesopotamian historical records as early as 4,000 B.C.¹ Opium usage is believed to have been first introduced to China and India by Arab sailors from these regions. By 300 A.D., the Arab sailors regularly visited ports on the Malabar coast of India and later established a trading colony at Canton.² Opium may have reached China even earlier, however, as its first appearance in a historical record in China was during the Han dynasty (206 B.C.- A.D. 220) of the Middle Kingdom. During this time, in contrast to its image and use during the Opium Wars, opium was ingested orally, primarily for a wide range of medicinal purposes. It was never regarded as a social or health concern by the Chinese government.³ Over time, however, this governmental view of opium in Chinese culture underwent a drastic shift. According to Edward R. Slack, author of *Opium, State, and Society: China's Narco-Economy*

1 M. Foster Farley, "Commissioner Lin and Opium," *History Today* 27, no. 2: (1977): 74. Accessed March 26, 2020. <http://0-search.ebscohost.com/library/lemoyne.edu/login.aspx?direct=true&d-b=afh&AN=4869110&site=ehost-live>.

2 Farley, "Commissioner Lin and Opium," *History Today* 27, no. 2: (1977): 74.

3 Edward R. Slack Jr., *Opium, State, and Society: China's Narco-Economy and the Guomindang, 1924-1937* (Honolulu: University of Hawai'i Press, 2001), 1.

and the Guomindang, 1924-1937, "The benign image of opium changed radically with the arrival of 'red-haired barbarians' from Europe."⁴ Though referencing the involvement of other Europeans in the opium trade of the Ming dynasty (1368-1644), Slack's observation applies equally well to the moral taint opium would acquire through its connection with the British in the 19th century. European "barbarians" would prove to be key players in the events of the Opium Wars.

Despite its ancient origins, the prohibition of opium in China was a relatively modern development. The first prohibition edict regarding opium, introduced by Emperor Yongzheng, was not issued until 1729. However, by the time of the edict, opium's medicinal use had become so widespread that the edict could not prohibit its use for medicinal purposes. Instead, the edict criminalized the smoking of opium and restricted the importation of the poppy.⁵ Emperor Yongzheng's edict proved largely ineffective; due to its ambiguity regarding the legal usage of opium and the fact that opium imports were still taxed to the government's benefit, it was only laxly enforced.

This policy was to be one of the first examples in which the Chinese government was forced to bow to the considerable influence of opium. Over time, this influence only grew. In fact, the decades immediately following the edict saw the recreational smoking of opium increase rather than decrease. As a result, the government began to view the consumption of opium as morally corrosive and its trafficking as a grave

criminal offense. In 1796, Emperor Jiaqing responded to the rise in opium usage by renewing all preexisting edicts with more severe punishments. In 1799, Jiaqing issued a new edict that banned the importation, cultivation, and use of opium, both medicinal and recreational, in clear terms.⁶ By 1800, the Chinese court had issued yet another edict against the importation of opium; this edict, along with its predecessors, was further reinforced two decades later by the Daoguang Emperor.⁷ Again, however, these endeavors were insufficient to truly fight back against opium's hold on China.

Though the smoking of opium for recreational purposes was originally practiced by the elite, over time it trickled down the social ladder and was eventually consumed by the common people. Opium's presence in every level of Chinese society was a primary reason that governmental efforts to suppress it were largely ineffective; it had ingrained itself into the lives of both the highest and lowest members of society. By approximately 1483 during the mid-Ming dynasty, opium came to be used by officials and eunuchs of the imperial court as an aphrodisiac.⁸ It is even believed, due to the discovery of morphine in his bones, that the Wanli Emperor (reign 1573-1619) himself consumed large amounts of opium, either as an aphrodisiac or for medicinal purposes.⁹ This evidence indicates that as early as the 15th century, opium had infiltrated the imperial court itself. From there, it made its way down the social ladder.

6 Slack, *Opium, State, and Society*, 1-2.

7 Farley, "Commissioner Lin and Opium," 74.

8 Zheng Yangwen, *The Social Life of Opium in China*, (Cambridge: University of Cambridge Press, 2005), 10-15.

9 Yangwen, *Social Life of Opium*, 17-19.

4 Frank Dikötter, Lars Laamann, and Zhou Xun. "Narcotic Culture: A Social History of Drug Consumption in China."

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5 Slack, *Opium, State, and Society*, 1.

The downward movement of opium occurred primarily in the late 18th and early 19th centuries, just before the outbreak of the First Opium War. Zheng Yangwen, author of *The Social Life of Opium in China*, summarizes this development:

From...eunuchs and 'the high and low of officialdom', through students, military officers, compardors and guild merchants, opium was making its way to the masses and to the interior during the short reign of Jiaqing...Opium smoking was becoming popular and opium was becoming increasingly available. Yet it still did not constitute a consumer trend in the textbook sense. It would take the first decade or so of Daoguang to realise this... consumption would be open to more, if not all, consumers.¹⁰

Because members of the upper class were the initial consumers of recreational opium, it was their influence that contributed to its eventual spread among the common people. Provincial officials and scholars made up the "leisure class," a part of the upper class, in cities such as Beijing and Canton. Their taste for opium inspired a desire for it among their social inferiors.

As a result of initially being a commodity accessible to only the leisure class, opium was endowed with fashion, status, and exclusivity. Furthermore, the provincial officials of the leisure class were considered the moral guardians of the Chinese people who established high principles in their work and lived as examples of these principles.¹¹ Thus, their consumption of opium legitimized

it for the common people.

However, as opium became popularized among the common people rather than remaining exclusive to its original, high-class consumers, it was increasingly viewed as vulgar and unrefined.¹² This view, coupled with the fact that opium addicts became dependent on the drug to the point of losing their autonomy, caused the imperial court's later anti-opium edicts to be founded on the belief that the consumption of opium was morally wrong and a shameful vice that needed to be stamped out. This attitude would be a driving force behind Commissioner Lin's 1839 crusade against the opium trade.

By the late 19th century, opium had completed its penetration of all levels of Chinese society. This is exemplified by the participation of low-class laborers, who performed a variety of physically demanding and unskilled jobs such as farmhands and porters. These laborers' reasons for smoking opium were very different than their fellow consumers in the upper class, however. Due to the physically demanding nature of their work, laborers used opium as a means of recuperation—it relaxed the muscles, rejuvenated the body, and endowed extra energy, even allowing a person to survive on a minimal intake of food.¹³ As a result, opium became an invaluable tool in securing their livelihoods.

Naturally, the spread of opium addiction accompanied the spread of opium use. By the time of the Opium Wars, the number of addicts in the Chinese population was estimated to be in the millions. In the first

¹⁰ Yangwen, *Social Life of Opium*, 70.

¹¹ Yangwen, *Social Life of Opium*, 81.

¹² Yangwen, *Social Life of Opium*, 76-77.

¹³ Yangwen, *Social Life of Opium*, 146-147.

years of the 19th century, though, the numbers were less drastic. Between 1801 and 1820, opium addiction was essentially kept in check by its high cost. Members of the upper class were among the few who could afford it, and the common people considered opium an unaffordable luxury.¹⁴ However, these circumstances did not last. The spread of opium just prior to the outbreak of the First Opium War in 1839 resulted in varied estimations of addiction from Chinese and foreigners alike. Due to the sheer size of opium imports, it was difficult to gauge exactly how many consumers, including addicts, could be supplied. But regardless of variation, all estimations indicate that opium addiction had spread to an alarming volume:

The Viceroy of Hupeh and Hunan estimated in 1838 that there must be over four million opium addicts. Another Chinese scholar reckoned that the 40,000 chests due to enter China that same year would supply eight and a half million smokers. Toogood Downing, a well-informed English physician with experience in Canton, had calculated two years before that the quantity of opium imported in 1836 would make when prepared for smoking... enough for the needs of 12,500,000 smokers. The figures differ, but the emphasis is clear; free trade was spreading opium addiction through China like a plague.¹⁵

Other sources place the number of addicts at around ten million, which seems a reasonable median.¹⁶

Because opium's saturation of Chinese

14 Jack Beeching, *The Chinese Opium Wars* (London: Harcourt Brace Jovanich, 1975), 31.

15 Beeching, *Chinese Opium Wars*, 66-67.

16 W. Travis Hanes III and Frank Sanello, *The Opium Wars: The Addiction of One Empire and the Corruption of Another* (New York: Barnes and Noble, 2002), 40.

society left millions of citizens in its grip, resentment of the drug mounted. Anger at the opium problem in China stemmed not only from the detrimental effects it had on users, but also that its spread came at the financial benefit of the British merchants, whom the Chinese so scorned. Due to possessing coveted exports such as tea and silk, China had grown accustomed to having the upper hand in trade affairs with the British. This is extremely evident in the Qianlong Emperor's lofty refusal to grant the British request for greater trade privileges, decades prior to the Opium Wars.¹⁷ The opium trade, however, reversed this imbalance in favor of the British. The anti-opium edict of 1799 also clearly reflects the dual sources of China's indignation towards the opium trade: "Foreigners obviously derive the most solid profits and advantages, but that our countrymen should pursue this destructive and ensnaring vice is indeed odious and deplorable," it states.¹⁸ Outrage aside, the facts remain clear—the Chinese people were addicted to opium, and the government desperately needed to respond.

Perhaps the most famous figure in the anti-opium crusade of the 19th century was High Commissioner and governor of Hupeh and Hunan provinces, Lin Zexu. Late in the year 1838, on the eve of the First Opium War, Lin was appointed by the Daoguang Emperor to eliminate the opium trade.¹⁹ Commissioner Lin was known for taking a hardline approach to suppression; during his 19th century campaign, he aimed not just to end opium trafficking in China, but to severely punish users as well. Though he advocated

17 Aisin-Gioro Hongli, "Qian Long: Letter to George III," 1793, *Internet Modern History Sourcebook*, Paul Halsall, ed., accessed 20 April 2020, <https://sourcebooks.fordham.edu/mod/1793qianlong.asp>.

18 Aisin-Gioro Yongyan, (1799), quoted in Hanes and Sanello, *The Opium Wars*, 21.

19 Arthur Waley, *The Opium War Through Chinese Eyes* (Stanford: Stanford University Press, 1958), 20.

20 Hanes and Sanello, *The Opium Wars*, 37-38.

for rehabilitation of addicts, Lin's policy allowed them a period of only eighteen months for recovery. If they were not able to cease smoking opium within that time frame, they would be executed.²⁰ In his 1839 letter to Queen Victoria, Lin expresses some of these inflexible policies: "Every native of the Inner Land who sells opium, as also all who smoke it, are alike adjudged to death." He continues, "Now it is a fixed statute of this empire, that any native Chinese who sells opium is punishable with death, and even he who merely smokes it must not less die."²¹

Lin began his anti-opium efforts swiftly following his arrival in Canton, a hub of trade in China and therefore a hub of opium, in March 1839, only three months after his appointment by the Emperor. Within a few days, he had addressed a series of notices to the citizens of Canton. The nature of these notices again illustrates opium's infiltration of every level of Chinese society, and the challenges Lin faced in exterminating it. The first notice was addressed to school teachers and instructed them to report any student who sold or smoked opium to the authorities. The second was addressed more broadly to the various denizens of Canton. In this notice, Lin laments the Kwangtung province's poor reputation in regard to the opium trade and states that the origins of opium smokers and dealers can nearly always be traced back to Kwangtung. Alongside the issue of drug-addicted schoolchildren, citizens even alleged that government employees in search of opium battered and robbed suspects or accepted bribes in exchange for leaving the opium alone if found.²² Canton was thus a prime example of the deeply

ingrained and corrosive nature of the opium problem.

The High Commissioner's anti-opium efforts in Canton were not limited to written mandates, however, and his endeavors did yield some tangible results. By May 1839, Lin had arrested 1,600 offenders, received 42,740 surrendered opium pipes, and seized 2,900 chests of opium.²³ Just a few weeks later, Lin had accumulated a total of over 20,000 chests of opium from British merchants. Following an order from the Emperor, Lin destroyed all of the opium he had collected. The drug was placed in three enormous trenches, which were then filled with water, salt, and lime. The mixture reduced the opium to a decomposing sludge, which was drained off into the sea. During this spectacle of destruction, Lin also made good on his earlier threats towards drug users; when one of the five hundred laborers present was caught attempting to steal a bit of opium, he was executed on the spot.²⁴

But despite Lin's zealous measures, the opium trade continued to flourish. Due to the British merchants' efforts, opium was both increasingly available and increasingly affordable. Jardine, Matheson & Co., one of the most influential British trading companies in China at the time, held sway in Canton. By 1840, it had 6,500 chests of opium on the market, and thousands more waiting on its ships.²⁵ Each chest weighed between 133 and 160 pounds.²⁶ "It was a buyer's market, and the Chinese, despite severe government sanctions, remained enthusiastic buyers and consumers,"²⁷ write W. Travis Hanes and Frank Sanello.

21 Zexu Lin, "Commissioner Lin: Letter to Queen Victoria," 1839, *Internet Modern History Sourcebook*, Paul Halsall, ed., accessed 26 February 2020, <https://sourcebooks.fordham.edu/mod/1839lin2.asp>.
22 Waley, *Opium War Through Chinese Eyes*, 23-24.

23 Beeching, *Chinese Opium Wars*, 77.
24 Beeching, *Chinese Opium Wars*, 84.
25 Hanes and Sanello, *The Opium Wars*, 103.
26 Farley, "Commissioner Lin and Opium," 75.
27 Hanes and Sanello, *The Opium Wars*, 103.

Lin's efforts, despite their decisiveness, had failed. Unfortunately, as demonstrated by the failures of previous edicts, no governmental restrictions on opium could combat its addictive grip on China.

Following the British-Chinese Skirmish of Kowloon in 1839, regarded as the first battle of the Opium Wars, High Commissioner Lin was dismissed in disgrace. Disappointed in both the continuing opium trade and the outbreak of war, the Emperor himself is rumored to have laid the blame at Lin's feet, reputedly claiming that the war was due to his "excessive zeal."²⁸ Lin was subsequently summoned to Peking and tried in a court presided over by the Emperor. Though he was initially sentenced to death for his failures, his punishment was commuted to exile in the Northeast of the empire.²⁹ China's staunchest opponent of opium was gone, and the drug would continue to plague the nation for some time.

The end of the disastrous First Opium War came with the signing of the Treaty of Nanjing in 1842, the first of what would be known in China as the "unequal treaties." "Unequal" is certainly a fitting label for the treaty, as it almost exclusively benefited the British. In Article IV, the Emperor agrees to pay the British Empire six million dollars in reparation for the opium seized by Commissioner Lin three years prior. The treaty additionally grants greater freedom to British merchants than they had previously enjoyed in China, even ceding the entire island of Hong Kong to Great Britain for the British merchants to use as a port.³⁰ However, the treaty makes no mention of one important issue—the legality of the

opium trade, over which the First Opium War was fought. This omission is due to the fact that it was a subject on which the Chinese were not willing to compromise. Though the British suggested that legalization of opium importation would be the most logical response to the inevitable consumption of the drug, it remained the sole demand the Chinese refused to accept.³¹ Despite their many defeats and failures during the opium crisis, the Chinese leadership, like Commissioner Lin, was implacable; opium was destructive, and they would attempt to resist its influence in any way possible.

Beginning with its first appearance in the ancient world, opium enjoyed an extensive and storied history in China. Its use as medicine ensured that its cultural relevance was established early, though both its place in Chinese culture and perceptions of it would undergo a marked evolution. Though initially regarded as a benign substance, the 18th and 19th centuries brought about significant efforts to eliminate the consumption of opium, beginning with the first prohibition edict in 1729. The failure of this edict indicated early that such measures would be unable to combat opium's central position in Chinese society. Though recreational opium consumption began with the upper class, its high status resulted in a desire for it among the lower classes as well. As it became available to the lower classes and addiction spread, the Chinese government began to view its consumption as a moral debasement. But by the time of serious suppression efforts, opium had already established a presence in the lives of Chinese citizens of varied social status, from provincial officials to manual laborers. As the number of opium addicts

28 Beeching, *Chinese Opium Wars*, 119.

29 Thomas Dormandy, *Opium: Reality's Dark Dream* (London: Yale University Press, 2012), 139.

30 Henry Pottinger, "Treaty of Nanjing (Nanking)," 1842, *USC US-China Institute*, accessed 17 April 2020, <https://china.usc.edu/treaty-nanjing-nanking-1842>.

31 Hanes and Sanello, *The Opium Wars*, 154.

climbed to the millions, High Commissioner Lin began his doomed 1839 campaign to end the opium trade and punish consumers. Despite some minor victories, the British merchants' efforts ensured that the opium trade continued, and tensions between the Chinese and the British finally escalated into outright war. The failure of suppression efforts was nearly complete, though Chinese officials refused to compromise by legalizing the opium trade at the end of the First Opium War. But despite their defiance, they had learned a bitter lesson: the roots of the poppy run deep.

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LEIGH LEWIS

Leigh Lewis is a senior at Loyola Marymount University. She is a Psychology major and Computer Science minor but has been passionate about photography since she was little. She first learned to take manual photographs on a digital camera, but in high school, she was given a film camera. Ever since then, she has enjoyed the process of shooting photographs and seeing them come to life after being developed.



Redemptive Cycles







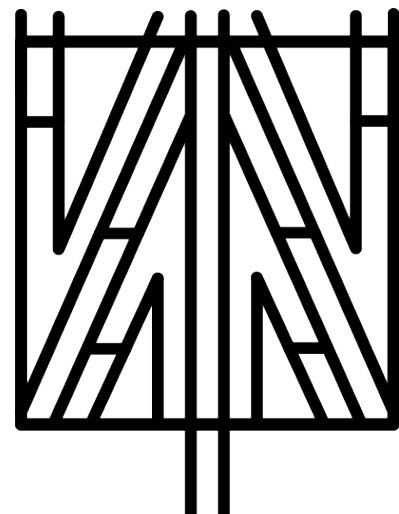
LEIGH LEWIS

FOSSE LIN-BIANCO

Fosse Lin-Bianco is an Electrical Engineering major at Loyola Marymount University. Outside of school, he trains as a circus performer specializing in aerial rope, juggling, and acrobatics.

During his time at LMU, Fosse has worked to explore the intersection of his two passions — engineering and circus arts. Fosse started the Digital Movement Art project in the summer of 2020 to conduct research that explores how to use engineering to create innovative and artistic circus experiences. After graduation, Fosse plans to pursue a career as a professional circus artist and continue the Digital Movement Art project to figure out how to create the future of circus.

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Creating Artistic Visual Representations of a Circus Performer's Acrobatic Movement

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Student, Loyola Marymount University

Dr. Barbara Marino,
*Associate Professor of Electrical and Computer Engineering,
Loyola Marymount University*

ABSTRACT— In this experiment, a motion tracking system was designed to track the acceleration of a human foot. The purpose of this system is to analyze how acceleration data can be used to artistically visualize a circus performer's movement. During experimentation, the newly created acrobatics shoe was worn by a circus performer and a variety of acrobatics skills were executed. The results generated acceleration data as well as a collection of digital art pieces that were unique to each individual skill and varied with each attempt.

I. INTRODUCTION

The objective of this experiment was to create a wireless and wearable electrical system that measures acceleration over time and generates digital art pieces that respond to this data. This system utilized LilyPad Arduino products and conductive thread to secure the electrical components to an existing acrobatics shoe. The acrobatics shoe was then tested by a circus performer (also the author in this experiment). As the performer executed a variety of acrobatic skills, the data was recorded and visualized in Processing, a programming environment built for visual design.

While simple in concept, this experiment allows an audience to view the movement of an acrobatic skill from a new perspective. After experiencing the skill, the audience is left with a visual image that they can remember. More importantly, the audience experiences the skills from a perspective that cannot be experienced without the use of the technology.

II. SYSTEM DESCRIPTION

The final acrobatic shoe with the motion tracking system is shown in Fig 1. The system was initially designed using alligator clips and jumper wires. After ensuring the system was functioning correctly, the components were sewed onto an acrobatics shoe using a non-conductive thread to first attach the components and then using conductive thread to secure the components and provide the electrical connections.

The primary function of the electrical system is to wirelessly track acceleration data. An accelerometer sensor was used in conjunction with wireless communication modules to accomplish this goal. A LilyPad Accelerometer, the small, circular device located closest to the toe cap as pictured in Fig. 1, tracks 3-axis acceleration in the system. A closer image of this device is shown in Fig. 2. This component measures acceleration with a minimum full-scale range of ± 3 g. It can measure the static acceleration of gravity in tilt-sensing applications, as well as dynamic acceleration resulting from motion, shock, or vibration [2].

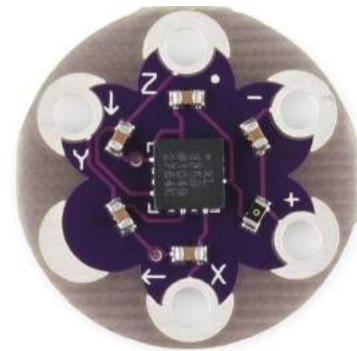


Fig. 2. Image of LilyPad Accelerometer or ADXL335 [3].

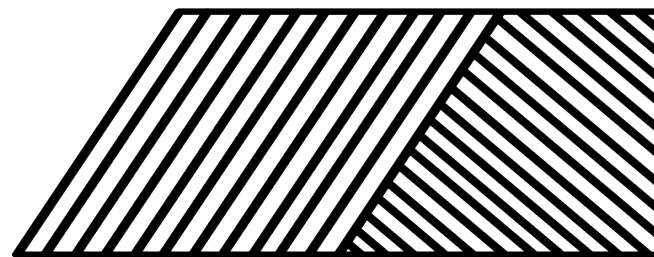
On the transmitting end of the system, the z, y, and x-axis acceleration measurements are converted to a voltage by the LilyPad Accelerometer and then read by the End Device XBee on I/O pins d1, d2, and d3, respectively. Once the XBee module reads the voltage, it packages the data and sends it to a corresponding XBee connected to a computer called the Coordinator XBee. The remote system is powered by a lithium



Fig. 1. Image of acrobatic shoe with acceleration tracking system [1].

polymer battery specifically made for e-textile projects. The battery is the white rectangular device shown towards the heel of the shoe in Fig. 1.

On the receiving end of the system, the Coordinator XBee is attached to the XBee Shield and these two components are connected to the SparkFun RedBoard (also referred to as the Arduino). These three components are then connected to a computer via USB port. The receiving end of the system is pictured in Fig. 3. The XBee Series 3 modules are used to provide the wireless communication between the



components on the shoe and the Arduino connected to the computer.

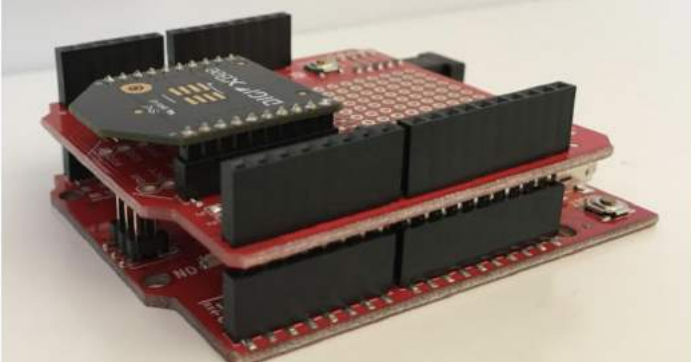


Fig. 3. Receiving end of the system including the Coordinator XBee, XBee Shield, and RedBoard.

The software files include an Arduino program and a Processing program. The function of the Arduino program is to receive the packet of data from the Coordinator XBee, parse out the acceleration measurements, and print the acceleration data for each of the three axes to the Serial Monitor [4]. The Processing program reads the data from the Serial Monitor and manipulates the numbers to create the distinct shapes on the digital canvas [5]. The Processing program also records the acceleration data for all three axes and saves the information as a ".csv" file. Both full length programs can be viewed on the "digital-movement-art" GitHub repository [6].

Other features of the Processing program include pressing the "S" key to take a screenshot of the painting and pressing the "SPACE" bar to toggle between pausing and resuming the program. The program also includes the capability of recording a

sketch, in which each frame of the sketch is saved. The images can later be placed into a video editing software to create a video or animation. To enable this feature the boolean variable *recording* must be set to *true* before the program runs.

Additionally, the program has two aspect ratio modes: Square (1:1) and Widescreen (16:9). This feature is enabled by uncommenting the desired *size(int width, int height)* function in the *setup()* function. Only one *size()* function is allowed to exist in a Processing program, so commenting out the *size()* function not being used is necessary. To create high resolution images, the pixel density is doubled in the sketch. So, although the canvas is sized at 800 x 800 pixels on the computer monitor, when an image of the sketch is saved, the resolution will be 1600 x 1600 pixels. The same is true for the Widescreen aspect ratio mode.

III. EXPERIMENTAL EVALUATION

A. Experimental Procedure

Before each experiment, the accelerometer was calibrated by sampling the acceleration data along each axis as the performer stood motionless with the shoe placed firmly on the ground in an upright position. This data was saved so that it can be subtracted from the incoming acceleration data during experimentation to produce the calibrated measurements.

During experimentation, the newly created acrobatic shoe was worn by a circus performer (also the author in this experiment) and a series of acrobatic skills were executed.

Table I

**DESCRIPTION OF EXPERIMENTS WITH RANDOM POSITION
PLACEMENT OF CIRCLES**

Test Number	Acrobatic Skill	Visual Color Representation
Test 1		
1.0	Forward Roll	Z-axis – <i>blue-green</i> Y-axis – <i>red</i> X-axis – <i>purple</i>
Test 2		
2.0 - 2.2	Forward Roll	Z-axis – <i>light blue</i> Y-axis – <i>red-orange</i> X-axis – <i>light pink</i>
2.3 - 2.5	Cartwheel	Z-axis – <i>maroon</i> Y-axis – <i>gunmetal</i> X-axis – <i>sea green</i>
2.6 - 2.8	Back Handspring	Z-axis – <i>black</i> Y-axis – <i>yellow</i> X-axis – <i>light gray</i>
2.9 - 2.11	Swish to Flying Kick	Z-axis – <i>pink</i> Y-axis – <i>dark gray</i> X-axis – <i>light gray</i>
Test 3		
3.0 - 3.2	Kip Up	Z-axis – <i>bright pink</i> Y-axis – <i>bright yellow</i> X-axis – <i>bright blue</i>
3.3 - 3.5	Handstand	Z-axis – <i>lime green</i> Y-axis – <i>turquoise</i> X-axis – <i>baby blue</i>
3.6 - 3.8	Aerial	Z-axis – <i>orange</i> Y-axis – <i>beige</i> X-axis – <i>viridian green</i>

Table II

DESCRIPTION OF EXPERIMENTS WITH TIMELINE PATTERN

Test Number	Acrobatic Skill	Visual Representation
Test 4		
4.0	Stepping Sequence	Color: Z-axis – <i>light blue</i> Y-axis – <i>yellow</i> X-axis – <i>red</i>
4.1	Stepping Sequence (Turning)	Same as Test 4.0.
Test 5		
5.0	Acrobatics Sequence	Same as Test 4.0.
Test 6		
6.0 - 6.2	Acrobatics Sequence	Same as Test 4.0, except speed of timeline is doubled.

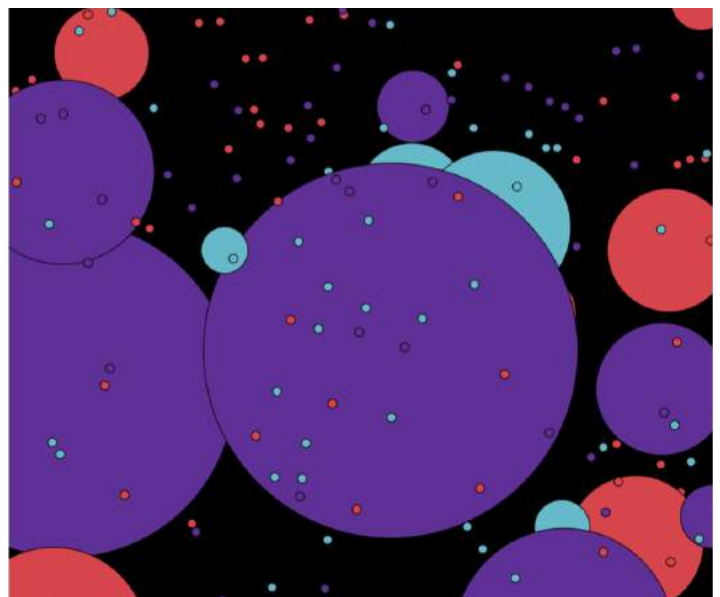


Fig. 4. Image of final sketch produced from Test 1.0.

TABLE III
3-AXIS ACCELERATION DATA FOR TEST 1.0*

date	time	z-axis (V)	y-axis (V)	x-axis (V)
8/19/20	18:53:28	1.634	1.876	1.386
8/19/20	18:53:28	1.634	1.876	1.386
8/19/20	18:53:28	1.631	1.872	1.399
8/19/20	18:53:28	1.644	1.888	1.392
8/19/20	18:53:29	1.615	1.859	1.373
8/19/20	18:53:29	1.640	1.885	1.395
8/19/20	18:53:29	1.634	1.876	1.386
8/19/20	18:53:29	1.631	1.872	1.383
8/19/20	18:53:29	1.644	1.885	1.405
8/19/20	18:53:30	1.640	1.882	1.392
8/19/20	18:53:30	1.644	1.885	1.408
8/19/20	18:53:30	1.644	1.888	1.399
8/19/20	18:53:30	1.647	1.888	1.402
8/19/20	18:53:31	1.640	1.882	1.399
8/19/20	18:53:31	1.644	1.885	1.399
8/19/20	18:53:31	1.644	1.888	1.405
8/19/20	18:53:31	1.647	1.888	1.405
8/19/20	18:53:32	1.650	1.892	1.405
8/19/20	18:53:32	1.650	1.892	1.402
8/19/20	18:53:32	1.650	1.892	1.412
8/19/20	18:53:32	1.656	1.898	1.415
8/19/20	18:53:33	1.656	1.898	1.408
8/19/20	18:53:33	1.653	1.895	1.418
8/19/20	18:53:33	1.656	1.898	1.415
8/19/20	18:53:33	1.663	1.901	1.405
8/19/20	18:53:34	1.660	1.898	1.428
8/19/20	18:53:34	1.656	1.898	1.418
8/19/20	18:53:34	1.660	1.901	1.421
8/19/20	18:53:34	1.656	1.898	1.421
8/19/20	18:53:35	1.653	1.895	1.431
8/19/20	18:53:35	1.640	1.882	1.392
8/19/20	18:53:35	1.647	1.885	1.389
8/19/20	18:53:35	1.650	1.892	1.447
8/19/20	18:53:36	1.653	1.892	1.325
8/19/20	18:53:36	1.608	1.850	1.383
8/19/20	18:53:36	1.702	1.911	1.131
8/19/20	18:53:37	1.373	1.267	1.163
8/19/20	18:53:37	1.521	1.760	0.912
8/19/20	18:53:37	1.212	1.444	1.112
8/19/20	18:53:38	1.176	1.415	0.168
8/19/20	18:53:38	1.975	2.214	0.026
8/19/20	18:53:38	2.211	2.452	0.590
8/19/20	18:53:39	1.740	1.982	2.069

8/19/20	18:53:39	1.602	1.847	1.260
8/19/20	18:53:40	1.627	1.872	1.434
8/19/20	18:53:40	1.673	1.917	1.389
8/19/20	18:53:40	1.640	1.882	1.418
8/19/20	18:53:41	1.653	1.898	1.418
8/19/20	18:53:41	1.644	1.885	1.444
8/19/20	18:53:42	1.644	1.885	1.383
8/19/20	18:53:42	1.653	1.898	1.444
8/19/20	18:53:42	1.650	1.895	1.418
8/19/20	18:53:43	1.650	1.892	1.421
8/19/20	18:53:43	1.653	1.898	1.415
8/19/20	18:53:44	1.660	1.901	1.408
8/19/20	18:53:44	1.656	1.901	1.418
8/19/20	18:53:44	1.656	1.901	1.421
8/19/20	18:53:45	1.656	1.901	1.421
8/19/20	18:53:45	1.656	1.901	1.415
8/19/20	18:53:46	1.656	1.898	1.415
8/19/20	18:53:46	1.656	1.898	1.412
8/19/20	18:53:47	1.660	1.901	1.412
8/19/20	18:53:47	1.660	1.901	1.415
8/19/20	18:53:47	1.650	1.895	1.395
8/19/20	18:53:48	1.650	1.892	1.402
8/19/20	18:53:48	1.650	1.895	1.402
8/19/20	18:53:49	1.656	1.901	1.402
8/19/20	18:53:49	1.653	1.898	1.395
8/19/20	18:53:50	1.640	1.885	1.395
8/19/20	18:53:50	1.647	1.888	1.399
8/19/20	18:53:50	1.650	1.892	1.408
8/19/20	18:53:51	1.644	1.888	1.395
8/19/20	18:53:51	1.644	1.888	1.386
8/19/20	18:53:52	1.666	1.911	1.399
8/19/20	18:53:52	1.650	1.895	1.392
8/19/20	18:53:53	1.644	1.885	1.392
8/19/20	18:53:53	1.656	1.901	1.399

*All values are accurate up to ± 0.002 V



The experimental procedure was broken into six distinct tests, with each test tweaking the acrobatic skills and the visual representations of the performer's acceleration. Table I describes Tests 1-3, where the position of circles on the canvas was random. Table II describes Tests 4-6, where the circles were placed in a timeline pattern. In other words, the position of circles were incrementally increasing from left to right as time passes. Finally, in all the tests, the diameter of the circle corresponded to the magnitude of acceleration and the Z, Y, and X-axis were each represented by distinct color.

B. Results

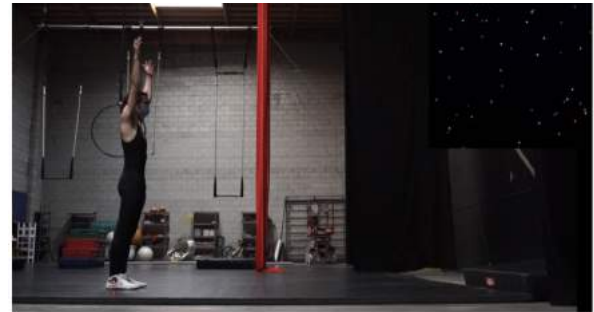
Fig. 4 shows the final sketch produced by Test 1.0 and Table III shows the acceleration data collected from Test 1.0. This data describes the analog voltage output of the accelerometer, which is proportional to the acceleration.

Fig. 5 demonstrates the process of the painting being created alongside the acrobatic movement. To view a video of the art pieces being created alongside the acrobatic skill for all the tests, refer to the video "Acrobat Acceleration - Experiment 1.0 | Digital Movement Art Project" on the Digital Movement Art YouTube playlist [7]. Additionally, a handful of art pieces generated notable results and they are shown in Fig. 6-11.

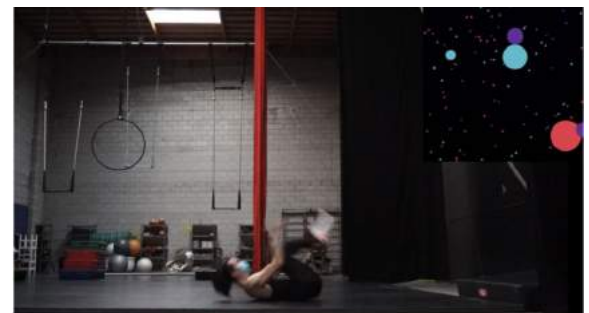
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Scan the QR code to see the full video of experiments.

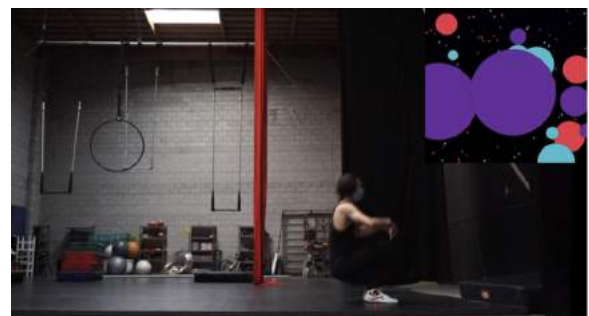
Fig. 5. Progress of art piece creation alongside acrobatic skill of a forward roll for Test 1.0



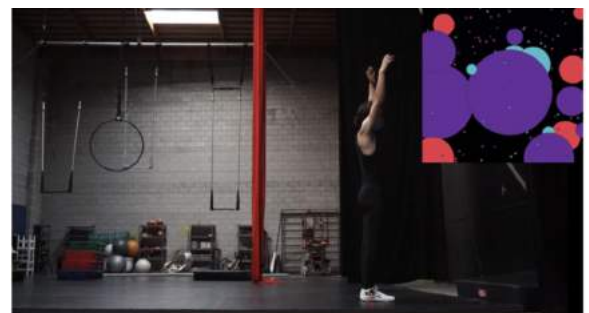
(a) Beginning of forward roll



(b) Halfway position for forward roll



(c) Finishing forward roll



(d) Ending position for forward roll

C. Discussion of Results

In terms of performance metrics, this experiment successfully records acceleration data and generates art pieces that respond to this data. While the functions of the completed system are

simple, the true impact of this experiment is determined more importantly by the art pieces created.

As the circus performer executes an acrobatic skill, the size of the circles that

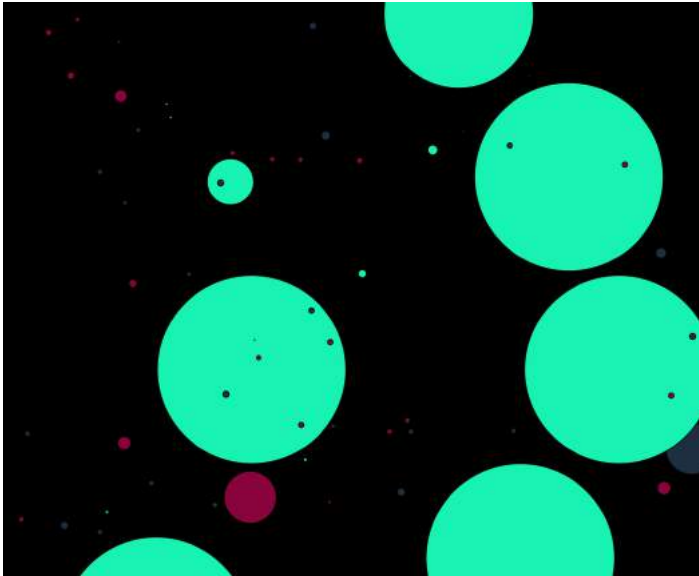


Fig. 6. Sketch from Test 2.3.

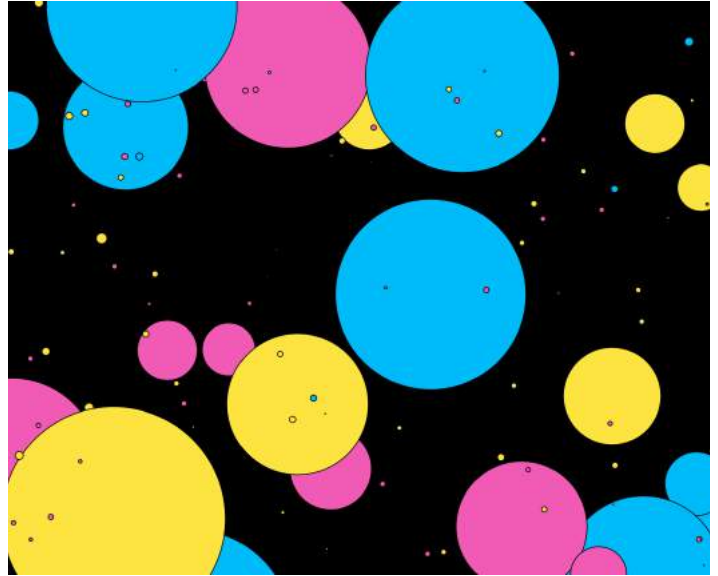


Fig. 8. Sketch from Test 3.2.

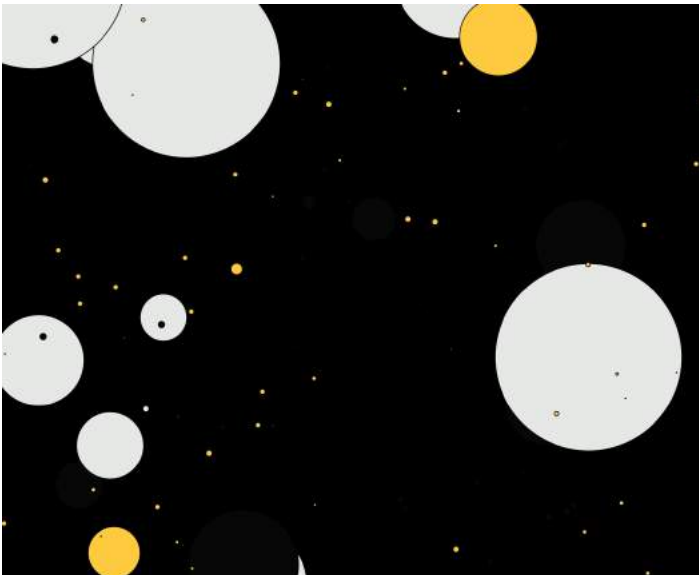


Fig. 7. Sketch from Test 2.7.

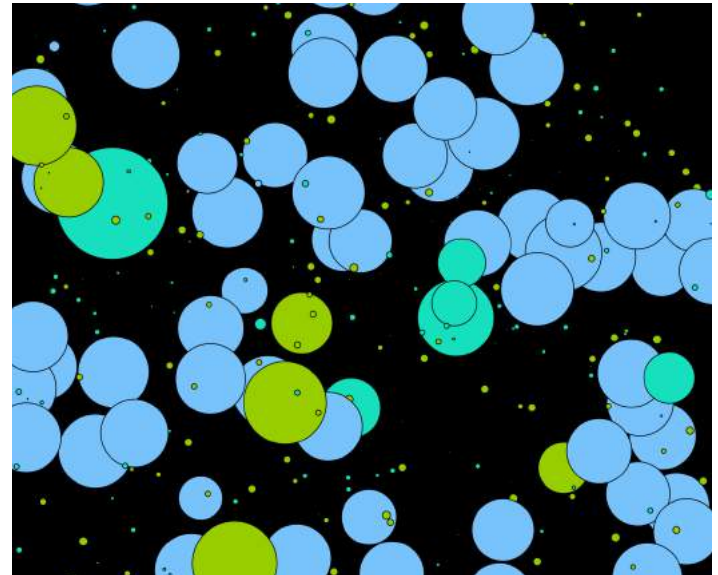


Fig. 9. Sketch from Test 3.3.

appear on the canvas react accordingly. This effect can be shown with the images in Fig. 5. At the start of the skill, in Fig. 5(a), the performer is moving very little and a collection of smaller circles appear on the canvas. When the forward roll has started,

medium-sized circles begin to appear on the canvas, as shown in Fig. 5(b). As the forward roll finishes, larger circles appear on the canvas, as shown in Fig. 5(c) and 5(d). This test demonstrates that the quicker the performer accelerates, the larger the circle drawn on the screen.

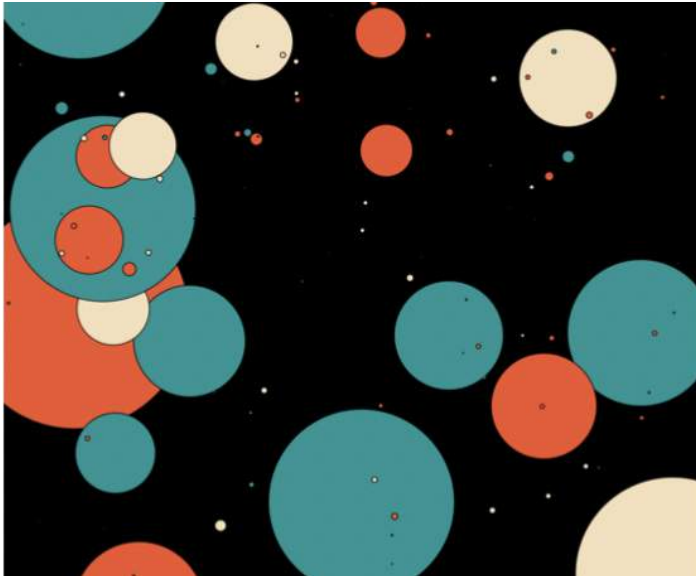


Fig. 10. Sketch from Test 3.8.

Additionally, Test 3.3 produced intriguing results. In this test, the movement of a handstand was executed. In this image, a collection of similar sized blue dots appear very frequently on the canvas. The movement of a handstand is more stationary compared to the other acrobatic skills. While the performer was holding the handstand, the shoe was rotated into an upside-down position. Since the shoe was not in motion, the tilt sensing mode of the accelerometer was activated and the art was responding to how far the shoe was offset from the calibrated position.

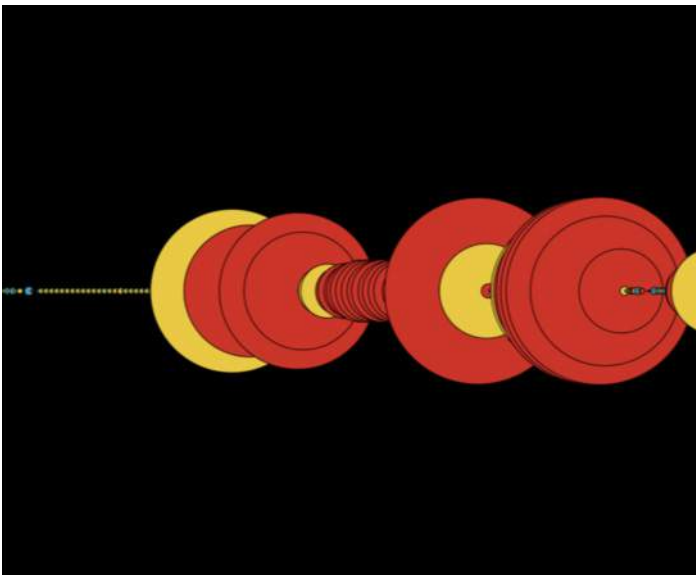


Fig. 11. Sketch from Test 6.0.

These art pieces allow audiences to view acrobatic skills from a new perspective that would not be possible without utilizing this technology. Additionally, these sketches capture the essence of live performance. Since the acceleration of an acrobatic skill will differ slightly each time it is executed, two sketches of the same movement will never be the same, similar to watching a live performance twice. These images retain the live aspect of circus performance, which give more meaning to the circles drawn on the canvas and creates a unique perspective for anyone experiencing this art.

D. Limitations

The primary limitation of the system is the lag in response time of drawing the sketch

when in recording mode. When recording mode is enabled, the Processing program saves an image of every frame that is drawn to the screen. In this scenario, a frame represents the new image created every time three circles (each representing the x, y, and z axes) are drawn to the canvas. In recording mode, the circles are drawn to the screen about 3-4 seconds after the acceleration is measured whereas the response time is less than 1 second in non-recording mode. Although recording mode is not needed for a live performance, in order to preserve the creation process of the art for future reference a method of recording is necessary.

This limitation is most likely caused by the initial size of the canvas and the increasing size of the saved image. With the square aspect ratio, the canvas size is 800 x 800 pixels with a pixel density of two. Therefore, the saved image is 1600 x 1600 pixels. These high resolution images are saved 10 times per second (due to the 100ms sampling rate on the XBee) which might be requiring significant computational energy. Additionally, the file size of the image increases with each saved frame. In Test 3.0, the first frame saved (frame 0) was 10 KB in size and the final frame saved (frame 103) was 159 KB in size. That is approximately a 16 times increase in size for about 4 seconds of movement. While this may not make a large difference in this test, the sketch can potentially run much slower for longer recordings such as a longer acrobatic sequence or a full-length circus act.

In the video of the experiments, this lag was accounted for by shifting the start

of the art making video to line up with the moment the shoe was turned on. With this shift, most of the art pieces closely line up to the performer's movement. However, a keen eye may still notice a lag in some of the recordings. This is most noticeable in Tests 4.0 and 4.1 with the Stepping Sequence and in Tests 6.0 and 6.2 with the Acrobatic Sequence. Furthermore, in a live performance a 3-4 second lag would be noticeable to audience members and possibly detract from the experience.

The secondary limitation is the graphic user interface (GUI). Many features of the Processing program require editing the source code, which can cause unintended errors when done incorrectly. A more developed GUI would more easily allow other engineers and artists to interact and use this system.

The third limitation is the unclear correlation between the voltage reading and the acceleration measurement. The LilyPad accelerometer measures the acceleration with a minimum range of ± 3.0 g. This measurement is then translated to a voltage to be read by the XBee, which is shown in Table III, and finally converted to a digital value. However, the correlation between the digital values and the g-force acceleration measurement is unclear. For this experiment, this precise level of specification is not entirely necessary because the art pieces reflect the movement of the performer to a degree that is recognizable by the human eye. However, for more precise measurements of acceleration, more testing should be done to determine this correlation.

The final limitation is the lack of experimentation with visual representations of the movement. There were a decent variety of acrobatic skills tested, but only three visual representations were tested. In future experiments, more visual representations should be tested by correlating the acceleration data to different shapes, colors, strokes, texts, dimensions, and more. Please note that this limitation is a creative one and this does not limit the functionality of the technical system.

IV. CONCLUSION

The objective of this experiment was to create a wireless and wearable electrical system that measures acceleration over time and generates digital art pieces that respond to this data. After analyzing the data, the system successfully satisfies all the objectives. However, to realize the full potential of this system, more experimentation is required, specifically creating a larger variety of artistic representations that correspond to the acceleration. Through more experimentation, this project can enable circus artists and engineers to create unique experiences during live performance and provide audiences with a new perspective on traditional acrobatic movement.

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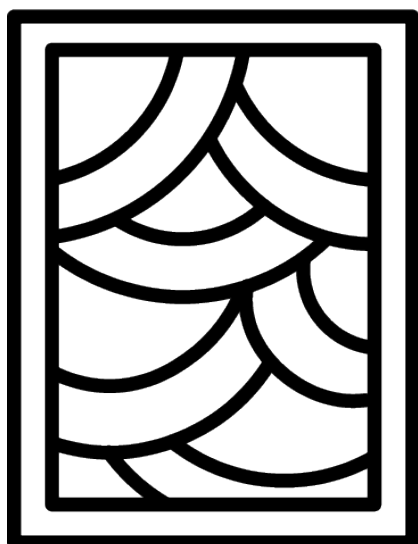
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Eyes to the Future







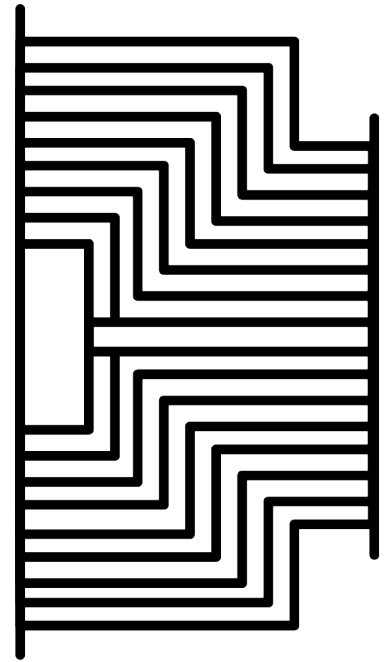
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The Church Under (Printing) Press-ure:

The Fates of Copernicus and Galileo

In 1633, Galileo Galilei was condemned to a life of indefinite house arrest after publishing a book supporting Nicholas Copernicus' theory that the Earth revolved around the sun. In this representation, the Earth was not the center of the universe as Church doctrine clearly stated. Curiously, when Copernicus published his theory in his book, the Roman Catholic Church did not punish Copernicus for contradicting Church doctrine. However, if Copernicus' book were prohibited, Galileo would not have had the foundation to base his support. I trace the reasoning behind the Roman Catholic Church's divergent responses to these two philosophizing astronomers back to Johannes Gutenberg's invention of metal movable-type printing. I illustrate the widespread effects of this invention and its connection to the matters of the Roman Catholic Church. An important intermediary is the growth of the Protestant Reformation, which I will show should be attributed to the printing press. The Council of Trent, a body of the Roman Catholic Church commissioned to respond to the Reformation, also played a pivotal role. I pursue this domino effect beginning with the advent of the printing press, and argue that the pressure this invention imposed on the Roman Catholic Church through the Reformation was the reason behind their varied responses to the works of Copernicus and Galileo.

The printing press sparked widespread changes across the European world. Johannes Gutenberg invented metal movable-type printing circa 1450 in Mainz, Germany. His invention compounded the earlier discoveries of oil-based ink and the Roman screw press with the advancements in metallurgy made by goldsmiths like himself¹. Even though it is now apparent that there were prior forms of printing in Asia, its development in Europe seems to have been discovered independently². Gutenberg's innovation quickly spread across the European world and had a profound impact on European society. Prior to Gutenberg's printing press, books were reserved for universities, monasteries, and the very rich due to their high price and limited availability.³ After the press, books became remarkably cheaper than earlier handwritten works and thus readily available. By 1480, the press "was nearly universal throughout western Europe."⁴ In the years after its spread, the price of books decreased by approximately 85%.⁵ From the 20 million texts produced by European printers in circulation by 1500, that number grew to 200 million by the next century.⁶ Literacy rates skyrocketed and education rates soared, setting the stage for the Scientific Revolution to come.

However, what is less well-known is the printing press's tremendous effect on the promulgation of Martin Luther's

1 Scott Smith, "Gutenberg's Press Roused A Learning Revolution," *Investors Business Daily*, November 12, 2013, <http://search.ebscohost.com.proxy.seattleu.edu/login.aspx?direct=true&db=bth&AN=91922357&site=ehost-live&scope=site>; David Deming, *Science and Technology in World History: The Black Death, the Renaissance, the Reformation and the Scientific Revolution* (Jefferson: McFarland & Company, 2012), 260, ProQuest Ebook Central.

2 Deming, *Science and Technology*, 31.

3 T Padmanabhan, "Dawn of Science," *Resonance: Journal of Science Education* 16, no. 1 (January 2011): 8, doi:10.1007/s12045-011-0008-1.

4 Jared Rubin, "Printing and Protestants: An Empirical Test of the Role of Printing in the Reformation," *The Review of Economics and Statistics* 96, no. 2 (2014): 271-72, <https://www.jstor.org/stable/43554930>.

5 Rubin, "Printing and Protestants," 272.

6 Smith, "Gutenberg's Press."

criticisms of the Roman Catholic Church. Martin Luther nailed his list of ninety-five theses on the doors of All Saints Church in Wittenberg on October 31, 1517. Soon after, someone obtained and translated that list and brought it to a printer. In less than two weeks, "Luther's theses had been distributed throughout Germany. By the end of the month, they were known throughout Europe."⁷ Recent scholars claim that it is "very unlikely that Martin Luther would have succeeded in his rebellion against the Church" had it not been for the printing press.⁸ Luther's ideas were massively distributed to all people.⁹ To those that were still illiterate, the press effectively spread all sorts of visual Reformation propaganda; to the literate, the press spread pamphlets which were brought as people traveled—further expanding the Reformation's reach.¹⁰ A recent empirical study concludes that "cities that were early print adopters were 52.1 percentage points more likely to adopt Protestantism by 1530, 41.9 percentage points more likely to adopt Protestantism by 1560, and 29.0 percentage points more likely to adopt Protestantism by 1600."¹¹ Essentially, the presence of a nearby printing press significantly increased the growth of Protestantism and its followers. Furthermore, ecclesiastical authorities became less and less relevant as the printing press gave men "direct access to the fount of Christianity, the Scriptures."¹² This furthered Luther's proclamation that faith is all that is necessary for salvation.¹³

Meanwhile, Nicholas Copernicus was hard at work with his *De revolutionibus orbium*

7 Deming, *Science and Technology*, 67.

8 T Padmanabhan, "Dawn of Science," 11.

9 Smith, "Gutenberg's Press."

10 Rubin, "Printing and Protestants," 274.

11 *Ibid.*, 282.

12 Deming, *Science and Technology*, 72.

13 *Ibid.*

coelestium (On the Revolutions of the Heavenly Spheres), finally published in March 1543.¹⁴ In his revolutionary book, he triumphantly states:

*I feel no shame in asserting that this whole region engirdled by the moon, and the center of the earth, traverse this grand circle amid the rest of the planets in an annual revolution around the sun. Near the sun is the center of the universe. Moreover, since the sun remains stationary, whatever appears as a motion of the sun is really due to the motion of the earth.*¹⁵

Copernicus states that the planets circle in orbit around a stationary sun. Notice how this heliocentric and heliostatic theory is contrary to the Catholic Church's Aristotelian geocentric doctrine of Earth as the center of the universe. Despite knowing that contention, Copernicus accepts it and tries to make his claim "clearer than sunlight."¹⁶ Furthermore, not only is the sun no longer stationary contrary to Aristotelian cosmology, but it has three motions. Copernicus states that the Earth moves daily around its own axis, yearly around the sun, and has another annual motion tilting its axis.¹⁷

Many are inclined to suggest that the reason Copernicus' book was not banned by the Roman Catholic Church after its publication, as Galileo's book would later be, was because of Andres Osiander's unsigned preface thought to be Copernicus' own.¹⁸ In

it, Osiander states that "these hypotheses need not be true or even probable. On the contrary, if they provide a calculus consistent with the observations, that alone is enough."¹⁹ By this, he states that the work should only be used as a calculative device and bears no representation on the reality of things. Osiander further warns of one "depart[ing] from this study a greater fool than when he entered it," suggesting it would be foolish to think otherwise.²⁰ Copernicus died soon after and was unable to clear up this misrepresentation. Reading the actual content of *De revolutionibus*, it is clear that Copernicus believed his system was true. He would not have stated that he "feel[s] no shame" and that he will make it "clearer than sunlight," as referenced above, if he had not wholeheartedly believed in the truth of his theory.²¹ Copernicus knew he was going against Church doctrine; in his letter to Pope Paul III, he even warns that people "will cry out at once that I and my theory should be rejected".²² While Osiander's preface and Copernicus' death may have helped pacify the Church, it was not the main factor halting the prohibition of his work.

The real reason Copernicus' book was not prohibited outright was because of the problems created by the printing press. Giovanni Maria Tolosani, a member of the Dominican Order, supplied insider info of the inner happenings of the Catholic Church at this time. He had strong ties to the Vatican through his lifelong friend, Bartolomeo Spina, the highly respected and Pope-appointed Master of the Sacred and Apostolic Palace.²³ In an appendix of one of Tolosani's treatises,

¹⁴ Michael Matthews, *The Scientific Background to Modern Philosophy: Selected Readings* (Indianapolis: Hackett Publishing, 1989), 33.

¹⁵ Nicholas Copernicus, *De Revolutionibus (On the Revolutions)*, 1543 C.E., trans. Edward Rosen (Baltimore: John Hopkins University Press), 23, http://www.geo.utexas.edu/courses/302d/Fall_2011/Full%20text%20-%20Nicholas%20Copernicus,%20De%20Revolutionibus%20%28On%20the%20Revolutions%29_%201.pdf.

¹⁶ Copernicus, *De Revolutionibus*, 24.

¹⁷ *Ibid.*, 25-26

¹⁸ Peter Dear, *Revolutionizing the Sciences: European Knowledge in Transition, 1500-1700* (Princeton: Princeton University Press, 2019), 40, 42.

¹⁹ Copernicus, *De Revolutionibus*, 3.

²⁰ *Ibid.*

²¹ *Ibid.*, 23, 24.

²² Matthews, *The Scientific Background*, 40.

²³ Edward Rosen, "Was Copernicus' Revolutions Approved by the Pope?" *Journal of the History of Ideas* 36, no. 3 (1975): 536, doi:10.2307/2708661.

published posthumously and now referred to as the *Heaven and the Elements* appendix, Tolosani notes that the Catholic Church was about to prohibit Copernicus' publication. He writes:

*The Master of the Sacred and Apostolic Palace had planned to condemn his [Copernicus'] book. But, prevented at first by illness, then by death, he could not carry out this plan.*²⁴

This solidifies that Osiander's preface did little to prevent the Church from prohibiting *De revolutionibus*; rather, the Catholic Church intended to prohibit it regardless. Alas, soon after, "the Vatican was so deeply engrossed in the portentous Council of Trent that Copernicus' *Revolutions* escaped official notice."²⁵ The Council of Trent convened for the first time in 1545, not too long after Copernicus' publication, to address the Reformation largely promulgated by the printing press. The pressure to respond to the Reformation the printing press sparked was the reason that *De revolutionibus* was saved from the Catholic Church's prohibition.

Since Copernicus' *De revolutionibus* was available to the public, it was available to a rising scholar named Galileo Galilei. Galileo first expressed interest in Copernicus' sun-centered theory in the late 1590s. He sought to prove Copernicus' theories as a way to attack Aristotelian geocentric interpretations of the universe.²⁶ In 1610, Galileo used his invention of the telescope to discover sunspots proving the rotation and imperfection of the sun, discovered that

Jupiter had moons just like the Earth, and recorded the phases of Venus.²⁷ The phases of Venus suggested that Venus rotates around the sun, but Galileo still lacked conclusive proof that the Earth did, too.²⁸

What is widely known as the Galileo Affair occurred in two parts. The first part was a trial in 1616 in which Galileo was called to Rome to defend his recent writings promoting heliocentrism. In their 1616 decree, the Congregation of the Holy Office ruled that Copernicus' theory of a sun-centered universe "is formally heretical since it explicitly contradicts in many places the sense of Holy Scripture according to the literal meaning of the words."²⁹ The Holy Office ended the matter by ordering "Nicholas Copernicus' *De revolutionibus orbium*... be suspended until corrected," along with prohibiting "all other books teaching the same thing."³⁰ If the Catholic Church had banned Copernicus' book upon publication as they had originally planned, then Galileo would have had no foundation to base his similar supporting theory.

There is an interesting twist to the events that follow. Galileo's name or works were not mentioned explicitly in the decree of his trial. Two reputable accounts record a differing message that Cardinal Bellarmine, sent by Pope Paul V, communicated to Galileo after the trial. Records at the Holy Office indicate the existence of an injunction mandating that Galileo "should not hold, teach, or defend [Copernicanism] in any

²⁷ Richard Blackwell, "A Brief Sketch of the Galileo Affair," in *Science, Religion and Authority: Lessons from the Galileo Affair* (Milwaukee: Marquette University Press, 1998), 25, ProQuest Ebook Central.

²⁸ Blackwell, "A Brief Sketch," 25.

²⁹ George V. Coyne, S.J., "Science Meets Biblical Exegesis in the Galileo Affair," *Zygon* 48, no. 1 (2013): 222.

³⁰ Blackwell, "A Brief Sketch," 32-33.

²⁴ Rosen, "Was Copernicus' *Revolutions*," 540.
²⁵ *Ibid.*, 541
²⁶ Dear, *Revolutionizing the Sciences*, 71.

way, either verbally or in writing.”³¹ However, a letter from Cardinal Bellarmine to Galileo, responding to Galileo’s request for clarifying the events of their private meeting, indicates that the only thing that happened was that Galileo was made aware of the trial’s decree and result that Copernicanism “cannot be defended or held.”³² The trial’s decree standing on its own would not prohibit a conclusive defense of Copernicanism, as illustrated by Galileo’s meeting with Pope Urban VIII in 1624. In this famous meeting, the Pope allowed Galileo to write about heliocentrism as long as it was not described as more than a hypothesis, unless Galileo could really prove the theory.³³

Sixteen years after the first trial, Galileo published his *Dialogues Concerning the Two Chief World Systems*. In it, he includes three characters, each representing either the Aristotelian geocentric position, Copernican view, or neutral position.³⁴ It was clear that the dialogue favored Galileo’s Copernican outlook, yet it failed to offer conclusive irrefutable proof that the Earth really revolves around the sun.³⁵ Despite vying to destroy all of Simplicio’s arguments, standing for the Aristotelian position and representing some of the Pope’s arguments himself, Galileo’s central proof about how the tides prove the Earth’s orbit did not make any sense.³⁶ In his *Dialogues*, Galileo concludes:

The monthly and annual periodic alterations of the tides could derive from no other cause than from the varying ratios between the annual motion and the addition to it

31 Blackwell, “A Brief Sketch,” 34.

32 *Ibid*

33 Timothy Moy, “Science, Religion, and the Galileo Affair.” *Skeptical Inquirer* 25, no. 5 (2001): 44.

34 Matthews, *The Scientific Background*, 61.

35 Blackwell, “A Brief Sketch,” 35.

36 Moy, “Science, Religion,” 44.

*and the subtractions from it of the diurnal rotation... Thus it is necessary that for this reason the tides should have a monthly period within which they become greater and smaller.*³⁷

Yet Galileo’s reasoning did not work. His theory does not even match up to the correct tidal cycle. Following his 10 pages of explanation of how the tides prove that the Earth moves around the sun would mean that “there is only one spring tide and one mean tide each month,” when in fact there are two of each every month.³⁸ Galileo was advocating for heliocentrism while lacking conclusive proof.

When a record of the injunction was found, Galileo was called for another trial in 1633. Going against a direct injunction was an impermissible crime. Furthermore, the Pope may have felt betrayed by Galileo for putting his words in the mouth of Simplicio and not mentioning the existence of the injunction before getting his approval to write.³⁹ Cardinal Bellarmine had died twelve years earlier, so could not attest to whether the injunction was communicated to Galileo or not. The official judgment of the Congregation of Holy Office stated Galileo was “vehemently suspected of heresy, namely, of having held and believed doctrine which is false and contrary to divine Holy Scripture.”⁴⁰ As is well known, Galileo was condemned to indefinite imprisonment and later died in house arrest.

Galileo’s sentence was a matter of preserving Church authority. Specifically,

37 Ron Naylor, “Galileo’s Tidal Theory,” *Isis* 98, no. 1 (March 2007): 15-16, <https://www.jstor.org/stable/10.1086/512829>.

38 Naylor, “Galileo’s Tidal Theory,” 16.

39 Moy, “Science, Religion,” 45.

40 Blackwell, “A Brief Sketch,” 37.

it was a matter of preserving the Catholic Church's sole authority to interpret scripture and their need to establish a strong position against dissenters. The Catholic Church was still in crisis from the aftermath of the Reformation, and actively tried to fight off the insurrection of Protestantism within the Christendom.⁴¹ In light of what the printing press had caused, the Roman Catholic Church could not afford to take a weak stance. Galileo's claims were essentially trying to reinterpret scripture contrary to Church doctrine. In the eyes of the Catholic Church, Galileo was questioning its authority just as Martin Luther had done. The Church had already interpreted the passages of the Bible relating to when God stops the sun in its tracks so Joshua's army could continue winning a battle at Gibeon, and Psalm 19:4-6 describing the sun rising out of the edge of Heaven, as clear indications of an Earth-centered universe.⁴² Moreover, the Church had already decided that they were the only ones who had the right to interpret scripture. In the fourth session of the Council of Trent, the Reformation Council declared:

*In matters of faith and morals... no one relying on his own judgment and distorting the Sacred Scriptures according to his own conceptions, shall dare to interpret them contrary to that sense which Holy Mother Church, to whom it belongs their true sense and meaning, has held and does hold.*⁴³

As Cardinal Bellarmine had justified before his death, the notion of geocentrism was a matter of faith and morals.⁴⁴ If they allowed

Galileo to reinterpret the Bible and continue to support a heliocentric theory, they would concede the ability for a layman to undermine Church authority.

In the conditions of a growing Reformation, the Roman Catholic Church could not allow the liberalization of doctrine while it was under attack.⁴⁵ The Reformation, sparked by the printing press, had done too much damage already. Conceding the allowance of Galileo would set a precedent of allowing dissent. Moreover, if the Holy Office did not condemn Galileo, the potential existence of an injunction would mean they would have let someone disobey direct Church orders. Despite there being an equal chance that no such injunction was communicated, it would mean doubting their own official records. Furthermore, not punishing him would essentially allow someone to defy and betray the Pope without consequences. It would mean the Church was allowing someone to get off easy which would make them seem weak at a time when the Reformation necessitated that they stay strong.⁴⁶ The Roman Catholic Church had to cover its bases. Galileo had to conform to their doctrine; they would not conform to him or any other theories. To protect their supreme authority, Galileo was "a collateral casualty of a much larger war."⁴⁷

The fate of Galileo and Copernicus lead directly back to Johannes Gutenberg's invention of the metal movable-type printing press. The printing press triggered a growth in learning and literacy unmatched in earlier centuries. It brought all sorts of texts directly into the hands of the people.

41 Moy, "Science, Religion," 45.

42 Blackwell, "A Brief Sketch," 26.

43 Coyne, "Science Meets Biblical Exegesis," 222.

44 Blackwell, "A Brief Sketch," 31.

45 Moy, "Science, Religion," 45.

46 Blackwell, "A Brief Sketch," 36-37.

47 Moy, "Science, Religion," 45.

When Martin Luther nailed his theses, the printing press spread his criticisms through Europe like wildfire. By the time Copernicus published *De revolutionibus orbium coelestium*, the Roman Catholic Church was too busy gearing up for the Council of Trent to respond to the growing Reformation the printing press spurred. Andres Osiander's preface was not what saved Copernicus' publication; if the Church was not under attack by Protestantism, they would have banned *De revolutionibus* as was originally planned. The printing press saved Copernicus' book, but it was also the reason Galileo was condemned for seeking to prove that very same sun-centered foundation. When Galileo published *Dialogues Concerning the Two Chief World Systems*, the Catholic Church was under pressure to preserve its authority in the face of the Reformation. The Council of Trent decreed it their sole right to interpret scriptures, and Galileo was undermining that authority. The possibility of an injunction further questioned the penalty for going against direct orders. The printing press set off the Protestant Reformation which saved Copernicus' *De revolutionibus*, but necessitated a strict response to Galileo and his *Dialogues*.

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