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LETTER FROM THE EDITORS

Dear Reader,

We are proud to present Volume V of the Indiana University Journal of Undergraduate Research (IUJUR). In it you will find a selection of work highlighting the creative and scientific diversity of undergraduate research at Indiana University, with topics ranging from songbird physiology to medieval chivalry. This volume recognizes the authors for their talent and persistence throughout our rigorous review cycle, and their faculty mentors who support and encourage this form of development outside the classroom. We hope that you find enjoyment and educational value from the pages within.

IUJUR is a student-run, faculty-advised organization, and for over six years, we have pursued the goal of making the research process more accessible and engaging for undergraduates. To do this, we publish this peer-reviewed, open-access journal for all to read, engage students in a editing cycle akin to that of professional journals, run an academic publishing class to train new student editors, and host professional development events throughout the year. We rely on the continued support of the Office of the Vice Provost for Undergraduate Education (OVPUE), IU Libraries, and our many faculty reviewers and advisors to realize our mission and become a reputable journal in the IU community.

The current volume represents a year of major changes, which reflect how both IUJUR and the undergraduate research community at IU has grown. We began to publish papers on a rolling basis, streamlined our marketing materials, better integrated our submission management platform into our staff's workflow, and hosted IU's first ever Research Day, a professional development conference for students interested in getting started with research or pursuing research careers after graduation. Our ongoing initiatives flourished as well. With the help of IU Libraries and OVPUE, we continued to run a successful academic publishing class for our student editors, and through our Online Creative Content team, we maintained a regular cadence of articles about issues and happenings in the research community at IU.

Our undergraduate staff had a significant role in each of these successes. The Student Editorial Boards have done an excellent job adapting to a year-round flow of submissions while perpetuating IUJUR's standards of quality. Our Public Relations Board worked tirelessly to promote our new events and the constant stream of published work. And, of course, our Visual Design and Publishing Board is responsible for the beautiful, pragmatic design of our journal—one rivaling that of much larger publishers. This journal reflects the cumulative efforts of our staff after a year of hard work, and their professionalism and dedication cannot be applauded enough.

As a team, we hope to continue to put forth an excellent journal for the next five years. We are pleased to have new submissions coming in at a steady pace, and we are excited for what the next volume may bring. Thank you for your support of undergraduate research, Indiana University, and our journal. We hope that you enjoy this volume.

Sincerely,
Shahin Saberi and Mac Vogelsang
Co-Editors-in-Chief

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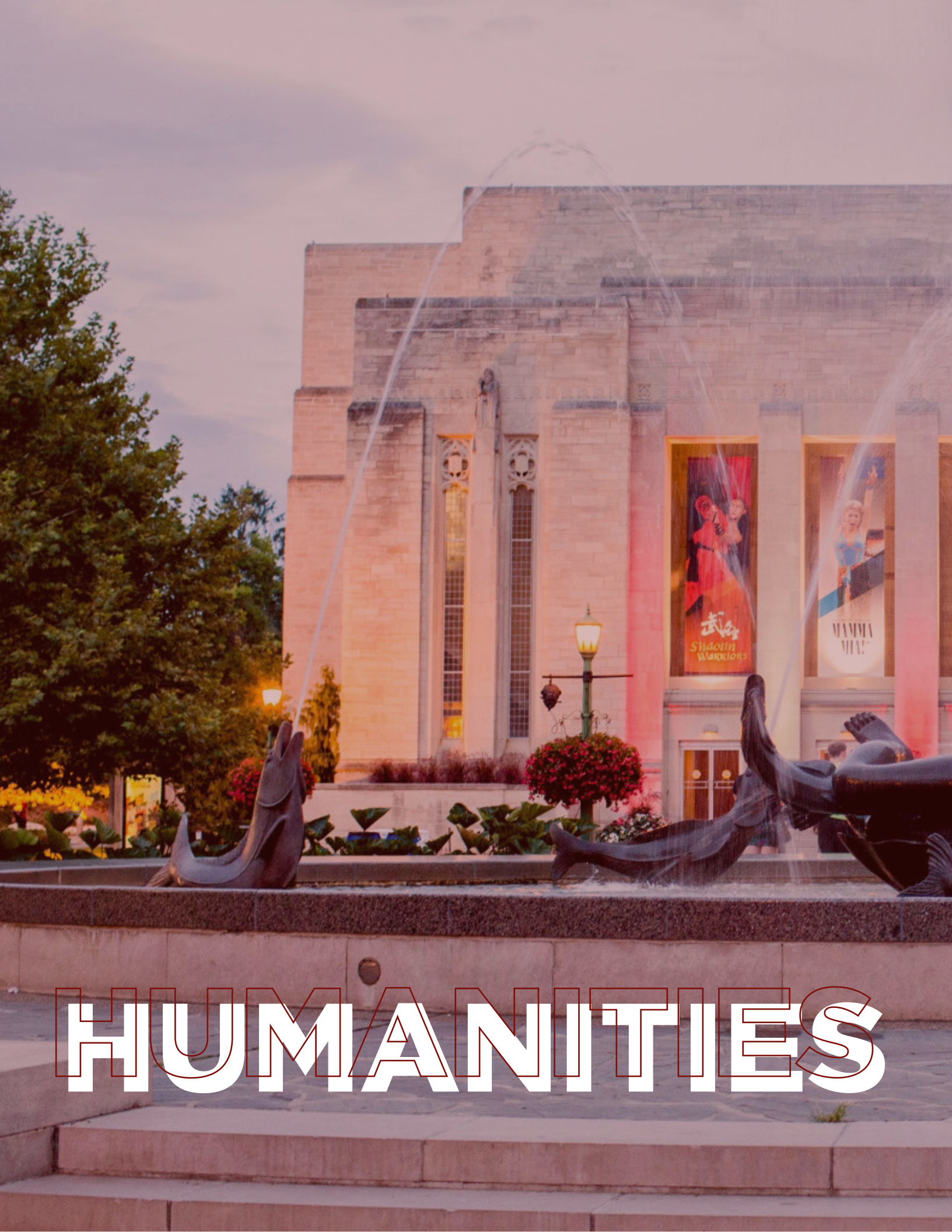
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Irony, Contradiction, and Voltaire's Garden: Re-Reading *Candide*

Sydney Adams

Faculty Mentor: Dr. Christoph Irmscher, Department of English, *Indiana University Bloomington*

ABSTRACT

Literary scholars have long debated the thematic significance of Voltaire's *Candide*, a 1759 novella that relentlessly satirizes Gottfried Leibniz's philosophy of optimism. In *Candide*, Voltaire assails his readers with displays of violence so absurd they might inspire anything from laughter to hopelessness. The novella's crude humor is hinged upon an unexpectedly-compassionate acknowledgement of human suffering. Voltaire uses *Candide's* plotline to attack the human assumption that any force of good will ever offset the evil in a world pervaded by cruelty and selfishness. He provokes questions with no answers in sight. Deriving a theme from the novella only becomes more difficult after reading its conclusion, which leaves readers dissatisfied, desperate for some sort of call to action. We are urged to cultivate our garden but given no advice on what that might entail. We are convinced of Leibnizian optimism's failures but deprived of a more-pragmatic philosophy to replace it with. In this essay, I analyze the ways Voltaire uses humor, irony, and structure in *Candide* not only to denounce deceitful forms of optimism, but to provoke future thought on the questions he could not answer himself.

KEYWORDS: *Voltaire, Candide, optimism, irony, humor, social action, realism, pragmatism, sentimentalism, Lisbon, Leibniz*

INTRODUCTION

In order to cope with the inevitable miseries accompanying existence, it is not uncommon for human beings to rely on the assumption that some pervasive, unconquerable force of goodness will eventually offset all the hardship they have experienced. But in the wake of disaster and violence, hopelessness threatens the legitimacy of this assumption. After the Lisbon earthquake of 1755, writer and philosopher François-Marie Arouet (better known by his pen name, Voltaire) attacked optimistic philosophies that suggested reasonless death and carnage could somehow be “for the best.”¹ Three years after the disaster, Voltaire wrote *Candide*, a self-proclaimed philosophical tale satirizing philosophy itself. No individual, religion, or society mentioned in *Candide* is spared from Voltaire's relentless satire and often horrifying plotline, culminating in a novel that is as unsettling as it is comical, as emotionally-wrought as it is flippant. Voltaire uses ludicrous displays of irony to emphasize the human capacity to rationalize the absurd with philosophies that offer no pragmatic value. He complicates this view with the notion that the kind of peace that bores is not necessarily preferable to suffering that stimulates.

From start to finish, *Candide's* picaresque plot is disconcertingly—and intentionally—contradictive. Speaking for other scholars, Roy S. Wolper evokes the “indecision and conflicting theories concerning structure, style, theme, and characters” that characterize *Candide*.² Critics have struggled to establish connections between *Candide's* messages and Voltaire's biography, hoping to reach consensus on what the novel has to say about social action and philosophy. Andrea Speltz writes that *Candide* is filled with verbal, historical, situational, and structural irony that “serves the anti-systemic thinking of its author,” simultaneously affirming and negating philosophical ideas like sentimentalism and egoism. To Speltz, these contradictions are a tool to diagnose “the moral narcissism inherent in sentimentalism” and condemn the human “tendency to linger self-indulgently over beautiful feelings at the expense of active compassion.”³ Michael Wood argues that Voltaire uses *Candide* to subtly attack the assumptions that “we can totally transcend our selfishness,” that “a final accounting of the balance of good and evil...is achievable” and

that “philosophies bear...direct relevance to human behavior.”⁴ In this essay, I posit that Voltaire's ambiguity and self-contradiction in *Candide* are deliberately invoked to obscure an easy, uncomplicated discovery of thematic meaning. This prolific, diverse discourse *may* be exactly what Voltaire hoped for when he wrote *Candide*. I also argue that the novel's unnervingly ambiguous conclusion is a final twist of irony that is quite intentional on Voltaire's part. In *Candide*, Voltaire transcends a simple denunciation of optimism, offering a disillusioned perspective on the paradoxical nature of the human condition.

VOLTAIRE'S DISTANCE FROM THE TEXT

Before attempting an in-depth analysis of Voltaire's intended message in *Candide*, I must first establish what we know about his relationship with the text. It is easy to assume that Voltaire speaks primarily through protagonist Candide, but this is likely not the case. Even as he introduces Candide, Voltaire's third-person narrator is keen on establishing distance from him. The narrator is not entirely omniscient; in fact, he goes out of his way to suggest that Candide is not someone he knows, but someone he “believe[s]” to be named for his reputed gentle disposition and straightforward mind.⁵ Readers should heed caution in assuming that Voltaire's message aligns with that of *any* character in the novel—even the unnamed narrator from whose perspective the story is told. I would argue instead that Voltaire speaks through *all* his characters and the interactions and storyline that fall between them. He speaks through a “man of taste” later in the novel, expressing that the difficulty of literature is “to be a great poet without any of the characters in the piece appearing to be poets themselves.”⁶ It is no coincidence that Voltaire includes this in the literary connoisseur's commentary; he is slyly, but directly, informing us of his literary intentions. *Candide* has no singularly wise individual; if it did, it would not be such an effective display of human selfishness and folly. Rather, Voltaire uses the novel in its entirety to convey a satirical depiction of the world around him. Wolper argues this point in his analysis of *Candide* when he writes that the novel's emphasis on compassion and action reflects “*Candide's* values, not *Candide's*.”⁷ Understanding this distance between Voltaire,

¹ Voltaire, *Candide*, trans. Roger Pearson (Oxford: Oxford University Press, 1990), 2.

² Roy S. Wolper, “Candide, Gull in the Garden?” *Eighteenth-Century Studies* 3, no. 2 (1969), 265.

³ Andrea Speltz, “War and Sentimentalism: Irony in Voltaire's *Candide*, Sterne's *Tristram Shandy*, and Lessing's *Minna von Barnhelm*,” *Canadian Review of Comparative Literature* 44, no. 2 (2017), 286.

⁴ Michael Wood, “Notes on *Candide*,” *New England Review* 26, no. 4 (2005), 19

⁵ Voltaire, *Candide*, 1.

⁶ *Ibid.*, 67.

⁷ Wolper, “Candide, Gull in the Garden?” 277.

the characters, and the story becomes extremely important when discerning meaning—especially regarding *Candide*'s famous closing scene and the garden Candide urges his companions to cultivate.

THE ROLE OF MULTIPLE PERSPECTIVES

Though no singular character delivers *Candide*'s theme, each character has a message and a purpose. The most distinctive philosophies are presented first in Pangloss's pedantic optimism, then in Martin's bitter pessimism, and finally in *Candide*'s abandonment of philosophy in favor of action-taking. Pangloss's philosophy is the easiest to identify. His statements function as a clear and intentional satire of Gottfried Wilhelm Leibniz, the German philosopher who coined the phrase "best of all possible worlds" that Pangloss (whose name means "all-tongue") is so fond of.⁸ Voltaire features the inexplicable suffering of the Lisbon disaster in chapter V, and Pangloss, true to form, refuses to relent in his optimism. He goes as far as to remind the victims of the earthquake that all their loss is still "the best there is" and necessary in "the scheme of the best of all possible worlds."⁹ Perhaps the most disturbing implication of statements like this is that no element of Pangloss's character suggests that he says it unkindly; rather, Pangloss deliberately subjects himself and others to delusion. He even convinces Candide that the best of all possible worlds *must* include Cunegonde's evisceration and rape, since it also included her beauty and love; evil is an "indispensable part of the best of all worlds, a necessary ingredient."¹⁰ It is this deliberate self-contradiction that Voltaire so vehemently opposes. In his *Philosophical Dictionary*, he writes that "All is well" means nothing more than that all is controlled by immutable laws. Who does not know that?¹¹ At its best, Leibnizian optimism is to Voltaire an extraneous redundancy, and at its worst, a destructive delusion capable of excusing atrocious displays of immorality and violence.

CANDIDE'S POSITION ON OPTIMISM

If Pangloss's character represents both Leibnizian optimism and Voltaire's antithesis, one might be inclined to assume that Martin, *Candide*'s most-outspoken pessimist, holds similar views to Voltaire's. But this is an oversimplification of Voltaire's intended message. Martin is a Manichaeist who believes the world's suffering is evidence that God has abandoned it "to some malign being," but Voltaire's work avoids theological justifications for suffering altogether.¹² Martin's hopelessness might resonate with Voltaire, but Martin does not believe that the trials of hopelessness are worth enduring; Voltaire does. In *Voltaire's Politics*, historian Peter Gay states that the optimism Voltaire criticizes is at its heart a "half-complacent, half-despairing" form of pessimism.¹³ Indeed, Voltaire is careful in his work to distinguish between optimism founded in hope and optimism founded in illusion. He writes in his "Poem on the Lisbon Disaster":

All will be well one day—so runs our hope.
All now is well, is but an idle dream.¹⁴

Voltaire thus suggests that hope is valuable, though an indiscriminately

optimistic philosophy is not. Despite her long history of victimhood to atrocious violence, *Candide*'s Old Woman says, "still I loved life." She goes on ironically to criticize this drive to live as "one of our most fatal tendencies" as humans, but she openly clings to existence all the same.¹⁵ This contradiction resonates with that expressed by Ely in Cormac McCarthy's novel *The Road*: "Nobody wants to be here, and nobody wants to leave."¹⁶ Existence may not be universally pleasant, but we choose to go on with it anyway. While McCarthy's novel suggests that this contradiction is a senseless way of prolonging suffering, Voltaire's seems to admire it as strength.

Candide declares that reality cannot be grounded in the best of all possible worlds, but Voltaire does not seem to believe that we live in the worst of all possible worlds either. Nor does he suggest our world's burdens are not worth bearing. French author Jean Sarrailh describes the world Voltaire creates in *Candide* as "simultaneously livable and bad."¹⁷ This is evident in the way that Voltaire's satire absurdly exaggerates the world's capacity for misfortune, but, despite their suffering, his band of characters still try to make a life for themselves at the end of the novel.

THE ROLE OF IRONY

Throughout *Candide*, Voltaire also incorporates several instances of verbal irony that produce individual meanings of their own. For example, his narrator's use of the oxymoron "heroic butchery" (*boucherie héroïque*) suggests that thoughtless acts of violence are inherently incapable of being noble in nature.¹⁸ Voltaire criticizes moral justifications for violence again later when Candide laments that he is "the best fellow in the world," but he has already killed three men "and two of them priests!"¹⁹ In this case, Voltaire's verbal irony not only pokes fun at the absurd measures humans take to justify their own evil, but he also suggests that *anyone* is capable of violence—and capable of feeling very little remorse for their own destructive choices. Situational irony appears in *Candide* as well, particularly in instances related to profound, sometimes comical, suffering. This is demonstrated in Voltaire's satirical mention of a eunuch who longs to feel sexual arousal—one of the many characters in the novel whose principal role seems to be to suffer.²⁰ Later in the novel, Candide, desperate to find some shred of truth in Pangloss's optimism, makes it his goal to find at least *one* person content with their life. But inevitably, he fails, having no answer to give Martin when he turns to him "with his usual sang-froid" and asks, "Have I not won the whole bet?"²¹

Perhaps the most emotionally jarring display of irony and suffering in the novel arises when Candide meets a slave. The slave plainly notes of his white slaveholders, "I don't know if I made their fortune, but they didn't make mine."²² Here Voltaire condemns a non-fictional irony—the way slaves are told that their servitude is an honor, as though they should feel grateful for the way their lives are continually demeaned. Despite the violence Candide witnessed over the course of his odyssey, this moment with the slave shocks him. He cries out in an apostrophe to Pangloss, "I shall finally have to renounce your Optimism."²³ To deepen the irony of this scene, it is important to note that this is the *only* direct mention of optimism in the text. It is no mistake that in a book subtitled *L'optimisme*, Voltaire only writes the word "optimism" once—and when he does, it is to renounce it as madness.

⁸ Wood, "Notes on *Candide*," 193; Voltaire, *Candide*, 2.

⁹ Voltaire, *Candide*, 13-14.

¹⁰ *Ibid.*, 9-10.

¹¹ Voltaire, *The Philosophical Dictionary*, trans. Theodore Besterman (New York: Penguin Books, 1972), 71.

¹² Voltaire, *Candide*, 58.

¹³ Peter Gay, *Voltaire's Politics: The Poet as the Realist* (New York: Princeton University Press, 1959), 21.

¹⁴ Voltaire, "Poem on the Disaster at Lisbon," *Toleration and Other Essays*, trans. Jacob McCabe (New York: G. P. Putnam's Sons, 1912), 262.

¹⁵ Voltaire, *Candide*, 31.

¹⁶ Cormac McCarthy, *The Road* (North Essendon: Radiant Heart Publishing, 2014), 169.

¹⁷ Wood, "Notes on *Candide*," 199.

¹⁸ Voltaire, *Candide*, 6.

¹⁹ *Ibid.*, 36.

²⁰ *Ibid.*, 28.

²¹ *Ibid.*, 77.

²² *Ibid.*, 53.

²³ *Ibid.*, 54.

Still, Voltaire's very particular wording in *Candide's* renunciation of Optimism is worth noting. *Candide* does not renounce *all* optimism; he renounces Pangloss's skewed version of it. This clue suggests Voltaire rejects what he perceives as the Leibnizian philosophy of optimism, but perhaps not optimism altogether. As Julian Barnes puts it, Voltaire's issue is with "prepackaged" philosophies.²⁴ Regardless, Voltaire never elucidates what his preferred philosophy is. His irony and sarcasm illuminate certain brief messages about violence, misery, and society's role in them, but they offer little insight when it comes to discerning the overarching meaning of the work. And looking to *Candide's* conclusion only brings more uncertainty.

THE SIGNIFICANCE OF CANDIDE'S FINAL SCENE

When it seems a fulfilling resolution to *Candide's* plot could only come from some dramatic display of enlightenment or tragedy, Voltaire offers us neither. After all the disasters, tragedies, and malicious acts that lead to the final scene, *Candide* and his companions find a peace that, while devoid of outright suffering, is so boring it might be more miserable than violence. Despite the tragedies the Old Woman has endured, she still wonders, "Which is worse... suffering all the misfortunes we've all suffered, or simply being stuck here doing nothing?"²⁵ In order to, in Martin's words, "make life bearable," *Candide* suggests that the companions follow the example of an old Turkish man, passing their days tending to the acres of land around them.²⁶ Whenever Pangloss attempts to interpret the meaning of their journey to this point, *Candide* interjects that Pangloss's ideas are fine, "but we must cultivate our garden."²⁷ He repeatedly interrupts philosophy with pragmatism, having no use for discussions of Pangloss's optimism or Martin's pessimism. Philosophical debate will not bring contentment, but work will at least prevent the "three great evils: boredom, vice, and need."²⁸

It could be argued that the way of life *Candide* ultimately adopts does not actually achieve anything positive; rather, it is a method of avoiding negatives. Robert Adams in "Candide on Work and Candide as Outsider" points out that Voltaire "does not believe [work] will make you any better, just that it may help you to support evils which are inevitable."²⁹ Yet, Voltaire's memorable language—his use of what would become a famous phrase, "cultivate our garden" (il faut cultiver notre jardin)—ascribes significance to the philosophy, implying, as Patrick Henry argues, that "something positive could be accomplished by work."³⁰ Perhaps it connects to *Candide's* commitment to action in the face of disaster. Perhaps it encourages self-improvement in a world of unrelenting cruelty.

Speltz writes that *Candide's* conclusion is Voltaire's way of alleviating "the tension between war and sentimentalism" by having *Candide* retreat to a community "beyond national and religious divides."³¹ Some readers may wonder, in a world as miserable as *Candide's*, is his philosophy ultimately just a "therapy of forgetting?"³² It is important to note that *Candide* and his companions turn their

backs on the atrocities they witness during their journey and seclude themselves in an isolated society of their own. But even if it is true that *Candide's* focus on his own garden turns a blind eye to the rest of the world's issues, Voltaire's message certainly has nothing to do with forgetting. As Wood puts it, *Candide* is an exercise in "unrelenting memory."³³ This brings me back to Voltaire's detachment from the characters in his novel. *Candide*, the character, might be content to turn a blind eye to other people's misery, but *Candide*, the novel, is a testament to human suffering. Even *Candide's* humor depends on an acknowledgement of pain. If Voltaire wanted to write a story that endorsed a life of ignorance, he would not have included the grisly detail and forceful satire that characterize *Candide*. English author Julian Barnes argues in "A Candid View of *Candide*" that Voltaire intentionally neglects the creation of a meaningful reformation at the end of the novel to deliberately acknowledge that no such reformation exists. *Candide* is not and should not be taken as an instruction manual for mending the world's atrocities; it is instead "a necessary expression of moral rage."³⁴

THE SEARCH FOR MEANING

A deeper analysis of *Candide* and the events that precede its conclusion can clarify what cultivating one's garden is *not*. It is not a tribute to pessimism—nor is it a mere endorsement of naiveté. What then does the novel's conclusion recommend we do? Voltaire tempers the caustic, polemic nature of his text with the vague piece of advice that we must cultivate our gardens, knowing that this in no way answers the questions that his work has provoked. In some ways, it might even undermine them. In the end, though Voltaire has assured himself and his readers that idle talk accomplishes nothing, he still recognizes that he cannot answer the question of human suffering. Instead, he proposes an honest lifestyle that might someday produce something better. *This* is Voltaire's garden. *Candide* is Voltaire's garden. He plants his ironies and his contradictions in the hope that they may eventually inspire a solution—that in cultivating our own gardens, we might find the answers that he could not.

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³³ Ibid.

³⁴ Barnes, "A Candid View of *Candide*."

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²⁵ Voltaire, *Candide*, 96.

²⁶ Ibid, 99.

²⁷ Ibid, 100.

²⁸ Ibid, 98.

²⁹ Robert Adams, "Candide on Work and Candide as Outsider," *Candide, or Optimism: A New Translation, Backgrounds, And Criticism*, by Voltaire, trans. Robert Adams (New York: Norton, 1966), 168.

³⁰ Patrick Henry, "Working in Candide's Garden," *Studies in Short Fiction* 14, no. 2 (1977), 183.

³¹ Speltz, "War and Sentimentalism," 286.

³² Wood, "Notes on *Candide*," 201.

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The World Upside-Down: The Carnavalesque Studio in *Entre visillos*

Stuart G. A. Sones

Faculty Mentors: Dr. Reyes Vila-Belda, Department of Spanish and Portuguese, *Indiana University Bloomington*, Dr. Jane E. Goodman, Department of Anthropology, *Indiana University Bloomington*

ABSTRACT

Carmen Martín Gaité's *Entre visillos* follows the experiences of several young, middle-class women living under the dictatorship of the Spanish general, Francisco Franco, during the 1950s. This neorealist account poignantly portrays the conservative confines of both traditional Spanish culture and fascist dictatorship in which these women lived. Despite these draconian conditions, Martín Gaité illustrates the bohemian party at the top-floor studio apartment of Yoni, an eccentric artist, as a space where women find agency in suspending their social responsibilities and gendered expectations. This essay, addressing this overlooked scene, examines how Martín Gaité applies place, setting, and temporality to define the characters' behavior and adherence, or nonadherence, to moral expectations under Francisco Franco's authoritarian, reactionary rule. Specifically, I analyze the spatial conditions for liminal anomie, the temporal dissolution and subversion of norms, in the novel. Through an approximation of Mikhail Bakhtin's *carnavalesque* and Michel de Certeau's theory of everyday resistance, I argue that the characters employ *tactics of resistance* against hegemonic social conventions to establish the studio soirée as a carnivalesque space. The private garret, far from the surveillance of the State, the pastoral power of the Church, and gossip of the family, acts as a safe haven for anomie, the expression of veiled attitudes, and the reimagination of Spanish identity during the epoch. By studying how the characters stray from societal mores through their paradoxical interpersonal relations, absurd values, and parodical behavior, it becomes clear that the studio is a unique, free space for contesting conventions of modesty and patriarchy under the Spanish dictatorship. The inclusion of themes of promiscuity, infidelity, and immodesty in the novel further reveals that *Entre visillos* itself is a carnivalesque work that reimagines the values, norms, and conscience of Spanish society.

KEYWORDS: *gender studies, Francoism, carnivalesque, Entre visillos, Spanish literature*

INTRODUCTION

Yves Montand blasts from the record player, an engaged woman reconsiders finishing her secondary studies, and an Englishman tap dances, belting *bulerías*. These images seem surprising given the reactionary, authoritarian environment of General Francisco Franco's regime in post-Civil-War Spain. French music, women seeking independence through education, and the satirical display of folkloric Spanish culture in a middle-class studio apartment all seem to hint at the unraveling of borders, conservative morality, and traditional gender roles. Carmen Martín Gaité's *Entre visillos* (*Between Lace Curtains*) reflects on the mundane, quotidian lives of several young, middle-class women inhibited by the strict regime in a small Spanish city during the 1950s¹. In doing so, Martín Gaité stealthily critiques the suffocating moral conventions young women must bear, and insinuates, to the state's despair, women's resistance to dominant ideologies in their desire to escape the limited worldview of their marginalization behind window curtains.

Through a neorealist, almost ethnographic, account, Martín Gaité underscores the frivolous boredom and repressive emptiness that dominated the lives of three sisters and their friends, exposing the dictatorial and societal repression that enveloped the city's social milieu. Centering on the lives of adolescents straddling the freedoms of childhood and expectations of womanhood, the heart of Martín Gaité's *Bildungsroman*, as Lynn K. Talbot describes, is the "development of the adolescent and 'the quest of the youthful self for identity'."² *Entre visillos* follows the tensions that arise when Pablo Klein arrives to the provincial city to teach German at the local institute. Pablo's critical perspective, progressive teaching pedagogy, and distinctive worldview as a foreigner, whose only connections to the city are his childhood memories, clash with the hegemonic conformity of the community. Nuria Cruz-Cámara posits that Pablo

inspires several women to break the mold: "Pablo sirve como una válvula de escape para los habitantes de ese universo cerrado, y en él varios personajes desahogarán sus frustraciones y sus anhelos de liberación y huida."³ Pablo's influence incites several young women to confront repressed external and internal conflicts with society and self. Although Pablo's rebellious inspiration makes these women conscious of their marginalization, inculcated social norms and internalized notions of submissive femininity continue to greatly limit these women's agency in achieving any level of independence. For example, sixteen-year-old Natalia, the youngest of three sisters and a student of Pablo's, aspires to continue her education after secondary school, but she fears approaching her father, a representation of the patriarchy, about the issue. Similarly, Elvira Domínguez, a daydreamer infatuated with Pablo, suffers from a "psychological self-entrapment" stemming from internalized repressive practices, evident in how she sexually fantasizes about Pablo, yet condemns him for attempting to satisfy her fantasies.⁴ These cases exemplify the complex ways in which the ingrained habitus⁵ of dominant, patriarchal ideology stifles women's individuality and independence in the novel.

Despite such homogenizing forces in the city, the reader peeks through the curtains of the studio apartment—analogueous to how the protagonist Natalia peers out from behind the lace—to find that young women begin to tear Spain's social fabric. Several women (among them, Gertru, Natalia's friend; Julia, Natalia's older sister; and Mercedes, the eldest sister) actualize their yearning for liberation in the studio scene. In this scene Yoni, the eclectic, progressive sculptor and son of the wealthy owners of the Gran Hotel, hosts a soirée

³ Nuria Cruz-Cámara, "Chicas raras' en dos novelas de Carmen Martín Gaité y Carmen Laforet," *Hispanófila*, no. 139 (2003): 99.

⁴ Marsha S. Collins, "Inscribing the Space of Female Identity in Carmen Martín Gaité's *Entre visillos*," *Symposium* 51, no. 2 (1997): 72.

⁵ Pierre Bourdieu, *Outline of a Theory of Practice* (Cambridge: Cambridge University Press, 1977). Habitus refers to the totality of structured and ingrained habits, dispositions, and unconscious schemes of thought that are socialized in a given society.

¹ Carmen Martín Gaité, *Entre visillos* (Barcelona: Austral, 2012).

² Lynn K. Talbot, "Female Archetypes in Carmen Martín Gaité's *Entre visillos*," *Anales de La Literatura Española Contemporánea* 12, no. 1/2 (1987): 82.

in his studio apartment, threatening imposed societal conventions. At his party, men and women intermingle and drink freely, foreign music invades autarkic Spain, and an Englishman comically chants *las bulerías* despite the conservative and politically isolated environment. The backdrop of absurd, rambunctious partying sets the scene for young women to envision their marginalized status.

The top-floor studio apartment of the hotel, defined by its spatial and temporal context, forges a free space where liminal anomie engulfs the sisters and their friends. Anomie arises from a conflict of belief systems that causes the disintegration of the relationship between individuals and society, thus eroding community conventions. Holding liberal beliefs on gender norms and freedoms, the middle-class party-goers clash with moral conservatism and authoritarian rule, engendering the temporary dissolution and subversion of standard norms in the studio. As such, both men and women take advantage of the studio's liminal normlessness to express themselves freely, giving them a taste of different possibilities and the potential for palpable, long-lasting nonadherence to social mores. In this state of anomie, the characters experiment with distinct lifestyles, invert social norms, and imagine new social identities. As one of the guests, Federico, announces, "aquí es el único sitio donde se pasa bien."⁶ The bohemian attic of Yoni's studio during the party is a carnivalesque space (carnivalesque, as Bakhtin defined, is the world upside-down where social roles and mores are reversed) in which men escape the banality of provincial life and young women are free to resist repression imposed by hegemonic Francoist society.

From an approximation of Mikhail Bakhtin's carnivalesque theories, I examine Yoni's garret as a carnivalesque space that serves as a safe haven for a desired, liminal anomie in which the defiance of traditional society is possible. Applying Michel de Certeau's theories of space and everyday resistance, I elaborate that the escape to the studio and the utilization of the anomic vacuum to subvert norms serve as *tactics of resistance* that comprise everyday defiance to conservative society and fascism. While men flirt, enjoy foreign luxuries, and mock conservative politics, escaping insipid autarky, women freely conceptualize a new life for themselves in the studio. Divergent from other settings in *Entre visillos*, in which women are marginalized, the bohemian studio during the party converts into a space for women's agency, the expression and performance of James C. Scott's theory of *hidden transcripts*, and the reimagination of the Spanish conscience.

FEMALES OF THE FRANCO ERA: GENDERED NORMS AND STATE POLICY

Carmen Martín Gaité (1925-2000) was born and raised in the provincial city of Salamanca. Her own experiences and observations studying in Salamanca during the first years of the dictatorship must have inspired her novel's realistic, almost ethnographic, portrayals of women's lives during the early postwar period. An omniscient narrator, the diary entries of Natalia, and the foreign perspective of Pablo Klein all narrate the seemingly mundane drama that envelopes the city. Through these three viewpoints, the novel centers on women's role in and relationship to Spanish society, elucidating women's reaction to their cloistered bodies and minds. As a glimpse into the lived realities of the era, the reader "has the opportunity to observe, analyze, and judge women's position in society."⁷ With this logic, we may understand Martín Gaité's work as an elaborate compilation of ethnographic fieldnotes written in excruciating detail to capture the experiences of middle-class

women in post-civil-war Spain—ethnographic fiction. By studying *Entre visillos* from an anthropological lens, we may better dissect and understand the role, sentiment, and agency (or lack thereof) of young women during the dictatorship.

In this section, I shall first analyze the historical and political trends that shaped women's civil and cultural status in society and that which influenced the lifestyles of the women in this novel. Based on these patriarchal dictums, I shall analyze the literary archetypes of femininity manifested in the novel's principal characters. These developments not only shed light on the social dynamics of the novel, they also identify that the studio apartment and the behaviors that occur there have yet to receive the scholarly attention they deserve.

As a reactionary divergence to changing gender roles, a symptom of the coming of 'modernity' which 'plagued' the interwar period, Franco's coup d'état of 1936 reestablished traditional, patriarchal family norms, indiscriminately linking *la mujer* to *la familia*.⁸ Following the Nationalist faction's victory over the Republicans in the bloody civil war (1936-1939), according to Helen Graham, the patriarchal family would become the foundation of Francoist social structure, "representing the corporate order of the state in microcosm."⁹ Policies that deindividualized women were emblematically advanced in the *Ley de bases* of 1938 which "freed" married, middle-class women from public work.¹⁰ Legislation, then, forced middle-class women into domestic roles, sheltered behind the *mirador* (windowed balcony) of the traditional provincial home. Domestic roles not only mandated women to reproduce life for the *patria*, but also reproduce ideology: women oversaw "correct ideological reproduction via the socialization of children in the home—the goal here being the imposition of social hierarchy."¹¹

The trope of motherly authority figures who embody and enforce patriarchy in the household is nothing new in Spanish literary history. A famous example is Bernarda from Federico García Lorca's *La casa de Bernarda Alba*.¹² Written before the 1936 coup, the themes of family, gossip, and repression presented in the play underline the imbedded history of women as agents of female repression in Spain's sociocultural and literary history. What proves to be distinctive of the post-civil war era, however, was the Church and State's patriarchal restoration campaign which reached into the core of family life. State and religious institutions worked to shape young women into docile subjects and indoctrinate women in state cult morality, priming them for marriage and domestic life.

The Catholic Church and State maintained a symbiotic relationship since the early years of Franco's regime. While the State politically empowered the Church, the Church gave religious legitimacy to Franco's brand of nationalism and helped to systematically facilitate the homogenization of Spanish culture in the 1950s. The indistinguishable realms of the religious and the political in the relationship between these two institutions came to be known as National Catholicism. The 1953 Concordat between the Vatican and Spain gave far-reaching authority to the Church in Spanish society,¹³ granting the Catholic Church hegemony over public and private life. Among the privileges of the Church were "the exclusive right to pursue missionary activities and to teach religion (a compulsory subject at all educational levels), to financial

⁸ Helen Graham, "Gender and the State: Women in the 1940s," in *Spanish Cultural Studies: An Introduction: The Struggle for Modernity*, ed. Helen Graham and Jo Labanyi (Oxford: Oxford University Press, 1995), 184.

⁹ Graham, "Gender and the State," 184.

¹⁰ Graham, 184.

¹¹ Graham, 187.

¹² Federico García Lorca, Allen Josephs, and Juan Caballero, *La Casa de Bernarda Alba*, 24th ed. (Madrid: Cátedra, 1997).

¹³ Cathelijne de Busser, "Church-state Relations in Spain: Variations on a National-Catholic Theme?" *GeoJournal* 67, no. 4 (2006): 286.

⁶ Martín Gaité, *Entre visillos*, 191.

⁷ Talbot, "Female Archetypes," 80.

support from the state and access to all forms of communication.”¹⁴ The Church under Francoism exerted a form of Foucauldian “pastoral power” that transposed the microcosm of a father’s care over his family onto the supervision and support of, and moral governing over, the individual, state subjects, and society.¹⁵ As Catholic principles and morality became inscribed in Spanish law, the Church played a major role in everyday life on a more personal level. Gender-segregated Catholic schools were the norm of the era and the cathedral’s central location in Martín Gaité’s novel emphasizes its importance to the community—so much so that it seems as if every winding street in the novel leads back to it. The Church’s ideology greatly affects the women in *Entre visillos*. Marsha S. Collins outlines that the Catholic confessional in the novel in particular espoused a “rhetoric and ritual of shame and guilt [to] drive out the demons of deviant female thought and behavior.”¹⁶ It is National Catholicism’s enforcement of cult morality that defines the practices of the Church and State as pastoral power seeking to prescribe, support, and productively shape modest and pious lifestyles among their subjects.

Another ideological institution founded on similar principles was the Sección Femenina of the Falange party, headed by Pilar Primo de Rivera, sister of the founder of the Falange party, José Primo de Rivera. This state social organization ordered that any single or widowed women who sought higher education or employment would have to complete its Servicio Social, a six-month, five-hundred-hour program that equipped women with skills in domestic work among other everyday activities.¹⁷ Soledad Fox notes that “From 1945 on, women were legally required to complete the program, which was aimed at morally purifying them and ensuring their futures as ideal Spanish mothers.”¹⁸ Although women of the era might have found leisure and community in the social service, Fox argues that the program nevertheless had undeniable brainwashing potential. Since “those already ensnared [in gendered ideology] work to reduce other females to the same state,”¹⁹ once indoctrinated into state prescribed domestic norms by the Sección Femenina, women return home incarnating the patriarchal ideology of the state and inculcate it among their children. Thus, the state deploys women themselves as agents of women’s repression.

Conscious of these sociopolitical orders, Martín Gaité portrays la tía Concha, Natalia’s aunt who lives with the family following her mother’s death, and Natalia’s older sisters as arbiters of morality and order in *Entre visillos*. Natalia explains to Pablo Klein that la tía Concha “era la que mandaba en todos y se había empeñado en civilizarla a ella.”²⁰ At home, la tía protects the chastity and honor of the family. She conducts the behavior and rhythm of the household. For example, la tía condemns Natalia for her ‘unwomanly’ behavior: “no sabes ni saludar.”²¹ Furthermore, Natalia’s aunt primes the sisters for wedded life. In her diary, Natalia writes that “la tía Concha nos quiere convertir en unas estúpidas, que sólo nos educa para tener un novio rico, y que seamos lo más retrasadas posible en todo, que no sepamos nada ni nos alegremos con nada.”²² Natalia’s entry not only underscores how women serve as agents

for socializing women into docile beings, uncritical of marginalized womanhood in a way that maintains social order, but also Natalia’s resilience to such repressing standards.

Moreover, Mercedes, the eldest sister, serves a similar role in maintaining patriarchal order. Mercedes belittles Julia for loving an unorthodox playwright and Natalia for her refusal to wear long dresses, a symbol of modesty.²³ These women, unconscious of the hegemonic ideology they reproduce, work to reinforce the sociopolitical gender order and norms, coercively defining idealized womanhood.

In Francoist Spain, idealized womanhood would come to represent submission, piety, and self-denial.²⁴ Adolescent women in Martín Gaité’s novel, grappling with their liminal status between childhood and womanhood, both embody and defy idealized notions of femininity. Talbot brilliantly analyzes *Entre visillos* from a literary archetypal framework, highlighting how recurring images and symbols in feminine works of fiction represent the marginalization of women in patriarchal society.²⁵ Talbot defines two primary archetypes among the women. First is the “growing up-grotesque” archetype which reflects how societal pressure limits women’s development of independence and intellect.²⁶ Rather than having agency to make pivotal life decisions, society determines their seemingly meaningless domestic livelihoods. This archetype is exemplified in how customs thwart young women’s dreams as they must negotiate between their personal desires and what is deemed best for the family and society. The sixteen-year-old protagonist, Natalia, the youngest of the three sisters, is reluctant to submit to traditional female roles and identities, which, according to Talbot, “reflects her struggle for authentic selfhood.”²⁷ Not only does Natalia refuse to behave and dress ‘properly,’ she also aspires toward a university degree in an environment that dismisses women’s education. Despite Pablo Klein’s encouragement, Natalia fears approaching her father about continuing her education. At the end of the novel, the audience is left wondering whether she will achieve her aspirations.

Similar to Natalia, Elvira Domínguez struggles for authentic selfhood. Elvira is a creative artist, yet ideas of proper womanhood, as well as her expected mourning after her father’s death, pressure her to keep her art hidden. Elvira, however, is cognizant of patriarchy’s restrictions. Over the course of the novel, she laments the suffocating, provincial city life. Elvira’s love affair with Pablo Klein represents her efforts to escape the confines of traditional wedded life. Although she spends most days shut inside her bedroom reading, she never stops daydreaming of escape: “me gustaría irme lejos, hacer un viaje largo que durase mucho. Escapar,” she confesses to Pablo.²⁸

Natalia and Elvira reflect what Nuria Cruz-Cámara terms “*chicas raras*,” or strange girls.²⁹ *Chicas raras* are those who question the feminine paradigm of their society. As Cruz-Cámara notes, the novel evokes the narrative structure of *Bildungsroman*, a narrative of individual development during formative years, the borderlands between the liberty of adolescence and the imminent responsibilities and expectations of womanhood. This timeframe is when “se empieza a manifestar su rareza respecto a los modelos imperantes en la Sociedad en la que están creciendo.”³⁰ The liminality of adolescence forces women to question gender roles and confront ideal femininity. *Chicas raras* prefer to die than submit to the destiny of being “una mujer resignada y razonable”—a resigned and reasonable woman.³¹

¹⁴ Busser, 286.

¹⁵ Michel Foucault, “Governmentality,” in Michel Foucault, *Power*, ed. James Faubion (New York: New Press), 222.

¹⁶ Collins, “Inscribing the Space of Female Identity.”

¹⁷ Soledad Fox, “Cellophane Girls: Feminine Models in *Entre visillos* and *Usos amorosos de la postguerra española*,” in *Approaches to teaching the works of Carmen Martín Gaité*, ed. Joan L. Brown (New York: The Modern Language Association of America, 2013).

¹⁸ Soledad Fox, “Cellophane Girls.”

¹⁹ Talbot, “Female Archetypes,” 83.

²⁰ Martín Gaité, *Entre visillos*, 240.

²¹ Martín Gaité, 244.

²² Martín Gaité, 254.

²³ Talbot, “Female Archetypes,” 83.

²⁴ Graham, “Gender and the State,” 184.

²⁵ Talbot, “Female Archetypes,” 81.

²⁶ Talbot, 82.

²⁷ Talbot, 84.

²⁸ Martín Gaité, *Entre visillos*, 126.

²⁹ Cruz-Cámara, “‘Chicas raras,’” 97–110.

³⁰ Cruz-Cámara, 98.

³¹ Cruz Cámara, 99.

Although Natalia and Elvira rebel against gender norms in their everyday life, they rely on men to provide this escape. Natalia leans on Pablo to encourage her education. Elvira marries Emilio who promises that they will escape the city, freeing Elvira to pursue her art and Emilio to pursue his studies. While Catherine G. Bellver posits that this reliance on men does not constitute the full actualization of the self against the grains of Spanish norms,³² I believe this avenue provides women the negative agency—agency that emphasizes working with and maneuvering within social structures rather than overcoming them—to navigate the frameworks of patriarchal society. Nevertheless, this reliance on men constructs a major distinction between the two *chicas raras*. On one hand, Natalia turns to Pablo to buttress her educational pursuits, which underlines her persistent rejection of traditional feminine identities. On the other hand, although Emilio speaks about “la libertad de la mujer [y] de su proyección social,”³³ he nevertheless breaks his promise, hindering Elvira from achieving her dreams by keeping her in the city. Elvira retires her dreams of escaping the city by marrying Emilio, assimilating to and internalizing the gendered mores of married provincial life.

Contrary to the rebellious characters of Natalia and Elvira, Natalia’s sisters and friends, reflecting women’s traditional socialization, succumb to the reproduction of symbolic violence,³⁴ gender roles, and social hierarchy in Francoist Spain. While this is partially true of these characters, it must be qualified in the case of the bohemian studio scene. According to Collins, “some of the women, like Natalia’s sisters Mercedes and Julia, as well as Tali’s [Natalia] best friend Gertru, seem predisposed or preconditioned to accept social positions of dull respectability, whether as virtuous spinsters or obedient wives.”³⁵ Gertru dropped out of secondary school; Ángel, her fiancée, forced her to abandon her studies to tend to the home. Julia, the middle sister, must balance her independence and obligations to her family and father. Although her boyfriend, Miguel, is a playwright in Madrid, social norms prevent her from achieving her dream of escaping the small provincial city. Julia’s yearning to marry an eccentric man provides another example of how women attempt to escape traditional lives. Finally, Mercedes, the eldest sister, the most conservative and norm-abiding of the three, takes it upon herself to enforce patriarchal norms among the sisters. Martín Gaité’s portrayal of these women’s lives masks the social commentary that underlies the drama of the conservative city. This social commentary, particularly in the studio apartment scene, qualifies and challenges the assumed submissive characteristics of these women.

From the analysis of the “growing up-grotesque” archetype, we discover how “Martín Gaité exposes the repressiveness of patriarchal control, yet she also suggests the possibilities of change through the actions of defiant women.”³⁶ In painting women as *chicas raras*, Martín Gaité constructs a reimagined feminine woman in opposition to Francoist femininity. The rebellious aspirations of education and unorthodox married life outside the city suggest the reworking of female agency under the regime and contrast with the feminine archetype that maintains the social order of fascist

Spain. Prior literature on the subject of gender in *Entre visillos*, however, stereotypically frames Mercedes, Julia, and Gertru as submissive subjects of patriarchal society, overemphasizing a static, repressed image of these young women. This image does not account for the irregular behaviors, self-realizations, and the redefinition of femininity that incubate at the studio apartment party. Since Natalia and Elvira were not present at the party, the objective of this paper is to reconsider these women according to their actions during the bohemian party scene and reposition them as agents in reconstructing Spanish femininity of the era. The studio, I contend, is the liminal space, the exception to the rule, where conservative women are permitted to rethink gender and fascist society itself. The party must be analyzed as a carnivalesque space of subversion, hedonism, and resistance.

SUFFOCATION AND ESCAPE: THE GENDERED SYMBOLISM AND POLITICS OF SPACE

Before diving into the studio apartment as a social and spatial exception, we must first establish an understanding of the rule in traditional Spanish society and the works of Martín Gaité. The relationship between space and gender in the works of Martín Gaité has received great scholarly attention during the past century of feminist literary criticism (see Bellver 2003; Collins 1997; Ochoa 2011). The most prominent inquiry has been into women’s relation to the juxtaposition of interior and exterior spaces, domesticity and the unfamiliar. According to Bellver, women in Spain have historically been excluded from public space and life, a practice steeped in medieval Christian morality and the veneer of remnant Islamic perspectives on gender.³⁷ Bellver highlights several objects in the novel that symbolize the division between public space (i.e. the domain of men) and private space (the domain of women): women are hidden behind symbols like veils, gowns, curtains, and fans.³⁸ Martín Gaité inscribes many of these symbols in the text, most predominantly in the novel’s titular lace curtains that shield women from the streets and immodesty.

The strict management of space in Spanish society and the novel prove to be a strategy of maintaining gendered hierarchy. The divisions between male and female life, embodied in public and private spatial boundaries, “promote the desired outcome, with regard to women, of inferior social status, ignorance, and passivity.”³⁹ The interior order of provincial life excludes women from public discourse, further marginalizing their subaltern voices and further articulating the regime’s dominant ideology in microcosm. Enclosure, a major motif in the imagery of the novel, “reinforces the impression of a restrictive society, closed in its configuration and structure, that hinders those who live in it from achieving their true aspirations.”⁴⁰ Throughout the novel, Natalia, Julia, and Mercedes often allude to being suffocated and trapped in their home. Natalia, for example, complains to her father that la tía keeps them “encerradas como el buen paño que se vende en el arca.”⁴¹ The women must convince their aunt to go out during the city fair at the beginning of the novel. Once permitted to leave, they are sanctioned by strict curfews. The suffocating enclosure of closed space is a clandestine metaphors for the female condition that Martín Gaité embeds into the otherwise monotonous narrative of petty, provincial drama.

³² Catherine G. Bellver, “Gendered Spaces: Boundaries and Border Crossings in *Entre visillos*,” in Carmen Martín Gaité: *El cuento de nunca acabar/Never-ending Story: (apuntes sobre la narración, el amor, y la mentira)*, ed. Kathleen M. Glenn and Lisette Rolón-Collazo (Boulder: Society of Spanish and Spanish-American Studies, 2003), 34.

³³ Martín Gaité, *Entre visillos*, 273.

³⁴ Pierre Bourdieu and Loïc J. D. Wacquant, *An Invitation to Reflexive Sociology* (Cambridge: Polity Press, 1992). Symbolic violence refers to the unconscious acceptance of one’s constructed image of the self in society, and thus, the tacit acceptance of power stratification.

³⁵ Collins, “Inscribing the Space of Female Identity.”

³⁶ Talbot, “Female Archetypes,” 81.

³⁷ Bellver, “Gendered Spaces,” 39.

³⁸ Bellver, 39.

³⁹ Bellver, 35.

⁴⁰ Talbot, “Female Archetypes,” 84.

⁴¹ Martín Gaité, *Entre visillos*, 254.

In spite of the restrictions of movement, the imagery of windows provide hope for women's liberation and Martín Gaité's critique of oppressive state policies and patriarchal social structures. Marín Gaité's argues in her work, *Desde la ventana*, that in Spanish literature "La ventana es el punto de enfoque, pero también el punto de partida."⁴² Although the multitude of references to windows in Spanish literature point to the stuffy reality of life behind glass, these references may also hint at the possibility for departure, literally opening windows and transcending domesticity. The *mirador*, or windowed balcony of the middle-class provincial home, emblematically symbolizes the threshold between the space assigned to women and the impermissible, purity and impurity.⁴³ Sheltered, gazing out of the *mirador* was the female condition under the regime. While the term *ventanera* (the window-gazing state) pejoratively denoted women's rejection of her proper place at home in *Siglo de Oro* literature (c. 1492-1681), Martín Gaité 'flips the script' in a feminist approach to Spanish culture.⁴⁴ Debra J. Ochoa posits that Martín Gaité inverted and reclaimed this condition to reflect the positive notion of a woman's desire to escape the home, her marginalization, and the confines of patriarchal society.⁴⁵ If a woman were to act upon her desire to escape her bounded existence at the window's threshold, however, physically leaving the home and entering the domain of the streets, a woman may encounter much of the same social repression from society at large.

The streets are just as suffocating as closed spaces in the novel. Narrow streets are stale corridors that seem to lead to the cathedral, a constant reminder of expected piety and the institutionalization of the Church in society. The public school, as Pablo notices, looks as if it were military barracks.⁴⁶ Not only are public spaces unbearably confining, they are also ruled by the supervision of men and community members who serve similar roles as the superintending, conservative family. The cultural and literary notion of *el qué dirán* (what they will say), the community gossip that stains the relationship between women and society, dominates the streets and public venues throughout the novel. For example, when Pablo invites Natalia for coffee at a local café, she fears that her father will see her with a stranger.⁴⁷ Although their voices are not valued, women's actions and bodies receive much attention in the conservative city. A woman is held responsible for upholding the honor of her family when in public and therefore may potentially tarnish her family's reputation by stepping out of line. While Elvira crosses the central plaza with Pablo and Yoni, Yoni is quick to caution Elvira that "si la veían acompañada de dos hombres que no eran Emilio [her future husband], y en pleno luto, que la iban a criticar."⁴⁸ Yoni's words resonate with the tell-tale forces of *el que dirán* that consume public space for women. *El que dirán* holds a Foucauldian sense of self-regulatory social pressure that disciplines women into abiding by social norms.

The breaking of norms in public space provokes harsh consequences in *Entre visillos*. Rosa is an entertainer who performs at the local Casino, and therefore is considered a "liberated" woman.⁴⁹ Although the Casino may seem like a place for recreation and relaxation, Martín Gaité portrays the Casino as enshrouded in the same social pressure and gossip as any other location in the novel. Rosa's public performance leaves her vulnerable to the

young women's scrutiny, who shun her for what they perceive as prostitution. The foreigner Pablo Klein, on the other hand, is the only character who associates with her in the novel. In a similar case, Gertru's sister marries a man from a different social class, provoking her parents' disdain. Shunned from her family, Gertru's sister is forced to move outside the city, outside the realm of community supervision. These examples showcase how Martín Gaité applies space to reflect gender, hierarchy, and the social strictures women must follow in Francoist Spain.

The symbolism of nature in *Entre visillos*, evident in Gertru's sister move to the countryside, marks what Talbot analyzes as the second primary archetype in the novel: the "green-world" archetype. This literary archetype associates young women with nature, the landscape where they find an escape from the real world.⁵⁰ Far from the critical eye of the city, nature is a space for self-reflection and the suspension from societal norms. Natalia finds respite exploring the countryside outside of the city. Pablo Klein takes his German class to the riverbank where the young girls feel more able to learn and think in the free environment. Furthermore, Elvira feels more comfortable expressing her feelings to Pablo while laying by the river. While nature is an escape for Natalia and her classmates and a refuge for opening up the heart for Elvira, I posit that there are other settings in the novel, such as the studio apartment, which also serve as safe havens from the monotony and repression of the small city.

Despite the confinement of both private and public space, *Entre visillos* highlights how women reclaim these areas in the novel. Marian Womack notes that women redefine feminine selfhood from their positions behind lace curtains: "Martín Gaité's intention... is to regain these spaces for the feminine freedom and creativity."⁵¹ The protagonist, Natalia, in particular, skillfully adopts conservative spaces for her own personal development. Although closely monitored by her family who "casi siempre están hablando de mí,"⁵² she studies in her room or salon, forging a space for herself to transcend the limited consciousness of domestic life to pursue greater ideas and movements. Reclaiming individuality through negotiating space also takes place outside of the home. Bellver argues that Natalia's navigation of open, public spaces (her classes by the riverside, for example) "not only challenges the oppressiveness of provincial life, it also marks a step in her development of toward self-realization."⁵³ These analyses of women redefining their confinement in the novel, however, have again ignored the pivotal studio apartment scene in which, in a similar manner, women reclaim space. The studio apartment is a space where the unthinkable in Spanish society actualizes and comes to reshape the way that women conduct themselves during the remainder of the novel. If society is held to the norms that I have outlined above, then how is it that both men and women openly transgress Francoist standards without repercussion in the studio apartment? The bohemian party in the studio, then, must be analyzed as a carnivalesque space where men and women renegotiate themselves and their roles in Spanish society.

CARNIVAL, POWER, & RESISTANCE

In analyzing the bohemian studio, it is necessary to first outline how Martín Gaité applies spatial structures to delineate the symbolic workings of self-regulatory, disciplinary powers in the small city.

⁴² Carmen Martín Gaité, *Desde la ventana* (Madrid: Espasa Calpe, 1999), 36–37.

⁴³ Bellver, "Gendered Spaces," 39.

⁴⁴ Debra J. Ochoa, "Martín Gaité's *Visión de Nueva York*: Collages of Public and Private Space," in *Beyond the Back Room: Perspectives on Carmen Martín Gaité*, ed. Marian Womack and Jennifer Wood (Oxford: Peter Lang, 2011), 95.

⁴⁵ Ochoa, 95.

⁴⁶ Talbot, "Female Archetypes," 84.

⁴⁷ Martín Gaité, *Entre visillos*, 239.

⁴⁸ Martín Gaité, 275.

⁴⁹ Bellver, "Gendered Spaces," 43.

⁵⁰ Talbot, "Female Archetypes," 82.

⁵¹ Marian Womack, Introduction to Part Two: "Space / Fantasy" of *Beyond the Back Room: Perspectives on Carmen Martín Gaité*, ed. Marian Womack and Jennifer Wood (Oxford: Peter Lang, 2011), 102.

⁵² Martín Gaité, *Entre visillos*, 243.

⁵³ Bellver, "Gendered Spaces," 43.

Public space and private venue under the Franco regime became imbued with State ideology. The State pervades much of social life in *Entre visillos*, exemplified by the portrait of Franco that looms over Natalia's classroom. Collins posits that this "decidedly male voice of power reminds women of their limited place in society."⁵⁴

The regime is also symbolically evoked in greater spatial structures that the young women navigate in the novel. In her critical analysis, "Determined, Detached and Drowning: The Use of Rhetoric of Enclosure in Carmen Martín Gaité's *Entre visillos*," Tiffany Gagliardi describes how Francoist power and societal vigilance restrict the characters' behaviors. The cathedral's bell tower, according to Gagliardi, represents the overseeing, institutional power of the Church and State over society. The Casino's balcony symbolizes social pressure and *el qué dirán* in the community. Both of these elevated structures reflect Michel Foucault's analysis on the passive, self-regulating disciplinary and surveillance power of Bentham's Panopticon in *Discipline and Punish*.⁵⁵ Since power often rests in elevated space, the two landmarks dominate the city. These high-vantage-point settings construct the power that Gagliardi analyzes as "delineated physical geography that imposes societal confinement upon the women."⁵⁶ The clock face of the cathedral's campanile resembles "un ojo gigantesco" that overlooks the city, monitoring the women's every move.⁵⁷ Meanwhile, when Pablo Klein goes to the Casino, he soon discovers how uncomfortable and suffocating the space is, not because of the lack of open space, but rather because the open architectural layout allows leering eyes to peer down from the balcony: "la primera cosa que me di cuenta al entrar, fue de que no existía ningún lugar apartado, sino que todos estaban ligados entre sí por secretos lazos, al descubierto de una ronda de ojos felinos."⁵⁸ These cases highlight that the surveying eyes of the Catholic Church and Falange, intertwined with the critical gaze of a conservative community, hold a monopoly over social life in most parts of the city.

The omniscient power of societal pressure, or *el qué dirán*, and the pervasive, all-knowing Church and State are inscribed in the physical geography of the novel. The characters are conscious of this overreaching surveillance and act accordingly. These physical landmarks become self-regulatory, preventative forces that thwart any behaviors designated as 'inappropriate' according to Francoism. Although Gagliardi's argument brilliantly defines how power mediates life through space, she does not address the other tall structure present in the work: the top floor of the Gran Hotel, Yoni's garret. Gagliardi's theory does not account for the inversion of rigid norms during Yoni's bohemian party in chapter XII. The height of the studio loft symbolizes a clash against the bell tower (the Church and State) and the balcony of the Casino (societal pressure and *el qué dirán*). Marking the city's skyline in opposition to the towering cathedral, the elevated top-floor studio houses a commanding subcultural resistance to dominant ideology and power. The studio's privacy rejects the State's power of surveillance, allowing the characters to act as they please. In this space, sedition is possible.

Practices of Everyday Life by Michel de Certeau is an interesting line of inquiry into the theories of resistance. De Certeau investigates the quotidian, spontaneous, and opportunistic tactics that individuals utilize to undermine the strategies that organized power

impose in maintaining sociopolitical order. De Certeau argues that although citizens subject to imposed state order cannot escape such hegemonic domination, they can "continually manipulate events within the system in order to precipitate 'fragmentary and fragile victories of the weak.'"⁵⁹ In employing these tactics, subordinate groups take advantage of circumstances to subvert the authoritarian strategies of the State.⁶⁰ These groups construct alternative spaces to express progressive ideas and 'unacceptable' behaviors. Within these spaces, divergent consciences form as a mode of defiance against the State.

De Certeau's theory of everyday resistance is particularly apt for analyzing the studio scene in *Entre visillos*. The characters' actions reflect minute acts of defiance which forge and construct the carnivalesque space. Frustrated by family rules and omniscient state power, the characters defiantly escape to the carnivalesque soirée in Yoni's garret. When Federico invites Julia to the party, "le daban ganas de escapar" from her aunt's surveillance, suffocating enclosure, and the imposed emptiness of Francoist society.⁶¹ Furthermore, behaviors at the party reflect the state of liminal anomie, the vulgarization of the regime, and the reimagination of the Spanish identity that constitute minor modes of resistance against hegemonic cultural norms.

Yoni's studio, molded by acts of everyday resistance, is the world upside-down, a social milieu that contrasts sharply with the norms that permeate the character's lives in the non-carnavalesque world. In *Problems of Dostoevsky's Poetics*, Mikhail Bakhtin develops his literary theory of the carnivalesque from the medieval fair, originally celebrated by Church clergy preceding Lent. Full of sacrifice and impiety, celebrating clergymen would challenge Church hierarchy and contest the truth. Thus, carnival is defined by temporal and spatial challenges to the mundane realities of stratified society. Bakhtin applies this historical understanding of carnival to several literary genres, such as the Menippean satire, which mock authority, renegotiate hierarchy, and invert social norms. This literature has the potential of altering popular imaginations and redefining social reality over time. Bakhtin referred to this transposition of the festival to literature as "the carnivalization of literature."⁶² In this analysis, just as Bakhtin transposed the carnival to literature, I transpose the carnival to setting, the carnivalization of space.

Bakhtin drew his theories of the carnivalesque from the public carnival that had the potential for influencing societal norms. Such influential public occasions, however, would be unthinkable for women during the epoch of this novel, characterized by imposed modesty and family roles. Instead, the privacy of Yoni's garret provides the opportunity for women to reclaim space and allows for deviation from such societal values without social repercussions. With this in mind, it is evident that there is a dynamic symbolism in the difference between the public and private. The palpable schism between open and closed spaces showcases how gendered concepts of the public and private are embodied in spatial layouts in the novel. This schism further develops in the public and private realms of the individual, her behaviors and personal thoughts. The pressure to conform to an idealized femininity, to marry and adopt a domestic lifestyle, results in females to perform, as Collins contests, with a "front"⁶³ that "individuals wear in public to define or fix

⁵⁴ Collins, "Inscribing the Space of Female Identity," 74.

⁵⁵ Michel Foucault, *Discipline & Punish: The Birth of the Prison*, trans. Alan Sheridan (New York: Vintage Books, 1995), 200-201.

⁵⁶ Tiffany D. Gagliardi, "Determined, Detached and Drowning: The Use of Rhetoric of Enclosure in Carmen Martín Gaité's *Entre visillos*," *Letras Peninsulares* 16, no. 3 (2003): 435.

⁵⁷ Martín Gaité, *Entre visillos*, 61.

⁵⁸ Martín Gaité., 132.

⁵⁹ Shahram Khosravi, *Young and Defiant in Tehran* (Pennsylvania: University of Pennsylvania Press, 2008), 2.

⁶⁰ Michel de Certeau, *The Practice of Everyday Life*, trans. Steven Rendall (Berkeley: University of California Press, 1984), 38-39.

⁶¹ Martín Gaité, *Entre visillos*, 187.

⁶² Mikhail Bakhtin, *Problems of Dostoevsky's Poetics*, trans. Caryl Emerson (Minneapolis: University of Minnesota Press, 1984), 122.

⁶³ Erving Goffman, *The Presentation of Self in Everyday Life* (New York: Doubleday, 1959).

their image for others.”⁶⁴ I would like to expand on this sociological approach of the public performance of feminine archetypes by incorporating a more politically-oriented analysis that takes into account the power dynamics of Franco’s authoritarian regime and patriarchal social structures.

Socially stratified Spanish society obliges women to put on a public face. In such stratified societies, James C. Scott discerns two modes of everyday discourse and performance, which are not necessarily in opposition to one another: *public* and *hidden transcripts*. The *public transcript* describes the performed interpersonal communication between the dominating groups within a society and those they dominate.⁶⁵ Through maneuvered verbal and nonverbal communication, both dominant and subordinate groups put on a façade that plays into their social roles. For fear of humiliation (one of the vulnerabilities of those in power) or punishment respectively, people replicate such masquerades in a myriad of dominant/subordinate social interactions, and in doing so, constantly reproduce hierarchical power structures. On the other hand, the *hidden transcript* for the subordinate group describes the “off-stage” practices and sentiments that “represent a critique of power spoken behind the back of the dominant.”⁶⁶ Outside the presence of authority and self-regulating power dynamics, exchanges between confidants allow for free speech, gestures, and expressions of indignation that would otherwise be self-censored. Neither the public nor the hidden transcript are more authentic to the social actor’s true sentiments. Rather, both modes of expression are legitimate performances of the social actor’s position in a stratified society and provide insight into the dynamics of domination on public discourse.

Francoist Spain produced fertile ground for the engenderment of hidden transcripts, since, as Scott argues, “the practices of domination and exploitation typically generate the insults and slight to human dignity that in turn foster a hidden transcript of indignation.”⁶⁷ As outlined previously, the dictatorship-imposed subjugation of women forced women to conform and perform a public transcript of modesty and self-denial. These public displays of the patriarchy are gendered and gendering, repressive and repressing. Natalia’s fear of approaching her father about her education, Gertru abandoning her studies for marriage, and Julia’s confinement in the provincial city despite her boyfriend’s invitations to live in Madrid are strong examples of such public transcripts. Limits to their self-expression and agency produce the inevitability of these women’s hidden transcripts that only surface in settings of intimacy, such as Yoni’s attic.

Although the *chica rara* Natalia has a defiant personality and rebellious aspirations, her behavior in front of authority figures throughout the novel resembles the same public transcript. Natalia behaves deferentially toward her aunt, father, and teachers, in line with the standards of the city and patriarchal regime. Her defiance, no matter how strong, is left drowning in expectations of ‘proper womanly conduct.’ Her diary, however, is a refuge for self-expression. Natalia retreats to her diary entries, which narrate sections of the book, in a deluge of suppressed sentiments, hidden behind the lace curtains of her personal experience. Talbot analyzes that Natalia’s diary entries “allow a more intimate view of Natalia and emphasize her alienation and inability to speak openly.”⁶⁸ The confidential diary account in *Entre visillos* echoes, as Talbot remarks, Simone de Beauvoir’s insight that “in [the diary’s] pages

is inscribed a truth hidden from relatives, comrades, teachers, a truth with which the author is enraptured in solitude.”⁶⁹ Women like Natalia, then, are left alone with their thoughts and feelings, abandoned by dehumanizing moral codes. If diary entries serve as intimate self-reflections of personal struggles with society, never to be seen, then they represent the internal hidden transcript.

Talbot’s reflection on the diary as a medium for voicing suppressed sentiments, however, fails to address how the defiant hidden transcripts become public. The analysis assumes that all dissent among the women in the novel is hidden in the private pages of diaries, never to be openly performed as direct opposition to power. Furthermore, Natalia’s diary does not account for how or why her sisters and friends, often portrayed as paragons of the submissive female paradigm, openly express defiant hidden transcripts at the studio party. For this reason, I contend that the studio scene is a pivotal moment in the novel that opens the door for questioning the status quo. Only the private, bohemian party in the studio grants this discord.

While the theories of Bakhtin and de Certeau applied in this paper reflect upon the subversion of norms and tactical resistance in the liminal anomie which both men and women experience at the studio party, Scott’s theories provide a better understanding as to how and why the young women at Yoni’s studio outwardly express their normally veiled indignation toward the patriarchy. Throughout this piece, I will highlight some of these offstage, unmasked expressions that women materialize in the carnivalesque space. The experimentation in Yoni’s studio begets the impetus for the young women to outwardly perform and embody their suppressed resentment of the dominant-subordinate power dynamics in Francoist Spain. These hidden transcripts translate to the public sphere when the divergent ways of being, thinking, and imagining gender roles and social norms, developed in the studio party, influence the personal decisions the young women make at the end of the novel.

THE CARNIVALESQUE STUDIO

Young women in *Entre visillos* traverse places of recreation outside of the home, the church, and the school. These places include the Casino, the city streets, shops, cafés, movie theaters, and bullfights. Previous literature on the gendered symbolism of public places in *Entre visillos* asserts that such spaces are delineated as modest venues for matchmaking. Bellver posits that “gender differences and boundaries are redrawn in situations in which men and women occupy the same general space” in a way that perpetuates the stasis of traditional norms: women remain marginalized to their ‘place’ in a physical room and society more broadly, male domination of social interactions and the physical atmosphere thrives, and social stratification burgeons.⁷⁰ Although the sanctioned spatial layouts of gender in both the novel and Spanish society hold true in the studio, I argue that women take a distinct agentive role in intercourse and self-imagination. While Bellver contends that different settings in the novel “prove to be merely a change in scenery for the same small talk, gossip, and discussions about boyfriends,”⁷¹ I propose that new behaviors and ideas arise at the studio party. The tall structure of the Gran Hotel and the privacy of the apartment symbolically oppose the provincial city’s cathedral and the Casino balcony, fostering a refuge for divergent conduct and belief. If self-awareness poses a threat to the status quo, then women’s self-realization in the studio proves the space to be carnivalesque and menacing to Francoist Spain.

⁶⁴ Collins, “Inscribing the Space of Female Identity.”

⁶⁵ James C. Scott, *Domination and the Arts of Resistance: Hidden Transcripts* (New Haven: Yale University Press, 1990), 2.

⁶⁶ Scott, *Domination and the Arts of Resistance*, xii.

⁶⁷ Scott, 7.

⁶⁸ Talbot, “Female Archetypes,” 83.

⁶⁹ Simone de Beauvoir, *The Second Sex*, trans. H. M. Parshley (1952; rpt. New York: Vintage Books, 1974), 380.

⁷⁰ Bellver, “Gendered Spaces,” 40.

⁷¹ Bellver, 40.

In *Problems of Dostoevsky's Poetics*, Bakhtin outlines the characteristics of carnivalesque literature that translate to the carnivalesque studio in *Entre visillos*. These characteristics emphasize chaos, the inversion of norms, and the imagination of alternative social identities. The studio party celebrating the departure of Colette, a French lady who stayed at the Gran Hotel, is Spanish society upside-down, a carnivalesque space of resistance.

According to Bakhtin, carnival is a pageant in which exists “free and familiar contact among people.”⁷² In carnival, hierarchical structures crumble, deference is demolished, and etiquette falters. In the studio, all of the party-goers actively and communally participate in the act of carnival. When Julia and Mercedes arrive at the studio party, still before sundown, “había...mucho jaleo.”⁷³ Every character present in the small room carouses carelessly, Federico drinks more than seven glasses, and the attendees all dance in pairs.⁷⁴ The chimney blazes, intensifying the steamy and lascivious atmosphere of the swarming living room. Remnants of this debauchery decorate the floor: “estaba...ceniceros y botellas esparcidos por la alfombra.”⁷⁵ The heat from the chimney, the sweaty bodies, and the cold from outside coalesce into fog on the shut window panes, obstructing the studio from the outside view.⁷⁶ Within the private walls of the top-floor studio, protected from the rest of society’s calumniating gaze and the pastoral power of the Church and the Francoist State, the characters may interact freely with one another, regardless of gendered hierarchy or sociopolitical authority. The differences between genders, ages, and blood-relations that permeate Francoist society vanish and hierarchy disintegrates, establishing a liminal anomie among the group in Yoni’s attic studio. In such anomie, hidden transcripts and rebellious behaviors are welcome and manifest.

The second characteristic of the carnivalesque is “[the] new mode of interrelationship between individuals” that forms in Carnival.⁷⁷ That is, new behaviors and distinct relationships, free from authority, develop between the characters. These alternative relationships, along with novel social identities, are exemplified in the couples’ behavior during the party. The studio scene begins with a quarrel between Gertru and her fiancée Ángel in the Gran Hotel lobby.⁷⁸ Their bickering highlights the strong animosity between the lovers that night. Despite their argument, the plans for the wedding, and the imminent promise of matrimony, the relationship between the two lovers degenerates during the party. Not only do they stop arguing, they also dissociate from each other. Ángel and Gertru hardly speak to one another; Ángel wants Gertru to tour the kitchen with Teresa so that he could court and win the heart of Colette, the French lady.⁷⁹ Although Ángel’s mendacious behaviors showcase the perpetration of patriarchy in the studio and Gertru’s compliance to his demands exacerbates a public transcript of female subjugation, at the same time, Ángel’s philandering with Colette promotes the acceptance of infidelity and free love at the party. While conceptions of traditional monogamy are abandoned and Ángel betrays his future wife, the characters in the scene experience a new sense of sexual liberation and garner divergent ideals and modes of interrelationship. Other party-goers in the scene echo Ángel’s licentious principles. Friends at the party, for example, “no habían dejado [a Gertru] ponerse al lado de Ángel porque dijeron que novios con novios era un atraso.”⁸⁰ This

way, social principles are reversed as the group deems traditional relationships as “backwards.” Therefore, settled interrelationships in the non-carnivalesque world disintegrate. The characters embody infidelity and free love as new, unorthodox values arise in Yoni’s attic. In this carnivalesque space, these alternative norms stress the formation of liberal consciences, resistant to the mundane and the conservative principles of traditional marriage.

The new interrelations between people open the possibility for the expression of eccentricity, the third characteristic of the carnivalesque that “permits—in concretely sensuous form—the latent sides of human nature to reveal and express themselves.”⁸¹ Eccentricities like foreign commodities and ideas and new bodily proxemics constitute tactics of resistance to hegemonic, conservative culture. The French music, foreign films, English tobacco, and clothes from Tangiers reflect the bohemian eccentricity of Carnival.⁸² Such foreign products would have been banned in Spain under the autarkic regime.⁸³ Yoni bypasses these bans, however, by having his American friend, Spencer, whom he met while living in New York, send him the latest trends and goods. Moreover, references to foreign figures throughout the studio scene, such as James Stewart, Juliette Greco, and Yves Montand, as well as the presence of foreigners like Colette and Pablo, bridge the isolated studio to the novel trends, ideas, and exotic imaginations of the outside world, transcending provincial life and national borders. In this way, Yoni’s studio as a refuge for eccentricity stages a cosmopolitanism in resistance to isolated provincial lifestyles and autarkic state policies. These foreign influences incite characters to imagine themselves differently and adopt cosmopolitan identities.

The eccentricity of the studio is also reflected in new bodily proxemics (the positions of and space between human bodies) between the characters. Free love at the party allows for genders to intermingle liberally. Although this social orgy would have been shameful in the 1950s, non-carnivalesque Spain that Martín Gaité portrays, the characters seem to forget or ignore the moral lessons they learned in Catholic schooling and mass. Open relationships are accepted and encouraged in the bohemian studio. While some isolated couples dance along the dark corners of the room, others drink alcohol at the bar or on the ground.⁸⁴ In the back, there is another room where other couples lay in the darkness, “las piernas sobresaliendo, y se movían, alternadas de hombres y de mujer.”⁸⁵ Both men and women experiment with their sexuality as resistance to the strictures of everyday life. In these rooms, a carnal, sensuous eccentricity manifests, breaking the conservative mores of Spanish modesty and Catholic piety.

Mercedes never realizes what happens in the back room. Federico explains that this room is “por si se queda a dormir Yoni, o amigos.”⁸⁶ In this case, Mercedes maintains a public transcript by not questioning the conspicuous deceitfulness of the men in the normlessness of the studio. Given that many of the women involved in this love affair do not voice themselves in the scene, it can be understood that the studio is still a male-dominated space where men take advantage of the suspension of norms to indulge in exploitative behavior toward the female characters. In Carnival, men take pleasure in escaping their dull provincial lifestyles. Although Mercedes is deceived by the men’s lustful scheming, other women optimize their freedoms to break out of their cloistered shells with these men. This room clearly demonstrates the debauched patriarchy

⁷² Bakhtin, *Problems of Dostoevsky's Poetics*, 123.

⁷³ Martín Gaité, *Entre visillos*, 188, 190, 191.

⁷⁴ Martín Gaité., 190-191.

⁷⁵ Martín Gaité., 188.

⁷⁶ Martín Gaité., 190.

⁷⁷ Bakhtin, *Problems of Dostoevsky's Poetics*, 123.

⁷⁸ Martín Gaité, *Entre visillos*, 197

⁷⁹ Gaité., 190, 192.

⁸⁰ Gaité., 196. Translation: “They did not let her stand beside Ángel because they said that couples being with couples was backwards.”

⁸¹ Bakhtin, *Problems of Dostoevsky's Poetics*, 123.

⁸² Martín Gaité, *Entre visillos*, 182-183, 190.

⁸³ Gabriel Jackson, “The Franco Era in Historical Perspective,” *The Centennial Review* 20, no. 2 (1976): 104-105.

⁸⁴ Martín Gaité, *Entre visillos*, 191.

⁸⁵ Martín Gaité, 191.

⁸⁶ Martín Gaité, 191.

that still revolves around the carnivalesque space, but it also it is clear that compared to conservative norms of the city, the party is ripe with new, liberal social projections. Both men and women have the freedom to experience a level of independence and sexual liberation in the normless anomie. The alternative proxemics and eccentric relationships at the party break social barriers and imagine new, liberal worldviews in Spanish society. Despite the studio being a male-centered space, the carnivalesque space also provides new opportunities for women's agency.

The carnivalesque also consists of "carnivalistic *mésalliances*," the phenomenon of unifying diametrically opposite characteristics: "Carnival brings together, unifies, weds, and combines the sacred with the profane, the lofty with the low, the great with the insignificant, the wise with the stupid."⁸⁷ In the non-carnivalesque world, the wedding of opposites would be almost impossible, but within the carnival, the absurd becomes the norm. An unlikely pair of characteristics coalesce in the case of Ramón, the tall, blond Englishman. Toward the beginning of the party, one of the guests, Manolo Torre, complains that the party would be a bore (*tostón*) until Ramón animated the studio by singing the *bulerías*. Manolo Torre tells Estrella, Ramón's wife, to convince him to sing. She crawls on the rug over to her husband. Martín Gaité provides a passive, composed portrait of Ramón: "estaba sentado inmóvil mirando al fuego. Se le encendían reflejos en el pelo con las llamas, se le volvían a borrar."⁸⁸ The tranquil image of the fire reflecting against the light hue of his hair reinforces Ramón's calm and sedated state.

Once many more people arrive and others begin to leave, Ramón suddenly breaks into song. His fiery, yet comical, performance parallels the overbearing heat of the chimney by which he sings. Then, Ramón jumps up and begins to tap dance, avoiding the cigarettes, glasses, and nutshells that line the floor. Flailing his arms, shaking his entire body, Ramón deafeningly claps and shrieks *bulerías* "como epiléptico."⁸⁹ Two unlikely characteristics unite in Ramón's parodical display. First, Ramón's English identity surprisingly intertwines with an authentic display of traditional flamenco dance. Second, Ramón's stoic personality mixes with his ardent spectacle of impassioned song and dance. The comically absurd scene seems to satirize Spanish folk dance while the unlikely wedding of characteristics establishes the carnivalistic *mésalliance* of the studio.

Ramón's performance of *bulerías* also constitutes a veiled tactic of resistance by mocking dominant culture and state policies. Despite flamenco's origins in Andalusian urban ghettos, this music of indigent Gypsies and Spaniards has appealed to the "whims and caprices" of elites since the mid-nineteenth century.⁹⁰ A century later, Franco's regime began a campaign to appropriate popular entertainment as a tool to pacify social unrest.⁹¹ Flamenco in particular began to represent a national folkloric memory when Franco "popularized a generic flamenco style for national and international consumption."⁹² In an attempt to consolidate and maintain power, Franco politically sanctioned flamenco as the heartbeat of Spanish patriotism, and in doing so, founded popular culture's hegemony over everyday lives.

In addition to this historical perspective, it may prove to be analytically advantageous to look at the etymological root

of "*bulerías*" to derive a deeper meaning to Ramón's satirical performance. The most commonly accepted origin of "*bulerías*," one of the most dramatic and rambunctious flamenco forms, derives from the word *burlería*, referring to the musical style as a song of 'mockery.'⁹³ Although it is unknown whether Martín Gaité had the etymology of the word in mind when writing this scene, it is nevertheless interesting to see how the root of the word underscores the boisterous mockery of dominant culture in Ramón's performance. Thus, the paradox of Ramón's *mésalliance* is a parody of Spanish culture that serves to mock folkloric Francoist Spain, deploying the dominant culture against itself to bastardize its essence. Such an outlandish performance unifies unlikely characteristics and burlesques the popular art form, critiquing Franco's strategies of institutionalizing entertainment to 'unify' the masses and quell dissent.

Mercedes and Julia both display additional cases of carnivalistic *mésalliance*. The carnivalesque space incites Mercedes, the stricter sister, to drink cognac and dance intimately with Federico, an act outside her ordinary role.⁹⁴ Mercedes' usually conservative character is coupled with flirtatious behaviors and a party spirit. Similarly, although Julia has a boyfriend in Madrid, she dances with Luis.⁹⁵ Julia's relationship status fuses with a new expression of sexuality. For this reason, the sisters' identities change: Mercedes lets loose and Julia temporarily disregards her committed relationship. These open expressions of promiscuity constitute tactics of resistance to the female archetypes these women typically represent in the literature about *Entre visillos*. The breakdown of these young women's general standards of behavior disassociates them from their normal roles in society, empowering them to perform a nonverbal hidden transcript of suppressed sexuality and revelry.

A final case of carnivalistic *mésalliance* manifests when Gertru forms a new perspective. Seventeen-year-old Gertru, who left her studies in favor of marriage, questions Ángel's authority during her conversation with Pablo Klein. Pablo Klein convinces Gertru to reconsider matriculating into school to finish her *bachillerato* the next year.⁹⁶ The high-school-dropout reframes her perspectives and rejects both her fiancée's commands and the State's sanctions on female education and domesticity. This sudden change of mind reflects a hidden transcript of desiring a self-reliant role outside her status as a housewife that would have only been possible in the carnivalesque space. The desire to study is direct tactic of resistance as it subverts gender roles imposed by Francoism. Thus, the soirée fosters divergent thinking and contradictory identities that transcend the limited studio space in the subsequent chapters.

The interaction with Pablo incites Gertru to approach Ángel about her aspirations on the walk home from the party. "Oye, dice ese chico [Pablo] que por qué no termino el bachillerato... Estoy a tiempo de matricularme todavía," Gertru voices, avoiding eye contact by looking at Ángel in the reflection of a shop window.⁹⁷ Ángel becomes defensive, arguing that they have already decided what is best for the both of them. When Gertru questions his authority, Ángel repudiates her challenge. "Pues porque no. Está dicho," Ángel hammers, "Para casarte conmigo, no necesitas saber latín ni geometría; conquese sepas ser una mujer de tu casa, basta y sobra."⁹⁸ Gertru's fiancée reiterates the popular aphorism of the era, "mujer que sabe latín...no tiene marido ni tiene buen fin" (a woman who knows Latin does not have a husband nor a good ending). In

⁸⁷ Bakhtin, *Problems of Dostoyevsky's Poetics*, 123.

⁸⁸ Martín Gaité, *Entre visillos*, 193

⁸⁹ Martín Gaité, 196.

⁹⁰ Timothy Malefyt, "'Inside' and 'Outside' Spanish Flamenco: Gender Constructions in Andalusian Concepts of Flamenco Tradition," *Anthropological Quarterly* 71, no. 2 (1998): 65.

⁹¹ Helen Graham and Jo Labanyi, *Spanish Cultural Studies: An Introduction: The Struggle for Modernity* (Oxford: Oxford University Press, 1995), 3.

⁹² Malefyt, "'Inside' and 'Outside' Spanish Flamenco" 65.

⁹³ Silvia Calado Olivo, *Por bulerías: 100 años de compás flamenco* (Córdoba: Editorial Almuzara, 2009), 235.

⁹⁴ Martín Gaité, *Entre visillos*, 194.

⁹⁵ Martín Gaité, 194.

⁹⁶ Martín Gaité, 199.

⁹⁷ Martín Gaité, 199.

⁹⁸ Martín Gaité, 199.

this case, Gertru's hidden transcript expressed in the carnivalesque space becomes public but is immediately rejected. Patriarchy prevails. When Ángel drops Gertru off at her home, he walks back to Yoni's party, most likely to continue to flirt with other women. Thus, the liberal aspirations that congeal in Gertru's mind at the studio lose their vitality once she leaves the party, demonstrating the unique space of the studio and the persistence of the town's dominant ideology.

In the last chapter of the novel, Gertru marries Ángel, signaling that the carnivalesque values of the studio fail to transcend the space. Gertru is unable to overcome the reproduction of patriarchal norms. Sitting in Gertru's room during the reception party, Natalia, Gertru's best childhood friend, cries, saddened by Gertru succumbing to her husbands' orders, replacing the books in her room with her wedding gifts.⁹⁹ Gertru forfeiting her studies for a married life exemplifies how a traditional, secure married future is sometimes more appealing than the prospects of liberation in a society where 'liberated' women are further marginalized.

The last characteristic of the carnivalesque is desecration. According to Bakhtin, the carnivalesque degrades and satirizes religion and conventions.¹⁰⁰ The ways that Ángel and Gertru behave at the party demonstrate how the values of liberated love denigrate the sacred convention of matrimony, considered to be the backbone of Francoist sociopolitical structures. Despite the remaining patriarchal culture that permeates the studio, free-thinking permits the possibility of rethinking gender. Previously in the novel, a group of men, including Federico, at the Casino comment on the role of women, qualifying them as "niñas de celofán" (cellophane girls).¹⁰¹ Soledad Fox posits that this snide remark reflects the dehumanization that takes place when women must conform to feminine standards in order to attract a man and marry for a secure future. Attempts to conform to a "doll-like demeanor," however, make women seem as if they were made of cellophane to the men, appearing to be "as artificial and fragile as the *visillos* that shield their daily existence."¹⁰² Expanding upon this interpretation, I propose that the notion of cellophane girls also reveals that these men view women as prizes wrapped in—rather than made of—cellophane that are awarded to macho men. In this way, women are dehumanized as sexual objects for a patriarchal world.

The carnivalesque attic, however, plants new understandings of gender that are contradictory to gendered norms, and these men's comments, during the regime. Following the party and on the walk home from the studio, Julia and Mercedes bicker over their romantic relationships and gendered expectations. Julia inverts the sexist remark when she yells at Mercedes, "te regalo a Federico envuelto en papel de celofán."¹⁰³ To Julia, it is not women that are prizes, but rather men. This inversion of gender norms demonstrates how the bohemian studio introduces progressive ideas in the minds of the young women that desecrate conservative gender values during the dictatorship. Again, the carnivalesque studio provided the intimate, non-hegemonic space for women to express and embody social critique. The inversion of the phrase proves to be a tactic of resistance against how both women and men are traditionally perceived. These liberal trajectories may have motivated Julia at the end of the novel to live and work in Madrid with her boyfriend, Miguel, thus embodying offstage sentiments in the public sphere.¹⁰⁴

Finally, the carnivalesque power within the borders of the studio walls presents itself clearly in the case of Mercedes when she steps

outside with Federico to talk on the balcony, leaving the anomie established at the party. Just as Carnival's debauchery must come to an end with the advent of Lent, so do the spatial boundaries of the studio walls divide the carnivalesque from the patriarchal and fascist. Outside of the private studio, Mercedes exposes herself to the power of State and societal norms, reentering the public space with its omnipresent scrutiny of the female behavior and body. Suddenly, the sentinelling "ojo gigantesco" of the cathedral spire, the "the all-seeing tower of the panopticon," spots Mercedes.¹⁰⁵ Once she realizes that the two are accidentally locked out of the studio, under the surveillance of both society and State, Mercedes becomes aware of the norms she has broken at the party. Frantic and fearful, Mercedes abruptly begins to worry about *el qué dirán*: "Dirán que dónde estamos," she frets.¹⁰⁶ Bellver argues that this scene "dramatizes the associations made traditionally, for women, between exterior spaces and temptation, sin, and indecency."¹⁰⁷ This division of the impermissible outside and the safe haven of the private studio not only suggests Martín Gaité's creative use of space to delineate tradition and modernity, patriarchy and carnivalesque liberation, but also emphasizes the studio as a unique space protected and exempt from the mores of the traditional city.

Still locked outside of the studio, Mercedes stops drinking and insists that Federico does the same, masking herself in the face of authority once again. Federico comments to Mercedes that she is "una chica muy maternal," signifying that Mercedes has returned to her normal role as a conservative agent of order and modesty.¹⁰⁸ Then, the cathedral bells chime the tenth hour; Mercedes realizes that her curfew is approaching and must depart. Ultimately, Mercedes and Julia, watched over by the cathedral's eye, return to their home, back to tradition.

IMAGINING THE WORLD UPSIDE-DOWN

Within *Entre visillos*, Yoni's studio apartment, forged out of resistance, becomes a refuge for free thought and self-expression that challenges the patriarchal and state power materialized in the towering structures of the cathedral campanile and Casino balcony. While the altitude of the studio symbolically threatens higher power, the privacy of the space allows the characters to do as they please, devolving their sphere into a social milieu of anomie. The protection provided at the bohemian party offers a safe haven for manifesting hidden transcripts and employing popular tactics to both escape the oppressive regime and threaten authority. The characters' paradoxical interpersonal relationships, progressive values, and parodical behaviors constitute meaningful threats to state institutions and societal values, forging a carnivalesque space for imagining novel social identities. In carnival, men escape the banality of provincial life while young women, who otherwise confine themselves to archetypal femininity, resist the norms that hegemonic, Francoist society imposed. This is the world upside-down that incites characters to explore new life trajectories.

It is this pivotal scene that influences these women to think differently about their role in society. The cases of Gertru and Julia reflect the carnivalesque studio's powerful influence on the young women's vision of themselves and their social roles. While Gertru attempts to break the norm by finishing her degree, she ultimately surrenders to her husband's vehement denunciations. On the contrary, Julia successfully goes against the grain, leaving her family and provincial city for progressive fantasies in the capital city. These distinct experiences after the party reflect both the possibility of and

⁹⁹ Martín Gaité, 267.

¹⁰⁰ Bakhtin, *Problems of Dostoevsky's Poetics*, 123.

¹⁰¹ Martín Gaité, *Entre visillos*, 134.

¹⁰² Soledad Fox, "Cellophane Girls."

¹⁰³ Martín Gaité, 201.

¹⁰⁴ Martín Gaité, *Entre visillos*, 278.

¹⁰⁵ Gagliardi, "Determined, Detached and Drowning," 433.

¹⁰⁶ Martín Gaité, 197. Translation: "They will say where we are."

¹⁰⁷ Bellver, "Gendered Spaces," 39.

¹⁰⁸ Martín Gaité, *Entre visillos*, 197.

limitations to women's agency under hegemonic social norms during the dictatorship. Although Bellver determines that all attempts of transcending the suffocating marginalization of the authoritarian society are "inevitably thwarted,"¹⁰⁹ particularly because most of the women end up "tied to an overbearing husband,"¹¹⁰ I retort that Julia maintains the negative agency of navigating predetermined social structures for her own minute personal gain. The carnivalesque studio opened Julia's eyes to a feasible escape to a bohemian lifestyle in the capital city with Miguel.

On a greater scale, outside of the claustrophobic studio and ludicrous party, *Entre visillos* resembles carnivalesque literature as it reflects on the limitations, emptiness, and repression of women under Franco. Seemingly benign and mundane, this critical yet realistic novel escaped the grasp of stifling 1950s Spanish censorship. A closer look, however, reveals how Martín Gaité skillfully addresses taboo and illegal topics such as fascination for foreign cultures and ways of life, gender roles, sexuality, and State and societal repression. Overall, the novel emphasizes the lives of women who break norms. Martín Gaité covertly challenges the legitimacy of social institutions and Francoist politics through the characters' behavior during and proceeding Yoni's soirée. When veiled indignation becomes public and embodied, power institutions are threatened. By way of these taboo topics, novel for the era, Martín Gaité imagines Spain as a society in which women have agency to challenge the patriarchal regime. The carnivalesque novel erases hierarchy, inverts norms, and establishes new potential Spanish identities that critique and challenge Francoism. In doing so, *Entre visillos* unshackles itself from the oppressive ideologies that permeated Spain under Franco's dictatorship and opens a new trajectory for reimagining Spanish society with hopes for liberation.

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¹⁰⁹ Martín Gaité, 34.

¹¹⁰ Martín Gaité, 47.

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All Roads Lead to Homosociality: The Role of Chivalry in Medieval and Modern Society

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ABSTRACT

This paper examines the role of chivalry in Marie de France's *lais*, focusing on Guigemar with support from Bisclavret. One of the most-studied authors of the medieval period, Marie de France channels the values, anxieties, and societal dynamics of her time by both adhering to and pushing against literary norms. Guigemar and Bisclavret present near-perfect examples of knighthood according to chivalric norms, save for two flaws: Guigemar has no love for women, and Bisclavret is a werewolf. The treatment of these knights and their peculiarities reveals the strict expectations of masculinity and the risks of breaking from them. I pay particular attention to the importance of humility in chivalric masculinity and the ways in which their peculiarities affect their relationships, especially with other men. Guigemar shows that humility, rather than courage, martial skill, or courtesy, was the most important chivalric value. Humility is so essential because the main role of chivalry was to preserve the relationships between men that formed the basis of medieval society. I argue that understanding the cultural history of chivalry is important for modern audiences because the concept of chivalry is still used by many groups to legitimize and promote their interests and continues to shape our perceptions of masculinity and gender dynamics. While what we think of chivalry has changed greatly since Marie de France's time, the ends of chivalry remain the same—to promote the interests of those in positions of power.

THE LIFE AND TIMES OF MARIE DE FRANCE

“One whom God has given knowledge / and good eloquence in speaking / should not keep quiet nor hide on this account / but rather should willingly show herself”¹. These lines, translated from old French to modern English, begin the general prologue to Marie de France's collected *lais*. Marie de France wrote for the court of Henry II and Eleanor of Aquitaine in the late twelfth century, and the *lais* that are the focus of this paper are a category of short, narrative poems that originated through oral storytelling in Brittany. While not much of Marie de France herself is known, her works have endured as containing some of the most delightfully unique moments in medieval literature. Love, specifically between noble men and women, is the central theme that pervades all of the stories. The ways that Marie de France depicts love are all drastically different—what is condemned or ridiculed in one *lai* is celebrated and praised in the next. These variations in representation are possible because of Marie de France's strong attention to specific socio-cultural context. Common themes of scholarship on the *lais* include courtly love, gender dynamics, and male relationships. Jenny Adams' work “Pieces of Power: Chess and Male Homosocial Desire” examines the similarities in another of the *lais* between heterosexual love and vassalage² and the importance of bonds between men³. The *lais*' emphasis on social ties provides the opportunity to consider how relationships between men formed the fabric of medieval society and how, in particular, chivalry functioned to regulate these relationships.

The period in which Marie de France wrote is sometimes considered the beginning of the High Middle Ages, and it was during this time that chivalry in England fully developed into a social and cultural ideal. The development of chivalry in England began in 1066 when William the Conqueror introduced the style of fighting on horseback and a new military code of conduct. This code of conduct, which medieval historian Nigel Saul argues is the beginning of chivalry, arose from the nobility's need for self-

preservation amid incessant warfare on the Continent. Some of its tenets included treating prisoners fairly and minimizing bloodshed after victory was secured⁴. In the eleventh century, a religious component of chivalry emerged as the Church began to consider knights as warriors of Christianity and used them to further their interests, as evidenced by the crusades. The last aspect of chivalry, courtesy, developed in the twelfth century. By the time that Marie de France was writing, chivalry had risen to an ideal that greatly influenced and was influenced by the culture and art of the time.

There is, of course, a great difference in how chivalry existed as an ideal and how chivalry functioned in everyday reality—what some knights and authors wanted chivalry to be and what knights actually were. A critical tension within chivalry is the need to promote martial prowess as a means to retain and gain power through military success, while also restraining violent impulses to prevent excessive violence, social destabilization, and mutual self-destruction. So, while depictions of knights and chivalry may focus more on personal glory and the virtues used to acquire it, such as courage or martial prowess, when we look to chivalry's origin as a means to mutual self-preservation, humility emerges as the most important chivalric value. Humility is motivated by dependence on others, by helplessness, rather than the acquisition of glory. It is this recognition of dependence that sustains homosocial bonds.

Medieval society was largely homosocial, meaning that the most important relationships that created power and that either created or destroyed social stability were between men. Marianne Ailes writes, “[m]en were largely defined...by their relationships with other men—father and son, lord and vassal”⁵, and Harriet Spiegel notes that another of Marie de France's works, the *Fables*, presents a male power hierarchy as both a representation and a critique of her own patriarchal society⁶. Chivalry and its composite values reflect the centrality of the homosocial bonds between a lord and his knights—the knights' military prowess helps the

¹ Claire M. Waters, *The Lais of Marie De France Text and Translation* (Petersborough, Broadview Editions, 2018), lines 1-4.

² Jenny Adams, “Pieces of Power: Medieval Chess and Male Homosocial Desire,” *The Journal of English and German Philology* 103, no. 2 (2004): 201.

³ Adams, “Pieces of Power,” 203.

⁴ Nigel Saul, “The Origins of English Chivalry,” in *Chivalry in Medieval England* (Cambridge: Harvard University Press, 2011), 10.

⁵ Marianne Ailes, “The Medieval Male Couple and the Language of Homosociality,” in *Masculinity in Medieval Europe*, ed. D. M. Hadley (New York: Taylor & Francis, 1999), 214.

⁶ Harriet Spiegel, “The Male Animal in the Fables of Marie de France,” in *Medieval Masculinities: Regarding Men in the Middle Ages*, ed. C.A. Lees, T.S. Fensters, J. McNamara (Minneapolis: University of Minnesota Press, 1994), 151.

lord gain and retain territory, the lord's generosity ensures that he protects and supports his knights, and humility makes it so that all parties maintain their obligations. Even situations that seemingly privilege bonds between men and women truly promote relationships between men. A key example of this dissonance in medieval culture and literature is courtly love. Courtly love is the process by which a noble man wins over a noble woman through grand acts of bravery and service, which supposedly elevates the woman to a position of power; however, many medieval scholars have argued that the importance of the lady does not hold below the surface. Ruth Karras argues that despite its performative heterosexuality, the real end of courtly love is to further homosocial posturing and bonding⁷; women create the excuse for action that is intended to be viewed by other men.

This reading of courtly love fits in with Eve Sedgwick's larger theory of male homosociality. Sedgwick defines male homosocial desire as the "social force, the glue" that shapes relationships between men⁸. One foundational concept in Sedgwick's work is the erotic triangle, meaning the situation in which a woman is the object of desire for two men and the two men are rivals for the woman's affection⁹. Sedgwick cites René Girard's observation that although the bonds between "lovers and the beloved" seem as though they should be the strongest in this configuration, the bonds between rivals are actually stronger and more active¹⁰. The woman is merely a conduit to support interactions and bonds between men. Marie de France's *Guigemar* portrays this dynamic between heterosexuality and homosociality with interesting implications about medieval society.

SUMMARIES OF GUIGEMAR AND BISCLAVRET

The titular knight of *Guigemar*, though highly successful in battle, has one critical flaw—his lack of interest in women. He comes across a magical white deer while hunting one day and fires an arrow at her. The arrow wounds the deer and then ricochets back to stab him through the thigh, a symbol of castration in medieval literature. The deer curses Guigemar that his wound will never heal until he falls in love with a woman and they both suffer greatly for their love. Guigemar sets out alone in search of a cure and is transported by a magical ship to a mysterious castle. There he meets a lady and falls in love, but they are separated when her jealous husband discovers them. Before they part ways, they promise to find each other, symbolized by their putting a knot in each other's clothing that only they can undo. The lady escapes from her husband to search for Guigemar after he has left and returned to his homeland. She is eventually abducted by a lord named Meriaduc who lusts greatly over her, even after she denies him multiple times. Guigemar then visits Meriaduc's castle, and Guigemar and the lady are at last reunited. Meriaduc, however, even after hearing their story, refuses to give up his advances on the lady, prompting Guigemar to go to war against him and ultimately kill him.

Bisclavret is a werewolf who spends many nights roaming the woods in his wolf form. After his wife grows suspicious of his frequent absences, Bisclavret finally tells her his secret. Horrified, his wife plots with another knight, and together, they steal his

clothes so that he will be trapped in his wolf form. The wife then marries the other knight once Bisclavret is presumed dead. Bisclavret is finally saved when the king of the land finds him in the forest and, impressed by his human-like qualities, takes him back to the castle. While at the castle, Bisclavret sees his wife and bites off her nose. Because Bisclavret had been so gentle before, the king assumes that the wife is guilty of some crime, and, after questioning her, the truth of her betrayal is revealed. Bisclavret transforms back to a man, his wife is banished, and the king rewards him with gifts of land.

Ultimately, *Guigemar* shows the transformation of a social nonconformist who is violently forced to participate in chivalric social norms into himself a violent enforcer of chivalric expectations. Bisclavret serves as a good supporting text to *Guigemar* because, unlike *Guigemar*, Bisclavret is an ideal model of knighthood throughout the lai. Both lais concern themselves with chivalry and demonstrate how the chivalric value of humility promotes male homosocial bonds. If *Guigemar* is the story of a man forced to practice humility to ensure the continuation of homosocial bonds, then Bisclavret shows the prosperity and stability that homosocial bonds can bring when maintained by humility.

CLOSE READINGS

Guigemar's lack of interest in women indicates the larger issue of his disinterest in homosocial bonds. The root of the problem is his independence. Marie de France attributes to *Guigemar* the customary values of chivalry, beauty, courage, and martial talent, and gives credence to these claims through other people's reactions. Not only do his parents and sister love him, when he goes away to train at court, "he made himself well-loved by all"¹¹. His singular flaw is that "he never had any interest in love"¹². In the following lines, Marie de France specifies that he has no desire for women, but the original statement also suggests that, more broadly, he is not interested in forming key social bonds. As a knight, he requires a lord to ennoble him and support him financially, but once he is knighted, he is able to "seek glory in Flanders"¹³, and wherever he goes, no one could "find at that time / so good a knight, or one who was his peer"¹⁴. *Guigemar* is such an exemplary knight that in fulfilling the expectations of chivalric masculinity, he ends up going against the code's purpose, which is to cement social bonds and ensure that people remain loyal to one another. He has no weakness that would force him to be dependent upon others. Even after he has been cursed by the white hind and is in severe pain, he intentionally leaves without any of his men because "he did not want any of his men to come / who might trouble him or hold him back"¹⁵. Furthermore, while hunting today is considered a very homosocial activity, some in Marie's time considered it a solitary and selfish pastime, adding to the sense of *Guigemar's* asociality, as William Burgwinkle notes¹⁶. The stag's curse that *Guigemar* "will never have a remedy! / Neither from herb nor root, / neither from doctor nor potion / will you find healing"¹⁷ uses heterosexuality as a mechanism, the purpose of which is to force him to experience crippling helplessness that can only be remedied through a social bond. *Guigemar* cannot lift the curse through any transactional or material solutions; he must engage in a relationship with a woman for which they both will suffer deeply.

¹¹ Claire M. Waters, "Guigemar," in *The Lais of Marie De France Text and Translation* (Petersborough, Broadview Editions, 2018), line 44.

¹² Ibid., l. 58.

¹³ Ibid., l. 51.

¹⁴ Ibid., ll. 55-56.

¹⁵ Ibid., ll. 143-144.

¹⁶ William Burgwinkle, "Queering the Celtic: Marie De France and the Men Who Don't Marry," in *Sodomy, Masculinity, and Law in Medieval Literature* (Cambridge: Cambridge University Press, 2004), 154.

¹⁷ Waters, "Guigemar," ll. 109-112.

⁷ Ruth Karras, "Mail Bonding: Knights, Ladies, and the Proving of Manhood," in *From Boys to Men: Formations of Masculinity in Late Medieval Europe* (Philadelphia: University of Pennsylvania Press, 2003), 21.

⁸ Eve Sedgwick, "Gender Asymmetry and the Erotic Triangle," in *Between Men: English Literature and Male Homosocial Desire* (New York: Columbia University Press, 1985), 21.

⁹ Ibid., 21.

¹⁰ Ibid.

The language of the hind's curse presents a conventionally homosocial dynamic that suggests that the heterosexual relationship between Guigemar and the lady is a proxy for more favored homosocial ties. Guigemar's immediate reaction to the hind's curse is entirely focused on survival. As a knight, he is accustomed to bloodshed, so that he was "frightened by what he hears"¹⁸ and "does not want to let himself die"¹⁹, shows how dire the situation is. Although hunting is a common metaphor for the pursuit of love, Guigemar's literal wound and the impending threat of death create stakes more comparable to those of a battlefield. In such a situation, Guigemar should be accompanied by his comrades-in-arms, but he intentionally leaves without them. The lady fulfills that role in some ways, as suggested by the lines, "she shall heal you / who will suffer, for love of you, / such great pain and sorrow...and you will do as much for her"²⁰. In many courtly romances, men undergo great feats of strength and bravery to prove their devotion for a woman, as is the case in Chretien de Troyes' later work *The Knight of the Cart*, in which Guinevere creates humiliating situations to test Lancelot's love. The woman is an observer and does not undergo similar tests of character, which makes sense if the unstated goal of courtly love is for men to gain honor. However, in the language of the curse, Guigemar and the lady undergo equal trials and are equally glorified. In this sense, they are acting more as comrades-in-arms who support each other in the pursuit of a common goal. The curse renders him helpless, thereby forcing him into a heterosexual relationship that is a proxy for more socially-valued homosocial bonds in which he had not previously been able to participate.

Guigemar and his lady are helpless not in the sense that they are entirely without agency, but in that they can alleviate their suffering only through each other. As the story progresses, Guigemar gradually depends more and more on others, modeling a traditional initiation ritual²¹. When he first embarks on his search for a cure, he acts as someone entirely independent, but the encounter with the enchanted ship strips him of all control. When he awakens, the ship is at sea, and he "is very sad, he does not know what to do"²², so he "prays to God that he take care of him"²³. In this moment, Guigemar is performing the chivalric value of piety, and his admission of his helplessness and supplication to a higher power is the first step towards the development of humility. Once he arrives at shore and is discovered, he begs the lady, "in God's name, / advise me, by your mercy! / For I do not know where to go, / nor can I steer the ship"²⁴. Guigemar does not know that this is the woman with whom he will fall in love, and he depends on her not for love but for the knowledge which he sorely lacks. Guigemar's emotional response, after they do fall in love and finally admit their feelings, is "ease,"²⁵ which, while positive, suggests a happiness derived from the loss of something negative rather than the gain of something positive. Love allays pain rather than creating pleasure.

Extending the idea that this forced heterosexual relationship stands in for preferred homosocial bonds, all meaningful social ties are formed to alleviate painful conditions. That the first words that Guigemar ever says to the lady are a plea for mercy encapsulates this process. People create bonds because they are forced to do so by need, such as Guigemar's need for knowledge; knights, lords, and kings all depend on each other for their continued survival. If a knight, such as Guigemar, over-exceeds at chivalric values, without the temperance of humility, then the

purpose of the chivalric code, namely to ensure that people will remain loyal and draw each other out of mutual helplessness, is completely undercut. If those in power want to maintain it, then the overly independent must be rendered helpless for the preservation of social order.

Like Guigemar, Bisclavret is defined by his abnormality, but his is less severely framed and he is not punished for it; rather, Bisclavret's abnormality highlights his nobility and, above all else, his humility. Guigemar's abnormality is prefaced by the line: "[o]nly in this did Nature make a mistake with him"²⁶. To make a mistake or err is *mepris* in French, but it is debatable who, between Guigemar and Nature, is the subject and object. Because of ambiguity in the original French, another possible translation, though less frequently used, is that it was Guigemar who made the mistake against Nature; this is discussed in a footnote in Waters' translation²⁷. In Bisclavret, Marie de France portrays werewolves as wild and destructive but then dismisses the mythology with the line, "[n]ow I let this matter be"²⁸, as she moves on to write about "a worthy man / whom I have heard marvelously praised"²⁹. Marie de France separates Bisclavret's reputation from the lore, suggesting that he will go against the expectations of beastliness. This distance contrasts with Guigemar who, under either interpretation of the "mistake," is directly implicated. He has either erred against Nature, or Nature has created him flawed. Even though it seems that Bisclavret, who is not fully human, should be more at odds with Nature than Guigemar, such a trespass is never indicated, foreshadowing that, unlike Guigemar, Bisclavret will not be intentionally punished.

Humility is such an important component of chivalry that Bisclavret's humility makes his inner humanity recognizable even through his beastly form. When the king's dogs attack Bisclavret in the forest, Bisclavret kisses the king's foot, prompting the king to exclaim, "how this beast humbles itself! / It has human understanding, it begs mercy"³⁰. Here, Bisclavret does what Guigemar was initially unable to do—he acknowledges his helplessness and seeks a bond. The king's logic reveals that the capacity for humility, the ability to beg for mercy, is uniquely human. The king sees the humanity within Bisclavret despite his beastly form because of his humility. Thomas Schneider writes that metamorphoses in which knights transform into animals are common throughout Marie's work, and the mutability of form serves to emphasize in contrast a "static masculinity: a concrete picture of what it means to be male and a knight, so solid that it remains constant even in physical transformations out of and into humanity"³¹. Humility is so essential to chivalry that Bisclavret, because of his displays of humility, is recognizable as a knight even when he is literally not human. Humility is so important that it transcends physical form. Furthermore, while Bisclavret's static masculinity is validated by comments that he is "noble and kind"³² and that "there is no one who does not hold it dear"³³, which mirror the way in which he was described at the beginning of the story, these traits of nobility and kindness are secondary. It is only after the king recognizes Bisclavret's humility that his other traits and nobility become visible, indicating that of all the chivalric qualities, humility is the most important.

By the end of the lai, Guigemar has become fully entrenched

²⁶ *Ibid.*, l. 57.

²⁷ *Ibid.*, l. 57n3.

²⁸ *Ibid.*, l. 13.

²⁹ *Ibid.*, ll. 15-16.

³⁰ Claire M. Waters, "Bisclavret," in *The Lais of Marie De France Text and Translation* (Petersborough, Broadview Editions, 2018), lines 153-154.

³¹ Thomas Schneider, "The Chivalric Masculinity of Marie de France's Shape-Changeers," *Arthuriana* 26, no. 3 (2016): 30.

³² Waters, "Bisclavret," l. 179.

³³ *Ibid.*, l. 178.

¹⁸ *Ibid.*, l. 124.

¹⁹ *Ibid.*, l. 128.

²⁰ *Ibid.*, ll. 114-118.

²¹ Burgwinkle, "Queering the Celtic," 153.

²² Waters, "Guigemar," l. 194.

²³ *Ibid.*, l. 200.

²⁴ *Ibid.*, ll. 333-336.

²⁵ *Ibid.*, l. 530.

in homosocial society. The lady, after Guigemar leaves, sails to Guigemar's homeland, where a lord named Meriaduc abducts her to his castle. Simultaneously, Meriaduc is at war with a neighboring lord, and he calls upon many knights to come to his aid, including Guigemar. Meriaduc asks him, "as a friend and companion, / not to fail him in this need"³⁴. Here we see a conventional homosocial bond between Guigemar and Meriaduc. Meriaduc is obliged to call upon Guigemar out of a need for more men, and Guigemar reciprocates, thus satisfying Meriaduc's need. The homosocial bond breaks down, however, once Meriaduc refuses to stop his pursuit of the lady. Guigemar responds as he should—he exercises humility and initiates a homosocial bond in order to satisfy a need. His humility is shown by his plea for "mercy"³⁵, and the proposed bond is that he will become Meriaduc's "liege man...serve him for two or three years / with a hundred knights or more"³⁶. Meriaduc's refusal breaks with chivalric code and disrupts the societal foundation of homosocial bonds. His earlier request that Guigemar come to his aid shows that he is at least partially dependent upon Guigemar. Thus, in order to preserve this bond and his own self-interest, he should reciprocate by honoring Guigemar's request to "restore"³⁷ the lady to him. Meriaduc's refusal stems from a lack of humility, as the root of humility is a recognition of one's dependence upon others, and it is a dangerous breach of the chivalric code which preserves social stability. In response to Meriaduc's betrayal, Guigemar "destroyed and captured the castle / and killed the lord within"³⁸. Guigemar not only kills Meriaduc, he eradicates his ties to nobility and power by capturing his castle, which is fitting since the chivalric system that Meriaduc has violated is there to preserve the nobility's high status. Guigemar is now so entrenched in chivalric code that he violently enforces it.

Some critics have argued that Guigemar's violent ending reflects anxieties about social stability. Joan Brumlick, for example, argues that Guigemar expresses concerns about feudal crisis caused by unfulfilled marital responsibilities. A key function of heterosexual marriages was to create heirs to carry on dynastic lines. Guigemar, though entangled in a heterosexual relationship, shows no intentions to marry. One common ending for romances is marriage, but Marie de France makes no mention of it at all. Brumlick writes that Guigemar's "excessive display of violence towards not only Meriaduc, but also many innocent people" represents the societal destruction that his refusal to marriage threatens³⁹. While this nuanced interpretation raises interesting questions about medieval societal anxieties, the heterosexual relationship between Guigemar and the lady has faded to the background by this point in the lai. Returning once again to Sedgwick's writing on male homosociality, women and homosexual relationships primarily function to promote bonds between men. Guigemar is forced into a heterosexual relationship not because of the inherent value of heterosexual relationships but because it will foster homosocial bonds. Early in the story, when Guigemar is still learning how to be humble, he and the lady are described on equal terms—they must both suffer equally for their love. Once Guigemar has learned to be humble, however, and the two lovers return to larger medieval society, the lady is no longer an equal but an object that facilitates interaction between Meriaduc and Guigemar. It is true that the unanswered question of Guigemar and the lady's relationship lingers at the end of the story, but it

is secondary to Guigemar's participation in and enforcement of chivalric norms in service of male homosociality.

Bisclavret, in contrast to the violence of Guigemar, depicts the stability and prosperity that male homosocial bonds maintained by humility create. Marie de France presents this philosophy in Guigemar: "[o]ne who can find someone loyal / should serve and love that person well / and be at his command"⁴⁰. While these lines are in the context of heterosexual love, the language is ambiguously gendered and emphasizes service. In this ideal relationship, one is explicitly masculine, as it is "his command," but the other party, the subject of the sentence, is not gendered, making it applicable to any reader. Another moment of openness is the reference to the masculine party as "that person." Again, while framed by heterosexuality, the masculine party is not specified as a lover or husband, indicating that this advice holds true to any relationship, including homosocial bonds. The words "serve" and "loyalty" emphasize stability through pledges and the fulfillment of needs, all of which are exemplified by Bisclavret and his king. In return for Bisclavret's show of humility, the king orders everyone to treat Bisclavret well even when he believes him to be a beast. When Bisclavret has transformed back into a man, found asleep "[o]n the king's own bed"⁴¹, the king then "returned all his land to him; / he gave him more than I can say"⁴². Both quotations have connections to marital traditions. Beds are commonly associated with sex and romance, and the bed in Bisclavret draws upon these connotations, suggesting intimacy between the Bisclavret and the king. Bequeathing lands falls within a king's conventional host of powers, but another prominent way in which lands are exchanged is through marriage. The relationship between Bisclavret and the king can, of course, be read as more homosexual than homosocial, but however one interprets it, the bond between men has rectified the betrayal done unto Bisclavret by his wife. Homosocial bonds, first initiated through Bisclavret's humility, are a source of stability and prosperity.

The social dynamics in Guigemar and Bisclavret shed light on the balancing act of increasing and maintaining control in medieval Europe. Chivalric masculinity is key to this balance as it must achieve two contradictory aims—foster capable knights who strengthen their lord through military victories and prevent those same knights from gaining enough power to rebel. The cruel treatment of Guigemar indicates exactly how much of a threat independent knights posed. While knights certainly held higher status and privileges than the peasant women whose respect and dignity were blatantly ignored by chivalric codes, those codes were not intended to serve them either. Conventions and obligations, whether homosocial, heterosexual, or otherwise, serve only those at the very pinnacle of the social hierarchy. While the aspects of chivalry have changed greatly, the ways in which people use and define chivalry to suit their intentions remains the same.

THE CASE FOR MEDIEVAL STUDIES: HOW REDUCTIONISM AND REVISIONISM AFFECT US TODAY

The medieval period continues to have an enduring grasp on our cultural consciousness as the reductionism that shapes our view of the Middle Ages in turn shapes our conceptions of love, masculinity, and gender dynamics. The 1987 Marine Corps recruitment commercial "Knight", the recent series of

³⁴ Waters, "Guigemar," ll. 750-751.

³⁵ Ibid., l. 842.

³⁶ Ibid., ll. 843-845.

³⁷ Ibid., l. 842.

³⁸ Ibid., ll. 879-880.

³⁹ Joan Brumlick, "Thematic Irony in Marie de France's *Guigemar*," *French Forum* 13, no. 1 (1988): 12.

⁴⁰ Waters, "Guigemar," ll. 493-495.

⁴¹ Waters, "Bisclavret," l. 298.

⁴² Ibid., ll. 303-304.

"Dilly Dilly" Bud Light commercials, and the popular Game of Thrones television series show that any party can use medieval symbolism to sell their audiences something, whether it be the idea that serving in the Marines is a noble pursuit, a six pack of beer, or the box set of a TV show. While these examples may seem innocuous, groups have also embraced medieval symbolism, or medievalism, to sell something much more pernicious. The most prevalent medieval concept in our culture today is arguably chivalry, which we now primarily associate with the supposed respect and protection of women. A key voice in the discourse surrounding modern medievalism and, in particular, chivalry is medievalist Amy Kaufman. Chivalry has been used to justify a range of actions from a North Carolina charter school's dress code that required girls to wear skirts in order to "preserve chivalry and respect among young men and women"⁴³ to the Ku Klux Klan's framing of hate crimes as a crusade to protect white women from "dangerous black men"⁴⁴. Not only did medieval chivalry seek to protect just a small subsection of women and only under a specific set of circumstances, it was also often unconcerned with the well-being of women. Modern invocations of chivalry typically either strip women of agency, as Richard Utz points out in his piece in response to former White House Chief of Staff John Kelly's comments on the sacredness of women⁴⁵, or they use concern for women to legitimize an otherwise unrelated venture.

The Middle Ages are more dynamic, more diverse, and, even, longer than we know imagine them to be. Searching for a singular notion of how concepts such as chivalry were defined and enacted is impossible, but the study of medieval texts, such as Marie de France's *lais*, does give readers a better understanding of the variety of ways that concepts like chivalry did function throughout the Middle Ages. Moreover, such study reveals exploitations of medieval symbolism for what they are and facilitates further analysis of our own modern values.

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NATURAL SCIENCES

A close-up photograph of a squirrel with reddish-brown fur perched on a tree branch, holding and eating a dark nut. The background is a soft-focus view of green leaves and brown branches.

natural sciences

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*Breeding Latitude and
Annual Cycle Timing in a
Songbird | Susan M. Reed*

Breeding Latitude and Annual Cycle Timing in a Songbird

Susan M. Reed

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ABSTRACT

In spring, songbirds undergo physiological changes such as migratory fattening and gonadal recrudescence in response to increasing day length. Past research suggests that the day length required to initiate physiological changes, known as the photoperiodic threshold, can vary by breeding latitude. In this study, we explored whether migrants breeding at higher latitudes require longer days in spring before physiological changes occur (i.e., whether breeding latitude of origin predicts photoperiodic threshold). We caught and housed male migrant and resident dark-eyed juncos (*Junco hyemalis*) in an indoor aviary. Photoperiod was increased incrementally from nine to sixteen hours over fourteen weeks. During each photocycle, morphological measurements of mass, subcutaneous body fat, and cloacal protuberance were measured as indicators of migratory and reproductive condition. Stable isotope signatures of hydrogen were used to estimate breeding latitude as an index of migratory distance. Our results show that migrants and residents differed in physiological changes, as migrants accumulated more subcutaneous fat, increased body mass, and displayed a significant delay in gonadal recrudescence relative to residents. Additionally, individuals breeding at higher latitudes deposited fat at a faster rate than individuals breeding at lower latitudes. These results supported our hypothesis that migratory strategy and breeding latitude may predict differences in photoperiodic threshold for both migratory and reproductive timing. Our findings contribute to the understanding of regulation of timing in annual cycles and improve predictions of how species might respond to changing environments.

KEYWORDS: *migration, reproduction, annual cycle timing, reproduction physiology, climate change, phenology, migration physiology, photoperiod, photoperiodic threshold*

INTRODUCTION AND BACKGROUND

Many animals exhibit a consistent annual cycle of changes in physiology and activity, referred to as seasonality (Chemineu, Malpoux, Brillard, & Fostier, 2007). Timing of reproduction is synchronized with the phenology of the surrounding environment to ensure optimal exploitation of natural resource pulses. Seasonally breeding animals that undergo an annual gonadal recrudescence and regression use both a primary predictive cue and supplementary cues to initiate and regulate timing of reproductive development. The change in day length, or photoperiod, is the initial predictive cue for many animals, as it initiates and regulates the reproductive cycle (Bronson & Heideman, 1994). Supplementary cues, such as temperature, food availability, and precipitation, can fine-tune the cycle's progress (Bronson & Heideman, 1994).

Many birds have a unique annual cycle because it not only includes a reproductive and non-reproductive state, but also a period of migration and molt, which are all energetically expensive chapters of the annual cycle. Because each of the chapters is so energy-intensive, timing of energy expenditure is crucial. Birds, like many other animals, use change in photoperiod as the initial predictive cue in the regulation of an optimally timed annual cycle (Dawson, 2001; Rowan, 1926). Birds change in sensitivity to photoperiod throughout the annual cycle, with periods of photosensitivity, photostimulation, and photorefractoriness (Kumar et al., 2010). Photosensitivity refers to responsiveness to changes in day length, while photorefractoriness refers to unresponsiveness to changes in day length. A critical day length initiates the photostimulated phase, when physiological changes, such as migratory fattening and gonadal recrudescence, are induced (Kumar et al., 2010). This critical day length is known as the photoperiodic threshold, which differs among species and even among populations of the same species (Robinson & Follett, 1982). The photoperiodic threshold is a valuable measure because it indicates the shift to a new chapter of the annual cycle (i.e., migration, reproduction, molt). In some species, individuals or populations do not migrate, allowing for more flexibility in the timing of reproduction. Therefore, reproduction is not constrained by the necessity to migrate in non-migratory, or resident, populations (Chemineu et al., 2007).

During reproduction in birds, a critical change in photoperiod activates the hypothalamic-pituitary-gonadal (HPG) axis, or endocrine reproductive axis (Dawson, 2001). This axis regulates the growth of gonads, which produce testosterone and sperm in males. The cloacal protuberance (CP) is the primary sperm storage structure for male birds that grows with the swelling of vas deferens tubules. Cloacal protuberance size is a reliable index of reproductive condition (Wolfson, 1952), and its volume can be easily calculated with the formula for volume of a cylinder with measurements of CP height and width.

Cues that drive the timing of reproduction (i.e., photoperiod) and act on the HPG axis also influence migratory timing (Ramenofsky, Cornelius, & Helm, 2012). Whereas CP is a reliable indicator of reproductive timing, fat deposition is a reliable indicator of migratory timing (Clark, 1979). Subcutaneous body fat varies seasonally throughout the annual cycle of migratory birds, in which fat deposition occurs prior to migration and wanes at the initiation of the breeding season (Clark, 1979). Prior to migration, birds experience temporary hyperphagia, leading to a notable increase in body mass and fat deposition. Fat is the primary energy source for migration; therefore, subcutaneous body fat is a good measure of timing of migration (Jenni & Jenni-Eiermann, 1998).

Previous studies have investigated the significance of non-photoperiodic supplementary cues, such as temperature (Perfito, Meddle, Tramontin, Sharp, & Wingfield, 2005; Wingfield, 1985), food availability (Hau, Wikelski, & Wingfield, 2000; Kumar, Singh, Misra, & Malik, 2001), social interaction (Dawson & Sharp, 2007), and the endogenous circannual rhythm (Gwinner, 2003; Wingfield, 1993). Until recently, implications of migratory strategy on annual cycle progress did not receive much attention (Fudickar, Grieves, Atwell, Stricker, & Ketterson, 2016; Ramenofsky, Campion, Pérez, Krause, & Németh, 2017), and there is still much to be explored in this area. Even less is known about how breeding latitude interacts with the timing of the annual cycle (Silverin, Massa, Stokkan, 1993), especially in consideration of seasonally sympatric populations.

Some populations receive the same photoperiodic and supplementary cues but differ in migratory strategy and migratory distance. Investigating these populations provides a terrific

opportunity to better understand the timing of reproductive phenology. In some special cases, populations that differ in migratory strategy (i.e., migrants and residents), overlap during part of the year in a distribution called seasonal sympatry (Winker, 2010). In dark-eyed juncos, migrants overwinter in sympatry with residents before departing on spring migration. These migrants breed in the boreal forest of Canada and extreme northern U.S. with a fairly extensive latitudinal breeding range. Migrants can also differ greatly in their breeding latitude, even when found at the same wintering site. Therefore, this provides an opportunity to determine how photoperiodic thresholds vary among individuals that differ in migratory strategy and migratory distance (n.b. migratory distance was measured as breeding latitude), as all individuals receive the same photoperiodic cues prior to migration. We hypothesized that migratory strategy and breeding latitude would predict differences in photoperiodic threshold for timing of migration and reproduction.

To address this hypothesis, we studied the dark-eyed junco (*Junco hyemalis*), a common north-temperate songbird that exhibits seasonal sympatry. Populations of migrants and residents are found in sympatry in Virginia during the overwintering season (i.e., October to April) prior to spring migration. Although migrants and residents share similar conditions throughout the nonbreeding season, behavioral and physiological differences between the populations can be observed by early spring. During spring, residents initiate breeding by defending breeding territories and growing CPs, while migrants prepare instead for migration by increasing fat (Nolan Jr. et al., 2002).

In this study, we asked how both migratory strategy and breeding latitude interact with migratory and reproductive phenology in migratory and resident populations of dark-eyed juncos. We quantified differences in cycles by measuring physiological traits associated with migration and reproduction as birds undergo an increasing photoperiodic treatment from short days of 9L (nine hours of light) to long days of 16L. Measurements included a subcutaneous body fat score, body mass, and cloacal protuberance size. We distinguished breeding latitude using stable isotopes of hydrogen in wing feathers. Stable isotopes H-1 (protium) and H-2 (deuterium) are variants of the hydrogen molecule whose ratios can be measured by mass spectrometry for isotopic ratios. These molecular variants are found in water, with isotopic signatures that vary predictably by latitude. Birds incorporate stable isotopes into their feather keratin in ratios specific to a location by ingestion of local organic resources. We predicted that individuals with higher breeding latitude would deposit more pre-migratory body fat and exhibit later onset of gonadal recrudescence than both residents and individuals migrating to lower latitudes. Differential responses to the initial predictive cue have potential to cause asynchrony in breeding phenology among populations, which would reinforce population divergence. We will be better able to predict and prepare for the effects of environmental change, including climate change, on populations with a greater understanding of annual cycle timing physiology.

MATERIALS AND METHODS

Study Species

Dark-eyed juncos (*Junco hyemalis*) are common songbirds that breed in temperate coniferous and mixed forests across Canada, Alaska, and high altitude regions of the eastern and western United States. In most recent phylogeny, there are approximately five distinct groups of *Junco hyemalis*, of which the slate-colored dark-eyed junco includes a migratory subspecies (*Junco hyemalis hyemalis*), hereafter ‘migrants’ or ‘migratory population’, and a non-migratory

subspecies (*Junco hyemalis carolinensis*), hereafter ‘residents’ or ‘sedentary population’ (Nolan Jr. et al., 2002).

Migratory populations breed north in Alaska and Canada and migrate south in the fall to overwintering grounds in the eastern United States, including the Appalachian Mountains. A resident population breeds in the Appalachian Mountains, remaining at the breeding grounds year-round. During the nonbreeding season, there is extensive overlap between migrants and residents, establishing a seasonally sympatric distribution of the populations. Seasonal sympatry occurs when populations live and interact in the same geographic location on a seasonal basis. Both migratory and resident populations are found within the same habitat, as they can be found foraging in mixed flocks in the winter (Nolan Jr. et al., 2002).

Bird Capture and Housing

Male juncos (15 resident and 49 migrant) were captured between November 10 and December 14, 2017. Residents and migrants were caught at Mountain Lake Biological Station in Giles County, VA (MLBS; 37°22' N, 80°32' W) and the surrounding Jefferson National Forest using regularly baited and continually monitored mist nets and walk-in Potter traps. Note that ‘resident’ does not imply birds that were resident at the common garden study site in Bloomington, IN. Additional migrants were captured near Bloomington, IN in rural areas and on Indiana University Research and Teaching Preserve sites.

At locations of seasonal sympatry in Virginia, we distinguished migrant and resident individuals based on bill coloration and other morphological indicators. Residents had a characteristic blue-gray bill color, whereas migrants had a pink bill color (**Image 1**) (Hamel, 1979). We confirmed classification using stable isotopes in feathers.

Only males were used in this experiment because females did not exhibit reliable, easily measured indicators of reproductive condition. Birds were sexed at capture using right wing chord length and plumage differences. Males were determined by a wing length of 80 mm or more, while individuals that did not meet this cutoff were released. Males typically had darker hood plumage coloration than did females, and this characteristic helped confirm our sex designations (Pyle, 1997).

Indiana-captured migrants and Virginia-captured migrants and residents were transported by car to Kent Farm Research and Teaching Preserve in Bloomington, IN and housed in an outdoor aviary under the same conditions until December 14, 2017. On December 15, 2017, all individuals were moved to climate-controlled (16 °C) free flight indoor aviary rooms (6.4 x 3.2 m and 5.7 x 5.5 m),



Image 1.

Blue-gray bill coloration in a resident (*J. h. carolinensis*, pictured left) and pink bill coloration in a migrant (*J. h. hyemalis*; pictured right).

where they experienced nine hours of artificial light for one month prior to sampling. On January 18, 2018, all birds were moved to individual cages (61 x 46 x 46 cm and 46 x 46 x 46 cm) that were organized across three rooms for the duration of the experiment (ten weeks). Migrant and resident groups were randomly assigned to the three rooms. The multi-room design allowed for a feasible sampling schedule.

Birds were provided with fresh food and water three days per week (M, W, F) for *ad libitum* consumption. Food and water were provided in elevated plastic containers and checked daily. Birds were fed a 2:1 mixture of white millet and sunflower chips, orange slices, and a soft diet of ground puppy chow, hard-boiled eggs, and carrots. Fresh water was mixed with powdered *Nekton-S Multivitamin for Birds*. On April 26, 2018, all birds were returned to free-flying condition in an indoor aviary to be held for future studies.

Experimental Design

In order to determine differences in physiological and morphological responses to photoperiodic cues by residents and migrants, we artificially regulated changes in day length. We refrained from incorporating a simulation of civil twilight, as birds might include twilight as a photoperiodic signal (Dawson, 2015). Photoperiod was increased every twelve days from January 18, 2018 to May 6, 2018 in the following schedule: 9 Hours Light (L):15 Hours Dark (D), 10L:14D, 11L:13D, 11½L:12½D, 11¾L:12¼D, 12L:12D, 12½L:11½D, 12¾L:11¼D, 13L:11D, 15L:9D, 16L:8D. The focus on photoperiods surrounding the spring equinox at 12L was designed to provide better resolution of the potential photoperiodic threshold for migration, as most migrants migrate northward during this time period. We will refer to each photoperiod schedule as the number of hours of light. We completed sampling of morphological measurements after a seven-day light entrainment period following each photoperiodic change.

Morphological Measurements

Experimental parameters included morphological measurements of subcutaneous fat, body mass, and cloacal protuberance volume. These parameters were measured for all individuals every twelve days.



Image 2. (Left) Fat score 1: trace lining of fat within furcular cavity. (Right) Fat score 5: fat bulging from both furcular cavity and abdomen.

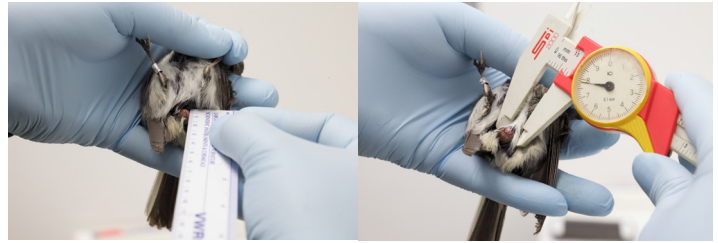


Image 3. (Left) Measurement of CP height using ruler. (Right) Measurement of CP width using calipers.

Subcutaneous body fat—hereafter 'fat score' or 'fat deposition'—was visually measured on a scale from 0-5: (0) no fat, (1) trace lining of fat in either furcular cavity or abdomen (**Image 2L**), (2) trace lining in both furculum and abdomen/full lining in either furculum or abdomen, (3) full lining in both furculum and abdomen, (4) bulging in either furculum or abdomen, or (5) bulging in both furculum and abdomen (**Image 2R**).

Body mass was measured using a sheer sock and Pesola spring scale (0-50 g) tared to zero. Body mass was rounded to the nearest half-gram.

CP height was measured using a ruler (**Image 3L**), while width was measured using calipers (**Image 3R**). Different measuring tools were used to ensure that measurements were made with the instrument flush against the CP structure. A CP volume estimate was calculated using the formula for the volume of a cylinder: $V = \pi \cdot r^2 \cdot h$. CP volume will hereafter be referred to as 'CP size'.

Feather Stable Hydrogen Isotopes

The most distal secondary feather of the right wing was collected from each individual at the time of capture for analysis of hydrogen stable isotope ratios ($\delta^2\text{H}$). Feather samples were stored in individual coin envelopes. After feathers were collected, oils and particulates were removed using a 2:1 chloroform-methanol mixture. Feathers were air-dried under a fume hood.

The distal end of each feather was cut, weighed to 0.5 mg, and placed into a 3 x 5-mm silver capsule. Capsules were plated and mailed to the US Geological Survey Stable Isotope Lab in Denver, CO. Hydrogen isotope ratios were measured using established methods of mass spectrometry (Fudickar et al., 2016; Wundner, Jehl, & Stricker, 2012). The $\delta^2\text{H}$ ratios were reported in parts per mil notation (‰) with respect to Vienna Standard Mean Oceanic Water (VSMOW) using internal water standards.

Statistical Analysis

To quantify the effects of population, photoperiod, and the interaction between population and photoperiod on recurring measures of subcutaneous fat score, body mass, and CP volume, we used two-way ANOVA tests (alpha level set at 0.05). To analyze significance of both inter- and intra-population variation of morphological measurements, we performed two-way ANOVA Bonferroni post-hoc multiple comparison tests. To test if mean differences in CP volume or fat score were associated with breeding latitude, we examined potential relationships between morphological measurements and hydrogen isotope values using Pearson correlation and linear regression. Differences in mean hydrogen isotope ratios between migrants and residents were determined using a one-sample t-test of population means. We performed all statistical analyses using Prism GraphPad. All reported p-values are two-tailed. All reported tests are two-way ANOVA unless otherwise annotated.

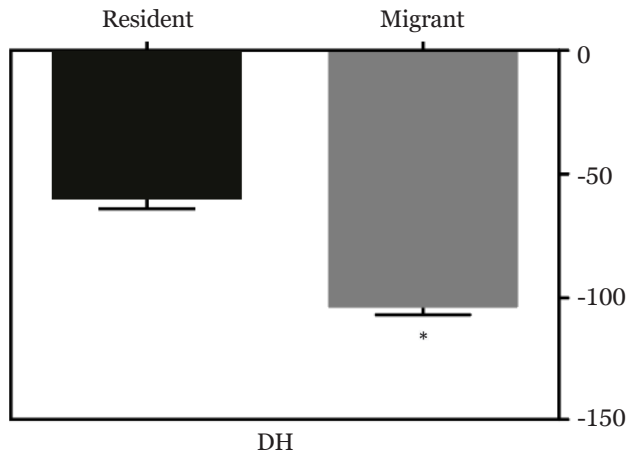


Figure 1.

Migrant feathers have a significantly lower $\delta^2\text{H}$ ratio than resident feathers ($F_{48,14} = 1.292$, $P < 0.0001$; t -test). Data are expressed as mean \pm SEM. * $p < 0.05$ vs. resident, t -test.

RESULTS

Stable Hydrogen Isotopes

Mean hydrogen isotope values ($\delta^2\text{H}$) were significantly lower in migrants than in residents ($F_{48,14} = 1.292$, $P < 0.0001$; t -test; migrant mean = -104.9‰ ; resident mean = -58.8‰ ; **Figure 1**). Migrant $\delta^2\text{H}$ values also covered a larger range than did those of residents ($\delta^2\text{H}$ migrant range: -33‰ to -141‰ , $\text{SEM}=2.9$; $\delta^2\text{H}$ resident range: -37‰ to -109‰ , $\text{SEM}=4.6$).

Fat Score

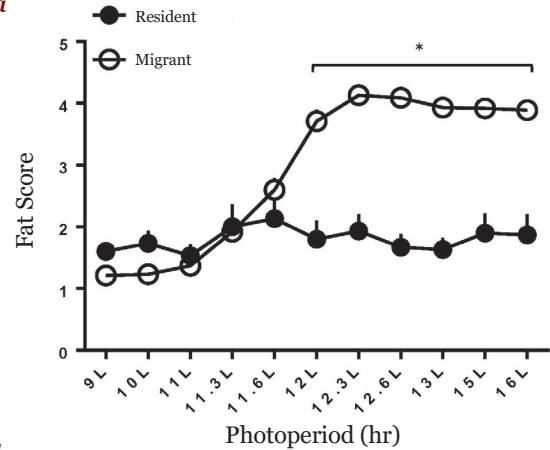
Migrants had significantly greater fat scores than residents and exhibited fat scores that increased significantly within the time frame of the experiment, whereas residents had fat scores that remained fairly constant throughout the study (**Figure 2a**). The interaction between population and photoperiod had a statistically significant effect on fat scores ($F_{10,653} = 15.30$, $P < 0.001$), as did the main effects of population and photoperiod ($F_{1,653} = 138.4$, $P < 0.001$; $F_{10,653} = 17.61$, $P < 0.001$). Fat scores in migrants were significantly higher at 12L than at 11.7L ($t_{653} = 5.143$, $\text{SE}=0.2147$; two-way ANOVA Bonferroni multiple comparisons).

There was also a significant relationship between breeding latitude and fat score among the migrant population at photoperiods of or exceeding 12L (**Table 1**; **Figures 3b-c**), which is the photoperiod at which fat deposition increased significantly among migrants (**Figure 2a**). However, there were no significant correlations between breeding latitude and fat scores among migrants at all photoperiods less than 12L (**Table 1**; **Figure 3a**).

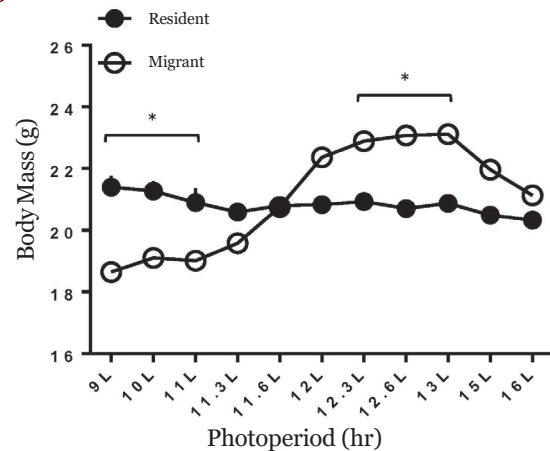
Body Mass

At the start of the experiment, residents had a significantly higher mean body mass than did migrants ($t_{653} = 5.461$, $\text{SE}=0.5043$; two-way ANOVA Bonferroni multiple comparison test). Body mass of residents did not notably change throughout the experiment, while that of migrants significantly increased after 11.7L, and remained significantly higher through 13L (12L: $t_{653} = 4.640$, $\text{SE}=0.3480$; 12.3-13L: $t_{653} = 4.677$, $\text{SE}=0.5069$; two-way ANOVA Bonferroni multiple comparisons; **Figure 2b**). The interaction effect of photoperiod and population on body mass was statistically significant ($F_{10,654} = 14.06$, $P < 0.001$), as was the main effect of

2a



2b



2c

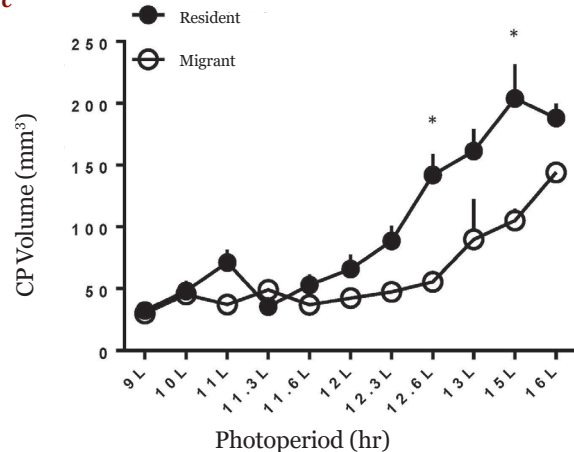


Figure 2a-c.

Figure 2a: Fat scores of migrants increased throughout the experiment, while those of residents did not. **Figure 2b:** Body mass fluctuated over time in migrants, while it remained fairly consistent in residents. Migrants started with a lower mean mass than residents and ended with a higher mean mass. **Figure 2c:** CP growth rate differed between migrants and residents, with residents having a faster rate. For all figures, data are expressed as mean \pm SEM. * $p < 0.05$ vs. resident, two-way ANOVA followed by Bonferroni post hoc.

photoperiod ($F_{10,654} = 10.38$, $P < 0.001$). There was not a statistically significant relationship between population and body mass ($F_{1,654} = 2.216$, $P = 0.1371$). Migrants started with a lower mean mass than residents and ended with a higher mean mass.

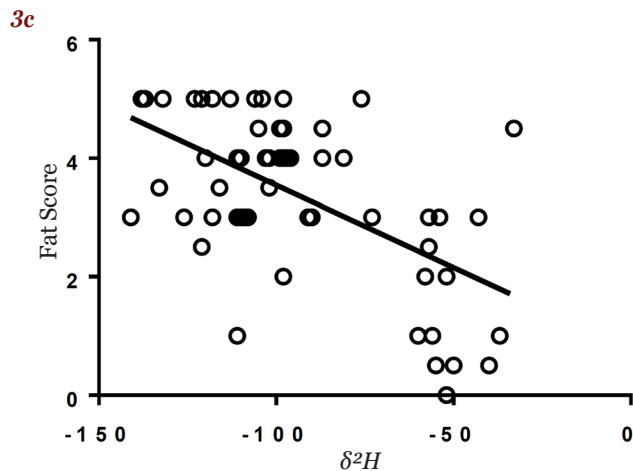
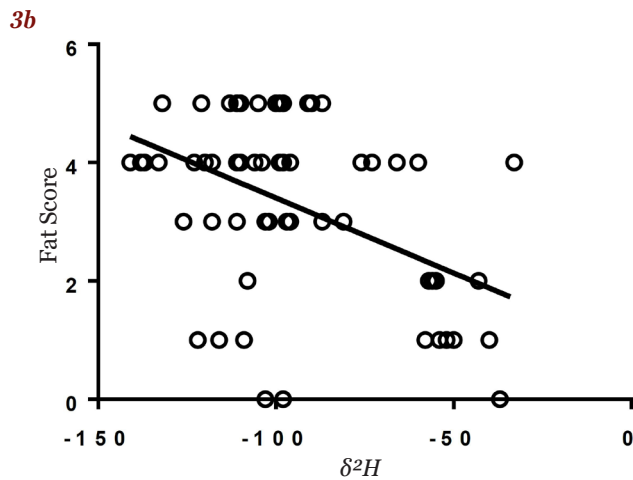
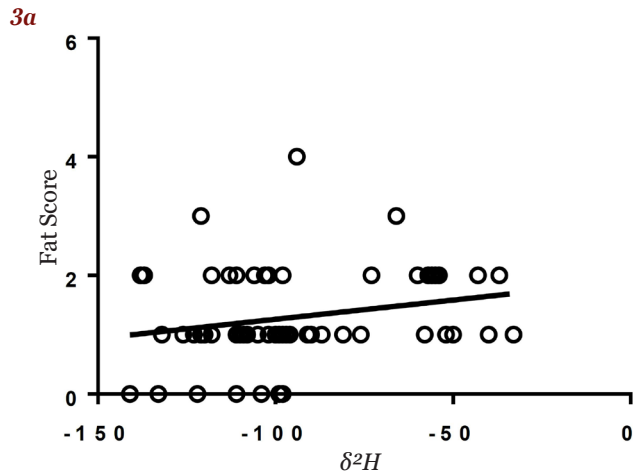


Figure 3a-c. δ^2H and fat score in migrants experiencing different photoperiods: (a) start of experiment at 9L, $r^2=0.054$, $P=0.066$; (b) middle of experiment at 12L, $r^2=0.221$, $P=0.001$; and (c) end of experiment at 16L, $r^2=0.331$, $P<0.001$. A significant relationship was found between δ^2H and fat score from 12L through 16L.

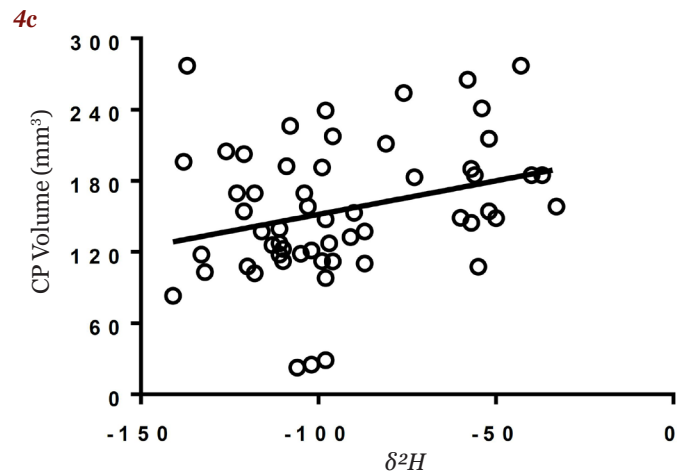
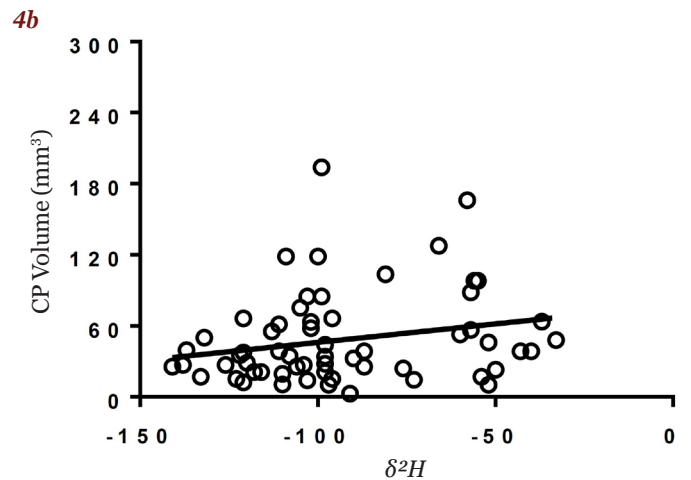
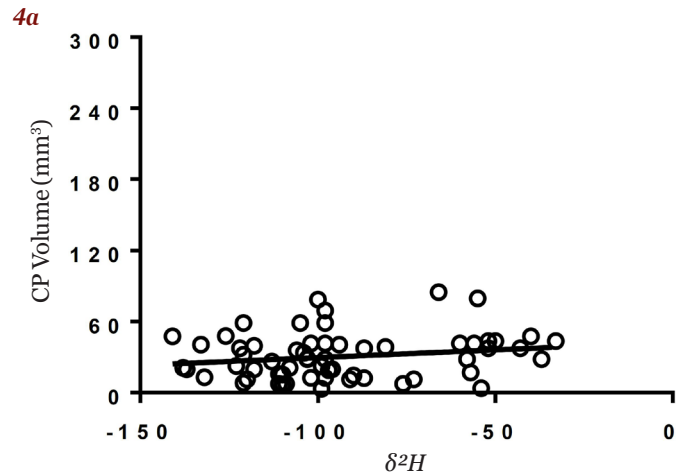


Figure 4a-c. δ^2H and CP volume/size in migrants experiencing different photoperiods: (a) start of experiment at 9L, $r^2=0.027$, $P=0.267$; (b) middle of experiment at 12L, $r^2=0.047$, $P=0.139$; and (c) end of experiment at 16L, $r^2=0.005$, $P=0.655$. No significant relationship was found between δ^2H and CP size.

Table 1.

Relationship between $\delta^2\text{H}$ (i.e., breeding latitude) and fat score at each of the eleven photoperiods in migrants

Photoperiod	P-value	r ²
9L	0.066	0.054
10L	0.065	0.055
11L	0.277	0.020
11.3L	0.851	0.001
11.7L	0.450	0.009
12L	0.001***	0.221
12.3L	<0.001****	0.303
12.7L	<0.001****	0.393
13L	<0.001****	0.387
15L	<0.001****	0.326
16L	<0.001****	0.331

Table 2.

Relationship between $\delta^2\text{H}$ (i.e., breeding latitude) and CP size at each of the eleven photoperiods in migrants

Photoperiod	P-value	r ²
9L	0.0267	0.027
10L	0.141	0.046
11L	0.018*	0.115
11.3L	0.955	0.000
11.7L	0.169	0.041
12L	0.139	0.047
12.3L	0.001**	0.200
12.7L	0.457	0.013
13L	0.107	0.061
15L	0.501	0.011
16L	0.655	0.005

Cloacal Protuberance Size

Both migrant and resident CP size increased throughout the experiment, with CP size growing faster among residents (**Figure 2c**). There was a significant interaction effect of population and photoperiod on CP size ($F_{10, 653} = 3.030$, $P < 0.0009$), and the main effects of population and photoperiod were also significant ($F_{1, 653} = 35.24$, $P < 0.001$; $F_{10, 653} = 21.22$, $P < 0.001$).

No consistent relationship was found between breeding latitude ($\delta^2\text{H}$) and CP size among the migrants (**Figures 4a-c**). Of the eleven photoperiods, CP size varied significantly with breeding latitude in only two (**Table 2**).

DISCUSSION

Our results showed that migrants and residents differed in physiological changes as a function of photoperiod, as migrants accumulated more subcutaneous fat, increased body mass, and displayed a significant delay in gonadal recrudescence relative to residents. Additionally, individuals breeding at higher latitudes deposited fat at a faster rate than did individuals breeding at lower latitudes, as there was a positive relationship between fat scores and $\delta^2\text{H}$ beginning at 12L. These results supported our

hypothesis that migratory strategy and breeding latitude may each predict differences in photoperiodic threshold for both migratory and reproductive timing. However, breeding latitude did not predict CP size as expected, which opposed our hypothesis that breeding latitude affects the photoperiodic threshold for gonadal recrudescence. Although our results indicated that breeding latitude is not associated with reproductive phenology (i.e., CP size), we instead found a strong relationship between breeding latitude and migratory phenology (i.e., fat deposition).

Hydrogen

As expected, mean hydrogen isotope values were significantly lower in migrants than in residents, reflecting the fact that migrants molt and grow feathers on their breeding grounds (i.e., at higher latitudes than residents) (Hobson & Wassenaar, 1996). The range of migrant $\delta^2\text{H}$ values was larger than that of residents, indicating that migrants breed over a broader latitudinal band (Wundner et al., 2012).

Body Fat Deposition and Migratory Phenology

We used fat score as an indicator of migratory phenology, as fat deposition occurs prior to migration and wanes at the onset of the breeding season (Clark, 1979). Migrants accumulated more body fat than did residents during the experiment. Both groups were exposed to the same photoperiodic treatment and were provided with food *ad lib*. Therefore, individuals were likely allocating energy differently and responding differently to photoperiodic cues based on migratory strategy. Migrants did not experience significant changes in consecutive fat scores except at 12L—a point that we considered the migrant photoperiodic threshold for induction of changes associated with migration (i.e., fat deposition). At this point, migrants experienced pre-migratory hyperphagia, resulting in a dramatic increase in fat deposition (Odum, 1960). The results agreed with our predictions that migrants would gain more body fat in preparation for an energy-intensive spring migration, while residents would not undergo fat deposition since they do not migrate. Therefore, we found migratory strategy to be a reliable predictor of photoperiodic threshold for phenological changes associated with migration.

In order to determine a greater resolution of differences in photoperiodic threshold among migrants, we investigated the relationship between body fat accumulation and breeding latitude. We found that $\delta^2\text{H}$ ratios and fat scores significantly covaried after 12L (**Table 1**), suggesting that individuals breeding at higher latitudes accrued body fat at a faster rate than did residents and individuals breeding at lower latitudes. Migration is energy-intensive, and fat is utilized as the primary energy source during migration (Jenni & Jenni-Eiermann, 1998; Odum, Connell, & Stoddard, 1961). Individuals traveling to higher breeding latitudes migrate greater distances; therefore, they likely prepare for migration earlier and utilize more fat energy in the process.

Fat scores and $\delta^2\text{H}$ did not significantly covary prior to 12L (**Table 2**). Migrants might not need to gain as much fat until reaching a photoperiod closer to their time of departure. Variation among fat scores was higher in the second half of the experiment (average SEM: 9L to 11.7L=0.11; 12L to 16L=0.16). Migrants likely did not increase their rate of fat deposition until they reached a critical day length that is longer than the winter day lengths of the first half of the experiment (i.e., closer to the vernal equinox). We concluded that both migratory strategy and breeding latitude were predictors of photoperiodic threshold for physiological changes associated with migratory phenology.

Mean Body Mass

Despite exposure to the same environmental conditions, migrants had lower mean body mass than did residents at the start of the experiment (9L) and had a higher mean body mass at the end of the experiment (16L). Body mass significantly increased among migrants at 12L. This change in body mass was linked to the photoperiod in which migrants also exhibited significantly higher fat scores, further confirming the prospective photoperiodic threshold for physiological changes associated with migratory timing. In contrast, residents did not change their average body mass throughout the experiment. These results supported the prediction that migrants would exhibit an increase in body mass and body fat deposition in preparation for migration, while residents would not increase mass because they do not accumulate pre-migratory fat.

We expected body mass to covary with subcutaneous fat deposition; however, this was not the case. The differences between body mass and fat deposition might be explained by the lack of body condition analysis. Body mass and condition together likely provide a stronger, more cohesive complement to body fat scores.

Cloacal Protuberance Size and Reproductive Phenology

Both migrant and resident CP size increased throughout the experiment, with residents exhibiting faster CP growth. This supported our prediction that CP growth rate would be slower in migrants; migration is energetically demanding and therefore constrains reproductive timing (Ramenofsky et al., 2012). Although both populations grew CPs steadily, there were no statistically significant increases in CP growth between consecutive increases in photoperiod among migrants or residents. Therefore, the photoperiodic threshold for induction of CP growth remained unclear.

We investigated the relationship between CP size and breeding latitude to test breeding latitude as a predictor of reproductive timing. CP size did not consistently covary with δ^2H . Since CP size is highly correlated with testis size (Fudickar et al., 2016), it was a strong indicator of reproductive condition. We deduced that breeding latitude was not a strong predictor of a photoperiodic threshold for reproductive phenology. These results differ from those of a previous common garden study on migrant and resident dark-eyed juncos (Fudickar et al., 2016). In this study, testis mass was found to significantly covary with δ^2H at approximately 12.7L (Ramenofsky et al., 2012). However, at a similar photoperiod, we found that CP size did not covary with δ^2H . Fudickar et al. (2016) collected testis samples on March 31 and April 1 at approximately 12.7L, while we completed 12.7L sampling on April 13; therefore, endogenous annual cycle clocks did not differ enough to suggest that we would have had such different findings. Differences in findings might be explained by inconsistency in migratory distance in the sample sizes of each study. More research is necessary to determine whether breeding latitude predicts timing of reproductive development in migratory songbirds.

Conclusions

Our results reinforce known differences between strategies of migrant and resident populations. Our results demonstrate a classic energy life-history trade-off between migration and reproduction. As seasonal animals, migrant birds experience three energy-intensive chapters in their annual cycle—migration, reproduction, and molt. These chapters are so energetically expensive that they cannot fully overlap without costs. Carry-over effects, costs of reproduction and migration, and trade-offs are integrated among life-history stages (McGlothlin et al., 2010; Wilson, 2012). The amount of energy

expended during each life history stage of the annual cycle varies greatly within and between species (Williams & Vézina, 2001). In this study, we find that a differential response to the initial predictive cue, photoperiod, resulted in differences in timing of annual cycles between populations. Migration constrained reproduction in the migrant population, as the rate of CP growth was slower in migrants than in residents and residents initiated breeding activity before the majority of the migrants. Residents did not experience the constraint of migration, and their rate of CP growth was significantly faster. The migrant population must undergo physiological changes associated with migration prior to expending energy when entering full reproductive condition. These differences in timing foster divergence between populations, since breeding phenology is not synchronized.

Our results also suggested that breeding latitude can predict migratory phenology but not necessarily reproductive phenology. We found that breeding latitude was a poor predictor of reproductive timing, which is not consistent with past research. This difference in results might be better explained with a more comprehensive understanding of how endogenous cycles affect reproductive timing. Alternatively, inconsistent results might be due to differences in variation of breeding latitude of populations. New technology, such as the use of high-resolution geolocators, will be helpful in future studies in more accurately measuring breeding latitude and migratory distance to determine how these factors affect phenology. Future studies may help explain our contradictory results with an improved experimental design that incorporates greater photoperiodic resolution from 13L to 15L, more precisely identifying the photoperiodic threshold for reproductive timing. Future studies are also urged to examine initial predictive cues and supplementary cues together by focusing on interactions between the non-photoc endogenous circannual rhythm, photoperiod, and breeding latitude. This focus will help us to better understand the dynamics of how endogenous clocks interact with initial predictors in the design of reproductive and migratory phenology.

Many birds are considered indicator species of environmental health, as they are highly sensitive to resource abundance, temperature, precipitation, etc. (Carey, 2009; Németh, Bonier, & MacDougall-Shackleton, 2013). As climate change is experienced, phenological misalignments have arisen that create asynchronies in migration and reproduction alongside gaps between food resource pulses and energy-intensive annual cycle chapters (Cohen, Lajeunesse, & Rohr, 2018; Visser & Both, 2005). Timing of breeding and migration were found to be flexible in some populations but not others in adaptation to changing environments (Visser, Caro, Oers, Schaper, & Helm, 2010). Therefore, it is important to investigate phenology of birds and other sensitive animals because they act as indicator species of not only environmental health but also environmental change. The better we understand the mechanisms and physiology that contribute to annual cycle phenology, the better we are able to predict and prepare for the effects of environmental change on populations. Our findings contribute to the understanding of regulation of timing in annual cycles and improve predictions of how species will respond to changing environments.

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Ethics Statement

This study was in compliance with BIACUC protocol #15-026-19 and conducted under the US Fish and Wildlife migratory bird scientific collection permit MB093279.

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APPLIED SCIENCES



applied sciences

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*Practices and Perspectives on Mental
Health in the Balkan Countries: A
Narrative Review | Maya E. Lee*

Practices and Perspectives on Mental Health in the Balkan Countries: A Narrative Review

Maya E. Lee

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ABSTRACT

Mental health and wellness are integral parts to a person's overall health and happiness, leading to an increased initiative to treat and support people living with mental health problems. A literary review researching the background of mental health treatment and how it intersects with the unique history and current situations within the former Yugoslav Republic nations was conducted. Existing literature about mental healthcare prevalence and practices within the region was analyzed and contextualized with regards to these historical perspectives. Significant gaps in research literature were identified, including economic research that is needed to determine how and from which governing body national healthcare systems should be funded. There is also a need for standardized data collection about where mental health infrastructure exists within the region and how effective its treatments are for patients. Finally, increased research into everyday mental disorders that are unrelated to the recent civil war would create accurate data for treatments and policies to better reflect the needs of the people. Filling these lapses in knowledge would greatly reduce barriers to mental healthcare within the Balkans.

KEYWORDS: *mental health, Balkans, Eastern Europe, healthcare systems*

INTRODUCTION

Mental disorders and diseases impact the lives of those who suffer from them as well as their loved ones across the world. Mental health and wellness practices are of significant importance to regaining and/or maintaining a healthy and happy lifestyle. In this review, the current state of mental healthcare within the Balkan countries is analyzed. This evaluation is contextualized within a history of mental healthcare practices and a history of the Balkans. The methodology consists of an overview of existing research on the state of mental healthcare services in the Balkans, with focus on the post-Communist period. Review of this literature and most recent data leads us to conclude that there exists significant barriers to effective mental healthcare services in the Balkans, but that they are not due to cultural or historical reasons (as has been frequently claimed in the past) but rather financial, governmental, and administrative obstacles that diminish the accessibility and efficacy of mental healthcare, not unlike elsewhere in the world.

HISTORY OF MENTAL HEALTH AND WELLNESS

Training in psychological and/or psychiatric health and treatments are crucial components of healthcare provision. However, this was not always the case. Throughout the last century, both the perceptions and practices of what is now encompassed by the term "mental health" have changed drastically for many reasons. When analyzed from a global viewpoint, this evolution follows a detectable trend from institution-centered treatments to more modern patient-focused care that emphasizes managing symptoms while maintaining a patient's quality of life and independence.

Around the start of the twentieth century, global attitudes to mental illness changed drastically, shifting the perspective of mental ailments away from social deviance or moral shortcomings with religious undertones (Bassuk and Gerson, 1978) and towards the more medical model we know today (i.e., as illnesses that require treatment). Even more recently in the last forty years, many nations have seen a shift from psychosocial to biopsychosocial models of explaining and treating

mental illness (Drake et al., 2003). This new approach aims not only to mitigate the symptoms of a mental disorder, but also to ensure that patients can live autonomously and be contributing members of society.

Alongside these changes in how we understand the causes of mental disorders, we have seen changes in how these symptoms are treated. The institutionalization of the mentally ill grew in popularity and practice, and was thought to provide an avenue to "protect [others in] society" from the mentally unwell (Bassuk and Gerson, 1978, p. 46). However, throughout the twentieth century, nations have seen marked deinstitutionalization in mental health treatments, highlighting the trend to treat patients and their illnesses in the hopes of societal reintegration, not simply sequestering them into institutions. For example, in post-WWII England, this change involved the closing of large insane asylums in the 1960s, as well as its National Health Service acknowledging mental illness as a prominent problem and incorporating mental health treatments into general medical practices (Turner et al., 2015).

At the close of the twentieth century we have seen increased focus on mental health globally, as exemplified by the publication of United Nations guidelines for governments around the world that provided increased rights to people dealing with mental health issues and their families in 1991 (World Health Organization, 2002). Since then, many global health institutions such as the World Health Organization have made mental health a priority by forming the Nationals for Mental Health coalition in 1996, which jumpstarted mental health initiatives across Europe, Africa, and Asia. Likewise, the 1993 report released by the World Bank identified that up to 8% of the "global financial burden of disability and disease" in the world is due to mental health-related issues. Statistics and international efforts such as these have led to increased awareness of mental health problems, encouraging governing bodies (whether nationwide or international) to become more involved in the advancement of mental health treatment and rehabilitation.

This paper seeks to analyze the current state of mental wellness within the Balkans. The presence or lack of research and knowledge concerning the state of healthcare within each country, and any consequential challenges those may have on mental health treatment in that nation, are here evaluated through a historical lens.

HISTORY OF MENTAL HEALTH AND WELLNESS IN THE BALKANS

In order to thoroughly understand the current state of mental healthcare and its practices within this region, we must examine the checkered history of psychology and psychiatry in relation to peripheral spaces in the world, the Balkans in particular. The exoticization of the area, with its roots dating back to the post-Enlightenment era, created a discourse that defined stereotypes surrounding the region and its inhabitants, affecting how psychology and psychiatry interacted with the Balkans and its peoples (Bjelić, 2010). In the 20th century, the Cold War further cemented some of these stereotypes by propagating the Western belief that the research, practice, and treatment of mental health diseases were greatly hindered due to Communist rule (Savelli and Marks, 2015). As this review will show, any research into the region's mental healthcare must take into account this history and beware of reproducing stereotypes.

More recently, the wars of Yugoslav succession have impacted mental health research in Balkan nations dramatically. The post-Communist development of each country has had lasting impact on the state of mental wellness in the region. High incidence of war-related mental trauma and its after-effects have been the major foci of mental health research within the region. But, even more fundamentally, the wars and post-war developments have proven financially and administratively challenging, contributing to the burden of funding necessary treatments or programming (Tomov, 2001).

Balkans as the Exotic Other

The region of southeastern Europe classified as the Balkans has varying boundaries and definitions. More modernly, the term has become associated with the countries which once made up the Yugoslav Republic: Bosnia and Herzegovina, Croatia, Macedonia, Montenegro, Serbia, and Slovenia. This geopolitical definition acquired a negative connotation after the Balkan Wars (both at the beginning and end of the 20th century), eventually giving rise to the term “balkanization,” meaning to break into smaller regions or states that are often hostile or uncooperative with one another (Bjelić, 2010, p. 84). In his article “Mad Country, Mad Psychiatrists: Psychoanalysis and the Balkan Genocide,” Dušan Bjelić (2010) summarizes the historical foundations for the modern state of mental illness within the Balkans, in regard to both psychology and the war of Yugoslav succession during the late 1990s. Bjelić argues that the region has been perceived as distinct from the rest of Europe for reasons dating back to the post-Enlightenment era. After the onset of this new way of thinking (which originated in Western Europe) in the eighteenth century, Eastern Europe was type-casted as the geopolitical Other, a land full of barbarism and backwards thinking whose people were not capable of following modern thought. Indeed, the term “balkanization” carried pejorative connotations and became “a synonym for the reversion to the tribal, the backward, the primitive, the barbarian” (Todorova, 2009, p. 3).

It is important to beware of the tendency to marginalize and Orientalize the Balkans when evaluating the history and practice of mental health and wellness. In other words, claims of Balkan backwardness or imperfect mental health practices must be checked against this prevailing history of marginalization and stereotyping, as these dialogues seem to have affected the scholarship on the contemporary state of Balkan mental health.

Legacies of the Cold War

Larry Wolff (1994) notes that the so-called Iron Curtain happened to fall along the demarcation of Europe that dated back to the Enlightenment ideas of the civilized West countered by the barbaric East. Indeed, even after the downfall of the Iron Curtain, the concept of Eastern Europe and its role as the dark counterpart to the more modern West has prevailed and impacted the dialogue surrounding ideas about health produced from this region. Wolff argues that beyond the delineations of the former Communist bloc, the West has “passively inherited” the idea of Eastern Europe that was conceived centuries prior, affecting opinions of the modernity of the region and reinforcing stereotypes of its peoples as backwards (Wolff, 1994, p. 3).

The Cold War resulted in multiple economic sanctions and the restriction of exports to Eastern bloc countries, including the Balkans. Western scholars and authors have theorized that this period led the then-Communist countries that now comprise the Balkans to fall behind in not only mental healthcare, but also overall healthcare and infrastructure. This “legacy of communism” is purported to have led to the lag in technological advances and governmental healthcare reform that was so formative for Western systems during this time (Tomov, 2001, p. 12). Additionally, Western researchers speculate that the destabilization caused by the collapse of the Communist bloc and the former Yugoslav Republic further contributed to the lack of healthcare policy and reform within these post-totalitarian countries (Jenkins et al., 2005).

However, recent research contradicts these conclusions. Savelli and Marks demonstrate that in the fields of psychology and clinical psychiatry, there was collaboration and participation from “both sides of the Iron Curtain” (Savelli and Marks, 2015, p. 125). Evidence for this can be noted from the historical regional collaboration between then-Communist countries and other nations, including multiple conferences and scientific articles. For example, Eastern bloc research was presented in Western countries during Communist rule. Likewise, research originating in Eastern-bloc countries also influenced scientific developments in the West. Examples include an approach to the clinical treatment of alcoholism, requiring a shift from viewing it as a personal problem to a certifiable illness, which was developed in Yugoslavia during the 1960s. Moreover, the Pavlovian theory that mental illnesses are derived from abnormal cortical structures (Savelli, 2018) serves as another instance of Eastern Europe influencing the West. Both concepts were eventually accepted globally and align with the worldwide trend towards the aforementioned biopsychosocial approach to treating mental illness.

The oversimplified assumption that all Communist countries operated in the same fashion as the Soviet Union, Savelli argues, led to the permeating Western belief that psychiatry under the Communist regime was “inextricably bound” to socialist ideologies (Savelli, 2018). This belief is challenged by noting that psychiatry in Yugoslavia was able to be uniquely influenced by Western European, American, and socialist principles due to Yugoslavia's political break from Stalinist-style Communism in 1948 (Antić, 2016).

Wars of Yugoslav Succession

Beyond the geopolitical discourse that distinguished the Balkans from the rest of Europe, its current grappling with the after-effects of the recent civil war has also uniquely challenged the region. The war, leading to the breakup of the Yugoslav Republic into separate, smaller countries, dominates current discussion about mental health and wellness within the region, specifically regarding post-traumatic stress disorder (PTSD). The amount of research solely dedicated to investigating the incidence of PTSD in the Balkans may attest to the severity of the conflict. According to Susan Woodward (1995), the

conflict generated the largest refugee crisis in Europe since World War II (p. 2) and warranted the first deployment of NATO troops to a European country (p. 3). Furthermore, the economic costs of the War and the infrastructure lost during that time created a notable financial burden that is perhaps not unrelated to the paucity of funding of healthcare systems and wellness programming. The reorganization and/or founding of new governing bodies post-war, research shows, has also contributed to lapses in availability and access to some healthcare (Tomov, 2001).

While the wars of Yugoslav succession may dictate many of the topics surrounding current mental healthcare and wellness, it is important to be cognizant of the broader history and take care to not repeat the past mistakes of over-emphasizing the otherness of the region. It is necessary to recognize that these histories have impacted health and wellness today by influencing how research into mental health from the region is done and contextualized (i.e., almost exclusive investigation of post-war conditions and PTSD). In addition to the significant funding difficulties and out-of-pocket payments to treat somatic diseases (see demographic research section), there is a chance that mental health issues may be even more threatened to be ignored due to significant stigma surrounding these problems and a lack of current available resources and treatments (Tirintica et al., 2018). When taken together, these barriers to healthcare impose a great risk to the overall mental wellbeing of Balkan peoples.

CURRENT STATE OF MENTAL HEALTH AND WELLNESS RESEARCH IN THE BALKANS

In the following section, an overview of the current state of research into mental healthcare and wellness in the region is presented. Existing research can be divided into three major areas: quantitative studies of the prevalence of specific disorders, research into the state of policies affecting mental health and wellness, and broader research into healthcare systems and delivery that affect mental healthcare. Major findings within each of these areas are here outlined.

A significant portion of current demographic research conducted about the region deals with how mental health was affected by the war in the 1990s. Other sociological and survey research has attempted to investigate the conditions of mental/overall healthcare access and management within the region. These assessments are used to evaluate the efficacy and delivery of healthcare in the Balkan nations and the threats or barriers to accessing better quality care that still exist.

A Review of Current Mental Health Demographic Data in the Balkans

To date, recent studies and surveys have shown that PTSD, along with major depressive disorder (MDD), are widespread within the region. In a survey study conducted in Serbia, 48% of respondents self-described their mental health status as “poor,” with 4.9% of respondents having been diagnosed with chronic depression (Sanrić-Miličević et al., 2016, p. 36). In Croatia, risk factors for the development of both PTSD and MDD have been researched, finding that increased minority status within society (e.g., ethnic or gender minority, lower socioeconomic statuses, etc.) increased the risk of developing PTSD. In particular, women were found to be at increased risk due to decreased political and economic autonomy following the demise of socialism after the war, as well as the widespread use of rape as a weapon during the war (Kunovich and Hodson, 1999, p. 325). A study conducted with refugees who had survived the war while living in what is now Bosnia and Herzegovina found that exposure to war experiences and incidence

of human rights violations (as defined by the Geneva Convention) increased the risk of developing PTSD. Within the studied cohort of thousands of Bosnian survivors, 30% were diagnosed with PTSD and 28% with MDD. The most commonly cited war experience amongst respondents was “active shelling/bombardment” (more than 70%) (Priebe et al., 2010, p. 2172). A study of Sarajevan school-aged children found that war exposure (here defined as witnessing killings and/or dead bodies or surviving bombings) increased the risk of developing PTSD. PTSD was also found to be comorbid with the presentation of Attention Deficit Disorder symptomatology at a rate equivalent to that of the global population (Husein et al., 2008). Furthermore, a study analyzing sensitivity to glucocorticoids, which are hormones released during times of stress, and its relation to PTSD diagnosis amongst Bosnian war refugees and control German citizens who had not been exposed to the Balkan War found that participants who had been diagnosed with PTSD were more sensitive to glucocorticoids (Pitts et al., 2016). While there is ample research investigating post-war mental illness in the region, there is a need for more inquiries into mental healthcare and wellness in the Balkans as it pertains to the everyday person or patient.

State of Mental Health and Wellness Policies

Research reviewed here indicates there is a need for mental wellness programming and treatment in the Balkans. However, varying policies and institutions within former Yugoslav nations affect the availability and accessibility of interventions. While these studies and their findings are impactful, it is difficult to parcel out specific effects that the recent wars have had on each individual country. The breakup of the former Yugoslav Republic was not uniform, and individual differences between these countries can be seen post-war in their policies and preparedness to combat the lasting effects of mental illness in the region (Jakovljević, 2013).

Countries within the region lack effective national bodies that are dedicated to mental illness awareness, prevention, and treatment. While some Balkan nations have established such entities, inadequate implementation of its policies weaken their efficacy. Other countries lack such bodies altogether. For example, an assessment found that in Croatia, the process of deinstitutionalization of mental illness facilities started in the early 1990s – significantly earlier than what is observed in other Balkan states (Mihic et al., 2015). This difference is theorized to be accounted for by various factors: Croatia’s pro-European stance during a time when the nation was vying for European Union entry (Mihic et al., 2015), the application of international trauma programs after the war to alleviate mental illness and trauma (Pupavać and Pupavać, 2012), and the fact that Croatia has the highest average annual income of any other Balkan nation (Jakovljević, 2013). It is also the only Balkan country to have certified and trained Health Technology Assessments (HTA), a systematic approach that helps make informed decisions of health budgeting and technologies. However, even with these advantages, Croatia still suffers from the lack of organization and implementation of mental health policies at the governmental level, making effectual treatment more difficult.

The Former Yugoslav Republic of Macedonia has also observed deinstitutionalization and the downsizing of psychiatric facilities in favor of more community-based mental health services. Moreover, it officially established a National Mental Health Policy in 2005 (Manuševa et al., 2016) and employs HTA training and guidelines. Serbia was slower to follow global trends in deinstitutionalization. Its current healthcare system (a mix between private and socialized) is suffering major economic losses, having yet to develop a cost-conscious policy (Jakovljević, 2013). On the other hand, Bosnia and Herzegovina has developed but not implemented a cost-effective budgeting system for their healthcare and lacks HTA training and

programming. According to the same study, Montenegro's healthcare system has the highest per capita spending out of all of the Balkan nations, but is also suffering funding issues due to ineffective policies. Kosovo has no national health insurance fund, and access to treatment of mental illnesses is limited.

With varying degrees of established infrastructure and government support, it becomes difficult to compare the state of mental healthcare in each Balkan nation. Additionally, various systems that track health and/or research information exist in each country, making data non-uniform across nations.

Healthcare Delivery in the Balkans

As a subsidiary of overall health, mental health is inextricably affected by current policies and the access to/availability of treatments, medications, etc. Below is a brief summary of healthcare systems and practices within former Yugoslav nations, as well as issues within these systems that could prove to be barriers to overall and mental healthcare.

Each country is threatened by the volatility of their single-payer healthcare funding systems. Socialized systems as seen in Serbia, Bosnia and Herzegovina, Macedonia, Montenegro, and (to a lesser degree) Croatia are extremely precarious when placed in the context of recovering from a series of larger economic setbacks since the wars of Yugoslav succession. For example, in the case of Serbia, notable dips in funding and thus healthcare coverage were seen during the 1990s because of the war, and again in 2008 due to the worldwide recession (Jankovljević, 2013). In an effort to curb spending, the Serbian National Health Institute established multiple policies and pharmaceutical guidelines in 2011 and instructed healthcare providers to limit resource consumption. However, in a nationwide survey conducted with primary, secondary, private, and specialist healthcare providers, it was shown that providers either remained largely unaware of the cost-cutting measures they were supposed to be taking part in, or they perceived the measures to decrease the quality of care they were able to administer. Consequently, the government's policies, while existent, were largely ignored and left unimplemented (Jankovljević, 2013).

The problem of healthcare system funding is not a new one to the region, with many solutions attempting to be applied. Funding healthcare systems via taxation, which is commonplace in Europe, can have reduced effectiveness in the Balkans due to high unemployment rates, unreported employment, increased corruption, and unpaid labor (Bredenkamp et al., 2013). For example, the current system used in Serbia allows for a population (making up approximately 16% of the entire populace) of patients that are supposedly exempt from paying expenses for their health coverage (Arsenijević et al., 2013, p. 374). However, yet again, coverage is lost in the intricacies of applying these rules: there are no laws stating private practices must abide by exemption rules, the guidelines for what qualifies a patient to be exempt are ambiguous and not known by providers nationwide, the process to file for exemption is convoluted, and there is a noted social stigma against identifying as a person of an exempt population (Arsenijević et al., 2013). All of these difficulties create barriers to care and health coverage for the people of Serbia.

Additionally, the practice of informal payments in exchange for healthcare or higher quality of care is widely practiced throughout the Balkans and continues to produce even further disparities (Bredenkamp et al., 2013). In a survey conducted throughout the region, it was found that 50% of Kosovars, 42% of Bosnians, and 22% of Serbs and Montenegrins paid out-of-pocket informal payments (Bredenkamp et al., 2013, p. 349). These informal payments, in the forms of gifts, foods, jewelry, or other services, may also include "bought and brought goods." These are defined as payments for

goods or the expectation that the patient provides goods that are required for care and which should be covered by health insurance (Mejsner and Karlsson, 2017, p. 621). Indeed, some respondents to a study conducted throughout the region stated that they either were unaware that the payments they were being asked to provide were informal/should be covered by their insurance, or they were seen as the only way to receive better quality care. Furthermore, these types of out-of-pocket payments were shown to be correlated with peoples' vulnerability to poverty, and healthcare expenditures made up a large portion of Balkanites' total expenses (Bredenkamp et al., 2013).

FUTURE DIRECTIONS

In conclusion, while the perceptions of mental health are influenced by the historical geopolitical discourse that surrounds the region, disparities in the accessibility and quality of mental healthcare within the Balkans are in fact due to far-reaching governmental, financial, and administrative obstacles. It is worth reemphasizing that the trend of treating mental illness as a disease that necessitates medical intervention instead of a personal problem has been seen both globally and within the Balkans. However, while the region has been on par with the global community in terms of perceptions and theories, the issues of actual delivery and implementation of these practices still remain.

Through cultural and historical analysis, it has been determined that many problems exist within the healthcare system related to mental health and wellness treatment within the Balkans. In order for these barriers to be abated, these specific gaps in knowledge must be addressed: which governing bodies should be in charge of funding healthcare systems so that free, nationwide coverage is actualized; mental healthcare infrastructure already in place and their effectiveness; and the impact of everyday mental illness (outside of post-war research) on people living in the Balkans.

These inquiries will require interactive, research-based efforts between each nation's mental healthcare providers and their healthcare system(s). Research should be conducted at the federal and hospital levels. Within the governments of each nation, research is necessary to identify where healthcare funding should come from and how/where financial income should best be allocated to optimize coverage. Furthermore, economic interventions such as increasing trainings (e.g., HTA) and resource-saving programming that is both widely known and amenable to practicing medicine would improve the cost efficacy of providing healthcare. At the hospital level, systematic reviews of what mental wellness care is available would help ensure that coverage is not localized to only certain areas of the country and is reaching as many people as possible. Likewise, quality assessments within both public and private clinical settings regarding the efficacy of pre-existing care will continue to improve each country's health outcomes. The standardization of this collected data would facilitate the sharing of information within and between nations, possibly leading to further collaboration and support for treatment efforts. Finally, more research outside of the realms of post-war PTSD and/or MDD could improve the average person's mental health. With this gain of knowledge, treatments and programming would be specifically catered to effectively address the needs of the people within each nation. All of these changes would bridge the divide between the development of policies and the implementation of medical treatments to ensure people and patients within the Balkans have equitable access to care and thus better health outcomes.

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*Back to the Future Consequences:
Considerations of Future
Consequences (CFC) Measure
Correlates with Exercises
Intensity | Calvin G. Isch*



Back to the Future Consequences: Considerations of Future Consequences (CFC) Measure Correlates with Exercise Intensity

Calvin G. Isch

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ABSTRACT

What motivational and trait differences allow some individuals to achieve long-term goals where others fail? Activity in the pursuit of these long-term goals can provide both immediate and future rewards, though it often requires the sacrifice of short-term gratification for the pursuit of the goal. For instance, when a student studies for a test, she is not playing games with friends. Exercise is such an activity. Although individuals may gain immediate rewards from exercise, they often describe future goals (e.g. staying healthy or training for a competition) as partially motivating their behavior (Ebbem & Brudzynski, 2008). Because exercise is an activity with future rewards, individual differences in future orientation may account for variance in exercise behavior. In this experiment, we use the Consideration of Future Consequences (CFC) questionnaire (Joireman et al., 2012) to measure future orientation, ask participants about perceived rewards associated with exercise, and record their behavior within a given workout. We find that CFC scores predict several aspects of exercise including frequency of engagement, intensity of exercise, and perceived future benefits associated with the activity—providing evidence that individuals who score highly on CFC believe exercise provides greater future benefits and exhibit increased activity to attain them.

KEYWORDS: *future orientation, goal achievement, motivation, self control, exercise*

INTRODUCTION

People who attempt to complete a college degree, train for a marathon, or quit a bad habit are pursuing long-term goals. While such goals are highly valued, people frequently fail to accomplish them: a US News report found that over eighty percent of New Year's Resolutions are given up by February (Luciani, 2015). Because these subjectively valuable goals are difficult to carry to fruition, it is important to understand the processes that lead to successes and failures in their pursuit.

Long-term goals require continual engagement in goal-directed activities and often involve present sacrifices with delayed benefits (Baumeister & Tierney, 2012). Existing research provides support for several strategies to motivate an individual's pursuit of these goals. Some have found that attending to delayed rewards increases performance (Mischel et al., 1989), while others report that perceived immediate rewards serve as a stronger predictor of persistence (Woolley & Fishbach, 2016). In addition to the effects of perceived rewards, certain personality traits might also lead to increased goal-directed behavior. Specifically, some people report valuing the future more than others, a trait captured by the Consideration of Future Consequences (CFC) scale (Strathman et al., 1994). This paper explores the effects of perceived present and future rewards as well as CFC on several facets of goal-directed behavior as measured by college students' cardio-workout activity in a campus gym.

Activity Engagement and Long-Term Goals

Long-term goals require continued engagement in goal-directed activities. Such engagement can be split into different components. We address three facets of engagement in cardio-workout routines: frequency, duration, and intensity. Activity persistence, or the duration of an activity, is in part determined by perceived value gained relative to the costs of continuing with a certain action (Rothman, 2000). Similarly, frequency of engagement and intensity of activity may also be driven by this value-cost calculation. Activities with high value and low cost may generally be engaged with more often, for longer, with more intensity than those with relatively low value and high cost. Activities for long-term goals often have distant perceived rewards and immediate costs, and as a result, they generally require self-control.

Self Control and Motivation

Whether it be eating chocolate and giving up on a diet, excessively watching Netflix instead of studying, or participating in other immediately-gratifying behaviors at the expense of long-term goals, nearly everyone has experienced a failure of self-control. In contrast, effective self-control leads to improved performance on individual tasks, and people who routinely show self-control perform better on many social and academic outcomes, accomplishing more long-term goals (Mischel et al., 1989). There are several techniques one can implement to improve self-control, including many that focus on increasing the perceived value gained from a task and decreasing its costs (Duckworth et al., 2018). That self-control involves a cost-benefit calculation when considering how to engage with a given activity suggests that it is modulated by one's motivation for various outcomes (Berkman et al., 2017).

There are many theories on the mechanisms involved with motivation. From "fuel" limited accounts (Galliot et al., 2007) to mechanisms that balance immediate and future rewards (Kurzban et al., 2013), these models explain why we are limited in our ability to persist in activities with distant rewards that come at the expense of immediate gratification. According to each perspective, the persistence and intensity of engagement is dependent on the value that the individual places on the immediate and delayed outcomes associated with the task. Most activities involve both immediate and delayed rewards, and while people frequently claim that delayed rewards are critical for increasing activity engagement (Fishbach & Choi, 2012), some scholars have found immediate rewards to be more salient at driving behavior (Woolley & Fishbach, 2016). For example, a student's interest in a subject, a characteristic that implies more immediate rewards associated with the activity, motivates their academic engagement and achievement with that subject (Harackiewicz et al., 2016). With evidence indicating both types of rewards are useful and valued with exercise (Ebbem & Brudzynski, 2008), there may be trait differences among individuals that allow certain types of rewards (e.g. future rewards) to be more effective at motivating behavior for some than others.

Considerations of Future Consequences Scale

Some individuals report valuing future rewards more highly, frequently allowing future goals to drive their day-to-day behavior. Others report living more in the present, expecting the future to take care of itself. To measure the differences in future considerations between individuals, a survey-based scale was developed: the Consideration of Future Consequences scale (Strathman et al., 1994). Past work has demonstrated that high scores on the CFC scale predict higher frequency of health-related behavior, reduced aggression, increased dietary control, and more frequent exercise behavior (Joireman et al., 2003; Piko & Brassai, 2009; Adams & Nettle, 2009). Subsequent analysis suggests there is evidence for two factors within the scale: CFC-future (CFC-F) and CFC-immediate (CFC-I) (Joireman et al., 2012). CFC-F captures a tendency to focus on the future consequences of engaging in certain behavior; CFC-I measures a tendency to focus on the immediate consequences of one's actions or the current opportunities missed. The distinction can be important for determining the motivators driving actions. For example, past work has found that those who exercise less often are concerned with the immediate consequences of their behavior, and prefer other activities to exercise, though they may still care about the future benefits associated with exercise (Joireman et al., 2012).

To investigate the connection between CFC scores and factors associated with long-term goal pursuit, we looked at college students' exercise behavior. We collected data to address three hypotheses: (1) CFC score will correlate with workout frequency, persistence, and intensity, (2) CFC will correlate with the magnitude of future rewards that participants perceive themselves to gain through working out, and (3) participants' perceived magnitude of immediate and future rewards will predict workout frequency, persistence, and intensity. These three hypotheses are related through the process outlined above: high-CFC individuals focus more on future goals, thus increasing their motivation for future rewards and consequently improving self-control to continue with tasks that lead to the accomplishment of those aims.

METHODS

Participants

We invited 150 individuals in an on-campus gym to complete pre- and post-workout surveys in return for a nutrition bar and a Gatorade. Participants were approached before starting a workout on a cardio machine. 20 participants did not return for the post-workout survey, and were excluded from analysis, leaving 130 remaining participants (71 females; M-age = 21.4; SD = 5.6). IRB exemption was granted for this experiment, and subjects were provided information on the study (including procedures and voluntary participation) before agreeing to participate.

Procedure

Participants first answered questions addressing how important the immediate, delayed, and distant rewards associated with their workout were to them (all questions are included in Appendix 1). Immediate rewards refer to those realized during the workout, delayed rewards occur within a few months, and distant rewards are the impacts of the exercise on health in five years' time. Participants answered these questions on a 1-6 Likert scale. Throughout the rest of the paper we refer to their answers on these questions as *reward-importance score*. Participants then answered questions on their weekly exercising habits, larger goals regarding exercise, anticipated workout length, and questions about whether that day's exercise activity was part of an existing routine. Next, they completed the 14-question CFC scale, with responses ranging from 1-7. Once the survey was completed, experimenters gave participants an identification card, noted down the time, and instructed them to begin

their workout and record the information provided by their cardio machine (either with their phone's camera or on a supplied card) once they were finished.

After completing their workout, participants returned to the experimenters and filled out another short survey. They reported the machine used as well as the duration, distance, and caloric information provided by their cardio machines. Participants then answered three questions addressing their perceptions of the amount of immediate, delayed, and distant rewards gained through their workout. We refer to these as reward-magnitude scores throughout the paper. Finally, participants answered demographic questions before receiving their snack.

RESULTS

Although workouts are not differentiated by machine in our analyses, participants used a number of different exercise machines in this study, with the elliptical being most common (27.7%, $n = 36$). The bike and the treadmill were each used by another 16.2% ($n = 21$ each) of participants, 13.8% ($n = 18$) choose the stepping machine, and the remaining 26.1% ($n = 34$) exercised on other machines (curve, $n = 8$; rowing machine, $n = 4$; track, $n = 3$; and multiple machines, $n = 19$). All machines (except the track) reported number of calories burned.

Calculating CFC

Of the 14 questions on the CFC scale, seven target CFC-I and seven target CFC-F. We used these scales independently and combined them together into an overall CFC score by reverse coding CFC-I responses and summing those answers with the CFC-F results.

To determine the relationship between CFC and frequency, persistence, and intensity of working out, we ran Pearson Correlations on overall CFC score ($M = 70.5$, $SD = 10.1$) with reported weekly visits ($M = 4.1$, $SD = 1.6$), minutes spent exercising ($M = 41.2$, $SD = 20.9$), and workout intensity ($M = 8.5$, $SD = 4.8$). We calculated intensity by dividing participants' reported number of calories burned by the number of minutes spent exercising. If participants used multiple machines, the calories burned on each machine were summed prior to dividing by total time. Seventeen participants were excluded from this calculation, as they failed to report the number of calories burned, resulting in 113 participants in the intensity calculation. There was no significant correlation between CFC and time spent exercising ($R = -.03$, $p = .74$), but there were significant correlations between CFC and intensity ($R = .19$, $p = .048$) as well as between CFC and frequency of reported weekly workouts ($R = .38$, $p < .01$). A scatterplot and best-fit line of participants' reported number of weekly workouts and CFC scores is shown in Figure 1.

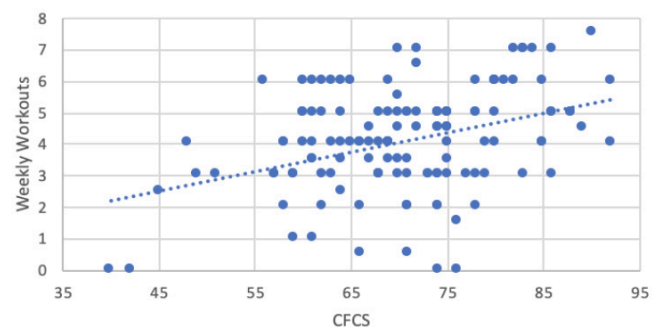


Figure 1.
CFC related to Weekly Workouts.

Additionally, participants' CFC scores were correlated with the reported duration (in months) of their existing exercise routines ($M = 12.9$, $SD = 19.3$, $R = .18$, $p = .04$), as well as reported intention to start a new routine or continue an existing routine on a 6-point Likert scale ($M = 5.4$, $SD = 1.0$, $R = .43$, $p < .001$).

To examine how CFC related to the different perceived rewards, we ran Pearson correlation analyses on overall CFC and participants' reported reward-importance (i.e. how important each reward type was to them) and reward-magnitude (i.e. how effective the workout was at producing each reward) scores for their workout. Table 1 shows the results. There are significant, positive correlations between CFC and reported delayed and distant reward-importance and reward-magnitude scores, but no statistically significant relationship between CFC and immediate rewards.

Rewards	Mean (SD)	N	Pearson Correlation, Significance
Immediate-importance	4.6 (1.2)	130	$R = .01$, $p = .95$
Delayed-importance	5.5 (0.7)	130	$R = .25$, $p < .01$
Distance-importance	5.3 (1.0)	130	$R = .33$, $p < .001$
Immediate-magnitude	4.5 (1.1)	130	$R = .10$, $p = .24$
Delayed-magnitude	5.0 (1.0)	130	$R = .18$, $p = .04$
Distance-magnitude	5.0 (1.1)	130	$R = .38$, $p < .001$

Table 1.

Relation of CFC to reward-importance and magnitude.

Reward-importance and magnitude scores are pulled from participant responses to the questions asking how important they considered the immediate, delayed, and distant rewards associated with working out and how much they perceived their workout as rewarding on each account. Responses were given on a 6-point Likert scale. Bolded items have $p < .05$ Significance

To address how perceived rewards predicted each aspect of exercise activity, we ran standard multiple regression analyses with the three reward-magnitude scores serving as predictor variables for each component of exercise activity (intensity, duration, and frequency). This resulted in three multiple regressions with reported immediate, delayed, and distant rewards predicting a different aspect of exercise in each regression. These analyses show how each reward predicts exercise intensity, duration and frequency when controlling for the other perceived rewards. Table 2 shows the beta coefficients of each predictor variable for each equation.

	Duration (n = 130)	Frequency (n = 130)	Intensity (n = 113)
Immediate-magnitude	$\beta = .06$, $p = .53$	$\beta = .01$, $p = .93$	$\beta = -.18$, $p = .11$
Delayed-magnitude	$\beta = .21$, $p = .05$	$\beta = .02$, $p = .83$	$\beta = .13$, $p = .29$
Distant-magnitude	$\beta = -.15$, $p = .12$	$\beta = .35$, $p < .01$	$\beta = -.03$, $p = .76$

Table 2.

Multiple regression beta coefficients for each measure of exercise activity.

Immediate, delayed, and distant reward magnitudes are the predictor variables.

Bolded items have $p \leq .05$ Significance

When we regressed time spent exercising on the three rewards ($r_{\text{immediate, delayed, distant}} = .230$, $p = .076$), we find that the delayed reward-magnitude was the only significant predictor of duration ($\beta = .21$, $t(130) = 2.0$, $p < .05$). In other words, the more subjects believed

that the exercise was beneficial at keeping them in shape (a delayed reward) the longer they exercised in a single visit. In our regression of exercise frequency on perceived rewards ($r_{\text{immediate, delayed, distant}} = .357$, $p < .01$) we find that distant reward-magnitude score (e.g. health in five years' time) was a significant predictor of the number of reported weekly workouts ($\beta = .346$, $t(130) = 3.8$, $p < .01$). Experienced immediate rewards did not predict duration or frequency of exercise with significance. Finally, when we regressed our intensity measure on the three perceived reward types ($r_{\text{immediate, delayed, distant}} = .162$, $p = .43$), we found that no perceived reward type significantly predicted intensity.

CFC Subscales

To examine the relative contribution of the immediate and future CFC sub-scales, we ran Pearson correlations for both CFC-I, CFC-F, and all of the reward-importance and reward-valuation scores. Surprisingly, CFC-I showed no significant correlation with immediate rewards and had a negative correlation with ratings of distant reward-importance ($R = -0.19$, $p = .031$). This trend continued for reward-magnitude scores, with the perceived efficacy of a workout driving future outcomes decreasing with CFC-I ($R = -.23$, $p < .01$). In contrast, CFC-F was positively correlated with delayed and distant reward-importance scores ($R_{\text{delayed}} = .27$, $R_{\text{distant}} = .34$, $p < .01$ for both) as well as the delayed and distant reward-magnitude scores ($R_{\text{delayed}} = .25$, $R_{\text{distant}} = .37$, $p < .01$ for both). Put simply, as CFC-F increased so did the reported importance of future rewards and reported beliefs about how an exercise would lead to those future outcomes. We also ran correlations between CFC-I, CFC-F and the three dimensions of goal directed activity. The results are presented in Table 3.

CFC-I & Intensity	CFC-I & Persistence	CFC-I & Weekly Workouts	CFC-F & Intensity	CFC-F & Persistence	CFC-F & Weekly Workouts
$R = -.21$, $p = .017$	$R = -.05$, $p = .52$	$R = -.20$, $p = .022$	$R = .04$, $p = .66$	$R = -.01$, $p = .94$	$R = .41$, $p < .01$

Table 3.

CFC-I and CFC-F related to workout activity measures.

Bolded items have $p < .05$ Significance

DISCUSSION

This study demonstrates how CFC relates with several aspects of exercise—an activity with many delayed benefits. Our results are consistent with previous findings that demonstrate the relationship between CFC and the frequency of engagement in present activity with delayed rewards (Strathman et al., 1994). Additionally, we find that CFC correlates with workout intensity within a single session; high-CFC individuals work out with more vigor compared to those low in CFC. These outcomes may be driven by the ways those high in CFC view the rewards associated with the activity. Our results provide evidence that these individuals report that they both value the associated future rewards more and believe that the workout is more effective at bringing about those future aims. These findings applied to typical accounts of motivation theory imply that high-CFC individuals are more highly motivated to pursue tasks with future benefits, allowing them to more easily exert self-control and engage with the activity more often with greater intensity.

Our results show no significant relationship between perceived immediate rewards and various aspects of workout performance; instead we find that perceived delayed rewards are better predictors of exercise activity. As such, our findings seem to conflict with earlier studies that found that immediate rewards serve as a better predictor of persistence than delayed rewards (Woolley & Fishbach, 2016). A

methodical difference in study design may explain this discrepancy. Unlike in the experiment by Woolley and Fishbach, participants in our study answered survey questions before beginning their workout. Consequently, participant awareness of being observed and of study questions regarding workout goals and long-term rewards may have primed some participants to consider what they “ought” to do and to work harder than individuals working out without awareness of these study-specific factors. Subsequent research should avoid this confound by waiting to collect information on goals and future orientation until after the workout and presenting a cover story (e.g. “We are trying to understand why students go to the gym and what machines they use.”) for any information collected before participants begin their workout.

Future work can expand upon these findings in many ways. First, it can measure the variables of interest from this study in different settings. The present study was limited to individuals who happened to be in a campus gym during the evening that the experiment took place, a group that might demonstrate different tendencies than the general population. Furthermore, our measures of some aspects of activity engagement (e.g., weekly workout frequency) are limited in that they are self-reported and are thus potentially influenced by imperfect recall, social desirability bias, etc. Future studies can directly measure activity over time to address this issue. By examining the relationship between CFC, the importance and magnitude of rewards, and activity performance, we will have a better understanding of the generalizability of these findings.

CONCLUSION

In summary, this experiment provides evidence that the CFC scale is a useful measure in understanding individual differences in exercise behavior, an activity with many future benefits. Gymgoers who score higher on the CFC scale workout more frequently, with greater intensity, and have a greater desire to create or continue a workout routine. They also rate future rewards as being more important and report that their current activity is more likely to drive future outcomes, a finding in line with typical explanations of motivation and self-control theory.

These findings provide evidence for individual differences that lead to varying amounts of activity directed toward future goals. Focusing on the future seems to increase goal salience and subsequent performance for tasks that involve many perceived future benefits. Using these results, individuals can attend to future rewards, find information that increases the amount they see a task as leading to that future aim, and ultimately improve their ability to achieve their long-term goals.

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APPENDIX I

Please answer the following questions:

How important is it that your exercise today is enjoyable and fun?

Not at all important

Very Important

1 2 3 4 5 6

How important is it that your exercise today is useful and effective at keeping you in shape?

Not at all important

Very Important

1 2 3 4 5 6

How important is it that your exercise today contributes positively to your health in 5 years?

Not at all important

Very Important

1 2 3 4 5 6

In one week, how many times do you typically work out?

_____ times

In one setting, how long do you usually workout?

_____ minutes / Until satisfied.

How long do you plan to work out today?

_____ minutes / Until satisfied.

Do you have another activity limiting how long you can stay today?

Yes, in _____ mins / No

Do you have a larger goal in visiting the gym? Circle all that apply.

Stay fit Training for a competition in the next 3 months

Lose weight Training for a competition over 3 months away

Get in shape Be with friends Look good for winter break

Health reasons Look good for spring break

Other _____

Do you come to the gym regularly? If so, how long have you had a routine?

Yes / No _____ months

Do you come in on the same days each week?

Yes / No

Do you intend to create (or continue) a routine of going to the gym over the next few months?

No Intention

Strong Intention

1 2 3 4 5 6

How much do you intend to have a routine of going to the gym in one year?

No Intention

Strong Intention

1 2 3 4 5 6

Considerations of Future Consequences Scale

For each of the statements shown, please indicate whether or not the statement is characteristic of you. If the statement is extremely uncharacteristic of you (not at all like you) please write a "1" in the space provided to the left of the statement; if the statement is extremely characteristic of you (very much like you) please write a "7" in the space provided. And, of course, use the numbers in the middle if you fall between the extremes.

1 = Not at all like you 7 = very much like you

_____ I consider how things might be in the future, and try to influence those things with my day to day behavior.

_____ Often I engage in a particular behavior in order to achieve outcomes that may not result for many years.

_____ I only act to satisfy immediate concerns, figuring the future will take care of itself.

_____ My behavior is only influenced by the immediate (i.e., a matter of days or weeks) outcomes of my actions.

_____ My convenience is a big factor in the decisions I make or the actions I take.

_____ I am willing to sacrifice my immediate happiness or well-being in order to achieve future outcomes.

_____ I think it is important to take warnings about negative outcomes seriously even if the negative outcome will not occur for many years.

_____ I think it is more important to perform a behavior with important distant consequences than a behavior with less important immediate consequences.

_____ I generally ignore warnings about possible future problems because I think the problems will be resolved before they reach crisis level.

_____ I think that sacrificing now is usually unnecessary since future outcomes can be dealt with at a later time.

_____ I only act to satisfy immediate concerns, figuring that I will take care of future problems that may occur at a later date.

_____ Since my day to day work has specific outcomes, it is more important to me than behavior that has distant outcomes.

_____ When I make a decision, I think about how it might affect me in the future.

_____ My behavior is generally influenced by future consequences.

Turn this form to the Researcher.

Information about Workout and Demographics

Info about your workout:

Machine (circle one):

Elliptical Treadmill Rowing
Machine
Bicycle Stepping machine Other _____

Duration: _____ Minutes

Calories: _____ Distance: _____

How enjoyable or fun did you find your workout today?

Not at all enjoyable *Very enjoyable*

1 2 3 4 5 6

How useful and effective was your workout for keeping/getting you in shape?

Not at all useful *Very useful*

1 2 3 4 5 6

How much will your exercise today positively impact your health five years from now?

Not at all impactful *Very impactful*

1 2 3 4 5 6

What is your Gender? _____

What is your age? _____

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