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Preface

I am proud to present the 2014 volume of *Oshkosh Scholar*, which showcases the very best examples of undergraduate research at the University of Wisconsin Oshkosh. In the following articles, students from math, philosophy, communication, and the social sciences present innovative research on a variety of topics. According to their faculty mentors, reviewers, and an interdisciplinary selection committee, none of these students merely summarize what is already known. All of them have found some shortcoming in society or a gap in knowledge and worked within their disciplinary methodologies to contribute something new to the scholarly conversation.

First we have two students who employ rigorous logic—one who zeroes in on one word, the other who considers oceans of numbers. Maria Bady carefully reveals the damage done by making light use of the word *rape*. Drawing on the theories of other philosophy scholars, Bady creates her own hybrid model to chart the impact of language. Her work shows the practical value of philosophy by suggesting we as a society stake out a moral position against the language of rape culture. In the field of math, Eric Boll charts new ground by expanding our current understanding of congruences. The earlier work of mathematicians could only go so far with paper and pen. Boll drew on his computer science expertise to create a program that expands the scope of what can be studied.

The next two papers examine interactions between medical professionals and the public. Healthcare workers in family practices and emergency rooms routinely use screening tools to check for intimate partner violence. But are these tools so geared toward heterosexual couples that they miss identifying LGBTQ individuals in dangerous situations? Ashley Leonardelli contacted people who had an interest in intimate partner violence and surveyed them to find out the effectiveness of these screening tools. Her conclusion suggests ways to make such tools more inclusive.

Another area of clinical contact is the pediatrician's office. According to Karen Thompson, many parents who take their children to the doctor receive informational pamphlets that they immediately discard. This communication studies major surveyed parents to find out how useful pediatric handouts are and concluded that many parents do not use them well. Her conclusion includes four actions medical professionals could take to disseminate medical information more effectively.

The final two papers illuminate questions of political leadership in the past and present. In the ideal world, Supreme Court justices are above partisan politics. But in reality, politicians try to appoint judges with politics that match their own. Modern presidents often choose judges from the circuit court because they have a record that leaves clues to their political beliefs. But until now, there has been no clear study on whether that technique actually works. Alex Phillips uses quantitative methods from political science to clarify that Supreme Court justices appointed from the circuit court actually have *more* ideological drift than justices from other backgrounds. The assumption of many presidents, often the savviest politicians of their day, do not hold up against hard data.

In the last selection, Patrick McCorkle charts the rise and fall of political ideals in fifteenth-century Florence. This chilling postmortem of republican ideals reveals how a charismatic leader can distort the past to craft his own vision of the future. McCorkle's account of the shifting political landscape of Renaissance Italy reveals that we cannot rest upon the safety of tradition because it is a malleable entity.

Altogether these findings demonstrate a rigorous search for truth from a talented group of young scholars. Not only do they expand our abstract knowledge, they suggest concrete ways to live in a more ethical and secure society. As Maria Bady writes, "The

philosopher makes our world better by giving us clear reasons for what ought to be.”
The next generation has demonstrated they are ready to build this better world on the basis of logic, data, research, and vision.

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“The series of handwritten notes on notebook paper are a representation of the thought and research processes scholars go through to produce research papers like those found in *Oshkosh Scholar*. The notes were written by students published in last year’s journal.”
— Jenna Schroeder

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Against the Slang Use of the Word *Rape*: A Langtonian-Birdian Reproach

Maria Bady, author

Dr. Larry Herzberg, Philosophy, faculty mentor

Maria Bady graduated in June 2014 from UW Oshkosh with a degree in philosophy. Her research started as a paper for her fall 2013 internship with the student organization CARE. She presented the original paper at CARE's annual #rapeisnotajoke event and at the 2014 Wisconsin Philosophical Association conference. After these presentations she continued to revise the paper, and she has since made substantial changes. Maria has a deep appreciation for philosophy. She is currently writing a series of philosophically themed children's books, which she hopes to one day publish.

Dr. Larry Herzberg is an associate professor of philosophy at UW Oshkosh, where he teaches a wide range of classes, including theory of knowledge and the philosophy of emotion, which are also his primary research interests.

Abstract

A disturbing trend that has surfaced recently in slang language is to use the word *rape* in a joking or hyperbolic manner. An example of this is, "I raped that exam!" In this paper, I argue that such use of the term *rape* is immoral. I begin by modeling my case after British philosopher Rae Langton's argument that pornography "silences" the speech of women in a particular way. I then discuss Alexander Bird's objection to Langton's notion of "silencing." In the end, I develop a hybrid theory that respects the cogency of Bird's objection while retaining the spirit of Langton's view. By analyzing communication in a novel way, I argue that the slang use of the word *rape* immorally silences rape victims/survivors, although not in the way Langton's argument would suggest.

* This article may be triggering to survivors of sexual assault and abuse.

Introduction

Before diving into my argument, I would first like to discuss why philosophy is the appropriate discipline for a discussion on the slang use of the word *rape*.¹ Philosophers have the unfair reputation of spending their days in ivory towers, blissfully ignorant of the world below. This is simply not true. Much like the biologist who uses a powerful microscope to inspect a specimen, the philosopher uses the tools of logic and reason to provide conceptual analyses of ideas, concepts, language, and indeed, entire worldviews. One part of this broad study is to analyze and form arguments that include *normative* terms. Normative terminology is prescriptive, rather than just descriptive. In this sense, we might say that the biologist makes our world better by giving us more detail about what is, and the philosopher makes our world better by giving us clear reasons for what ought to be. Philosophy has much to offer to humanity and the subject at hand.

Now consider, if you will, the following examples:

1. - "What does Suzy get when she goes into town?"
- "Raped."
2. "It's not rape if you say, 'Surprise!'"
3. "That exam totally raped me!"
4. "I raped that exam!"²

Did they shock you? Chances are that if you're over the age of 23, they did. Would it surprise you to know that many middle school, high school, and college students use the word *rape* in these ways? The first two examples are jokes that were heard in a middle school, and they should clearly be criticized in their own right, but it is the last two examples on which I wish to focus. They are instances of the slang use of the word *rape*, here said in a hyperbolic manner and meant to signify dominance. It is troubling to hear the word said in this way because it trivializes the reality of rape. The general definition of the word is, "To force (someone) to have sex with you by using violence or the threat of violence."³ This definition, contrary to the slang use, portrays the gravity of sexual assault.

So what is wrong with the slang use? The philosopher Rae Langton leads us to an answer. Langton wrote a compelling paper called "Speech Acts and Unspeakable Acts," in which she draws upon the work of J. L. Austin to make the argument that pornography *illocutionarily disables* the free speech of women (*illocution* is a type of *speech act*, and I will give definitions for both of these terms later). I employ Langton's argument to make a similar, though slightly more nuanced, case. I contend that the slang use of the word *rape* can lead to the illocutionary disablement of rape victims/survivors and is therefore immoral.⁴ I do not expect, nor do I wish, that public policy or laws will be developed based on the reasoning provided here in support of this contention. Rather, I would like to impress upon readers the immorality of using the word *rape* this way, and leave them to decide whether or not they agree. My hope is that the goodness of people will prevail and they will choose not to act immorally.

In what follows, I will first present consequences of the slang use of the word *rape*. Next, I will provide a brief discussion of speech acts and a summary of Langton's argument. Third, I will present my own argument, which uses Langton's as a model. Then I will respond to an objection Alexander Bird makes to Langton's argument. Finally, I will present my hybrid theory, which combines the work of Langton and Bird. This Langtonian-Birdian theory should serve as a powerful reproach against the slang use of the word *rape*.

Consequences of the Slang Use of the Word Rape **Trivialization**

Just imagine that you are a college student and one night you are sexually assaulted in your dorm room. Now flash forward to a few weeks later and you hear a fellow student say, "That exam totally raped me!" (example number 3). What do you feel? What goes through your mind? Do you feel fear because your gut reaction was that you thought another student had been raped? Or how about anger that the other student is comparing doing poorly on a test to the most traumatic night of your life? This is not just a thought experiment; given that one in five college women will be sexually assaulted,⁵ the chances of this scenario happening are high.

What we see in the scenario is that using the word *rape* as slang trivializes the reality that actual rape victims/survivors face. Victims/survivors of sexual assault may have to endure, among other things: shame, guilt, physical and emotional trauma, social pressure, mistreatment from the criminal justice system, and, in short, nothing less than the total upheaval of their lives. Using the word *rape* to express how well one did (or did not do) on an exam takes this reality and belittles it.

Semantic Amelioration

In *Slang & Sociability*, author Connie Eble writes, "Sometimes the connotation associated with a term becomes more favorable or less favorable, opposing processes

called amelioration and pejoration.”⁶ Can the slang use of the word *rape* lead to its semantic amelioration? The word *amelioration* simply means the improvement of something, and thus, *semantic amelioration* means the improvement in the evaluatively negative connotations of a word (usually over time). If we consider our examples from the introduction again, we can reasonably conclude that example number 4 (“I raped that exam!”) is the beginning of the amelioration of the verb *to rape*.

If a student says, “I raped that exam!” she could intend to convey several different meanings, but the most likely is that, by using hyperbole, she is expressing that she did extremely well on the exam. This would mean she intends to convey a positive evaluation of the situation, and the phrase will then carry a positive connotation. This is a change from the usual negative connotation associated with the word *rape*. Now, does the student really mean to say that rape is something positive? Most likely she doesn’t, but because she is using the word in a sentence that has a positive connotation, it starts to be ameliorated. The denotation of *rape* stays the same, but the connotation becomes more positive. This is not desirable, I contend, because having such a word with a negative connotation is extremely useful. It conveys the proper evaluation that the act of rape is indeed wrong.

I worry that this connotative shift will lead to the full semantic amelioration of *rape*. It would not be the first time something like this has happened. Consider the verb *to ravish*. This verb has two different, and opposite, meanings. One is “to force (a woman) to have sex with you by using violence or the threat of violence,” and the other is “to fill (someone) with pleasure, joy, or happiness.”⁷ The former definition is seldom used anymore, though the denotation is still retained. In contemporary times, the latter definition is more often associated with *ravish*, and it is worrisome that a word that is a synonym for *rape* has a positive meaning attached to it. Although we may be a long way away from the word *rape* completely ameliorating to include a positive meaning, the slang use, such as in example number 4, is the start of the amelioration process.

In sum, example number 3 leads to trivialization and example number 4 leads to not only trivialization but also semantic amelioration. These arguments on trivialization and semantic amelioration are an integral part of my further argument regarding illocutionary disablement, which will be considered presently. A final note is that trivialization and amelioration of *rape* can be included as symptoms of what is called *rape culture*, which I’ll discuss later. First, I would like to address a possible objection to the trivialization argument.

Objection

A possible objection to my argument against trivialization is that trivializing is, in some ways, a good thing. The counterargument is: the trivialization of *rape* reappropriates the word by taking the power of that word back. Much like what some members of the black community attempt with the “N”-word, the semantic amelioration of the word *rape* can be beneficial.⁸

Reappropriation of words is a highly contested issue that revolves around whether it is better to ban a word or to consciously change its meaning. The “N”-word, as mentioned, is one example. Another is the current debate within feminism over whether or not to ban or reappropriate the word *bossy*. This word is often used to insult girls and women and discourage them from being leaders. Sheryl Sandberg and the Lean In Foundation started a campaign to ban the word for this reason, but prominent feminist bell hooks believes its reappropriation is more beneficial.⁹ Notice that both arguments are based on what is better for those in the disadvantaged position (girls and women, in this case). This is why the argument for reappropriation is wrongly applied to the word *rape*. Who could possibly benefit from *rape* becoming more positive? It would seem

that the victims/survivors would not benefit from reappropriation; instead, the rapists would.

Furthermore, there are current words that already do what the ideal reappropriations for the “N”-word and *bossy* strive to do. For example, instead of the “N”-word (the debated term for reappropriation is *nigga*) there is *brother* (*brotha*); instead of *bossy* we have *confident* or *commanding*. Thus, the terms in question are not a necessity in our language. However, we do need the word *rape* because unfortunately the act of rape is a horrific reality in our world and we need a word to reflect this. Do we want the verb *to rape* to become equal to a neutral verb like *to stand*?

There is empirical evidence that humans pay closer attention to the word *rape* than to other words. Researcher Luiz Pessoa states, in “Emotion and Cognition and the Amygdala,” “One of the key functions of attention is to help select specific items that will further shape information processing. One way in which emotional content guides information processing is linked to the prioritization of this class of stimuli relative to neutral items.”¹⁰ Pessoa had subjects try to detect words that were written in a green font among distracting white-colored words. The experiment revealed that subjects could better detect emotionally laden words such as *rape* compared to words such as *house*, therefore demonstrating that emotionally laden stimuli are privileged.¹¹ In other words, Pessoa’s research shows us that *rape* shocks our brains more than other, more neutral terms.

If the word is continually trivialized by its slang use, I wonder, what would this do to the shock factor? I suspect that those who have had significant exposure to the slang use would not have the same reaction that Pessoa’s subjects did. This is problematic because, as previously stated, having *rape* retain its negative connotation conveys the proper evaluation that the act of rape is wrong. Likewise, given Pessoa’s research, we should want *rape* to retain its power to shock us because another proper evaluation of the act of rape is that it is shocking.

There are two other final points against reappropriation. First, it may be suggested that language is always changing, and it changes to suit the people who use it. If people begin to use the verb *to rape* in the ameliorated sense, then they will probably invent another word that reflects the horrors of the act. This may be true, but if it is, it might take hundreds of years for that to happen. Meanwhile, survivors are being hurt every day by the slang usage. The final point is that it is a mistake to conflate *is* with *ought*. Just because something *is* a certain way, doesn’t mean it *ought* to be. So the fact that certain words do change their meanings over time does not imply that they always ought to do so.

Langton’s “Speech Acts” Argument against Pornography Speech Acts

In his highly influential book *How to Do Things with Words*, J. L. Austin tells us that when we speak we actually do things. Our speech itself is action. He demarcates three different types of acts: locution, perlocution, and illocution.¹² Locution is simply saying the words. For example, if I say, “The girl said to the boy, ‘Jump high!’” the locution of the girl is “jump high.”¹³ Perlocution is the effect, or consequence, that can be elicited by performing the locution. If the boy is persuaded to jump high, then this is what is called a *perlocutionary effect*.

Illocution is the most interesting of the three and is best illustrated by an example. A couple is getting married, and they each say “I do.” In saying “I do” they are married.¹⁴ The act of saying the words made them married. The difference, then, between perlocution and illocution is the “in” versus the “by.” For example, *by* the bride’s saying “I do,” the bride’s mother became angry because she did not approve of

the marriage. In saying “I do,” the bride and her partner were married.¹⁵ These are the basics of Austin’s theory, which Langton applies in an interesting way to her argument against pornography. It is important to note that just as our physical actions can be blocked in some ways, so can speech acts. It is this blocking (or *disablement*) that interests Langton.

Langton’s Argument

Rae Langton’s paper on speech acts and pornography was (and is) both controversial and highly regarded. She combined the work of Catherine MacKinnon, who argued that pornography should not be protected as free speech because it silences the free speech of women, with Austin’s work on speech acts.¹⁶ Langton states, “If speech is action, then silence is failure to act. If pornography silences women, then it prevents women from doing things with their words.”¹⁷

How can speech acts be silenced? We can certainly see how locutionary acts can be silenced—if someone puts tape over my mouth so I cannot speak, I am silenced. *Perlocutionary frustration*, as it is called, is simply when, for example, person X makes an argument but person Y fails to be persuaded by this argument. It is more difficult to understand how illocutionary acts can be silenced. Langton says,

But there is a third kind of silencing that happens when one speaks, one utters words, and fails not simply to achieve the effect one aims at, but fails to perform the very action one intends. Here speech misfires . . . although the appropriate words are uttered, with the appropriate intention, the speaker fails to perform the intended illocutionary act. Silencing of this third kind we can call illocutionary disablement.¹⁸

The best way to illustrate this is through examples, and Langton gives several. She first gives the example of when a warning fails, and she notes that this example comes from Donald Davidson:

Imagine this: the actor is acting a scene in which there is supposed to be a fire. . . . It is his role to imitate as persuasively as he can a man who is trying to warn others of a fire. “Fire!” he screams. And perhaps he adds, at the behest of the author, “I mean it! Look at the smoke!” etc. And now a real fire breaks out, and the actor tries vainly to warn the real audience. “Fire!” he screams. “I mean it! Look at the smoke!” etc.¹⁹

Langton says that the actor gets the locutionary act correct—he says the correct word in saying, “Fire!” He intends to warn the audience that there really is a fire, but because uptake is not secured, he fails to warn.²⁰ The illocutionary act of a warning has misfired. It is important to note this mention of uptake. For Austin and Langton, uptake is required for an illocutionary act to be successful. Uptake is the hearer’s comprehension of the speaker’s intended illocutionary act. Simply put, it occurs when the audience understands what the speaker says. If there is no uptake, then a misfiring has happened and silencing of the illocutionary act—which Langton calls *disablement*—can occur. The idea that uptake is required for an illocutionary act to be performed is contested by other philosophers, including Alexander Bird, whom I shall address later.

Langton’s argument for how pornography illocutionarily disables women follows the fire example. Pornography objectifies women, is violent and degrading, and portrays acts of rape as normal. In other words, much of pornography shows women being objectified and used as mere tools for male pleasure, and there is a preponderance of pornography that shows women enjoying violent and degrading sex. Much of it even shows women resisting and refusing sexual advances and then, after the man goes

ahead despite her resistance, she is shown to enjoy it. These images in pornography—or rather, since pornography is speech, this kind of speech—can lead to illocutionary disablement when a woman says “no” to sex.²¹ Langton says,

Consider the utterance “no.” We all know how to do things with this word. We use it, typically, to disagree, to refuse, or to prohibit. In sexual contexts a woman sometimes uses it to refuse sex. . . . However, in sexual contexts something odd happens. Sometimes a woman tries to use the “no” locution to refuse sex, and it does not work.²²

The author further elucidates how the “no” locution does not work. It fails in two ways, she says. The first way is when the rapist understands the locution correctly as a refusal, but he ignores it. The other way it does not work is what constitutes illocutionary disablement. This is when the woman performs the “no” locution, but uptake is not secured; the rapist does not take her “no” to mean a refusal. It is not that he understands she is refusing and just ignores her, but instead, due to repeated watching of pornography in which violent acts and acts of rape are portrayed as normal, he doesn’t even comprehend her “no” as a refusal. Just like when the actor yells, “Fire!” there is something that goes wrong, and the refusal—the illocutionary act—is disabled.

My Argument: A Langtonian Reproach

I propose that the same style of argument that Langton uses can be applied to the relationship between the slang use of the word *rape* and rape victims’/survivors’ statements of “he raped me.” As previously mentioned, the slang use of the word *rape*, as in examples 3 and 4, trivializes the word and begins the process of semantic amelioration. This can lead to the disablement of the illocutionary act of the locution “he raped me.” But to understand how this happens, we must know which illocutionary act is performed. In Langton’s argument, the “no” locution had the illocutionary act of refusal. In Davidson’s example, the “fire” locution had the illocutionary act of warning. In the “he raped me” locution, the illocutionary act is accusal.

The question, then, is how this illocutionary act occurs. First we must look at what *accusal* or *to accuse* means. A general definition is “to charge with wrongdoing.” When a victim/survivor tells her friend that she has been raped, she is accusing her rapist of wrongdoing. When she goes to a police station to report a rape and she says, “He raped me,” she is accusing her rapist of wrongdoing. And again, the same action occurs when she is on the witness stand and is asked to identify her rapist: the jury looks on as she looks at the attacker and says, “He raped me.” Now if we consider some of the perlocutionary effects of these cases, we can see that by saying “He raped me” to her friend, she can cause the friend to believe her or not to believe her. By saying it to the police officer, she can cause the officer to start an investigation. By saying it on the witness stand she can cause the jurors to find the rapist guilty. These are all perlocutionary effects, but where does the illocutionary disablement come in?

The illocutionary disablement comes when any one of the people mentioned above does not recognize her accusal. It is when uptake is not secured. At first this may seem far-fetched, but given our discussion of trivialization and semantic amelioration, I contend that it is not. As stated, an accusal is a charge of wrongdoing. Here is where the argument becomes a bit more nuanced: wrongdoing can mean a legal wrongdoing or a moral wrongdoing. While it may be unlikely that uptake is not secured for an accusal of legal wrongdoing (after all, the police officer, jurors, and friend will most likely understand that rape is a legal wrongdoing), it is not as unlikely when it comes to moral wrongdoing. If the word *rape* is trivialized, or if it begins to take on a positive connotation, then it can be difficult for a rape victim/survivor to make the accusal of

a grave moral wrongdoing and have her audience secure uptake. Just like Langton's argument that repeated watching of certain types of pornography can lead to a rapist not having the proper uptake of a victim's refusal, repeated hearing and use of the word *rape* as slang can lead to the disablement of the illocutionary act of accusal (of moral wrongdoing).

We may then ask the question, "Well, so what?—the uptake of the legal wrongdoing is still secure." This strikes me as odd and rather dangerous. Of course there is a difference between morality and legality, but some things are made illegal precisely because we consider them to be immoral. Rape is one of these things. In practicality, I do not think we are in danger of rape becoming decriminalized because of the slang use of the word and its consequences, but the principle still holds. Do we want to do anything to undermine our view that rape is immoral?

An Objection by Alexander Bird

Alexander Bird responds to Langton's argument in his paper "Illocutionary Silencing," where he asks whether or not uptake is necessary for refusal. He starts out by discussing a case of warning. He says,

I doubt even that warning requires uptake, as the following case shows.

A burglar enters a property at night. He has seen a clearly displayed sign: "Warning: premises patrolled by fierce dogs" but believes this is just a blind, intended to mislead people into thinking there are dogs.

Believing that there are none, he later discovers his mistake when attacked by the patrolling dogs. The burglar has no right to claim that he was not in fact warned of the presence of dogs, just because he believed the sign was intended to deceive rather than genuinely warn. He was warned alright, but he failed to see that the warning was sincere.²³

Bird goes on to state, "If pornography does create a climate where certain men cannot recognize a woman's intention of refusing, that cannot prevent her from refusing."²⁴

What this quote and the burglar case show is that there was a situation where the intended audience thought what was being said was insincere, and therefore uptake was not achieved. According to Bird, despite the lack of uptake, the illocutionary act occurred. The burglar thought the intention of the sign was to deceive, and although he didn't have the proper uptake of the sign's intention, the sign still provided a warning. Applied to Langton's example, the rapist thinks that the intention of the woman in saying "no" is to deceive, and despite his lacking the uptake of refusal, the woman still refused.

Bird is muddling things a bit here because in these examples the burglar and rapist did have uptake of warning or refusal, respectively, but thought it was insincere.

For the burglar or rapist to uptake deception, he first has to have an idea of what the speaker is deceiving him about; in Langton's example, this is the speaker's refusal of sex. Bird's example is different from Langton's because in the latter author's example the rapist does not comprehend the refusal at any point in the exchange.²⁵

However, this problem is not crucial to Bird's position. He still raises the valid question of whether or not uptake is required for a speaker to do things with her words. With regard to the woman's action, does it matter if the rapist thought her refusal was insincere? Does it matter if he did not even have uptake of her refusal? Bird says no, the refusal does not depend on the uptake of the audience, but rather on the intention of the speaker. It does not matter if the rapist didn't comprehend her refusal or if he thought it was insincere. If the woman intended to refuse and performed the requisite action (saying "no"), then she did refuse.²⁶ Bird's position is convincing. It does now seem odd to say that the woman didn't refuse simply because the rapist

didn't understand her. On the other hand, there is clearly something going wrong with communication here.

My intuition is that each author is partially right but is missing something. Bird is right that uptake is not necessary for a person to perform the illocutionary acts we have been discussing. I can still say "no" to someone who does not recognize that I'm refusing, and when I say "no" I am still refusing. I can still say, "He raped me," and even though my audience may not recognize that I'm making an accusation of wrongdoing, I am still doing just that. So Bird is correct that lack of uptake does not mean that I did not perform the illocutionary acts of refusal or accusal. But likewise, Langton is also correct that a type of disablement occurs when the intended audience does not secure uptake. Where do both authors go wrong? I contend that they both have been discussing the incorrect illocutionary act, and if we focus on the correct one, the problems that both authors face will be solved.

Toward a Hybrid Theory: A Langtonian-Birdian Reapproach

Neither Langton nor Bird do an adequate job of explaining how communication happens. For Langton (following Austin), whenever a speaker performs an illocutionary act (or in other words, *illocutes*), she communicates. The performance and communication are tied together in such a way that one cannot illocute without communicating. She doesn't elaborate on how this happens. For Bird, the speaker's intention is all that is needed to perform an illocutionary act, and he does not focus on communication at all. To understand what is happening and why both Langton and Bird have been focusing on the wrong illocutionary act, we must briefly analyze action.

Action: Intention and Performance

For every act we must consider three things: (1) the agent's intention, (2) the performance of the act, and (3) the consequences of the act. Only (1) and (2) relate directly to illocution, and (3) relates to perlocution; because perlocution is not the main focus of this paper, I will not address consequences here. Intention is important because we can perform multiple acts with the same movement. In classroom settings, the silent raising of a hand indicates that a student has a question. A student may raise his hand over his head and it would not be unusual for the teacher to ask, "Question? Or just stretching?" This is because the same movement can do different things, and the student's intention determines which act is occurring. The performance of the act is important because if the student intends to tell the teacher he has a question, then he must relay this intention to the teacher in the correct way (by raising his hand). He cannot, for example, relay his intention to the teacher by turning around in a circle and barking like a dog.

For illocutionary acts, intention and performance are just as important. Let's take Langton's case of refusal again and analyze it in these terms. In saying "no" to sex, what illocutionary act is the woman performing? Langton and Bird both say it is refusal. I want to suggest that she is performing two illocutionary acts at once—one of refusal and one of the communication of refusal. This may seem to be splitting hairs, but it is not, because there are two different intentions that the woman has when she says "no"—to refuse and to communicate this refusal.

If we take a physical example again this will become clearer. When Michael Jordan made one of his typical buzzer-beating, game-winning shots, what was he doing? In making that shot, he was doing two things—scoring and winning the game. He intended to do both and in performing the requisite action (making the shot), the acts of scoring and winning were both performed. If this is so, why should the same thing not be possible for speech acts?

A general definition of *to communicate* is “to convey information to someone else.” In saying “no,” the woman intends to refuse and to communicate the refusal. Here, her act of refusal is the piece of information she wants to convey. I will call the act that follows from the first intention the *primary act* and the act that follows from the second intention the *secondary act*. The reason for this terminology is that usually when we speak, we must first know what it is that we want to say. Likewise, when we communicate with others, we generally first must know what it is that we want to communicate.

Now that I’ve made the case for the performance of two illocutionary acts per locution, we’ll have to see whether both acts can be silenced (or, in Langton’s terminology, “disabled”) or if only one of them can. If the primary act can be disabled, then I will call this *primary act disablement*. If the secondary act can be disabled, then I will call this *secondary act disablement*.

Primary and Secondary Act Disablement

Is it possible for the primary act to be disabled? To use Langton’s example again, if a woman intends to refuse and performs the requisite locution, can that act of refusal be disabled? This is the question on which Langton and Bird disagree. Bird is correct here in saying that this act of refusal cannot be disabled. The reason is, it makes little sense that such an act would require uptake. It may come down to competing intuitions, but I follow Bird in saying that if a rape victim refused sex, then she refused, despite her audience’s lack of uptake. After all, are we to go to a rape victim and say to her, “Oh, but since the rapist didn’t have the proper uptake, you didn’t actually refuse”? This seems like it would be wrong on many levels. I conclude that primary acts, such as refusal and accusal, cannot be disabled. If this were the only possibility of disablement, then both Langton and I would be wrong when we say that pornography and the use of the word *rape* as slang illocutionarily disable. However, there is another possibility—secondary act disablement.

Is it possible for the secondary act to be disabled? That is, can the illocutionary act of communication be disabled? The answer is yes. Communication is relational between a speaker and a hearer, and this is why it requires uptake. Remember that *to communicate* is “to convey information to someone else.” If my audience does not know the information I wish them to know, then the act of communication was not completed.

Communication, then, is an action that seems to require an act from the speaker and an act from the hearer. The speaker must intend to perform the act of communication, and to actually perform it she must say the requisite locution. In intending so and performing so, she has performed her part of the action. The act of communication can be disabled when something gets in the way of the hearer’s part of the act (the uptake). This is secondary act disablement. In Langton’s example, what gets in the way is that pornography is violent and degrading and portrays acts of rape as normal. When a woman says “no” to sex, it disables the illocutionary act of communication (of refusal) by preventing the man from securing uptake. In my example, the use of the word *rape* as slang can disable the illocutionary act of communication (of accusal) that occurs when a victim/survivor says, “He raped me.”

Further Considerations

I would like to discuss very briefly two further considerations. The first is the culpability of the rapist if uptake is not secured. Bird mentions that this is a possible undesirable consequence of Langton’s view.²⁷ Should we say that the man committed a rape if he did not know that the woman was refusing? Yes, we should. This is because

consent is not based on the absence of a “no,” but rather on an affirmative “yes.” In other words, a lack of refusal does not equal consent. For example, if a victim is intoxicated and does not say “no,” this does not mean that she has consented to sex. The same logic applies to cases in which a victim is sober. Therefore, if the rapist didn’t have uptake of the refusal, that doesn’t mean that he did (or should) have uptake of consent.

Finally, it would be helpful to address what exactly the difference is between the statements “I raped that exam” and “I murdered that exam.” Both are reprehensible, but the reason the reproach of the former is so important has to do with context. Murder has always been severely castigated in our society, as have murderers. But rape and rapists have not. Instead, we have what is called a *rape culture*. The Baltimore-based organization called “FORCE: Upsetting Rape Culture” writes,

In a rape culture, people are surrounded with images, language, laws, and other everyday phenomena that validate and perpetuate rape. Rape culture includes jokes, TV, music, advertising, legal jargon, laws, words and imagery, that make violence against women and sexual coercion seem so normal that people believe that rape is inevitable. Rather than viewing the culture of rape as a problem to change, people in a rape culture think about the persistence of rape as “just the way things are.”²⁸

How does a rape culture do these things? It allows the star athlete or celebrity artist to get away with rape simply because of his status, it blames the victim while excusing the perpetrators, and it perpetuates harmful language such as the use of *rape* as a slang word.

Conclusion

Using Rae Langton’s argument against pornography as a model, and in conjunction with Alexander Bird’s convincing objection, I have developed a hybrid theory of illocutionary disablement. With this Langtonian-Birdian view, I have shown that the slang use of the word *rape* can lead to the illocutionary disablement of rape victims/survivors. The hybrid version is necessary to make the distinction between those illocutionary acts that may be disabled and those that may not be disabled.

In performing a certain locution, a speaker may intend for two illocutionary acts to occur—the primary act, which are acts like refusal and accusation, and the secondary act, which is the communication of the intended primary act. Only the secondary act requires uptake, and thus only the secondary act may be disabled. In sum, when victims/survivors say, “He raped me,” they intend both to accuse and to communicate this accusation to others. The communication of this accusation may be disabled by the slang use of the word *rape* because it interferes with the hearer’s necessary uptake.

The use of the word *rape* as slang is both a symptom and a cause of a profoundly sick society, which overtly condemns the act of certain kinds of rape but covertly tolerates rape in general.²⁹ Like a two-way street, our language informs rape culture, and in turn rape culture informs our language. One way we can work to heal this society is by ridding it of the sickness in our language. I propose that we fight against the use of *rape* as a slang word because not only does it cause immediate harm to victims/survivors of rape, it also leads to the illocutionary disablement of these victims/survivors when they have enough courage to speak up and say, “He raped me.” Such disablement is obviously harmful to, and disrespectful of, the victims/survivors. The use of the word *rape* as slang is therefore not only annoying, crass, or unkind, but it is also immoral.

Acknowledgements

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Notes

1. An important note: throughout this paper I will be referring to rapists with male pronouns and to the victims/survivors with female pronouns. I do this because this is the terminology Langton uses, and I model my argument after hers. It is important to recognize, however, that females can be perpetrators and males can be victims/survivors. Also, I recognize that the gender binary of male-female is insufficient, but I will use traditional pronouns for ease.
2. Examples 3 and 4 are heard quite often on university campuses, including the University of Wisconsin Oshkosh, where I have heard these expressions many times. Examples 1 and 2 are similar to a joke told by comedian Daniel Tosh in his stand-up routine. See "Daniel Tosh – rape," YouTube video, 0:52, posted by "PikeysPooOutdoors's channel," July 19, 2012, <https://www.youtube.com/watch?v=isSJwdXgho>.
3. *Merriam-Webster Online*, s.v. "rape," accessed November 20, 2013, <http://www.merriam-webster.com/dictionary/rape>.
4. I do not here have the space to expand on this issue. Briefly though, when I say "moral" or "immoral" I have Kantian ethical theory in mind, though I believe that my argument would also successfully fit into the framework of the other two main ethical theories (utilitarianism and virtue theory).
5. The White House Council on Women and Girls and the Office of the Vice President, "Rape and Sexual Assault: A Renewed Call to Action," January 2014, http://www.whitehouse.gov/sites/default/files/docs/sexual_assault_report_1-21-14.pdf, 1.
6. Connie C. Eble, *Slang & Sociability: In-Group Language among College Students* (Chapel Hill: University of North Carolina Press, 1996), 58.
7. *Merriam-Webster Online*, s.v. "ravish," accessed November 20, 2013, <http://www.merriam-webster.com/dictionary/ravish>.
8. There are others within the black community who argue against this attempted reappropriation of the "N"-word.
9. Charing Ball, "Ban Bossy or Be Bossy and Proud?" *Madame Noire* (blog), April 1, 2014, <http://madamenoire.com/416066/ban-bossy-bossy-proud/>.
10. Luiz Pessoa, "Emotion and Cognition and the Amygdala: From 'What Is It' to 'What's to Be Done?'" *Neuropsychologia* 48, no. 12 (October 2010): 3420, doi:10.1016/j.neuropsychologia.2010.06.0383420.
11. *Ibid.*
12. J. L. Austin, *How to Do Things with Words* (Cambridge, MA: Harvard University Press, 1962), 103.
13. *Ibid.*, 101. My example is analogous to Austin's, which is, "Shoot her!"
14. Rae Langton, "Speech Acts and Unspeakable Acts," *Philosophy and Public Affairs* 22, no. 4 (Fall 1993): 300, ProQuest Philosopher's Index (AN 1241801).
15. *Ibid.*
16. *Ibid.*, 314.
17. *Ibid.*
18. *Ibid.*, 315.
19. *Ibid.*, 316.

20. Ibid.
21. Marlene Goldsmith, "Sexual Offenders and Pornography: A Causal Connection?" *Without Consent: Confronting Adult Sexual Violence; Proceedings of a Conference Held 27–29 October 1992* (Canberra, Australia: Australian Institute of Criminology, 1993), http://aic.gov.au/media_library/publications/proceedings/20/goldsmith.pdf. Goldsmith does not address illocutionary disablement but I would like to note that there is substantial research on the relationship between violent and degrading pornography and rates of sexual assault; much of this research indicates there is a correlation. Goldsmith goes a step further and suggests a causal relationship.
22. Langton, "Speech Acts and Unspeakable Acts," 320.
23. Alexander Bird, "Illocutionary Silencing," *Pacific Philosophical Quarterly* 83, no. 1 (March 2002): 10, doi:10.1111/1468-0114.00137.
24. Ibid., 11.
25. Celia Kitzinger and Hannah Frith, "Just Say No? The Use of Conversation Analysis in Developing a Feminist Perspective on Sexual Refusal," *Discourse & Society* 10, no. 3 (July 1999), doi:10.1177/09579265990/0003002. The authors do an extensive conversation analysis on sexual refusal. They compare normal, nonsexual refusals to sexual refusals and note that in both it is more normal to use indirect speech and pauses rather than direct verbal communication. Following this, they state that their research supports the idea that rapists understand the refusal, they just don't like it. This is contrary to Langton's view, which states that the rapist does not secure uptake.
26. Speech acts allow nonverbal communication to be considered as speech (this means works of art, written signs, shakes of the head, etc., can all be considered speech). So if the woman screams or pushes the rapist away, this also counts as a speech act of refusal.
27. Bird, "Illocutionary Silencing," 3–4.
28. "Rape Culture," FORCE: Upsetting Rape Culture, accessed August 5, 2014, <http://upsettingrapeculture.com/rapeculture.php>.
29. There are very few types of rape that are overtly condemned by society. An example is what RAINN (Rape, Abuse and Incest National Network) calls "home invasion sexual assault." That is, if a victim is raped at home by a stranger she didn't invite inside, then she remains blameless in the eyes of society. These types of cases are rare. In most other cases—such as acquaintance rape and blitz assaults—the victim is blamed for a variety of reasons, including: what clothes she wore, when and where she was at the time of the assault (e.g., walking alone at night or being in a dangerous neighborhood), trusting a perpetrator (and victims are told they should have "just known" a friend or acquaintance is a rapist), and ingesting intoxicants with or without her knowledge. Furthermore, aside from blaming the victim, our society often excuses the perpetrator. An example is CNN's coverage of the 2012 Steubenville, Ohio, rape case. When society blames the victim or excuses the perpetrator, it tolerates rape. For more on the different types of rape, see "Types of Sexual Violence," RAINN: Rape, Abuse and Incest National Network, accessed October 17, 2014, <https://www.rainn.org/get-information/types-of-sexual-assault>.

Bibliography

Austin, J. L. *How to Do Things with Words*. Cambridge, MA: Harvard University Press, 1962.

Ball, Charing. "Ban Bossy or Be Bossy and Proud?" *Madame Noire* (blog). April 1, 2014. <http://madamenoire.com/416066/ban-bossy-bossy-proud/>.

Bird, Alexander. "Illocutionary Silencing." *Pacific Philosophical Quarterly* 83, no. 1 (March 2002): 1–15. doi:10.1111/1468-0114.00137.

"Daniel Tosh – rape." YouTube video, 0:52. Posted by "PikeysPooOutdoors's channel." July 19, 2012. <https://www.youtube.com/watch?v=isSJwdXggho>.

Eble, Connie C. *Slang & Sociability: In-Group Language among College Students*. Chapel Hill: University of North Carolina Press, 1996.

- Goldsmith, Marlene. "Sexual Offenders and Pornography: A Causal Connection?" *Without Consent: Confronting Adult Sexual Violence; Proceedings of a Conference Held 27–29 October 1992*. Canberra, Australia: Australian Institute of Criminology, 1993. http://aic.gov.au/media_library/publications/proceedings/20/goldsmith.pdf.
- Kitzinger, Celia, and Hannah Frith. "Just Say No? The Use of Conversation Analysis in Developing a Feminist Perspective on Sexual Refusal." *Discourse & Society* 10, no. 3 (July 1999): 293–316. doi:10.1177/0957926599010003002.
- Langton, Rae. "Speech Acts and Unspeakable Acts." *Philosophy and Public Affairs* 22, no. 4 (Fall 1993): 293–330. ProQuest Philosopher's Index (AN 1241801).
- Pessoa, Luiz. "Emotion and Cognition and the Amygdala: From 'What Is It?' to 'What's to Be Done?'" *Neuropsychologia* 48, no. 12 (October 2010): 3416–29. doi:10.1016/j.neuropsychologia.2010.06.038.
- "Rape Culture." FORCE: Upsetting Rape Culture. Accessed August 5, 2014. <http://upsettingrapeculture.com/rapeculture.php>.
- "Types of Sexual Violence." RAINN: Rape, Abuse and Incest National Network. Accessed October 17, 2014. <https://www.rainn.org/get-information/types-of-sexual-assault>.
- The White House Council on Women and Girls and the Office of the Vice President. "Rape and Sexual Assault: A Renewed Call to Action." January 2014. http://www.whitehouse.gov/sites/default/files/docs/sexual_assault_report_1-21-14.pdf.

More Congruences for the k -regular Partition Function

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Abstract

A partition of a number n is a list of positive integers whose sum is n . For example, $4 + 2 + 1$ and $4 + 1 + 1 + 1$ are both partitions of 7. It can be shown that 4 has 5 partitions, 9 has 30 partitions, 14 has 135 partitions, and Srinivasa Ramanujan proved the following beautiful result: the number of partitions of $5n + 4$ is divisible by 5 for any nonnegative integer n . The k -regular partition function counts the number of partitions of n whose parts are not divisible by k . In 2012, for particular values of k , David Furcy and David Penniston found many families of integers whose number of k -regular partitions is divisible by 3. In this paper, I extend their results to larger values of k and provide an overview of the methodology used to arrive at the result. In the interest of brevity, only a sketch of the proof is given.

Roadmap

This project lies at the intersection of mathematics and computation, so it necessitates the presentation of a significant amount of background material. The first three sections introduce partitions, explain congruences, and demonstrate how to calculate both. Though the reader may be unfamiliar with these topics, the introductory material largely deals with relatively simple concepts like integers and divisibility. Several of the new concepts are endnoted with exercises that can be completed with paper and a pencil. The exercises are not designed to be difficult, but they will provide a familiarity with the material that mere reading cannot achieve. The following three sections describe the methodology I used for the project, present my new results, and provide an abridged proof of the results. The penultimate section discusses my results within the context of the field and offers some possibilities for future work. Finally, the last section is dedicated to acknowledging the contributions of those who made this project possible. An answer key for the exercises is provided as an appendix.

Introduction to Partitions

An *integer* is a whole number that can be negative, positive, or zero. Thus, -1 , 2 , and 0 are all integers, while 0.5 and $1/3$ are not. Given an integer n , a *partition* of n is a nonincreasing sequence of positive integers that add up to it. For example, $3 + 1$ is a partition of $n = 4$. The numbers present in a partition are called *parts*. A natural

question arising from this definition is: Given some nonnegative integer n , how many partitions does it have? As an example, figure 1 provides all the partitions of 5.

- 5
- 4 + 1
- 3 + 2
- 3 + 1 + 1
- 2 + 2 + 1
- 2 + 1 + 1 + 1
- 1 + 1 + 1 + 1 + 1

Figure 1. The partitions of $n = 5$.

We find that 5 has a total of 7 partitions (note that due to the nonincreasing condition, we do not consider $1 + 4$ or $1 + 3 + 1$ to be partitions). For convenience, we define a function $p(n)$ which, given an integer n , returns the number of partitions of n . Then, as we just found, $p(5) = 7$.¹ Table 1 features the first eleven values of $p(n)$. Note that $p(0)$ is equal to 1 because there exists only one list of positive integers whose sum is 0, namely the empty list. Since the sum of any list of positive integers is at least 0, we have that $p(x) = 0$ for all negative integers x .

Table 1. Some values of $p(n)$.

n	$p(n)$
0	1
1	1
2	2
3	3
4	5
5	7
6	11
7	15
8	22
9	30
10	42

It is possible to create new functions similar to $p(n)$ by placing restrictions on the partitions. Given a positive integer k , a partition is called k -regular if none of its parts are divisible by k . The 2-regular partitions of 5 are listed in figure 2.

- 5
- 3 + 1 + 1
- 1 + 1 + 1 + 1 + 1

Figure 2. The 2-regular partitions of $n = 5$.

The remaining partitions of 5 are not 2-regular because they contain parts, namely 4 and 2, that are divisible by 2:

- 4 + 1
- 3 + 2
- 2 + 2 + 1
- 2 + 1 + 1 + 1

Figure 3. The non-2-regular partitions of $n = 5$.

Similar to $p(n)$, we define the k -regular partition function $b_k(n)$ to return the number of k -regular partitions of n . Figure 2 shows that $b_2(5) = 3$.² The k -regular partition function for certain values of k is the focus of this paper.

Congruences

A *congruence* is a statement about divisibility, and there exist many congruences for the partition function. The first five values of $p(5n + 4)$ are in table 2. Note that each value ends in either 0 or 5, meaning that each is divisible by 5.

Table 2. Some values of $p(5n + 4)$.

n	$5n + 4$	$p(5n + 4)$	$p(5n + 4)$, factored
0	4	5	$5 \cdot 1$
1	9	30	$5 \cdot 6$
2	14	135	$5 \cdot 27$
3	19	490	$5 \cdot 98$
4	24	1575	$5 \cdot 315$

It turns out that this phenomenon continues indefinitely; that is, every number in the infinite list $p(29), p(34), p(39), \dots$ is also divisible by 5. This pattern is part of a set of results known as *Ramanujan's congruences*, which were among the first congruence results to be proven about the partition function.

$p(5n + 4)$ is divisible by 5.

$p(7n + 5)$ is divisible by 7.

$p(11n + 6)$ is divisible by 11.

Figure 4. Ramanujan's congruences, for any integer n .

Srinivasa Ramanujan proved the first two congruences of figure 4 and stated the third without proof, and after his death, G. H. Hardy used material from Ramanujan's notebooks to reconstruct a proof of the third result (Ramanujan 2000). Ramanujan's work still inspires new research today, and there is even a journal dedicated to results that stem from his discoveries and creations.

Note that 5, 7, and 11 are all prime numbers, i.e., each is divisible only by 1 and itself. The curious reader may wonder whether congruences of the form " $p(An + B)$ is divisible by A " exist for other primes A , but it turns out that 5, 7, and 11 are unique in this regard (Ahlgren and Boylan 2003). On a brighter note, for any positive integer M that is not divisible by 2 or 3, there always exist congruences of the form " $p(An + B)$ is divisible by M " (Ahlgren and Ono 2001). Johansson (2012) gives one such congruence for $M = 13$:

$$p(711647853449n + 485138482133) \text{ is divisible by } 13.$$

Unfortunately, Ahlgren and Ono's proof that congruences always occur is not constructive: it does not explicitly show how to find congruences, but merely demonstrates that they exist.

Perhaps unsurprisingly, congruence results akin to those satisfied by the partition function $p(n)$ also occur for the k -regular partition function $b_k(n)$ for various values of k . Consider $k = 13$. For n between 0 and 12, $b_{13}(n)$ is the same as $p(n)$, since no partition for these numbers can contain parts divisible by 13. However, for larger n , $b_{13}(n)$ excludes some of the available partitions, and so it grows more slowly than $p(n)$.

Table 3. $p(n)$ versus $b_{13}(n)$.

n	$p(n)$	$b_{13}(n)$
0	1	1
10	42	42
20	627	612
30	5604	5302
40	37338	34193
50	204226	181014

Similar to Ramanujan with $p(n)$, there is a pattern in the 13-regular partition function:

Table 4. Some values of $b_{13}(9n + 7)$.

n	$9n + 7$	$b_{13}(9n + 7)$	$b_{13}(9n + 7)$, factored
0	7	15	$3 \cdot 5$
1	16	228	$3 \cdot 76$
2	25	1881	$3 \cdot 627$
3	34	11496	$3 \cdot 3832$
4	43	57360	$3 \cdot 19120$

Calkin et al. (2008) proved that the congruence

$$b_{13}(9n + 7) \text{ is divisible by } 3$$

holds true for any nonnegative integer n .

Moreover, Webb (2011) proved a *recurrence*—a relationship between a function and its previous values—for the 13-regular partition function. The values of $b_{13}(n)$ in table 5 demonstrate the recurrence:

Table 5. Recurrence values for $b_{13}(n)$.

n	$b_{13}(3n + 1)$	$b_{13}(9n + 4)$	$b_{13}(3n + 1) + b_{13}(9n + 4)$	$b_{13}(3n + 1) + b_{13}(9n + 4)$, factored
0	1	5	6	$3 \cdot 2$
1	5	100	105	$3 \cdot 35$
2	15	972	987	$3 \cdot 329$
3	42	6450	6492	$3 \cdot 2164$
4	100	34193	34293	$3 \cdot 11431$
5	228	154293	154521	$3 \cdot 51507$

The recurrence can therefore be stated as

$$b_{13}(3n + 1) + b_{13}(9n + 4) \text{ is divisible by } 3,$$

and it holds for all nonnegative n .

Suppose we replace the n in the recurrence by $3n + 2$. This is equivalent to only considering $n = 2$, then $n = 5$, then $n = 8$, and so on. When we make the replacement, the recurrence becomes

$$b_{13}(3(3n + 2) + 1) + b_{13}(9(3n + 2) + 4) \text{ is divisible by } 3,$$

which simplifies to

$$b_{13}(9n + 7) + b_{13}(27n + 22) \text{ is divisible by } 3.$$

Since we simply selected particular values from the original recurrence, this new statement is also true. Observe that the expression from the congruence is present in this new recurrence. Since $b_{13}(9n + 7)$ is divisible by 3 and $b_{13}(9n + 7) + b_{13}(27n + 22)$ is also divisible by 3, it must be the case that

$$b_{13}(27n + 22) \text{ is divisible by } 3.$$

In other words, the recurrence generated a new congruence out of the old one. Even better, this process can be repeated indefinitely, with each new congruence generating yet another. The first few congruences Webb generated for the 13-regular partition function are located in table 6. To avoid repetition, I elide the “is divisible by 3” portions of the congruences.³

Table 6. Some of Webb’s congruences for $b_{13}(n)$ divisible by 3.

Number of Uses of the Recurrence	Congruence
0	$b_{13}(9n + 7)$
1	$b_{13}(27n + 22)$
2	$b_{13}(81n + 67)$
3	$b_{13}(243n + 202)$
4	$b_{13}(729n + 607)$

All of the (infinitely many) congruences can be written as a single statement: for all nonnegative integers m and n ,

$$b_{13}\left(3^{m+2}n + \frac{5 \cdot 3^{m+1} - 1}{2}\right) \text{ is divisible by } 3.^4$$

My congruences for the k -regular partition function are similar in form to this result, though the proof is slightly different.

Congruence results have been found for many other values of k (Ahlgren and Lovejoy 2001; Andrews, Hirschorn, and Sellers 2010; Calkin et al. 2008; Dandurand and Penniston 2009; Furcy and Penniston 2012; Gordon and Ono 1997; Lovejoy 2001; Penniston 2008). Furcy and Penniston deal with values of k that are less than 50. I extend their results by proving congruences for $b_k(n)$ for particular values of k between 50 and 100.

Calculating Partition Functions

The k -regular partition numbers can be constructed out of the values of $p(n)$. Therefore, in order to search for congruences involving $b_k(n)$, it is helpful to know the values of $p(n)$. However, calculating them by hand is time consuming because $p(n)$ grows quickly; for example, $p(30)$ is 5604 and $p(100)$ is 190,569,292. Luckily, a formula arising out of the pentagonal number theorem proved by Leonhard Euler

makes it possible to calculate $p(n)$ without building any partitions (Enestrom 1910). The n^{th} pentagonal number is defined to be $G(n) = (3n^2 - n) / 2$. As the name implies, this formula has a geometric interpretation: $G(n)$ is equal to the number of dots appearing in the n^{th} set of nested pentagons like those in figure 5.⁵

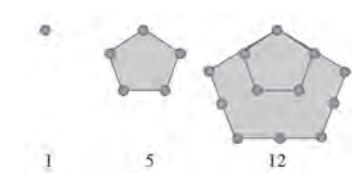


Figure 5. Count the dots: calculating $G(1)$, $G(2)$, and $G(3)$.

The *generalized pentagonal numbers* result from placing all integers in the formula.

Table 7. Some generalized pentagonal numbers.

n	$G(n)$
0	0
1	1
-1	2
2	5
-2	7
3	12
-3	15
4	22
-4	26
5	35
-5	40

Recall that a recurrence is a relation between a function and its previous values. Euler proved the following striking recurrence for $p(n)$:

$$p(n) = p(n - 1) + p(n - 2) - p(n - 5) - p(n - 7) + p(n - 12) + p(n - 15) - - + + \dots,$$

where the alternating pattern of adding twice and subtracting twice continues indefinitely, and the numbers that are subtracted from n are the generalized pentagonal numbers. Also recall that $p(x) = 0$ when x is negative, so the sum terminates once it reaches a generalized pentagonal number larger than n . Using the recurrence, if the values of $p(0)$, $p(1)$, \dots , $p(n - 2)$, and $p(n - 1)$ are all known, then we can calculate $p(n)$ without much extra work. In fact, only a small subset of these partition numbers needs to be known. For example, we can use the values in table 1 to calculate $p(11)$:

$$\begin{aligned} p(n) &= p(n - 1) + p(n - 2) - p(n - 5) - p(n - 7) + p(n - 12) + p(n - 15) - - + + \dots \\ p(11) &= p(11 - 1) + p(11 - 2) - p(11 - 5) - p(11 - 7) + p(11 - 12) + p(11 - 15) - - + + \dots \\ p(11) &= p(10) + p(9) - p(6) - p(4) + p(-1) + p(-4) - - + + \dots \\ p(11) &= p(10) + p(9) - p(6) - p(4) \\ p(11) &= 42 + 30 - 11 - 5 \\ p(11) &= 56 \end{aligned}$$

We find that to calculate $p(11)$, we only need to know $p(10)$, $p(9)$, $p(6)$, and $p(4)$.

Using the recurrence is much less tedious than enumerating all partitions by hand, and it can be easily implemented on a computer to calculate all the partition numbers between 0 and n for reasonably large n .⁶ Alternatively, if we are interested in a single value $p(n)$ rather than all of the values $p(0), p(1), \dots, p(n-1), p(n)$, there exist efficient algorithms to calculate it without needing any of the previous values (Johansson 2012). From this point forward, all of the partition values I will mention were calculated using Euler's recurrence in a computer program.

Methodology

The method I used to prove my congruence results is due to Furcy and Penniston. It can be broken down into three steps: calculate partition values, search for congruences, and prove congruences. The nature of the proof restricts its applicability to values of k such that 3 divides $k-1$. Hereafter, all values of k mentioned will have this property unless stated otherwise.

I began the calculate step by implementing Euler's recurrence in the C programming language and using this program to generate all values of $p(n)$ for n up to two billion. The partition function grows quickly— $p(10^9)$ has 35,219 digits—so it was not feasible to store its true values. Luckily, I was only concerned with divisibility by 3, so every partition number could be stored as either 0, 1, or 2, depending on whether $p(n)$, $p(n)-1$, or $p(n)-2$ was divisible by 3, respectively. This is called considering $p(n)$ modulo 3. Thus, every partition number I calculated consisted of a single digit. Even so, the set of all partition numbers took up 500 megabytes of space, approximately 75% of the capacity of a standard CD.

The computation was performed *serially*—one partition number at a time—and took approximately eight days to complete. Once it was done, for each k between 50 and 100, I used the values to calculate $b_k(n)$ for all n less than 10,000,000. These sets of ten million values were the *search spaces* of my project. I decided the size of the spaces by trial and error; this size eliminated all false positives from the search step but was small enough to calculate in a reasonable amount of time (a few seconds). Furcy and Penniston searched for congruences of the form

$$b_k(3^A n + B) \text{ is divisible by } 3,$$

where k is less than 50, A is between 1 and 10 and B is between 0 and $3A-1$. I searched for congruences of this same form, but with k between 50 and 100. The search step was a simple brute-force search: it looked at every possibility of A and B and checked if $b_k(3^A n + B)$ is divisible by 3 for all n that kept $3^A n + B$ within my search space. If the divisibility held for all n that I checked, then I added a congruence to the list of candidates. Next, again using a brute-force search, I looked for recurrences of the form

$$b_k(3^A n + B) + b_k(3^C n + D) \text{ is divisible by } 3,$$

and

$$b_k(3^A n + B) - b_k(3^C n + D) \text{ is divisible by } 3,$$

where A is less than C and both are less than or equal to 10. As we saw earlier, such a recurrence could potentially be used to generate new congruences out of old ones. Indeed, analogous to Webb's result for $b_{13}(n)$, I found recurrences for certain $b_k(n)$ that generated infinitely many new congruences.

The final step was to prove the congruences and recurrences found in the search step. The problem is that a congruence like

$$b_{67}(729n + 301) \text{ is divisible by } 3$$

is a statement about infinitely many values of n , while the search step of course checks only finitely many. While I will not go into detail here, it is possible to construct a mathematical object known as a *modular form* that encodes the values of $b_k(n)$. Additionally, there is a transformation that can be applied to a form called the *Hecke operator*, which can yield a function that might correspond to a candidate congruence or recurrence found in the search step. Once a candidate congruence is associated with a modular form, a theorem of Jacob Sturm tells us that if the congruence holds up to a certain point, then it must hold forever (Sturm 1987).

The proof step therefore consisted of three parts. First, I constructed modular forms that corresponded to each of the congruences and recurrences. Then, depending on the Sturm bound attached to each form, I calculated the necessary values of the k -regular partition function using the values of $p(n)$ and verified that each congruence and recurrence held true. Finally, I applied the relevant recurrences to each congruence to generate families of numbers whose k -regular partition numbers are divisible by 3.

Results

Theorem 1. Let n and m be any pair of nonnegative integers. Then, all of the following are divisible by 3:

$$\begin{array}{ll} b_{67}\left(3^{2m+6}n + \frac{5 \cdot 3^{2m+5} - 11}{4}\right) & b_{67}\left(3^{2m+7}n + \frac{11 \cdot 3^{2m+5} - 11}{4}\right) \\ b_{70}\left(3^{2m+6}n + \frac{13 \cdot 3^{2m+5} - 23}{8}\right) & b_{70}\left(3^{2m+7}n + \frac{23 \cdot 3^{2m+5} - 23}{8}\right) \\ b_{79}\left(3^{2m+4}n + \frac{11 \cdot 3^{2m+3} - 13}{4}\right) & b_{79}\left(3^{2m+5}n + \frac{5 \cdot 3^{2m+4} - 13}{4}\right) \\ b_{91}\left(3^{2m+4}n + \frac{5 \cdot 3^{2m+3} - 15}{4}\right) & b_{91}\left(3^{2m+5}n + \frac{11 \cdot 3^{2m+4} - 15}{4}\right) \end{array}$$

Note that for each pair of families, the first family has even powers of 3 attached to n , while the second has odd powers of 3. Also, the powers of 3 attached to n increase by 2 when m is increased by 1. Thus, each pair of families generates congruences containing all powers of 3 greater than or equal to the even power of 3 calculated when $m = 0$. Table 8 illustrates this by showing the first few congruences from the families for $b_{67}(n)$.

Table 8. Some of my congruence results for $b_{67}(n)$ divisible by 3.

m	Congruence from Family 1	Congruence from Family 2
0	$b_{67}(729n + 301)$	$b_{67}(2187n + 2002)$
1	$b_{67}(6561n + 2731)$	$b_{67}(19683n + 18040)$
2	$b_{67}(59049n + 24601)$	$b_{67}(177147n + 162382)$

As an example of an individual congruence, values of $b_{67}(729n + 301)$ are placed in table 9.

Table 9. Some values of $b_{67}(729n + 301)$.

n	$729n + 301$	$b_{67}(729n + 301)$, factored
0	301	$3 \cdot 3288304305337708$
1	1030	$3 \cdot 24111764832321169867987562139516$
2	1759	$3 \cdot 36477912261775772450764503576351$
3	2488	$3 \cdot 555816587146753951030956700341289285382444975430921$
4	3217	$3 \cdot 16563511516295866880289667762269701587577286136177203182764$

Similar to Furcy and Penniston, I also found examples of congruences with no applicable recurrences in the search space, and vice versa.

Theorem 2. Let n be a nonnegative integer. Then, the following are divisible by 3:

$$\begin{aligned}
 &b_{35}(243n + 180) \\
 &b_{70}(729n + 392) \\
 &b_{70}(2187n + 2093) \\
 &b_{61}(9n + 2) - b_{61}(729n + 362) \\
 &b_{85}(9n + 1) - b_{85}(729n + 361)
 \end{aligned}$$

Recall that my search for congruences was brute-force. This type of search ensures that all congruences that exist within the search space are found, which leads us to my final theorem.

Theorem 3. The congruences generated by Theorem 1 and listed in Theorem 2 account for *all* congruences of the form

$$b_k(3^A n + B) \text{ is divisible by } 3,$$

where the variables k , n , A , and B are integers subject to the following conditions:

- $50 < k \leq 100$
- 3 divides $k - 1$
- n is nonnegative
- $1 \leq A \leq 10$
- $0 \leq B \leq 3^A$.

Sketch of the Proof

Since the proofs of the cases are nearly identical, I will only sketch the proof of the first congruence family in Theorem 1. A candidate congruence found in the search step was

$b_{67}(729n + 301)$ is divisible by 3.

Additionally, I found the recurrence

$$b_{67}(243n + 58) - b_{67}(2187n + 544) \text{ is divisible by } 3.$$

I now show that it is possible to construct modular forms that encode these values of $b_{67}(n)$.

As is customary, I will denote the complex vector space of modular forms of weight k , level N , and Dirichlet character χ as $M_k(\Gamma_0(N), \chi)$ and will write

$$f \in M_k(\Gamma_0(N), \chi)$$

to denote that f is a function in this space. The values k and N are used to calculate the Sturm bound for all modular forms in the space. My modular forms are built out of products of Dedekind's eta function, which is defined as:

$$\eta(z) := q^{1/24} \prod_{n=1}^{\infty} (1 - q^n),$$

where $q(z) = e^{2\pi iz}$. There exist criteria that determine whether or not a particular product or quotient involving the eta function is in fact a modular form (Ono 2004).

My first form is

$$g(z) = \eta(67z)\eta(z)^{10205} \in M_{5103}(\Gamma_0(67), \chi_{67}).$$

The definition of the eta function and some elementary techniques in number theory show that $g(z)$ can be expressed as:

$$g(z) = \left(\sum_{n=0}^{\infty} b_{67}(n)q^{n+428} \right) \cdot F_0(z).$$

The sum in parenthesis is called a q -expansion. The function $F_0(z)$ has a q -expansion that is not divisible by 3. Written another way,

$$g(z) = (b_{67}(0)q^{428} + b_{67}(1)q^{429} + b_{67}(2)q^{430} + b_{67}(3)q^{431} + \dots) \cdot F_0(z).$$

We can apply the index 3 Hecke operator (written as T_3) to $g(z)$ and then consider the result's divisibility (or non-divisibility) by 3. Table 10 contains the first six applications of T_3 to $g(z)$, modulo 3. As with $F_0(z)$, each $F_i(z)$ has a q -expansion that is not divisible by 3.

Table 10. Six applications of T_3 to $g(z)$.

i	$g(z)$ after i applications of T_3 , modulo 3
0	$\left(\sum_{n=0}^{\infty} b_{67}(n)q^{n+428} \right) \cdot F_0(z)$
1	$\left(\sum_{n=0}^{\infty} b_{67}(3n+1)q^{n+143} \right) \cdot F_1(z)$
2	$\left(\sum_{n=0}^{\infty} b_{67}(9n+4)q^{n+48} \right) \cdot F_2(z)$
3	$\left(\sum_{n=0}^{\infty} b_{67}(27n+4)q^{n+16} \right) \cdot F_3(z)$
4	$\left(\sum_{n=0}^{\infty} b_{67}(81n+58)q^{n+6} \right) \cdot F_4(z)$
5	$\left(\sum_{n=0}^{\infty} b_{67}(243n+58)q^{n+2} \right) \cdot F_5(z)$
6	$\left(\sum_{n=0}^{\infty} b_{67}(729n+301)q^{n+1} \right) \cdot F_6(z)$

The properties of the Hecke operator imply that each one of the functions in table 10 is congruent modulo 3 to a member of $M_{5103}(\Gamma_0(67), \chi_{67})$. The sixth application of T_3 to $g(z)$ is used to prove the first congruence for the first result in Theorem 1. The bound given by Sturm for $M_{5103}(\Gamma_0(67), \chi_{67})$ is $n = 28917$. I computationally verified that $b_{67}(729n + 301)$ is divisible by 3 for any nonnegative n less than or equal to this bound. With a minor argument about the properties of F_6 , Sturm's theorem implies that $b_{67}(729n + 301)$ is divisible by 3 for any nonnegative n .

With the congruence proven, all that remains is to demonstrate that the recurrence is true and to apply it to the congruence. A proof similar to the one above, using the modular forms

$$h_1(z) = \eta(67z)\eta(z)^{10205} \in M_{5103}(\Gamma_0(67), \chi_{67})$$

and

$$h_2(z) = \eta(67z)\eta(z)^{39365} \in M_{19683}(\Gamma_0(67), \chi_{67}),$$

shows that the recurrence

$$b_{67}(243n + 58) - b_{67}(2187n + 544) \text{ is divisible by } 3$$

holds for any nonnegative n . Note that h_1 is the same as g from my proof for the congruence. The function h_1 has weight 5103, while h_2 has weight 19683, so we must "scale" h_1 to weight 19683 to get both functions in the same space (which allows the use of Sturm's theorem). This scaling can be accomplished by multiplying h_1 by

a certain power of the Eisenstein function E_4 . The properties of E_4 imply that this multiplication does not change h_1 modulo 3.

Finally, taking the recurrence and replacing n by $3n + 1$ yields a new recurrence,

$$b_{67}(729n + 301) - b_{67}(6561n + 2731) \text{ is divisible by } 3,$$

which is applicable to the congruence I just proved. The first new congruence generated is therefore

$$b_{67}(6561n + 2731) \text{ is divisible by } 3.$$

Repeated applications of the recurrence yield the first family of congruences of Theorem 1 in the Results section.

Conclusion and Future Work

Furcy and Penniston found fourteen families of congruences for nine different values of k where k is less than 50. I found only eight families of congruences over four values of k between 50 and 100, which suggests that congruences become less common as k increases. However, it is possible that congruences *do* occur for other values of k , but at higher numbers than those in my search spaces. Thus, this work can be extended by increasing the size of the search space and looking at the values of $b_k(n)$ for $k \leq 100$. Attempting to find congruences for higher values of k while keeping the search space the same size might prove to be fruitful, though it seems that any such results would be sparse. It may also be possible to find a different proof method that removes the requirement that $k - 1$ be divisible by 3.

Recall that Ahlgren and Ono showed that there always exist congruences of the form

$$p(An + B) \text{ is divisible by } M$$

when M is not divisible by 2 or 3. It is not unreasonable to suspect that an analogous result exists for the k -regular partition function. Therefore, a general extension of this work would be to prove that for certain values of k , congruences of the form

$$b_k(An + B) \text{ is divisible by } M$$

always occur for values of M , possibly subject to restrictions as in the $p(n)$ case.

Acknowledgments

I would like to thank Dr. David Furcy for his insightful comments about the optimization of the calculation of partition numbers and Dr. David Penniston for his unfailing support and guidance. This work was generously funded by an Undergraduate Student/Faculty Collaborative Research grant from the University of Wisconsin Oshkosh.

Notes

1. Write the partitions of $n = 4$. How many did you get (i.e., what is $p(4)$)?
2. Write all the 3-regular partitions of $n = 5$. How many are there (i.e., what is $b_3(5)$)?
3. Notice that each entry after the first in table 6 is calculated by multiplying the previous entry by 3 and then adding 1. For example, $3 \cdot (9n + 7) + 1 = (27n + 21) + 1 = 27n + 22$. Apply this technique to the last entry to get the next congruence.

4. Set $m = 5$ in the “single statement” expression to verify your answer for the previous question.
5. Copy the diagram for the 3rd pentagonal number. On top of it, draw a pentagon with four dots on each side. Count the dots to get the 4th pentagonal number.
6. Suppose we only knew the values of $p(0)$, $p(1)$, $p(2)$, $p(3)$, and $p(4)$. Use the recurrence and table 1 to find $p(5)$.

Bibliography

- Ahlgren, Scott, and Jeremy Lovejoy. “The Arithmetic of Partitions into Distinct Parts.” *Mathematika* 48, no. 1–2 (2001): 203–11.
- Ahlgren, Scott, and Ken Ono. “Congruence Properties for the Partition Function.” *Proceedings of the National Academy of Sciences of the United States of America* 98, no. 23 (2001): 12,282–84.
- Ahlgren, Scott, and Matthew Boylan. “Arithmetic Properties of the Partition Function.” *Inventiones Mathematicae* 153, no. 3 (2003): 487–502.
- Andrews, G. E., M. D. Hirschorn, and J. A. Sellers. “Arithmetic Properties of Partitions with Even Parts Distinct.” *Ramanujan Journal* 23, no. 1–3 (2010): 169–81.
- Calkin, Neil, Nate Drake, Kevin James, Shirley Law, Philip Lee, David Penniston, and Jeanne Radder. “Divisibility Properties of the 5-regular and 13-regular Partition Functions.” *Integers: Electronic Journal of Combinatorial Number Theory* 8, no. 1 (2008).
- Dandurand, Brian, and David Penniston. “ ℓ -divisibility of ℓ -regular Partition Functions.” *Ramanujan Journal* 19, no. 1 (2009): 63–70.
- Eneström, Gustaf. *Verzeichnis der Schriften Leonhard Eulers*. Jahresbericht der Deutschen Mathematiker-Vereinigung 4. Leipzig, Germany: B. G. Teubner, 1910.
- Furcy, David, and David Penniston. “Congruences for ℓ -regular Partition Functions Modulo 3.” *Ramanujan Journal* 27, no. 1 (2012): 101–08.
- Gordon, Basil, and Ken Ono. “Divisibility of Certain Partition Functions by Powers of Primes.” *Ramanujan Journal* 1, no. 1 (1997): 25–34.
- Johansson, Fredrik. “Efficient Implementation of the Hardy-Ramanujan-Rademacher Formula.” *LMS Journal of Computation and Mathematics* 15 (2012): 341–59.
- Lovejoy, Jeremy. “Divisibility and Distribution of Partitions into Distinct Parts.” *Advances in Mathematics* 158, no. 2 (2001): 1–8.
- Ono, Ken. “The Web of Modularity.” *CBMS Regional Conference Series in Mathematics* (American Mathematical Society) no. 102 (2004): 18–19.
- Penniston, David. “Arithmetic of ℓ -regular Partition Functions.” *International Journal of Number Theory* 4, no. 2 (2008): 295–302.
- Ramanujan, Srinivasa. “Congruence Properties of Partitions.” In *Collected Papers of Srinivasa Ramanujan*, 232–38. Providence: AMS Chelsea, 2000.
- . “Some Properties of $p(n)$, the Number of Partitions of n .” *Proceedings of the Cambridge Philosophical Society* 19 (1919): 207–10.

Sturm, Jacob. "On the Congruence of Modular Forms." *Lecture Notes in Mathematics* 1240 (1987): 275–80.

Webb, J. J. "Arithmetic of the 13-regular Partition Function Modulo 3." *Ramanujan Journal* 25, no. 1 (2011): 49–56.

Appendix

Answers to Exercises

1. The partitions of $n = 4$ are:

4
 $3 + 1$
 $2 + 2$
 $2 + 1 + 1$
 $1 + 1 + 1 + 1$.

Thus, $p(4) = 5$.

2. The 3-regular partitions of $n = 5$ are:

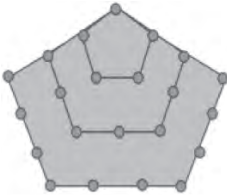
5
 $4 + 1$
 $2 + 2 + 1$
 $2 + 1 + 1 + 1$
 $1 + 1 + 1 + 1 + 1$.

Therefore, $b_3(5) = 5$.

3. $3(729n + 607) + 1 = (2187n + 1821) + 1 = 2187n + 1822$.

4. $3^{(5+2)}n + (5 \cdot 3^{(5+1)} - 1) / 2 = 2187n + (1644 / 2) = 2187n + 1822$.

5.



Counting the dots, we find that $G(4) = 22$.

6. $p(n) = p(n-1) + p(n-2) - p(n-5) - p(n-7) + p(n-12) + p(n-15) - \dots$

$$p(5) = p(5-1) + p(5-2) - p(5-5) - p(5-7) + p(5-12) + p(5-15) - \dots$$

$$p(5) = p(4) + p(3) - p(0) - p(-2) + p(-7) + p(-10) - \dots$$

$$p(5) = p(4) + p(3) - p(0)$$

$$p(5) = 5 + 3 - 1$$

$$p(5) = 7$$

Do Existing Screening Tools Accurately Reflect Experiences of LGBTQ-Identified Victims of Intimate Partner Violence?

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Ashley T. Leonardelli is a recent graduate of UW Oshkosh. She holds a B.A. in psychology with minors in Spanish and social justice. Her passions include social justice, activism, diversity studies, psychology, and global travel. As an undergrad, she was heavily involved in diversity and inclusivity efforts, and cofounded the first social justice club on her campus. She was awarded the Chancellor's Award for Excellence for her strong academics, leadership capabilities, and extensive campus involvement. Ashley was also active in the local Psi Chi chapter, and served as a research assistant for two faculty members. After interning at the campus LGBTQ Resource Center, she solidified her commitment to increasing protections and services for LGBTQ-identified survivors of intimate partner violence (IPV). Since that time, she has given numerous presentations about IPV against LGBTQ-identified persons and worked with a student organization to incorporate the topic into a well-attended, annual campus event on partner violence. She is also currently volunteering with a local LGBTQ community organization and assisting with their antiviolence project. After completing an international internship, she plans to pursue her Ph.D. in clinical psychology and work with victims of partner violence, specializing in services for diverse victims.

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Abstract

The purpose of this study was to assess how relevant existing screening tools are to lesbian, gay, bisexual, transgender, and queer (LGBTQ) victims of intimate partner violence (IPV). Screening tools are surveys medical and mental health professionals give to their beneficiaries to determine if the person is experiencing some form of abuse (e.g., emotional or physical). Expert participants decided the relevance of each screening tool by rating all items on the three most commonly used: Hurt, Insult, Threaten, Scream; Partner Violence Screen; and Abuse Assessment Screen. Participants were also asked to evaluate the relevance of new questions, designed by the principal researcher based on extensive literature reviews. All three tools and researcher-generated items were rated as "somewhat relevant" to LGBTQ victims with participants reporting that wording changes and additional questions could improve the tools' relevance. These results help inform best practices for identifying LGBTQ survivors of IPV.

Keywords: intimate partner violence, LGBTQ victims, screening tools

Background

Following the reauthorization of a more inclusive Violence against Women Act (VAWA), greater attention has been given to diverse populations that are disproportionately impacted by intimate partner violence (IPV) (Violence against Women Reauthorization Act of 2013). One group that will receive increased protections and resources as a result of the new VAWA is lesbian, gay, bisexual, transgender or transsexual, and queer (LGBTQ) victims of IPV (Violence against Women Reauthorization Act of 2013; United States Department of Justice 2012). These provisions were added as a result of research indicating that LGBTQ-identified survivors face heightened discrimination and barriers when trying to seek assistance (Ciarlante and Fountain 2010; Greenberg 2012; National Network to End Domestic Violence, “The Violence against Women Act (VAWA),” 2013). Additionally, a 2010 survey administered by the Centers for Disease Control and Prevention (CDC) found that lesbian- and bisexual-identified persons experienced higher rates of IPV than their heterosexual counterparts (e.g., 61% of bisexual women versus 35% of heterosexual women), emphasizing the need for increased services for these survivors (CDC 2012).

It is important to note that the term *LGBTQ* will only be used in this paper when facts, research, and other statements are relevant to all persons who identify as lesbian, gay, bisexual, transgender or transsexual, or queer. Similarly, the author recognizes and respects that many people who have a history of abuse prefer the term *survivor*; therefore, the term *victim* will only be used when it has been used in the literature or research being cited.

Despite recent advances, IPV against LGBTQ-identified persons is still an invisible issue. Many factors within and outside the relationship contribute to this invisibility, the most detrimental of which are homophobia and transphobia. American psychologist George Weinberg coined the term *homophobia* to refer to the “irrational emotional reaction of fear, disgust, anger, discomfort, and aversion to homosexuals” (Weinberg 1972, 145). Transphobia is defined as “any attitude or behavior predicated in the assumption that biological sex and gender are binary and synonymous, resulting in the marginalization of transgender individuals at personal, familial, and/or societal levels” (Ciarlante and Fountain 2010). Since these biases are so prevalent in the United States, many survivors refrain from reporting out of fear that it will increase prejudice against their relationships (West 1995; Hassouneh and Glass 2008; Island and Letellier 1991). Those who do report are often met with disbelief or criticism (Ciarlante and Fountain 2010; Peterman and Dixon 2003). Abusive partners also capitalize on homophobia and transphobia by threatening to “out” their partners to families, friends, employers, landlords, and adoption agencies (West 1995; Ciarlante and Fountain 2010). Considering the potentially disastrous consequences, such as loss of employment, this threat is effective at keeping partners from reporting (West 1995; Ciarlante and Fountain 2010; Greenberg 2012).

Prejudices against LGBTQ-identified people have resulted in harmful stereotypes about IPV in their relationships. Based on traditional notions about masculinity and femininity, one myth is that the larger person is the abusive partner (Hassouneh and Glass 2008). This results in a wrongful arrest of the victim or a label of mutual abuse, which is equally damaging (Hassouneh and Glass 2008). Another stereotype is that one woman cannot physically harm another (Hassouneh and Glass 2008). Similarly, many people believe that men cannot be victims of abuse because they can, or should be able to, defend themselves (Island and Letellier 1991). These myths not only prevent victims from realizing they are being abused, but they also cause many service providers to deny or invalidate abuse against LGBTQ-identified persons (West 1995; Island and Letellier 1991). To combat these misconceptions, greater exposure to and

education about potential abuse in same-sex relationships and relationships involving transgender persons is needed. The hope is that if homophobia and transphobia are reduced, LGBTQ-identified survivors will feel more comfortable disclosing their experiences of IPV.

In addition to reducing prejudice against LGBTQ survivors of IPV, the methods for identifying them may need to be improved. One of the most common methods for identifying victims of abuse is the use of screening tools (Nelson et al. 2004). Screening tools are surveys administered in medical and mental health settings that ask participants questions about their relationships and any abuse they may be experiencing. Despite the surveys' frequent usage, some service providers have concerns regarding the lack of sound psychometrics—more specifically, the screening tools' abilities to accurately determine if a person is experiencing abuse (see Rabin et al. 2009 for a review of the psychometric properties of the most commonly used tools). There are also concerns regarding the tools' lack of cultural sensitivity. Although some versions have been translated into Spanish or tested with both men and women, no tool has intentionally incorporated the experiences of non-heterosexual and non-cisgender survivors into its design. To clarify, the term cisgender refers to a person whose gender identity aligns with their biological sex. For example, a person who was born with the body of a female and also identifies as a female is considered cisgender.

In 2008, researchers Chan and Cavacuiti assessed gay-identified patients' and family practitioners' comfort levels with using the Woman Abuse Screening Tool (WAST), renamed the Gay Abuse Screening Protocol (GASP), to reflect the patients' experiences. Their results showed that participants were comfortable with answering the questions, which was reflected by a mean score of 4.16 out of 5.0 for patients and 4.48 for physicians (Chan and Cavacuiti 2008). In light of these findings, the authors concluded that “this study demonstrates that the WAST can be applied comfortably to gay males and also can be a valuable tool to help identify gay men who are abused” (Chan and Cavacuiti 2008). The first of its kind, this study was an important step toward determining whether screening tools are effective at identifying gay male victims of IPV.

Current Study

Although the previous study was a significant first step, it only looked at one subgroup of LGBTQ-identified survivors. Additionally, the WAST is not as commonly used in the United States, leaving the applicability of more frequently used tools unknown. The current study aimed to address this disparity by evaluating the applicability of the three most commonly used tools (Rabin et al. 2009) to LGBTQ survivors of IPV. Consistent with research demonstrating unique factors in abusive same-sex relationships, I hypothesized that participants would rate the three selected tools as less relevant to the experiences of LGBTQ-identified survivors. I also hypothesized that participants would rate researcher-generated questions (including specific LGBTQ factors) as very relevant to the experiences of non-heterosexual and non-cisgender survivors. Findings from this study have implications for use of IPV screening tools with LGBTQ victims, whether it be to support the effectiveness of such tools with non-heterosexual victims of abuse, demonstrate a need for modification of existing tools, or suggest creation of an entirely new tool that is more inclusive of the experiences of diverse populations.

Method

Participants

Participants (mental health professionals, college students, and university staff primarily from Wisconsin) were recruited via an e-mail invitation or presentation by the principal researcher. The researcher recruited students and staff from undergraduate and graduate student groups designed to increase equality for LGBTQ-identified persons on campuses and in the health-care system. A nationwide Listserv was used to recruit mental health professionals with interest in issues faced by LGBTQ-identified clients and professionals. Eligibility for participation was either presented verbally or in the e-mail invitation and was determined by meeting one of three criteria: (1) self-identification as anything other than heterosexual and/or cisgender; (2) personal experience with intimate partner violence or familiarity with someone who has experienced it, regardless of sexual orientation or gender identity of the victim; and/or (3) any student or professional with a strong interest in the issue of IPV in same-sex relationships. These criteria were intended to create an expert pool of participants who had formal training and/or personal interest in intimate partner violence against LGBTQ-identified persons.

In total, 26 people participated in the study. The average age of participants was 31.6 years (range 18–65) and the majority (84%) self-identified as female. In total, 65% of participants identified as non-heterosexual. Participants were also asked to indicate the number of non-heterosexual relationships they had been involved in over the past six months. Research has shown that people in their first same-sex relationship are more likely to tolerate abuse or fail to label their experiences as abuse (Ristick 2003). Most participants (92%) reported being in five or fewer non-heterosexual relationships, with the remaining participants (8%) in six or more non-heterosexual relationships (table 1).

Table 1. Participant characteristics.

Ethnicity	
European American	25 (96%)
Asian American	1 (.04%)
Age	
Under 30	18 (69%)
30–40	6 (23%)
50–60	1 (.04%)
60–70	1 (.04%)
Gender Identity	
Female	22 (85%)
Male	3 (12%)
Male to Female Transgender	1 (.04%)
Sexual Orientation	
Lesbian	5 (19%)
Gay	5 (19%)
Bisexual	3 (12%)
Queer	4 (15%)
Heterosexual	9 (35%)
Number of Non-Heterosexual Relationships Over Past Six Months	
0	12 (46%)
1–2	5 (19%)
3–5	7 (27%)
6–8	1 (.04%)
9–11	1 (.04%)
Educational Attainment	
Started or completed an undergraduate degree	9 (35%)
Started or completed a graduate-level degree (i.e., master's, doctorate, MD)	17 (65%)
Knows a Survivor of Intimate Partner Violence	
Yes	24 (92%)
Survivor Identifies as Non-Heterosexual and/or Non-Cisgender	
Yes	14 (54%)

Materials

Three intimate partner violence (IPV) screening tools were chosen for review in this study. Criteria for selection included intended clinical setting, psychometric qualities, and applicability to diverse populations. Each tool's length was also taken into consideration because shorter tools have high clinical utility. Of the four most commonly used tools, the three selected were the Hurt, Insult, Threaten, Scream (HITS, figure 1); Partner Violence Screen (PVS); and the Abuse Assessment Screen (AAS) (Rabin et al. 2009). The fourth most common tool, the Woman Abuse Screening Tool (WAST), was excluded because it is long and its intended clinical settings are already covered by at least one of the other tools (i.e., family practice settings) (Rabin et al. 2009).

Developed in 1998, the HITS is a short four-question screening tool intended for use in family practice settings (Sherin et al. 1998). Since its creation, it has also been tested with Caucasian men, Latina and African American women, and translated into Spanish (Chen et al. 2005; Shakil et al. 2005; Rabin et al. 2009). First used in 2006, the PVS was designed for emergency rooms (Halpern et al. 2006). It has been tested with men, women, and a variety of ethnicities, and across socioeconomic status (Mills, Avegno, and Haydel 2006; Rabin et al. 2009). The third tool selected, the AAS, was originally created in 1991 to screen for IPV among pregnant women (Norton et al. 1995; Rabin et al. 2009). Five questions in length, this tool has been tested with women of a variety of ethnicities and socioeconomic statuses and has been tested internationally (Moonesinghe, Rajapaksa, and Samarasinghe 2004; Rabin et al. 2009). Although designed for pregnant women, only one question asks about being physically abused while pregnant, which is why it was included for assessment. Additionally, the question regarding pregnancy is still relevant to some non-heterosexual victims of IPV.

Procedure

Participants completed the online surveys in a location of their choosing. Once they signed the electronic consent form, participants completed four online surveys, which took an average of 25 minutes to complete. The first three surveys contained questions about the items on the HITS, PVS, and AAS, respectively. The fourth survey included questions generated by the principal researcher that were based on an extensive literature review of IPV in same-sex relationships and designed to be more reflective of the experiences of LGBTQ-identified victims. Prior to completing each survey, participants were shown an example of the actual screening tool (see figure 1 for an example of the HITS screening tool).

SCREENER 1: "HITS"

Below is an example of one of the most commonly used screening tools, which is known as the Hurt, Insult, Threaten, Scream (HITS). The instructions for the HITS are also included. **Please do not fill out this survey! It is only included as an example to help you become familiar with the HITS screening tool.**

HITS Tool for Intimate Partner Violence Screening: *Please read each of the following activities and circle the answer that best indicates the frequency with which your partner acts in the ways depicted.*

How often does your partner?	Never	Rarely	Sometimes	Fairly Often	Frequently
1. Physically hurt you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Insult or talk down to you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Threaten you with harm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Scream or curse at you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	1	2	3	4	5

Each item is scored from 1-5. Thus, scores for this inventory range from 4-20. A score of greater than 10 is considered positive.
Source: Clinical Research and Methods (Fam Med 1998;30(7):508-12.)
HITS is copyrighted in 2003 by Kevin Sherin MD, MPH; For permission to use HITS,
Email kevin_sherin@doh.state.fl.us; *HITS is used globally in multiple languages 2006

Figure 1. HITS screening tool.

Next, they were shown the same screening tool and asked to rate each item’s relevance to the experiences of LGBTQ-identified survivors on a Likert scale of 1 (not relevant at all) to 5 (very relevant). For example, the first question on the HITS screening tool is, “How often does your partner physically hurt you?” (Sherin et al. 1998). After reading this question, participants rated how relevant they felt the item was to someone who identifies as LGBTQ and is in a potentially abusive relationship. Once participants rated all questions on a particular screening tool, they were given two opportunities to further explain their answer. The first free response question was, “What changes would you make to the existing (screening tool name) questions so that they are more applicable to victims of intimate partner violence who identify as LGBTQ?” The second question was, “What questions would you add to the survey keeping in mind the importance of a brief screening tool?” (appendixes B–E). The fourth survey regarding researcher-generated questions followed the same format except the second free-response item regarding additional questions was omitted (appendix E). Additionally, a new question was inserted, which asked, “Would the addition of these questions make these tools more effective at identifying LGBTQ-identified survivors of intimate partner violence?” (appendix E). After completing all four surveys, participants read an electronic debriefing statement and were thanked for their participation.

Results

In total, 26 participants completed the surveys. An overall relevance score was computed for each tool and researcher-generated questions by combining the mean rating of each item and dividing by the total number of items. Based on these calculations, the HITS received the highest rating ($M = 4.94$) while the AAS received the lowest rating ($M = 4.59$), a statistically significant difference ($t(32) = 2.81$, $p < .005$). Contrary to the hypothesis, all three tools and researcher-generated items were generally rated as relevant (i.e., $M = 4.0$ or higher) to LGBTQ-identified victims.

In terms of modifying the HITS tool, 14 of 30 respondents suggested adding a question that asks, “Has your partner ever threatened to out you to family/friends, your workplace, and/or government agencies (i.e., adoption organizations)?” Another frequent response was to include items that ask about an abusive partner criticizing the other partner’s gender identity and/or sexual orientation ($n = 3$). An example provided by a participant was, “Does your partner invalidate your gender identity by picking on physical gender attributes? (body/facial hair, chest/breasts, genitals, voice intonation, hairstyle, surgical scars, etc.).”

A common suggestion for the PVS was to ask about each control tactic individually rather than a broad form of abuse (i.e., “criticize gender identity and/or sexual orientation” versus “emotional abuse”). Other tips were to create inclusive instructions for the screener (i.e., indicating that abuse can happen to anyone in any type of relationship) and to add questions that are inclusive of polyamorous relationships (i.e., “partners” instead of “partner”). An important recommendation regarding the AAS was to include female and gender-neutral pronouns as options for the question, “If yes, by whom?”

In reference to researcher-generated items, 11 of 17 respondents said all seven items should be included to increase the screening tools’ relevance to LGBTQ victims. For the remaining six respondents, the item that received the most support was, “Has your partner ever told you that what you’re experiencing isn’t abuse because ‘men can’t abuse men’ or ‘women can’t abuse women’?” In terms of modifying these new questions, five of twenty-two (22.7%) respondents felt gender-neutral terms should be used instead of “him or her” (see #4 and #6 in appendix E). Two respondents also felt there needed to be more questions that were reflective of the experiences of bisexual and trans-identified survivors. One participant commented, “Remember that transgender persons have some unique risks, especially financial risks and access to medical care issues.”

Discussion

In total, 24 of 26 (92%) participants reported having personal experience or knowing someone who has had experience with IPV. Of those 24, 14 (58.3%) of the survivors identified as something other than heterosexual or cisgender, which is reflective of statistics regarding the prevalence of IPV in non-heterosexual relationships. This suggests that the participants were familiar with IPV in general and the experiences of LGBTQ survivors in particular, as was the goal of recruitment.

Interestingly, the items that received the highest ratings dealt with physical and emotional abuse and the threat of being outed by an abusive partner, which is consistent with research detailing common patterns and tactics in abusive same-sex relationships (see appendix A for statistical evidence) (Island and Letellier 1991; West 2002). This close resemblance to previous research re-emphasizes participants’ knowledge of the experiences of LGBTQ-identified survivors of IPV. The lowest-rated items, derived from the AAS, ask the person to identify their abuser yet only list male choices (e.g., husband, boyfriend), which are inapplicable to survivors whose partners identify as anything other than male. Participants’ consensus on the overall applicability of the screening tools likely demonstrates the importance of asking about shared experiences (e.g., emotional, physical, and sexual abuse) in addition to experiences unique to LGBTQ-identified survivors.

Although all screening tools were rated as relevant to the target population, 83% of participants requested a change or addition, which suggests that the relevance to LGBTQ survivors could be improved. Most respondents suggested using gender-neutral words such as *they* and *partner(s)*. Though a seemingly small change,

participants explained that inclusive wording would make LGBTQ-identified survivors feel acknowledged and thus more likely to disclose experiences of abuse. Similarly, one participant commented that service providers must be openly inclusive and validating of LGBTQ-identified survivors in order to increase disclosure of abuse. Ard and Makadon list a number of ways for professionals to accomplish this, including familiarizing themselves with the unique needs and experiences of LGBTQ-identified clients, using inclusive language (appropriate pronouns or gender-neutral language), and having materials (posters and brochures) that talk specifically about IPV against LGBTQ-identified persons (Ard and Makadon 2011).

Another noteworthy suggestion participants provided was to include at least one question about every form of abuse. Current screeners only ask about two to three different forms of abuse (e.g., emotional, physical, and/or sexual), which could be invalidating to survivors who are experiencing other types of abuse (e.g., financial and spiritual). As one participant indicated, transgender-identified survivors are particularly vulnerable to other forms of abuse; therefore, items about them should be included to increase the tools' ability to identify these survivors (Greenberg 2012). Asking about more types of abuse may also increase the tools' sensitivity, as they are prevalent among all victims of IPV regardless of gender identity or sexual orientation (National Network to End Domestic Violence, "The Violence against Women Act (VAWA)," 2013).

Numerous studies have demonstrated a high prevalence of intimate partner violence in relationships involving persons who identify as lesbian, gay, bisexual, transgender or transsexual, or queer (e.g., CDC 2012). A growing body of research also highlights control tactics and types of abuse that are unique to these relationships (West 2002; Island and Letellier 1991). Where research is lacking, however, is in relation to best practices for identifying LGBTQ survivors of IPV. Because screening tools continue to be one of the most common methods for identifying heterosexual victims of IPV (Rabin et al. 2009), it is necessary to determine whether such tools are also effective at detecting LGBTQ victims. To date, this is only the second study with this purpose. Results from both studies suggest that existing screening tools are relevant to LGBTQ-identified survivors. However, participants in the present study indicated that wording changes and additional questions could significantly improve the tools' relevancy to LGBTQ survivors and their likelihood of disclosing abuse.

Bibliography

- Ard, K. L., and H. J. Makadon. "Addressing Intimate Partner Violence in Lesbian, Gay, Bisexual, and Transgender Patients." *Journal of General Internal Medicine* 26, no. 8 (2011): 930–33. doi:10.1007/s11606-011-1697-6.
- Balsam, K. F., and D. M. Szymanski. "Relationship Quality and Domestic Violence in Women's Same-Sex Relationships: The Role of Minority Stress." *Psychology of Women Quarterly* 29, no. 3 (2005): 258–69. doi:10.1111/j.1471-6402.2005.00220.x.
- Black, M. C., K. C. Basile, M. J. Brieding, J. Chen, M. T. Merrick, S. G. Smith, M. R. Stevens, and M. I. Walters. *The National Intimate Partner and Sexual Violence Survey (NISVS): 2010 Summary Report*. Atlanta, GA: National Center for Injury Prevention and Control, Centers for Disease Control and Prevention, 2011.
- CDC (Centers for Disease Control and Prevention). National Center for Injury Prevention and Control Division of Violence Prevention. *National Intimate Partner and Sexual Violence Survey: 2010 Findings by Sexual Orientation*. Accessed March 23, 2012. http://www.cdc.gov/violenceprevention/pdf/nisvs_factsheet_lbg-a.pdf.

- Chan, E., and C. Cavacuiti. "Gay Abuse Screening Protocol (GASP): Screening for Abuse in Gay Male Relationships." *Journal of Homosexuality* 54, no. 4 (2008): 423–38.
- Chen, P. H., A. Jacobs, M. S. Johnson, S. Rovi, and M. Vega. "Screening for Domestic Violence in a Predominantly Hispanic Clinical Setting." *Family Practice* 22, no. 6 (2005): 617–23.
- Ciarlante, M., and K. Fountain. *Why It Matters: Rethinking Victim Assistance for Lesbian, Gay, Bisexual, Transgender, and Queer Victims of Hate Violence and Intimate Partner Violence*. A Joint Policy Report by the National Center for Victims of Crime and the National Coalition of Anti-Violence Programs. March 2010. [http://www.victimsofcrime.org/docs/Reports and Studies/WhyItMatters_LGBTQreport_press.pdf?sfvrsn=0](http://www.victimsofcrime.org/docs/Reports_and_Studies/WhyItMatters_LGBTQreport_press.pdf?sfvrsn=0).
- Cohen, T. "House Passes Violence against Women Act after GOP Version Defeated." CNN.com. Last modified February 28, 2013. <http://www.cnn.com/2013/02/28/politics/violence-against-women>.
- Cole, Thomas B. "Is Domestic Violence Screening Helpful?" *JAMA: The Journal of the American Medical Association* 284, no. 5 (2000): 551–53.
- Courvant, D., and L. Cook-Daniels. "Trans and Intersex Survivors of Domestic Violence: Defining Terms, Barriers and Responsibilities." Trans Survivor Project. Accessed March 25, 2012. <http://www.survivorproject.org/defbarresp.html>.
- Greenberg, K. "Still Hidden in the Closet: Trans Women and Domestic Violence." *Berkeley Journal of Gender, Law and Justice* 27, no. 2 (2012): 198–373.
- Halpern, L. R., T. B. Dodson, C. Hayes, V. J. Perciaccante, and S. Susarla. "A Protocol to Diagnose Intimate Partner Violence in the Emergency Department." *Journal of Trauma and Acute Care Surgery* 60, no. 5 (2006): 1101–05.
- Hassounah, D., and N. Glass. "The Influence of Gender Role Stereotyping on Women's Experiences of Female Same-Sex Intimate Partner Violence." *Violence against Women* 14, no. 3 (2008): 310–25. doi:10.1177/1077801207313734.
- Herek, G. M. "Beyond 'Homophobia': Thinking about Sexual Prejudice and Stigma in the Twenty-First Century." *Sexuality Research and Social Policy* 1, no. 2 (2004): 6–24. http://psychology.ucdavis.edu/RAINBOW/html/Beyond_Homophobia_2004.PDF.
- Herman, D. *The Antigay Agenda: Orthodox Vision and the Christian Right*. Chicago: University of Chicago Press, 1997.
- Island, D., and P. Letellier. *Men Who Beat the Men Who Love Them: Battered Gay Men and Domestic Violence*. New York: Routledge, 1991.
- Max, W., R. A. Bardwell, E. Finkelstein, D. P. Rice, and S. Leadbetter. "The Economic Toll of Intimate Partner Violence against Women in the United States." *Violence and Victims* 19, no. 3 (2004): 259–72.
- Mills, T. J., J. Avegno, and M. J. Haydel. "Male Victims of Partner Violence: Prevalence and Accuracy of Screening Tools." *Journal of Emergency Medicine* 31, no. 4 (2006): 447–52.
- Moonesinghe, L. N., L. C. Rajapaksa, and G. Samarasinghe. "Development of a Screening Instrument to Detect Physical Abuse and Its Use in a Cohort of Pregnant Women in Sri Lanka." *Asia-Pacific Journal of Public Health* 16, no. 2 (2004): 138–44.

- National Coalition against Domestic Violence, Public Policy Office. *Domestic Violence Facts*. Accessed March 28, 2012. [http://www.ncadv.org/files/DomesticViolenceFactSheet\(National\).pdf](http://www.ncadv.org/files/DomesticViolenceFactSheet(National).pdf).
- National Gay and Lesbian Task Force. "History of Nondiscrimination Bills in Congress." Accessed January 23, 2013. <http://www.thetaskforce.org/issues/nondiscrimination/timeline>.
- National Network to End Domestic Violence. "About Financial Abuse." Accessed January 17, 2013. <http://www.nnedv.org/resources/ejresources/about-financial-abuse.html>.
- . "The Violence against Women Act (VAWA) Renewal Passes the House and Senate and Signed into Law." Accessed March 20, 2013. <http://www.nnedv.org/policy/issues/vawa.html>.
- Nelson, H. D., J. Klein, Y. McInerney, and P. Nygren. "Screening Women and Elderly Adults for Family and Intimate Partner Violence: A Review of the Evidence for the United States Preventive Services Task Force." *Annals of Internal Medicine* 140, no. 5 (2004): 387–96.
- Norton, L. B., B. Lima, L. Hume, J. Peipert, and S. Zierler. "Battering in Pregnancy: An Assessment of Two Screening Methods." *Obstetrics and Gynecology* 85, no. 3 (1995): 321–25.
- Out & Equal Workplace Advocates. "LGBT Terminology & Cultural Information." Accessed March 23, 2013. http://www.outandequal.org/documents/S3-Building_Bridges-Handout.pdf.
- Parikh, R., A. Mathai, S. Parikh, G. C. Sekhar, and R. Thomas. "Understanding and Using Sensitivity, Specificity, and Predictive Values." *Indian Journal of Ophthalmology* 56, no. 1 (2008): 45–50. doi:10.4103/0301-4738.37595.
- Rabin, R. F., M. H. Bair-Meritt, J. C. Campbell, and J. M. Jennings. "Intimate Partner Violence Screening Tools: A Systematic Review." *American Journal of Preventive Medicine* 36, no. 5 (2009): 439–45. doi:10.1016/j.amepre.2009.01.024.
- Ristick, J. "Exploring Dynamics of Abusive Lesbian Relationships: Preliminary Analysis of a Multisite, Qualitative Study." *American Journal of Community Psychology* 31, no. 3–4 (2003): 329–41.
- Shakil, A. S. Donald, M. Krepcho, and J. M. Sinacore. "Validation of the HITS Domestic Violence Screening Tool with Males." *Family Medicine* 37, no. 3 (2005): 193–98.
- Sherin, K. M., X. Q. Li, A. Shakil, J. M. Sinacore, and R. E. Zitter. "HITS: A Short Domestic Violence Screening Tool for Use in a Family Practice Setting." *Family Medicine* 30, no. 7 (1998): 508–12. <http://www.conference.stfm.org/fmhub/FULLPDF/JULYAUG98/cram1.pdf>.
- United States Department of Justice, Office on Violence against Women. *VAWA 2013 Summary: Changes to OVW-Administered Grant Programs*. Accessed March 28, 2012. <http://www.ovw.usdoj.gov/docs/vawa-2013-sum.pdf>.
- Violence against Women Reauthorization Act of 2013. S. 47. 113th Cong. (2013). <http://www.govtrack.us/congress/bills/113/s47/text>.
- Weinberg, G. *Society and the Healthy Homosexual*. New York: St. Martin's, 1972.
- West, C. "Lesbian Intimate Partner Violence: Prevalence and Dynamics." *Journal of Lesbian Studies* 6, no. 1 (2002): 121–27. doi:10.1300/J155v06n01_11.
- West, Dawn. *My Girlfriend Did It*. VHS. St. Paul, MN: Casa de Esperanza, 1995.

Appendix A
Statistics Indicating the Items Rated as “Most Relevant” across Screeners

As explained in the “Discussion” section, items that asked about physical and/or emotional abuse and the threat of being outed were rated as “most relevant” to non-heterosexual and/or non-cisgender survivors of IPV. It is important to note that asking about a person’s feelings of safety is another way to gauge whether physical and/or emotional abuse is occurring (see #6). A person cannot feel safe with a partner if they are being hurt physically and/or emotionally.

Item	Mean	Standard Deviation
“How often does your partner physically hurt you?”	4.9	.1
“How often does your partner insult or talk down to you?”	4.9	.2
“How often does your partner threaten you with harm?”	4.9	.2
“How often does your partner scream or curse at you?”	4.9	.2
“Have you been hit, kicked, or punched by your partner in the past year?”	4.9	.1
“Do you feel safe in your current relationship?”	4.8	.4
“Have you ever been physically or emotionally abused by a partner?”	4.8	.7
“Has your partner ever threatened to reveal personal information (i.e., sexual orientation, gender identity, or gender expression) that could negatively affect an aspect of your life (i.e., social status, occupational status, parental custody)?”	4.8	.8

Appendix B

Survey from Current Study about HITS Screening Tool

Qualtrics.com

The purpose of this survey is to determine the relevance of questions on the Hurt, Insult, Threaten, Scream (HITS) Survey to victims of intimate partner violence who identify as lesbian, gay, bisexual, transgender, or queer (LGBTQ). Please read over each question and provide a rating of how appropriate you feel each question is for a victim who identifies as LGBTQ. For example, if you feel the question "How often does your partner physically hurt you?" doesn't apply to LGBTQ relationships you would fill in the bubble under the heading "**Not relevant at all**". Please be sure to provide a rating for each of the four questions and answer questions 5-8. Your input is greatly appreciated!

Again, please rate the relevance of each question to **LGBTQ victims of IPV**

How often does your partner:

	Not relevant at all to LGBTQ victims	Not very relevant	Neutral	Somewhat relevant	Very relevant to LGBTQ victims
Physically hurt you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Insult or talk down to you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Threaten you with harm	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Scream or curse at you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What changes would you make to the existing HITS questions so that they are more applicable to victims of intimate partner violence who identify as LGBTQ?

What questions would you add to the HITS survey keeping in mind the importance of a brief screening tool?

>>

Appendix C
Survey from Current Study about PVS Screening Tool

Qualtrics.com

The purpose of this survey is to determine how relevant questions on the Partner Violence Screen (PVS) are to victims of intimate partner violence who identify as lesbian, gay, bisexual, transgender, or queer (LGBTQ). As before, please read over each question and provide a rating of how fitting you feel each item is to LGBTQ relationships. Please be sure to provide a rating for each item and answer questions 4 & 5.

Again, please rate the relevance of each question to LGBTQ victims of IPV

	Not relevant at all to LGBTQ victims	Not very relevant	Neutral	Somewhat relevant	Very relevant to LGBTQ victims
Have you been hit, kicked, punched, or otherwise hurt by someone in the past year?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Do you feel safe in your current relationship?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Is there a partner from a previous relationship who is making you feel unsafe now?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What changes would you make to the existing PVS questions so that they are more applicable to victims of intimate partner violence who identify as LGBTQ?

What questions would you add to the PVS survey keeping in mind the importance of a brief screening tool?

Appendix D

Survey from Current Study about AAS Screening Tool

The purpose of this survey is to determine how relevant questions on the Abuse Assessment Screen (AAS) are to victims of intimate partner violence who identify as lesbian, gay, bisexual, transgender, or queer. Please read over each question and indicate how relevant you feel it is to these victims.

Again, please rate the relevance of each question to LGBTQ victims of IPV

	Not at all relevant to LGBTQ victims	Not very relevant	Neutral	Somewhat relevant	Very relevant to LGBTQ victims
Have you ever been emotionally or physically abused by your partner or someone important to you?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Within the last year, have you been hit, slapped, kicked, or otherwise physically hurt by someone?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
(If applicable) Since you've been pregnant, have you been slapped, kicked, or otherwise physically hurt by someone?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If YES, by whom? (Circle all that apply)					
Husband Ex-Husband Boyfriend Stranger Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multiple	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Within last year, has anyone forced you to have sexual activities?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
If YES, by whom? (Circle all that apply)					
Husband Ex-Husband Boyfriend Stranger Other	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Multiple	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Are you afraid of your partner or anyone you listed above?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

What changes would you make to the existing AAS questions so that they are more applicable to victims of intimate partner violence who identify as LGBTQ?

What questions would you add to the AAS survey keeping in mind the importance of a brief screening tool?

Appendix E
Survey from Current Study about Researcher-Generated Items

qualtrics.com

The following questions were created by the principal researcher based on an extensive literature review of articles and studies done on the issues of intimate partner violence in the LGBTQ community. Please read over each question and indicate how relevant you feel each one is to LGBTQ relationships. In addition, please indicate whether you feel that adding each question to existing screening tools would make the tool more effective at identifying LGBTQ victims of intimate partner violence.


	Not relevant at all to LGBTQ victims	Not very relevant	Neutral	Somewhat relevant	Very relevant to LGBTQ victims
Has your partner ever said something to you that made you feel worthless?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has your partner ever made you feel as if you deserve to be treated in a negative way?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has your partner ever told you that what you're experiencing isn't abuse because "men can't abuse men" or "women can't abuse women"?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has your partner ever told you that you will not be able to find another romantic partner besides him or her?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has your partner ever threatened to reveal personal information (i.e sexual orientation, gender identity, or gender expression) that could negatively affect an aspect of your life? (e.g., social status, occupational status, parental custody)	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
Has your partner ever made you feel guilty so that you would engage in sexual activities with him or her?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

Would the addition of these questions make these screening tools more effective at identifying LGBTQ victims of intimate partner violence?

☐ Yes

☐ No

>>



Which one(s)?

Does your partner attempt to control various aspects of your life such as:

- Family relationships
- Social circle
- Finances
- Not applicable

☐ Not relevant at all

☐ Not very relevant

☐ Neutral

☐ Somewhat relevant

☐ Very relevant

Would the addition of this question make these screening tools more effective at identifying LGBTQ victims of intimate partner violence?

☐ Yes

☐ No

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Parents and Pamphlets: Unraveling the Mysteries of Parent Responses to Pediatric Handouts

Karen Thompson, author

Dr. Jennifer R. Considine, Communication, faculty mentor

Karen Thompson graduated from the University Honors Program at UW Oshkosh with the distinction of summa cum laude in January 2014 with a degree in education and Spanish. From 2013 to 2014, she collaborated with Dr. Jennifer Considine through the Undergraduate Student/Faculty Collaborative Research Program. Karen aspires to research and practice clinical medicine as a pediatrician. Her undergraduate research experience enhanced her knowledge of communication in healthcare and strengthened her interest in research and medicine.

Dr. Jennifer R. Considine is an associate professor of communication studies at the University of Wisconsin Oshkosh. Her research interests span the areas of organizational, group, and health communication, with special emphasis on communication about emotion and spirituality. Her research has been published in several journals, including: *Journal on Excellence in College Teaching*, *Communication Studies*, *Health Communication*, and *Management Communication Quarterly*.

Abstract

Written handouts are usually provided to parents at routine pediatric visits, but little is known about how parents use this written medical information. To explore this topic, handouts provided by the American Academy of Pediatrics (AAP) Bright Futures Initiative were analyzed and 20 parent participants were interviewed to learn about their personal experiences with pediatric well-child care (WCC) and their use of handouts distributed during WCC visits. Results of this study determined that the four responses to health promotion materials are revelation, reminder, reassurance, and rejection. First-time parents are most likely to use handouts. Handout use may increase when they are provided at the beginning of visits, when they are personalized to each family, or when providers discuss them directly with parents. Further, results suggested that handouts are largely used by parents to reinforce existing beliefs rather than challenge or change them.

Introduction and Background Importance of Well-Child Care

In the United States, many children are routinely seen by a pediatrician for well-child care (WCC) visits, during which pediatricians provide physical examinations and discuss important health, developmental, social, and behavioral topics that may significantly impact the child's life (Norlin et al. 2011). Physicians typically assume that WCC improves the child's lifelong trajectory and reduces the possibility of developing chronic diseases such as diabetes later in life (Norlin et al. 2011). Educational screening and intervention for school performance may also occur during WCC visits (Norlin et al. 2011). WCC can potentially stimulate early detection of problems, prevent negative health outcomes, and encourage healthy behaviors.

According to the Washington State Department of Health, during a typical WCC visit a nurse or medical assistant sees the family first, then a doctor examines the patient more thoroughly and gives health promotion materials to parents

(Organizational Research Services 2010). Throughout this paper, the term *parent* is broadly used to apply to a biological parent as well as a legal guardian. During a WCC visit, parents want to be reaffirmed in their ability to care for and make decisions for their child. Factors that may increase satisfaction and adherence to treatment decisions are: the context in which information is communicated; finding a treatment that meets the needs and expectations of the patient; patient involvement in gathering information about treatment options and decision making; and a positive, supportive, encouraging attitude of the provider (Brown, Stewart, and Ryan 2003). Pediatricians use questions to inform and compliance-gaining strategies to motivate parents to comply with usual parental practices relating to health care (Parrott, Burgoon, and Ross 1992). This review suggests that patient and parent satisfaction and adherence to the physician's suggested treatment and directions depend on two major components: patient-provider interaction and communication of information (Brown, Stewart, and Ryan 2003).

The complexity and volume of health promotion information often exceeds the patient-provider interaction time at each pediatric office visit (Sanders et al. 2009; Brown, Stewart, and Ryan 2003). To supplement interaction time, primary care providers typically offer health information handouts for patients and parents. According to a study on injury prevention for patients age 6–20 months, parents who received information specific to their child's needs and discussed this information with a physician experienced better results than those parents receiving generic information (Nansel et al. 2002). Therefore, care providers can assist parents by presenting and discussing handouts tailored to parent needs. Since there is not enough time during WCC visits to address all of the physical, cognitive, and behavioral changes children go through as they develop, providers distribute handouts to parents. Lack of time is the supposed problem, and handouts are the proposed solution. The qualitative study reported in this paper examines how parents use handouts provided during WCC visits. This paper first reviews literature about how handouts should be created, distributed, and presented and then describes interviews during which parents were asked about WCC handouts.

Information Provision and Reception

According to the Health Belief Model, individuals are more likely to accept a behavior pertaining to their health if they have incentive and confidence and understand the risks and benefits (Corcoran 2011). Providing appropriate verbal and written information, such as handouts given after routine pediatric visits, may persuade individuals to adopt healthy behaviors. Handouts are believed to increase patient satisfaction and adherence to treatment. Health promotion topics vary based on age group and development of the patient (Organizational Research Services 2010). Many providers offer a unique handout to parents at each WCC visit, which pertains to the child's health needs at a specific age. This is important because a child's development and needs are different at each stage of their growth. Parental use of written health information may depend on whether it is physically available, intellectually understandable, and visually appealing.

Previous studies found that health information for the care of young children was typically delivered in verbose, multipage pamphlets that were too complex for many adults to read and comprehend (Sanders et al. 2009). By contrast, using phrases such as “you and your doctor will decide your goals” is reader friendly and permits parents to be active in health-care decisions (Seubert 2007). Physicians tend to choose the materials they share based on readability, integrity, visual appeal, and user-friendliness because they want parents to read and apply the health promotion information

(Organizational Research Services 2010). As this selection process suggests, the design of health promotion handouts is critical to both providers and parents.

To write effective health-related educational text, health-care professionals must consider the content, organization, layout, and accessibility of the text (Abraham and Kools 2012). Handouts can fail in two ways: (1) they fail to appreciate the health literacy of the audience and (2) they fail to engage the audience. Health literacy is explained as “an individual’s capacity to understand and use health information to meet individual and family health needs” (Sanders et al. 2009). Health literacy designers must consider their audience’s capacity and motivation to read such material. For example, socioeconomic status of parents is correlated to health literacy and decision making for health-related topics (Yin et al. 2012). Parents who have a low socioeconomic status tend to have low health literacy (Yin et al. 2012). Patients and parents who are classified as having low health literacy tend to be unable to reach a provider during evenings and weekends, convey less confidence in health-related situations, and leave decisions up to a doctor (Yin et al. 2012). When handouts fail to appreciate the health literacy of the audience, they are not useful. Furthermore, even when handouts are accessible to the health literacy level of an audience, handouts may fail to visually engage that same audience.

Many leaflets and handouts fail to appeal in form and layout, thus discouraging reader engagement and diminishing the effectiveness of the handout (Abraham and Kools 2012). In *Writing Health Communication: An Evidence-Based Guide*, Abraham and Kools (2012) describe four basic steps to designing material. Step one is designing the layout, including appropriate page size, line spacing, text margins, and anticipating its effect on readers. Step two is use of text structure, graphics, and color to maximize attention, accessibility, and impact on an audience. Step three is to “get the message right,” meaning that writers of handouts should know their readers’ preconceived notions about a topic and how ready they are to change routines and practices if necessary (Abraham and Kools 2012). Step four is to evaluate material by testing the effectiveness of its intervention on a small sample group and then to make necessary adaptations. The American Academy of Pediatrics (AAP) endorses the Bright Futures Initiative, a program that was created by using similar methods to those described above.

Bright Futures

Bright Futures was established by the AAP. It provides guidelines for medical education and training to supplement clinical care and knowledge to treat the whole child (Stoltz et al. 2008). Partnerships between families, communities, and health-care professionals are encouraged by this initiative, in order to increase health education (Stoltz et al. 2008). It includes the provision of handouts as a key component of WCC. The Bright Futures curriculum emboldens health professionals at all stages of their careers to integrate health promotion material and concepts into their practices because it provides action-oriented resolutions to advance the health and well-being of children and families across the country (Stoltz et al. 2008). In sum, this program suggests that handouts can increase prevention behaviors and promote children’s health.

The Bright Futures curriculum is useful because it presents information in an appealing, accessible, and structured format (Zimmerman et al. 2006). The handouts contain fundamental information in an easy-to-read style (Zimmerman et al. 2006). They are visually attractive and present information in a bullet-point format to facilitate quick and easy reading. The intended audiences of Bright Futures material are families, pediatric health-care providers, and community representatives. Bright Futures has been used in various states including Maine, South Carolina, Louisiana, Virginia, and

Georgia as one of the guidelines for policy making and children's health standards (Zimmerman et al. 2006). Since Bright Futures handouts are endorsed by the AAP and used throughout the United States, it is justifiable to use them as one of the main focuses of this research on WCC.

Justification for Study

As this literature review suggests, much is known about how handouts should be created and distributed at WCC visits. However, little is known about how handouts are distributed and how parents process the information in the handouts. We need additional studies to help providers better understand the link between theory and practice in handout design and distribution. The goal of providing written health information is to prepare parents to make good health decisions for their children, but little research demonstrates if, or how, this purpose is being achieved. While the early research on Bright Futures shows some practitioners are incorporating these materials into their practices, little research has been conducted examining how parents are using them. The following research questions guide this study:

1. Do parents receive health promotion materials at WCC visits?
2. How do parents use these handouts to make health decisions for their children?
3. How do AAP handouts meet parent needs?

Method

Data Collection

Data was collected in 2013, through qualitative semi-structured interviews, involving 20 parents of children age four and younger. Interviews allow participants to tell stories with total freedom or give accounts that justify their behavior (Lindlof and Taylor 2002). In this study interviewers permitted parents to explain how and why they used handouts received during WCC visits. The interviews in this study were semi-structured in nature; therefore, as additional topics emerged they were explored. For example, because vaccination handouts are routinely provided to parents, this became a key topic of conversation in some interviews. Eighteen individual interviews were conducted with mothers and one interview was conducted with a mother and father who were married and had children together.

Approval of this research project was granted by the University of Wisconsin Oshkosh Institutional Review Board. All potential research participants were provided with information about the study prior to agreeing to participate. If they made the decision to be interviewed, participants signed a written informed consent document agreeing to voluntarily participate in the study and be tape-recorded during the interview.

The interview included two stages. First, questions were asked to explore how parents had received and used handouts provided during their children's WCC visits. Second, parents were asked to review Bright Futures handouts to evaluate their effectiveness. Because it was unlikely all parents retained the handouts they typically received at WCC visits, it would have been difficult to use those to determine how parents felt about the layout and content of health promotion handouts. Furthermore, the Bright Futures curriculum is promoted by the AAP and served as a consistent text for parents to comment on.

Study Participants

Parent participants were recruited through Mothers of Preschoolers (MOPs) groups in mid-sized communities in Wisconsin. Additional parents were recruited

through snowball sampling, which means we asked participants to refer other potential participants for the study.

Parents ranged from 23 to 43 years of age. Nineteen participants were female and one participant was male. Participants provided their highest level of completed education: three completed some college, fourteen were college graduates, and three had earned a master's degree or beyond. Participants' level of education was high, and they had access to quality health care. These data suggested the participants had a relatively high level of health literacy. Health literacy is defined as a person's ability to understand general terminology related to health care. In this paper, it is specifically a parent's comprehension of suggestions a provider may make regarding the health of a child at a WCC visit. That most likely impacted participant responses and opinions about WCC and handouts. The majority of participants had multiple children: three participants had one child, six had two children, four had three children, four had four children, one had five children, one had six children, and one had seven children.

Data Management and Analysis

All interviews were audio-recorded and transcribed with both verbal and signed consent from the participants. Interviews averaged 20 minutes and yielded 81 single-spaced pages of transcripts. Transcriptions were analyzed using a modified grounded theory approach (Charmaz 2006). In the first stage of data analysis, my mentor and I reviewed eight interview transcripts to identify major categories of information. Through discussion, several major categories were identified and refined including distribution and use of handouts, provider-parent power dynamics, vaccinations, and health information sources. We used the constant comparative method of data analysis to further refine these categories during analysis of the final eleven interviews. In the second stage of analysis, the quotations in each of these categories were coded, and codes were compared to find connections and themes across the data.

In addition, study participants and researchers analyzed written handouts provided by AAP Bright Futures. I used content analysis to identify the major themes of the Bright Futures handouts for children ages 12 months to 4 years. Participants were given the handout that matched their child's age and asked to provide feedback about the format and content of the handout.

Findings

Distribution and Use of Health Promotion Materials

The distribution and use of health promotion materials varied. Some parents reported receiving handouts, while others did not. The way handouts were delivered by providers and received by parents seemed to have some influence on use. Four major categories of handout use were identified: revelation, reassurance, reminder, and rejection. Parents evaluated Bright Futures handouts and suggested improvements.

Do Parents Report Receiving Handouts?

Parents reported receiving three different types of handouts: WCC handouts, vaccination handouts, and injury/illness handouts. Of the 20 parent participants, 17 recalled receiving handouts at WCC visits similar to the Bright Futures handouts, with information about milestones and safety for a particular age group of children. Three parents did not recall receiving handouts similar to what the AAP recommends. One of these three received a sheet of paper with the child's height and weight measurements. Another of the three was given login information for a personal account on MyCharts, an online account that stores patient information. However, the parent had not yet

looked at MyChart. The third parent was only given vaccination handouts, which she did not read.

Reception and Use of Well-Child Handouts

Of the 17 parents who received handouts, 12 found these handouts useful, 4 did not read them, and 1 did not report on their usefulness. Overall, handouts tended to be used more frequently by first-time parents, when they were discussed by the health-care provider, and when they were personalized. They were used less frequently by parents with multiple children or when given to parents at the end of the visit with no discussion.

Six of the 12 parents who received and used handouts appreciated that the handouts were specific to their child. Julie, a mom of two, did not remember when or from whom she received the handouts, but reported that she liked receiving them because she appreciated looking at the results of the visit and her child's vitals, which were recorded in the handout. This confirmed research by Nansel et al. (2002), which suggests that even without explanation, tailoring handouts to the specific child increased usage.

The same study also proposes that parents who discussed handout information with a health-care provider experienced better results than those parents receiving generic information (Nansel et al. 2002). Three parents reported positive relationships between their families and their pediatricians and recalled receiving handouts from their pediatricians during the middle or end of the visit. Kelly, a mom of four, appreciated that the doctor "highlight[ed] any changes that have come along . . . and address[ed] any changes that happened between the last kid and this kid." Charlie, a mom of two, reported that the doctor "highlight[ed] a few things that are important." The third parent, Sarah, a mom of seven children, said that the doctor explained the handouts. She appreciated the information and found it reassuring. Sarah also had access to an online account containing medical records for each of her children. She had not yet accessed this account, but did appreciate the opportunity.

Parents were more apt to use health promotion materials when a physician, nurse, or medical assistant explained them. Two parents who used the same physician recalled that the nurse gave them handouts and explained the material at the end of every office visit, not just WCC visits. The parents appreciated and used these handouts. This suggests that the primary caregiver or support staff can increase handout use with explanation.

While discussion increased use, another way to increase use of handouts was to provide them to parents at the beginning of the WCC visit. Three of the parents recalled receiving handouts from the nurse at the beginning of the WCC visit and reading them briefly while waiting for the doctor. An explanation of the information was not provided to these three parents, and one of them said the handout felt like a checklist to make sure the doctor remembered to talk about everything that was important for a child that age.

Finally, regardless of timing, discussion, or specificity, handouts were used much more by first-time parents. Two first-time moms who received handouts at the end of a visit both read the handouts and found them helpful. One parent recalled stopping at the front desk as she left to receive handouts that included the doctor's notes from the visit. The parent read the notes briefly at first, then more thoroughly later. Although no explanation of handouts was given to these mothers, they used the handouts. The importance of handouts to first-time parents was underscored by the lack of handout use for parents of multiple children. All of the four parents who received handouts but did not use them had multiple children (ranging from a minimum of three to a

maximum of five children). Two of these parents received handouts at the end of the visits, without any explanation of the information they contained. One received handouts from the doctor and the other could not remember who gave the handouts. The other two moms who did not use handouts were given them by the nurse at the beginning of the visit. All four moms said they read the handouts when they were first-time moms, but no longer read them.

While the use of WCC handouts varied based on four conditions—when provided, first-time parent status, explanation, and specificity to the child—the use of vaccination handouts was almost nonexistent, though the parents interviewed believed providers were required to disperse the handouts. The next section provides an explanation for how parents used these handouts and why WCC handouts were used more frequently than vaccination handouts.

How Did Parents Use Handouts?

Parents used WCC handouts for three main reasons: revelation, reassurance, and reminder. This study found that a fourth response to handouts is that some parents reject the information handouts provide.

Revelation

Under the category of revelation are those parents, largely first-time moms, who used the handouts to garner new information. Nina, a mom of two, noted, “I think with my first I probably read everything that I had gotten and I was watching for them to hit different milestones and using suggestions of try to play this with them and these are things they might like doing.” Sally, a mom of three, added, “Many first-time parents would especially find [handouts] helpful because they don’t exactly know where to start always. Especially those who were younger and didn’t have younger siblings of their own. . . . And the whole car seat belt stuff is good because the laws seem to change quite frequently on how tall you have to be and how much you have to weigh and what direction should you face . . . so that information is helpful, especially given that there are laws regarding it and you don’t want to be unintentionally breaking the law.” Sally’s quote suggests that even non-first-time parents may use the handouts for revelation in cases when health and safety programs frequently change recommendations.

Kaley, mother of two, liked the Bright Futures handouts because they gave her new insights on what stages her children are currently in. Kaley had younger children who were not yet able to verbalize their thoughts. So, she appreciated reading about the developmental stages they were progressing through: “It’s nice because you see how much they are capable of and how much they understand even if they can’t tell you. A lot of things on here that maybe you wouldn’t even think of either. Ooo toilet training. Yes, I really like this. It would be helpful to get something like this at each stage.” After the interview, Kaley requested to look at additional handouts to discover how her children would develop in the near future. Many parents, like these three, appreciated the handouts for the revelations they provided.

Reassurance

Second, some parents appreciated the reassurance the handouts provided. As a parent of four children, Jane was already doing what the health promotion materials recommended, so she felt reassured in her parenting practices by reading it: “I think it’s always helpful to have something that gives a parent a check. . . . It’s easy to think you got it down, but there’s always something. It even is good for just affirming too. Even if you’re a good parent, affirmation is important and it’s not out there. If you

are doing 90 percent even, it encourages you to keep doing what you're doing. I think that's an angle that it's not always helping those who need help, it's also [reaffirming]." Kaley, mother of two, was concerned about her younger daughter's physical delay in developing the ability and motivation to walk. She reported, "There are kids that walk later than she did but it was just nice to see in black and white that she was still in the range." Kaley appreciated a handout from her pediatrician that explained a range of milestones encountered at specific ages. The tangible knowledge provided her with reassurance.

Ana, mother of two children, stated that she reads handouts briefly at the visit, puts them in a stack of papers at home, then reads them a little more as she files them away. When asked how helpful the handout was, Ana replied, "It was good because it's a good measure to see if my kids are where they should be." The papers she received were more detailed than the AAP handouts but discussed the same topics and provided the same reassurance.

The handouts listed advice that some parents were already following. The parents who read handouts distributed by a medical provider were encouraged to know they, as parents, were practicing "good" parenting skills and helping their children develop in a healthy manner.

Reminder

Third, health promotion materials were used as reminders. These contrast with revelations in that reminders were typically for parents who had known the information at some point and needed a quick refresher, whereas revelations referred to wisdom received by the reader for the first time. Barb, mom of three, appreciated that handouts given at the beginning or in the middle of a WCC visit reminded her of questions to ask the physician: "They do help a little. I can't say I've ever used them but I think it's a good outline checklist for the pediatrician to go over. While it's just a one blurb sentence, it sparks me to think, oh I did want to ask this. When you go in [to the doctor's office] sometimes you forget so it's a good reminder." Although Barb did not read handouts, she did briefly glance at them during the visit. Julie had a similar opinion: "A lot of it is checkpoints, and if you can't do something you talk about it with the doctor." Nina agreed: "It would remind me of things I should be asking about." After the WCC, Sarah used the reminders to help her family at home: "It reminds you of hazards, maybe in your home. Or maybe covers over the light sockets or watch for lamp cords or things you might forget about. Also, child's basic habits, so if they are drinking milk how many ounces of milk they should have a day. Then there are also the papers on car seat safety." Joyce, mom of four, appreciated the reminders that she did not often think about: "With the things regarding children and being safe with adults, protecting their own bodies, I think it's probably a good reminder because many parents want to avoid that or are in denial that it may ever happen." Parents appreciated different types of reminders depending on the physical and emotional milestones their children faced at different ages. As these comments show, the timing of handout provision can influence whether the handouts served as reminders that guided parent-provider interaction during the WCC visit or parenting practices after the visits.

Rejection

A few parent participants rejected the handouts because they believed the health information on them was common sense. Tarah, mom of two, stated, "If your child is healthy, to me, when I read this, this will sound terrible or stereotypical, most of this should be common sense. No TV in your child's bedroom. Who would put a TV in a three-year-old's bedroom? Seriously, sit in car seats? You should know this as part of

your responsibility of being a good parent.” She later added, “All this stuff is common sense to some, [but] not everybody has common sense.” Tarah did not use handouts because she viewed them as providing extremely basic information.

When parents held a strong viewpoint on a topic, such as opposing vaccination schedules, they were more likely to reject the information health-care providers gave. Many of the participants in this study had already decided how they wanted to vaccinate their children before they discussed it with their pediatricians. When pediatricians attempted to persuade parents to vaccinate their children on a previously set schedule, parents opposed to the schedule typically became frustrated instead of compliant. Pat, mom of four, felt pressured by her doctor: “I was still going to have them done, I was just going to spread them out. The pediatrician that we saw was not happy with me to the point that he sent another pediatrician in to try to talk me into having the immunizations done even though I didn’t want to, and I had good reason to not want to. I just really felt pressured that way to stay on their schedule and do what they wanted me to do rather than what I wanted to do.” Victoria, mom of two, stated her belief that pediatricians only present information supporting vaccinations: “If you are worried about your kid, they are very compassionate, but once you start talking about immunizations and not wanting to do them, you really hit a wall. Maybe everyone’s not that way, but the only information is how safe and good it is.”

Just as parents who did not plan to vaccinate had very strong opinions, those who planned to vaccinate their children did too. Sally, mom of three, has had her children immunized because, she said, “I have friends who don’t immunize at all and I’m against that because I don’t think that’s fair that I have to do it because I feel like if nobody does it we are sending ourselves back a hundred years.” Regardless of whether they were for or against vaccinations, none of the parents reported reading or using the handouts provided when their children were immunized. This rejection of immunization handouts, even by parents who used other handouts received at WCC visits, may indicate that when parents believe an issue is controversial and they have strong opinions on the issue, they are unlikely to read handout information at all.

How Do AAP Handouts Meet Parent Needs?

After participants described health promotion materials provided to them at WCC visits, they were asked to review the handout that corresponded most closely to their child’s age (between twelve months and four years). Parents’ comments on the Bright Futures handouts reinforced the four responses to handouts: revelation, reassurance, reminder, and rejection.

Positive Feedback

Parents seemed to appreciate the simple layout, which enabled quick reading of the handouts for reminder and reassurance. They appreciated that the Bright Futures handouts were one-sided and one page, and that the information was presented in sections and bullet points. Parents replied that adding graphics was not necessary because they take up space and give the impression that information is common sense.

Constructive Feedback

Participants proposed some content and layout changes. First, they wanted increased access to the physician, including a 24/7 nonemergency phone number, clinic hours, and a clinic phone number. Second, parents wanted milestones listed and a printout of their child’s vital signs and percentages of height, weight, and head circumference so they could follow their child’s growth curve. Third, parents requested more information in the handouts, such as at what age children should be

feeding themselves, the amount of milk children should have at each age, how children verbalize what they are thinking, amount of Tylenol and Ibuprofen to give at each age, choking hazards, more information on developmental abilities, and specific ideas of gross motor activities.

Rejection was also evident in parent statements about the AAP handouts. Some of the parent participants were offended by “common sense” information, such as descriptions of seat belt laws. After viewing this information that they already knew, they felt they would not learn anything by reading the remaining parts of the handout. It should be noted, however, that other parent participants valued this same information as revelation or reassurance. This supported the proposition that handouts should be tailored specifically for different families for a better chance of avoiding rejection.

Where Else Do Parents Get Health Information?

Some parents rejected information received from health-care provider’s offices, which validated current research. A majority of participants who rejected the provider’s information or wanted additional health information solicited health information from books, magazines, websites, their own parents, or family members who were medical professionals. Common online sources included babycenter.com, WebMD, blogs, Facebook posts, healthimpact.com, and Google. Jan, mom of one child, stated: “I think most parents prescribe to Baby Center. Just being able to read that easily with my time, I’d say it says the same things [as handouts]. It’s a repeat of all the information and probably a good reminder for people who are going through it with their third or fourth child.” Like Jan, many participants considered these sources and pediatrician handouts equally reliable. As with handouts provided during WCC visits, parents turned to these supplemental sources for revelation, reminder, and reassurance.

Discussion

Health promotion material was initially intended to supplement limited interaction time among patient, parent, and provider during pediatric health-care visits. Currently, the material is also provided to increase patient satisfaction and promote prevention behaviors. The AAP created Bright Futures to foster partnerships among families, health-care providers, and communities in an effort to care for and treat the whole child (Stoltz et al. 2008). These positive outcomes can only be achieved if parents use the health promotion material provided. This study found that parents view handouts as one potential source of health information; however, the parents did not seem to consider the handouts a particularly influential source if they did not already agree with the information.

The 20 interviews showed that parents used these handouts to either learn new information or reinforce current beliefs but not to challenge existing beliefs and practices. First-time parents were more receptive to information in the handouts and used them more for revelation, whereas parents with more than one child were more confident in their previous experience than the material provided and used them more for reassurance and reminder. In some cases, particularly with respect to vaccination handouts, parents rejected the handouts entirely and found other sources of information.

The study found that many non-first-time parents did not want doctors to tell them what decisions to make for their children, and this rejection of provider authority also carried over to rejection of handouts. Instead, parents wanted doctors to respect parental authority by supporting the parents’ decisions. Joyce, mom of four, reported that pediatric medical staff were sometimes: “usurping parental authority” when they told the parent “you need to do this” instead of giving a reminder. Joyce also reported,

“There is a place for doctors, but people put them in a place where everything they say is golden. But they don’t know everything. And they are learning all along as a parent is. Granted they know more than a lot of parents do about health issues, but as a parent you know your child better. So for them to say do this, this and this, they don’t know your kid and maybe that’s not the best for your kid.” Like Joyce, some parents became frustrated, rejected the information, or turned to another source that more clearly supported their position on the issue. In fact, 17 of the parents in this study seemed to hold this opinion and felt that the handout information contained suggestions that they might consider, but would judge based on their belief systems.

Handout use, or lack thereof, suggested information processing patterns similar to those of social judgment theory (Sherif and Hovland 1961). This theory proposes that when a person hears a message on a topic, he/she will compare that message to what he/she already believes about the topic and decide whether to accept or reject the new information (Perloff 2003). His/her latitudes of acceptance and rejection—the range of positions he/she finds acceptable and unacceptable—may be wide or narrow, depending on how strongly he/she feels about the topic (Perloff 2003). When a person has a particularly strong opinion on a topic, as many of these participants did about vaccinations, his/her latitude of rejection is likely to be very wide and he/she is unlikely to objectively process and be persuaded by new information. First-time parents and parents with less experience may be more willing to accept advice from a provider because he/she is less committed to a certain position and his/her latitude of acceptance is wider. These parents are more willing to expose themselves to new information, allowing for the possibility that handouts can lead to more preventative behaviors.

Given the high health literacy of participants in this study, it did not initially seem problematic that parents are using the handouts primarily as a source of reassurance and reminder. These were good parents making good health decisions for their children. However, the complete rejection of the vaccination handouts and the incomplete processing of WCC handouts were somewhat disturbing. Handouts provided when children receive vaccinations typically include information about the risks and benefits of vaccines, when the vaccine should be given, and possible serious reactions to the vaccines (CDC 2013). The fact that parents did not use these handouts—even to compare their current beliefs with that of their pediatricians—suggested that these handouts were, at best, serving no purpose other than wasting paper. More disturbing, however, is the possibility that health-care providers believe that simply providing parents with these handouts is equivalent to providing this information to the parents. Given that only six of the parents in this study had discussions with their care providers about any of the handouts they received, it is possible that care providers have little idea whether parents are processing the information on the handouts.

These interviews advocated that discussion of handouts is especially important because it can help providers judge if, and how, parents perceive the information on the provided handouts. In addition, when providers engage in extensive conversations with parents, providers build relationships with parents and providers may hold more influence over parent beliefs. In the study, the three parents who bestowed significantly more power on their doctors reported more frequent conversations and stronger personal relationships with their pediatricians. Samantha had a well-established relationship with her doctor. She often spoke with him to learn about the stages her child was progressing through and respected his knowledge: “I really just have full trust in my doctor. . . . I just trust the process.” Hana, mom of three, described her relationship with her doctor as excellent and revealed, “I feel comfortable with the choices she gives me. She’s giving me choices that she would also use.” Perhaps when pediatricians have this strong relationship with parents, they are better able to persuade parents to objectively analyze new information.

Conclusions

Practical Implications

There are four main practical implications of this study. First, when handouts are provided at the beginning of a visit, parents will be more likely to use handouts. This implication was found by noting that parents who received handouts at the beginning of a WCC visit were more likely to read the handout while sitting in the exam room waiting for a provider to evaluate their children. This was particularly relevant to the reminder theme because handouts reminded parents of questions to ask providers during the visit.

Second, providers should ask if parents want handouts and discuss recent findings with them, because many experienced parents do not use handouts. Highlighting the new information on a handout may discourage rejection and encourage parents to use the handout for revelation, reassurance, and reminder.

Third, parental use of handouts was strongly correlated with a discussion of the handouts between a provider and a parent during WCC visits. Even if time constraints prevent the primary pediatrician from discussing handouts with parents, discussion with nurses or other office staff may increase usage.

Fourth, since a common place parents look for information about healthcare is online, health-care providers could maintain clinic websites or blogs that feature relevant information for parents. Websites should include clinic hours, telephone numbers for the clinic, and a 24/7 nonemergency number. The website should also include common childhood illnesses and treatments, dosages of common over-the-counter medications such as Tylenol, seasonal illnesses and treatments, and WCC handouts.

Study Limitations

There were some limitations to this study. Only 20 parents were interviewed. All participants were Caucasian, and there was a relatively high level of health literacy among this group. In addition, most of the participants were recruited from local MOPs, so there may have been significant similarities in beliefs among participants. However, these parents are likely to be representative of the larger MOPs community, which numbers over 92,000 members worldwide (Mothers of Preschoolers 2014).

Future Research

Given the limitations of the study, future research should be conducted to increase the demographic of participants. Demographics to be expanded upon could include race, gender, amount of education completed, and level of health literacy. This research investigated parent reception and use of handouts, but future research could investigate health-care provider perspectives about the selection and distribution of WCC handouts. In addition, future research could continue to explore why some parents view physicians as having more credibility and authority than others, particularly on the issue of vaccinations.

Bibliography

- Abraham, Charles, and Marieke Kools, eds. *Writing Health Communication: An Evidence-Based Guide*. London: Sage, 2012.
- Brown, Judith Belle, Moira Stewart, and Bridget L. Ryan. "Outcomes of Patient-Provider Interaction." In *Handbook of Health Communication*, edited by Teresa L. Thompson, Alicia M. Dorsey, Katherine I. Miller, and Roxanne Parrott, 141–61. Mahwah, NJ: Lawrence Erlbaum Associates, 2003.
- CDC (Centers for Disease Control and Prevention). "Vaccination Information Statements." 2013. <http://www.cdc.gov/vaccines/hcp/vis/vis-statements/mmr.html>.
- Charmaz, Kathy. *Constructing Grounded Theory: A Practical Guide Through Qualitative Analysis*. Thousand Oaks, CA: Sage, 2006.
- Corcoran, Nova. *Working on Health Communication*. London: Sage, 2011.
- Cox, Elizabeth D., Maureen A. Smith, Roger L. Brown, and Mary A. Fitzpatrick. "Learning to Participate: Effect of Child Age and Parent Education on Participation in Pediatric Visits." *Healthcare Communication* 24, no. 3 (2009): 249–58. doi:10.1080/10410230902804141.
- Eaton, Leslie G., and Barbara J. Tinsley. "Maternal Personality and Health Communication in the Pediatric Context." *Health Communication* 11, no. 1 (1999): 75–96. Communication & Mass Media Complete, EBSCOhost. doi:10.1207/s15327027hc1101_5.
- Lindlof, Thomas R., and Bryan C. Taylor. *Qualitative Communication Research Methods*. 2nd ed. Thousand Oaks, CA: Sage, 2002.
- Mothers of Preschoolers. *MOPS Media Kit 2014*. <http://www.mops.org/forms/2014MopsMediaKit-b.pdf>.
- Nansel, Tonja R., Nancy Weaver, Maureen Donlin, Heather Jacobsen, Matthew W. Kreuter, and Bruce Simons-Morton. "Baby, Be Safe: The Effect of Tailored Communications for Pediatric Injury Prevention Provided in a Primary Care Setting." *Patient Education and Counseling* 46, no. 3 (2002): 175–90. Cochrane Central Register of Controlled Trials, EBSCOhost. doi:10.1016/S0738-3981(01)00211-7.
- Norlin, Chuck, Morgan A. Crawford, Christopher T. Bell, Xiaoming Sheng, and Martin Stein. "Delivery of Well-Child Care: A Look Inside the Door." *Academic Pediatrics* 11, no. 1 (2011): 18–26. doi:10.1016/j.acap.2010.12.008.
- Organizational Research Services. "Qualitative Evaluation of Provider Perceptions of CHILD Profile Health Promotion Materials." 2010. <http://www.doh.wa.gov/portals/1/Documents/Pubs/348-NonDOH-ChildProfilePromotionMaterialsEvaluation.pdf>.
- Parrott, Roxanne, Michael Burgoon, and Cathey Ross. "Parents and Pediatricians Talk: Compliance-Gaining Strategies' Use During Well-Child Exams." *Healthcare Communication* 4, no. 1 (1992): 57–66. doi:10.1207/s15327027hc0401_S.
- Perloff, Richard M. *The Dynamics of Persuasion, Communication and Attitudes in the 21st Century*. 2nd ed. London: Lawrence Erlbaum Associates, 2003.
- Sanders, Lee M., Judith S. Shaw, Ghislaine Guez, Cynthia Baur, and Rima Rudd. "Health Literacy and Child Health Promotion: Implications for Research, Clinical Care, and Public Policy." *Pediatrics* 124, no. S3 (2009): S306–S314. MEDLINE with full text, EBSCOhost. doi:10.1542/peds.2009-1162G.

- Seubert, Doug. *A Tale of Two Handouts: Applying Health Literacy Recommendations to Improve Readability of Printed Patient Education Materials*. Marshfield, WI: Marshfield Clinic, 2007. <http://www.healthcommunications.org/resources/handouts.pdf>.
- Sherif, Muzafer, and Carl I. Hovland. *Social Judgment: Assimilation and Contrast Effects in Communication and Attitude Change*. New Haven, CT: Yale Press, 1961.
- Stoltz, Rebecca A., Kara Connors, Justine Blum, and Henry H. Bernstein. "Integrating Bright Futures into Medical Education and Training." *Pediatric Annals* 37, no. 4 (2008): 244–51. MEDLINE with full text, EBSCOhost. doi:10.3928/00904481-20080401-02.
- Thompson, Teresa L., Alicia M. Dorsey, Katherine I. Miller, and Roxanne Parrott, eds. *Handbook of Health Communication*. Mahwah, NJ: Lawrence Erlbaum Associates, 2003.
- Yin, H. Shonna, Benard P. Dreyer, Karina L. Vivar, Suzanne MacFarland, Linda van Schaick, and Alan L. Mendelsohn. "Perceived Barriers to Care and Attitudes Towards Shared Decision-Making among Low Socioeconomic Status Parents: Role of Health Literacy." *Academic Pediatrics* 12, no. 2 (2012): 117–24. doi:10.1016/j.jacp.2012.01.001.
- Zimmerman, Beth, Judith Gallagher, Valerie Gwinner, Marisa Ferreira, Rebecca Ledsky, and Laura Sternesky. *Using Bright Futures in Public Health Efforts to Promote Child Health: Findings from Six Case Studies*. Washington, D.C.: Health Systems Research, 2006. altarum.org/sites/default/files/uploaded-publication-files/06_project_report_hsr_using_bright_futures.pdf.

Circuit Court Experience and Consistency on the Supreme Court (1953–2013)

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Abstract

The modern trend of appointing judges from the U.S. Circuit Court of Appeals to the U.S. Supreme Court is undeniable. As a near prerequisite to attaining a seat on the bench, Justices from appellate courts have been appointed because of, among other factors, perceived ideological consistency. Presidents seek to extend their legacies far beyond their terms, and Senators seek to approve nominees with ideologies consistent with their parties' political interests. In either case, the expectation is ideological consistency. Ideological drift is a phenomenon well observed since the shift of Justice Blackmun, but studies have not attempted to measure circuit court experience and evaluate its relation to drift. The model here reasons that circuit court experience does relate to less ideological drift, but finds that Justices with circuit court experience actually drift more than Justices without this experience. These findings hold important implications for the judicial selection process.

Presidents Prefer Nominees with Circuit Court Experience

The 2012 U.S. Supreme Court decision to uphold the Patient Protection and Affordable Care Act threw many Court watchers for a loop. Chief Justice John Roberts sided with the liberal wing of the Court to uphold the Act's central provisions, namely the individual mandate provision that required citizens who are able to afford healthcare insurance to purchase it. President George W. Bush selected Chief Justice Roberts, a former judge on the U.S. Courts of Appeals for the D.C. Circuit, for his credentials and presumably for his record of voting conservatively. Political commentators, such as David Straus, predicted that Chief Justice Roberts would remain ideologically consistent throughout his likely "30-year" tenure (Straus 2005, 1). Of course, Roberts's swing in the Affordable Care Act case is not indicative of a wholesale reversal in ideology, but it raises questions about judicial selection and ideological drift.

Chief Justice Roberts is a former circuit court judge appointed to the Supreme Court. In fact, of the 24 Justices appointed since 1953, 16 of them have originated from the circuit courts. President Eisenhower informally started the practice in claiming that "he, 'would use an appeals court appointment as a stepping stone to the Supreme

Court” (Epstein et al. 2007). Presidents have come to use the circuit courts as a source of legitimized, qualified, and ideologically consistent judges. Often, these judges are capable of withstanding Senate hearings and fulfilling presidential legacies as Justices. Christine Nemacheck elaborates by stating that circuit court judges “have already passed the hurdle of Senate confirmation once and that the issues appeals court judges deal with proved a concrete basis for evaluating how these judges would perform on the Supreme Court” (Nemacheck 2007, 143). Court scholar David Yalof furthers this point, explaining, “Federal appellate opinions offer perhaps the best gauge available for predicting an individual’s future voting behavior on the Supreme Court” (Yalof 1999, 170). Presidents generally set their criteria for selecting Justices along three lines: Senate confirmation, shared ideology, and ideological consistency. They cannot be certain that circuit court judges will meet these criteria well, but as Nemacheck also states, presidents “might be more certain about these candidates than about candidates who have not served on the federal bench, and the courts of appeals in particular” (Nemacheck 2007, 143). Few scholars, however, have studied whether circuit court experience has paid dividends to presidents in terms of ideological consistency.

Much research has been done on the politics of the appointment process and judicial ideology, but little comparing the ideological drift (or consistency) of Supreme Court Justices who have circuit court experience with Justices who do not. Judicial consistency is an important concept in political science and legal research. Consistency and ideological drift represent a Justice’s propensity to shift in political ideology. Research that measures this kind of change is critical to presidents and senators selecting Justices because it gives them an ability to predict what a prospective Justice might be like on the Court.

As indicated before, presidents presumably reason that nominees with federal court experience are more predictable than nominees without this experience. Scholars and commentators suggest that consistency is the intention of appointing those judges to the Court, but few have examined the issue directly.

Are Justices appointed from the circuit courts less likely to drift ideologically than Justices without circuit court experience? Given the scholarly work and literature in the field, I hypothesize that Justices with circuit court experience drift less than Justices without. After detailing previous findings on ideological drift, I plan to pit ideological consistency data against circuit court experience and two other control variables. If presidents and senators emphasize judicial consistency when choosing Justices, examining the relationship might shed light on this strategy.

Literature Review

For much of the U.S. Supreme Court’s history, few Justices with circuit court experience were appointed to the bench. Congress did not create the modern Court of Appeals until 1891 and its jurisdiction was limited to interstate conflicts and maritime cases (Judiciary Act of 1891). Judicial experience is not a Constitutional requirement for presidential appointments to the bench. As noted by Susan Smelcer, “Presidents appeared to emphasize characteristics other than judicial experience in choosing nominees. Appointees were selected, in part, because they were perceived as capable of maintaining public respect for the Court in an increasingly hostile political environment and, in many cases, had demonstrated personal loyalty to the President” (Smelcer 2009, 18). This sentiment was observable as late as President Lyndon Johnson’s nominations. Circuit court experience as a near necessity for appointment to the U.S. Supreme Court did not gain traction until the 1980s. Since 1953, two-thirds of the nominated and confirmed Justices came from the U.S. Courts of Appeals, while one-third did not have any federal court experience. In contrast to the previous era (1881–1952) only

26 percent of the Justices appointed had circuit court experience (Smelcer 2009). The modern trend of drawing Justices from the Circuit Court system is apparent. The aim of the following is to discuss ideological drift generally as well as in connection to circuit court experience.

Judicial Drift

Irrespective of Justices' prior judging experience, scholars disagree whether Justices are ideologically stable in their decisions or whether they drift. When presidents nominate candidates to the Court, they "can be reasonably certain that their appointees will behave in line with expectations" (Epstein et al. 2007, 1486). Predictability and consistency are the marks of a good nomination. Presidential administrations end, but Justices often serve as many as 30 years. Ideologically stable Justices show a clearly vetted choice and help to serve the president's legacy positively. However, some Justices have moved drastically left or right. President Eisenhower famously said of his Court nominations, "I made two mistakes, and both of them are sitting on the Supreme Court" (Smelcer 2009, 1). Chief Justice Warren and Justice Brennan departed from Eisenhower's conservative leanings and championed several civil rights era Court rulings.

Conversely, the conventional position is that Justices, for the most part, vote predictably. In reference to Chief Justice John Roberts, David Straus argues that an "unpredictable Supreme Court is a myth" (Straus 2005, 1). Specifically, he states:

Judge Roberts is an exceptionally able lawyer—as good as they come—and it is quite possible that the Senate will confirm him. But whatever his views are now, the Senate, and the American people, should count on his being the same person throughout the 30 or so years he is likely to spend on the court if he is confirmed. The idea that judges change their basic philosophical views once they are on the bench is a myth. (Straus 2005, 1)

Straus gives the conventional interpretation of judicial consistency, but other scholars suggest that ideological drift is expected and happening: "Contrary to the received wisdom, virtually every Justice serving since the 1930s has moved to the left or right or, in some cases, has switched directions several times" (Epstein et al. 2007, 1486). Epstein et al. use their statistical models and ideological scores (which I also use in my model) to track judicial movement. Their models successfully predict shifts that qualitative scholars have suggested over decades. Justice Blackmun is often noted in qualitative scholarship for his shift in judicial ideology to the liberal wing (Epstein et al. 2007, 1486). Epstein et al. quantitatively support this claim and predict, with their model, that Justice Blackmun would move progressively liberally throughout his term.

Blackmun began his tenure as a conservative Justice (supporting approximately 35 percent of civil rights claims). After the first five years, Epstein et al. found that Justice Blackmun progressively supported more civil rights claims throughout his tenure, reaching over 70 percent in his final term.

When Epstein et al. use the scores, they identify ideological drift, but offer no definitive, observable explanations for what compelled the drift. However, they give a host of variables that might contribute to judicial drift. Particularly, they suggest that drift may be Justices responding to and conforming with public opinion (Epstein et al. 2007, 1520). I plan to use a rough representation of this concept as a control within my own model.

Federal Experience and Ideological Congruence to the President

Matthew Hitt of Ohio State University studied how the amount of information available to presidents about potential Justices (judicial experience and executive experience) affects how ideologically congruent presidents and Justices are. Hitt argued that the more information presidents have on nominees' professional and executive experience, the more ideologically congruent they would be with the president. Senators, according to Hitt, might also constrain choices for the president if they are from the opposite party. In explaining the appointment of Justice Souter, Hitt states, "Bush [Sr.] selected a more moderate (and minimally experienced, it should be noted) nominee to raise the probability of confirmation. If the president must moderate his choice in the face of a hostile Senate, it follows that the eventual nominee will be further away from the president's ideal point, and nearer to the Court's median" (Hitt 2013, 799). The president's ideal point is rooted in data from the administration's public positions on particular cases to determine how the president would vote on a case.

Hitt's findings demonstrate that the more information a president has about a Justice's federal experience (in the executive and the judicial branch) the more congruent those Justices are with the president. Hitt explains that "by selecting nominees with more relevant experience, presidents experience greater success with their appointment" (Hitt 2013, 799). Hitt finds that senatorial constraint and divided government fail to reach statistically significant levels. Although constraint and divided government may fail in Hitt's model of congruence, it is likely useful for measuring ideological consistency here.

Hitt differentiates from this study because he combines federal executive experience and federal judicial experience into a single variable. Additionally, Hitt's research uses the first 10 terms of a Justice's career and does not study how all Justices perform throughout their careers. Hitt argues that the Justices have acclimated to the Court after 10 terms and the appointment process no longer influences them (Hitt 2013, 798). His inclusion of divided government as a possible influence on Justice-president congruence, however, is useful in studying long-term ideological drift. I use this variable in the present model.

Measuring Movement

Since 1953, Congress and the president have appointed 24 Justices, 16 of whom have been appointed from circuit courts. As the literature suggests, selecting circuit court Justices has several advantages for the president, broadly categorized into three concepts. First, appellate judges pass more easily through the nomination process because of the legitimacy associated with the federal court system. Second, a history of judicial decision making strongly indicates judges' ideologies to the president and Congress. Third, using knowledge of the judge's ideology across his or her history of appellate opinions, presidents select nominees they believe will be consistent in their rulings on the Court (Epstein et al. 2007; Nemacheck 2007; Yalof 1999).

The third concept is a presidential strategy largely unexplored by existing literature. If presidents are choosing Justices from the circuit courts in part because they believe those Justices will be the most consistent, are Justices selected from the circuit court system really more ideologically consistent than their non-circuit court counterparts? The relevant literature suggests that drift is occurring and measurable. Given these disparities, I hypothesize that circuit court experience will predict less ideological movement.

Appellate Court Experience and More Limited Drift

Given the background information on presidential and Senate motivations for appointing circuit judges and the research on ideological drift, it can reasonably be suggested that circuit court experience may result in less ideological drift. Simply, if X is present (circuit court experience), then there should be less variation of Y (ideological drift) in contrast to when X is not present. If the hypothesis is supported, the presidential and congressional strategy for judicial selection is also supported. If the hypothesis is unsupported by the data, the results are still relevant to judicial selection; they may suggest that choosing Justices on the basis of their appellate court experience might relate to more limited drift.

In answering whether circuit court experience influences ideological drift, a model measuring these concepts against each other must be offered. Conceptualizing the model pits drift against circuit court experience, but there are more variables to consider. However, much of the research defining and assigning ideological scores to Justices has already been done. Martin and Quinn have measured the ideology of Justices for each year since 1937. Their data are essential to this research, but some work was done to create the actual variables. Not only are circuit court experience and drift added, but the research literature provides control variables.

Three Variables Predicting Ideological Drift

The question here is whether circuit court experience indicates a more ideologically consistent Justice. The dependent variable, ideological drift, measures how much Justices deviate each year from their first year on the Court. To operationalize and measure Justices' ideological drift, I use the aforementioned Martin-Quinn scores for each Justice from 1953 to 2013. In the Martin-Quinn scores, Justices are given an ideology number for each year of their service. The numbers are on a 12-point scale, from -6 (most liberal) to +6 (most conservative). For instance, Justice Scalia scored 3.326 in 2012. How Martin-Quinn arrives at the values is complicated. Martin-Quinn uses data from the Supreme Court Database to determine the policy preferences of each Justice. Using a Markov chain Monte Carlo algorithm to determine the ideal mean points for each Justice, the algorithm considers a range of inputs from case data. The Martin-Quinn scores have assigned each Justice a score for each year since 1937 (Martin and Quinn 2013).

Since the research question in the present study is concerned with Justices' prior experiences as judges on the U.S. Courts of Appeals, the primary explanatory variable is circuit court experience. Using Justices' biographical data located on www.oyez.org, I coded this variable 1 if Justices had circuit court experience, and 0 if otherwise.

Based on the findings by Epstein et al. and Hitt, I include two control variables in the model: divided government (Hitt 2013) and House control (Epstein et al. 2007). The divided government variable asks whether the president's party affiliation and the majority party in the Senate are different. As mentioned before, Hitt suggests that when a divided government is present, presidents are constrained in their choices and must nominate Justices more in line with the Senate's concerns. Hitt contends that this might alter the ideological variability between the Justice and the president. Given that presidents use three criteria for choosing Justices (ideology, confirmation, and consistency), and that a divided government constrains one criterion (ideology), I surmise that presidents might rely more on ideological consistency when there is divided government. For divided government, values are coded 1 if yes and 0 if otherwise.

Since other scholars have suggested that drift may be explained as Justices responding to (following) public opinion (Epstein et al. 2007), I include a rough

measure of public opinion in the model. The idea here is that if the public mood is conservative, this will manifest in the House of Representatives being controlled by Republicans. If public opinion leans in the liberal direction, the controlling party in the House of Representatives will be Democrats. As a rough indicator of public opinion over time, I examine whether the House of Representatives (in each year of this study) is controlled by either Democrats or Republicans to establish the national mood as liberal or conservative. House control (public opinion) is coded 0 for Democratic control and 1 for Republican control.

Modeling Judicial Drift

The primary source of data is the Martin-Quinn database of ideological scores. The posterior mean (what Martin-Quinn characterize as the ideal measure) points from Martin and Quinn are used to construct the dependent variable ideological drift (Martin and Quinn 2013). All other independent variables were coded using publicly available data from the Office of the Clerk of the House of Representatives and the U.S. Senate websites. The years of study are from 1953 to 2013. An appropriate starting point for the study is 1953 because it was the year that marked the trend of appointing Justices from the circuit courts. Beginning with President Eisenhower publicly stating that he would use the circuit courts as a source of Justices, two-thirds of appointed Justices have come from the circuit courts.

The quantitative method is most appropriate for measuring judicial drift in this instance because it is able to pool the candidates in association with each other. The unit of analysis, however, is not Justices themselves, but the Justices' particular drift during a particular year. The Martin-Quinn dataset provides the mean point score for each Justice in each year of service, but does not calculate a drift variable. To capture ideological drift, I use the Martin-Quinn scores to create the variable. Justice ideology is on a 12-point scale, a continuous variable with numerous values ranging from -6 to +6. I compare a Justice's ideology score from the first year of service (Y_1) with each Justice's ideology score in subsequent years (Y_{1+T}). I then take the absolute value of this comparison to show movement in positive terms. Hence, ideological drift for each Justice for each year of service (Y) is $|Y_1 - Y_{1+T}|$.

Since the dependent variable is a continuous variable, I can express ideological drift in an OLS regression model equation, $Y = a + b_1X_1 + b_2X_2 + b_3X_3 + e$, where Y is ideological drift and a is the constant. The primary explanatory variable (circuit court experience) is b_1X_1 . The control variables are divided government (b_2X_2) and house control (b_3X_3), and e is the error term.

Results and Analysis

Pitting circuit court experience (b_1X_1) against ideological drift ($|Y_1 - Y_{1+T}|$) in a basic linear regression reveals a statistically significant relationship. With a Sig. value of .022, the threshold for statistical significance is met with it being below .05. Observing the B coefficient shows the amount of drift between Justices with circuit court experience and those without to be similar. The value for our Y in the B coefficient is .211. This indicates that for every positive increase in the Y value, the amount of drift increases .211. Because circuit court experience is a dichotomous variable, there is only one change in value from 0 to 1. On a 12-point scale (established by Martin-Quinn for ideology), this suggests that Justices appointed from the circuit courts actually drift slightly more than those appointed from other professions.

Table 1. Prior judicial experience influencing high court decision making.

Model	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
Constant	.688	.088		7.826	.000
divgovt	.111	.083	.062	1.344	.180
pubopinion	.399	.095	.200	4.206	.000
Circuit court experience	.211	.092	.107	2.304	.022

Moving to the control variables, divided government and political mood (public opinion) of the public (as represented by House control) have mixed results. Divided government at the time of appointment of the Justice is statistically insignificant to their ideological drift with its Sig. value exceeding .05. The controlling party of the House of Representatives, however, is statistically significant and to a greater degree than circuit court experience. With a Sig. value of .000 and a B coefficient of .399, House control affects judicial drift more than any other variable. The variable is dichotomous between 0 being Democrat controlled and 1 being Republican controlled. The B coefficient shows that when Republicans control the House, Justices drift .399 more on a 12-point scale than when the House is controlled by Democrats. Examining the context surrounding this research might further explain these findings.

Contradicting Data in Context

In measuring ideological drift against circuit court experience, it was expected that Justices with appellate experience would drift less than those without experience. Yet, the model predicts that Justices with circuit court experience will actually drift slightly more (0.22 more on a 12-point scale). However, this outcome is still significant in its implications. The data seem to question the contention that circuit court judges make for more consistent Justices on the Court than Justices from outside the federal bench.

Presidents and senators might need to consider alternative strategies to control drift on the Court, depending on which way the Justices are drifting. The circuit courts will continue to be a source of Justices to the Court, but whether the circuit courts are a source of ideologically consistent Justices is in question. Other characteristics may need to be examined before appointing Justices to the bench. This is difficult, however, as the true sources of drift have not been thoroughly researched or suggested by the current body of literature. The only relevant suggestion here is that a circuit court background is not predictive of less drift.

Moreover, a divided government at the time of judicial appointment does not predict more ideologically consistent Justices in this model. This discovery is in line with Hitt’s findings, which also revealed that a divided government is statistically insignificant. The variable as a concept was unlikely to work from initial formation. Although the Senate and president have a common interest in ideological consistency on the Court, it is unlikely that the two entities in opposition would produce more consistent appointments because of fewer choices. The president and Senate only take a few months to select a Justice, while the individual they are selecting serves for as many as 30 years. However, this is not to suggest that the branches of government do not play a role in judicial drift.

In accounting for political mood of the public as Epstein et al. suggest, the model uses a rough interpretation of that variable. I used the controlling party in the House as

a rough gauge of public opinion. This is an approach of necessity given that there are no consistent and reliable public polls that reach back as far as 1953. It is interesting that the model suggests that House control might be significant. It shows that when the Republican Party controls the House, Justices tend to drift nearly half a point more on the 12-point scale. Further research on the relationship between drift and political mood of the country would further improve our understanding of judicial drift.

Conclusion: Limitations and Future Research

Ward Farnsworth, in his critique of the Martin-Quinn paper, makes a case for approaching models such as these with caution. Farnsworth explains that the methods behind Epstein et al.'s work are "black box"—like and confusing to even the most advanced academic (Farnsworth 2007). Farnsworth explains:

The difficulty arises because the authors want to do more than make this contribution; they want to give advice. . . . For despite the hedge words I mentioned a moment ago, it would be easy to take away from their article a conclusion that it is generally hard to predict what any Justice will think and do ten or fifteen years after appointment. (Farnsworth 2007, 1902)

The work of Epstein et al., like the work here, relies unequivocally on the use of Martin-Quinn scores. If scholars are to make use of the Martin-Quinn scores, they may need to be wary of making predictions.

Constrained Research

Bearing Farnsworth's warning in mind, 24 Justices is a small sample size. Using 1953 as the starting year is appropriate, as it is generally referred to as the beginning of the modern Court, but it yields only 24 Justices. As a sample size, 24 is below the statistically recommended 30. However, with more than 400 observations for the entire sample size, some meaningful observations are possible and suggest themes in ideological consistency. Additionally, this research has controls for two other variables (House control and divided government), but there are many more that should be considered. Epstein et al. and other scholars suggest a host of other variables that might relate to ideological drift. Future research into judicial drift may attempt to broaden the scope of Court decision making while also controlling for more variables.

Future Use

The work here has made an attempt to evaluate presidential strategies outcomes. The model suggests that circuit court judges may not make for more ideologically reliable Justices than their non-circuit court peers. Circuit court Justices, according to the model, drift slightly more (0.22 on a 12-point scale) than non-circuit court Justices. If the information is reliable, judicial drift on the Court is happening, and circuit court experience does not predict less drift. This is important because presidents have often predicted that the circuit court experience would provide for less drift. However, it is important to note that the model does not show which way the Justices are drifting. If a Justice appointed by a politically conservative president drifted more conservatively throughout the Justice's term, then the president would not be concerned that the Justice was a poor choice. If, however, a conservative president appointed a Justice who drifted more liberally (as in the case of Justice Blackmun) the president would likely be more concerned. Future research on the topic should investigate which way Justices drift according to the Martin-Quinn scores to better reveal the nature of drift in relation to federal court experience.

In either case, Straus's contention that "the idea that judges change their basic philosophical views once they are on the bench is a myth" is clearly in question even when these Justices have federal court experience (Straus 2005, 1). Depending on which way the Justices drift, presidents might do well to revisit their preferences for circuit court judges. The model shows that the difference in ideological drift between Justices with experience and Justices without is slight and that those Justices with experience are prone to drift more. This finding puts Justices nearly on par with each other in their propensity to drift, regardless of professional background. Given this understanding, the modern tradition of appointing circuit court judges to the Court because of, among other factors, their more predictive consistency is perhaps unfounded.

Bibliography

- Bergara, Mario, Barak Richman, and Pablo Spiller. "Modeling Supreme Court Strategic Decision Making: The Congressional Constraint." *Legislative Studies Quarterly* 28, no. 2 (May 2003): 247–80.
- Circuit Court of Appeals Act. 26 Stat. 826 (1891).
- Epstein, Lee, Andrew D. Martin, Kevin M. Quinn, and Jeffery A. Segal. "Ideological Drift among Supreme Court Justices: Who, When, and How Important?" *Northwestern University Law Review* 101, no. 4 (2007): 1483–1541.
- Farnsworth, Ward. "The Use and Limits of Martin-Quinn Scores to Assess Supreme Court Justices, with Special Attention to the Problem of Ideological Drift." *Northwestern University Law Review* 101, no. 4 (2007): 1891–1903.
- George, Tracey E., and Lee Epstein. "On the Nature of Supreme Court Decision Making." *American Political Science Review* 86, no. 2 (1992): 323–37.
- Hitt, Matthew P. "Presidential Success in Supreme Court Appointments: Informational Effects and Institutional Constraints." *Presidential Studies Quarterly* 43, no. 4 (2013): 792–813.
- Martin, Andrew D., and Kevin M. Quinn. "Dynamic Ideal Point Estimation via Markov Chain Monte Carlo for the U.S. Supreme Court, 1953–1999." *Political Analysis* 10, no. 2 (2002): 134–53.
- . "Measures." Martin-Quinn Scores. Accessed December 1, 2013. <http://mqscores.berkeley.edu/measures.php>.
- Nemacheck, Christine L. *Strategic Selection: Presidential Nomination of Supreme Court Justices from Herbert Hoover through George W. Bush*. Charlottesville, VA: University of Virginia Press, 2007.
- Smelcer, Susan Navarro. *Supreme Court Justices: Demographic Characteristics, Professional Experience, and Legal Education, 1789–2009*. Congressional Research Service, September 9, 2009. <http://fpc.state.gov/documents/organization/132310.pdf>.
- Straus, David A. "It's Time to Deal with Reality: The Myth of the Unpredictable Supreme Court Justice Debunked." *Chicago Tribune*, August 7, 2005. http://articles.chicagotribune.com/2005-08-07/news/0508070326_1_justices-antonin-scalia-supreme-court-roosevelt-appointees.
- Yalof, David A. *Pursuit of Justices*. Chicago: University of Chicago Press, 1999.

Fifteenth-Century Florentine Exceptionalism: Civic Humanism, the Medici, and Savonarola

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Abstract

The Italian city-state of Florence had a long-standing tradition of exceptionalist rhetoric during the Renaissance, though the focus of the city's distinction altered over time. This tradition, also referred to as the "Myth of Florence," is similar to the idea of "American exceptionalism." This paper aims to investigate the distinct change in Florentine exceptionalism over the course of the fifteenth century. The civic humanists of the early 1400s viewed Florence as a New Rome, spreader of political liberty, and, with its republican form of government, heir to the ancient Roman Republic. In the 1490s, Dominican Friar Girolamo Savonarola argued that Florence was a New Jerusalem, destined to become the new model of Christendom on earth. Medici hegemony explains the rhetorical shift from Rome to Jerusalem. Before 1434, Florence was a functioning republic. After that date, and until 1494, Florence was increasingly under the rule of one family. The transition to a quasi-principality made civic humanist rhetoric impossible and paved the way for Savonarola to craft his message of Florentine religious exceptionalism.

Introduction

Many Americans are familiar with their nation being referred to as a city on a hill. Such rhetoric argues that America is an exceptional nation and other countries should mimic American values and institutions. Throughout America's history, political leaders, intellectuals, and ordinary citizens have commented on this idea of American exceptionalism. The Italian city-state of Renaissance Florence had a similar tradition, sometimes called the "Myth of Florence." As an early center of the Italian Renaissance, Florence boasted strong republican values, veneration for antiquity, and humanist studies. Modern scholars have argued that Renaissance Florence was the precursor to the modern state. Already in the fourteenth century, Florentines first wrote about their city as having a special place in the world, arguing that it possessed an excellence that warranted emulation in both religious and secular matters.¹ This "Florentine exceptionalism" evolved until it eventually became more coherent by the early fifteenth century. By this time, many intellectuals argued that Florence's republicanism was the most important feature of its political system.² This intense belief in republicanism was combined with a renewed vigor in classical studies—in which Florentines sought

antecedents for their political values—and civic engagement—which became a hallmark of the Florentine political culture.³

Political freedom and republican government were not possible under Medici hegemony (1434–1494). After 1434, Florence increasingly became ruled by the Medici family, a powerful group that made its fortune in banking and finance.⁴ The themes of republicanism and liberty in civic humanism became incompatible with the new quasi-principality. Once the Medici family was firmly in power in the 1450s, intellectuals began arguing that withdrawal from society and politics was required in order to achieve enlightenment.⁵ It was simply impossible to say scholars, prominent citizens, and aristocratic families should intervene in public life when Florence increasingly became a republic in name only.

The Medici were forced out of the city in 1494 after the invasion of the peninsula by the French King Charles VIII. Once the Medici fled, Dominican Friar Girolamo Savonarola quickly assumed a place of authority within the city. Already popular due to his fiery sermons and charismatic personality, Savonarola seemed to predict both the Medici's collapse and the Florentine invasion by Charles VIII. Departing from the secular bent of civic humanism, Savonarola called upon Florence to become a New Jerusalem, completely redefining the rhetoric of the city's exceptionalism.

Humanism to Civic Humanism: Florence as New Rome

The original humanist movement and Florentine exceptionalism began to take shape during the fourteenth century. During this time, Giovanni Villani referred to Florence as possessing a unique position in the world.⁶ Villani's exceptionalist message was one of the first written examples of the Florentine exceptionalism tradition. The humanist movement of the fourteenth century sought to make classic Roman and Greek literature relevant to contemporary Florentine life. Original humanists include Francis Petrarch, the great Italian writer, and Niccolo Niccoli, a collector of classical texts, who started a revival in classical studies around the Italian peninsula in the Renaissance.⁷ Early humanism was isolated in nature, practiced by individuals such as Petrarch who desired to emulate classical writers like Cicero in order to live a virtuous life. Petrarch had no interest in pursuing public office or directly applying the knowledge of the ancients to modern life. For example, one of Petrarch's masterpieces is called *The Secret*. This book was never intended to be published and details Petrarch's internal, individual struggles between an active and contemplative life—that is, between earthly pleasures and Christianity. Petrarch wanted to use classical texts to improve the quality of his personal life. His writing was entirely for his own use and was not to be applied to society.

Fifteenth-century humanism and Florentine exceptionalism changed considerably from their fourteenth-century counterparts. The first decades of the 1400s saw the emergence of civic humanism, which labeled Florence as the New Rome, successor to the great Roman Republic, and bringer of political liberty to the Italian peninsula.⁸ Additionally, driven by both intellectual and political events, political elites and intellectuals in the Italian peninsula eventually created a humanist education for future politicians in order to cultivate civic virtue. Ancient models such as the Roman Republic were concrete examples of civic virtue. In this new humanist curriculum, Roman, and later Greek, literary classics and the primacy of human, temporal concerns became the main focus.⁹ Such an education was competition to the medieval, scholastic education that emphasized Catholic morals and values.¹⁰ Twentieth-century Renaissance historian Hans Baron coined the term "civic humanism" to describe the fifteenth-century movement and contended that original versions of Florentine exceptionalism like Villani's history were repurposed in the more civically applied

humanism by the beginning of the fifteenth century. Villani's nascent exceptionalist message was not intended to train future civil servants, but the themes he emphasized were used in the civic humanist tradition.¹¹ As a result, my composition employs civic humanism as another form of the Florentine exceptionalist tradition.

Comprehending the political context of Florence's late fourteenth-century wars with Milan is crucial to understanding civic humanism. In the late 1300s, the duchy of Milan sought to unite the Italian peninsula under its authority. The Visconti family ruled Milan as despots at this time, and Gian Galeazzo Visconti united much of Tuscany, minus Florence, under his thumb. Visconti had conquered all areas surrounding Florence by 1400. All seemed lost for Florence until Visconti's sudden death in 1402. Baron argued that Florence viewed its victory against Milanese aggression as republicanism and liberty triumphing over tyranny and oppression.¹² Consequently, civic humanism required and could only function in a republican government. Principalities or despotisms were not compatible with civic humanism due to its foundation in republican Florence. Since civic humanism was created when republican Florence was fighting despotic Milan, republicanism and liberty became important elements of that philosophy.

This article treats Leonardo Bruni and Coluccio Salutati, witnesses to the Milanese Wars and contemporary intellectuals, as civic humanists, although neither one ever described himself as such. Here it is key to make the distinction between Bruni's and Salutati's rhetoric and their actual political beliefs. Historian James Hankins has demonstrated that during the lives of Bruni and Salutati, the two participated in many activities opposed to republican ideology.¹³ Ignoring what Bruni and Salutati felt or believed as private individuals, this paper looks at what the two intellectuals said in their public praise of Florence. In other words, the goal here is not to determine who Bruni and Salutati were internally, but to analyze their public works in the context and age of civic humanism. Finally, I mainly focus on the political aspects found in their civic humanism: republicanism and liberty. There was certainly more to the movement, such as education and literary criticism, but these aspects are not the focus of this article.

As many scholars have noted, Salutati was a transitional figure between Petrarch's humanism and civic humanism.¹⁴ Nevertheless, the Florentine chancellor articulated many ideas central to the new Florentine exceptionalism. His *Invective against Antonio Loschi* was written in 1398 in response to Loschi's charges that Florence was the real oppressor and Milan had the right to unite the peninsula. The document revealed an intense thirst for political liberty: "Great is our love for the liberty that you, most foolish of all men, call shameful; only those who have never experienced it, like yourself, fail to appreciate it and to understand its value."¹⁵ Loschi was a representative of Milan who argued for Milanese domination of the peninsula. Salutati was criticizing both Loschi's affection for despotism and his failure to appreciate political liberty. From Salutati's perspective, Loschi, who lived in a despotic state, naturally could not truly appreciate political freedom. Not only was Loschi an idiot according to Salutati; he was the most foolish of all men. While one normally finds incendiary and lofty language in invectives, the excerpt presented here hits at civic humanism's core. For Salutati, Loschi's support for a tyrannical regime was truly abhorrent.

Salutati did not stop there, and continued to attack Loschi: "Your famous Roman steadfastness and strength in defending your shameful liberty, or, should I say, your most fierce tyranny. You always pride yourselves on claiming descent from the Romans."¹⁶ Both Salutati and Loschi claimed that the ancestor of their respective municipalities was Rome, but they each selected different periods in Roman history from which to claim descent. For civic humanism and other ideologies that

sought to justify territorial aggression, tracing a city's ancestry back to Rome was very important.¹⁷ Salutati and others like him believed that their respect for liberty derived from the Roman Republic, the apex of human political organization in their eyes. Consequently, civic humanists went to great lengths to prove that republican Rome, a polity that respected liberty, was the ancestor of contemporary Florence. Milan and similar despotic states argued that they were fulfilling the role of the Roman Empire and would bring peace to the peninsula by creating a universal authority. During the latter half of the fourteenth century the Visconti family in Milan had tried to unite Italy under one government. From Salutati's perspective, Loschi's counterarguments were invalid. Milan, at this time being an expansionist despotism under the thumb of the Visconti family, was more analogous to imperial (as opposed to republican) Rome—that is, something to be shunned, according to Salutati. Milan was not an heir to the Roman Republic because it cultivated tyranny, akin to the Roman Empire. For the civic humanists, the Roman Republic represented true greatness, not the perpetually declining empire.¹⁸ In other words, not all of Rome's historical periods should be emulated.

From a civic humanist's worldview of history, it is evident Rome's heir had to be a republic. Salutati showed that Florence, due to its republican government and embrace of liberty, was the New Rome. Salutati went further than that and even argued that Florence would surpass its legendary ancestor because the city loved liberty so much: "The steadfastness and the fortitude of the Florentines, superior even to that of the Romans, in defending their most beloved liberty; a divine gift, as the saying goes, more precious than all the money in the world."¹⁹ Once more, Salutati reiterated the importance of liberty to both the Romans and the Florentines: political freedom was the lifeblood in any society. Florence would eclipse the Roman Republic by honoring political freedom, not by territorial aggression. Again, Milan was deeply flawed because its political system and desire to become a universal empire destroyed liberty at home and abroad. Salutati held political freedom higher than any other temporal principle.

Lastly, the way Salutati talked about religion revealed civic humanism's fundamentally secular nature. God was mentioned sparingly, reflecting the overwhelming political flavor of the quote in the preceding paragraph. One can easily miss the "divine gift" comment amid the excerpt's main secular focus. As other scholars have pointed out, the civic humanists took a decidedly more secular outlook than the religiously devout intellectuals from the Middle Ages.²⁰ This did not mean Salutati was not religious, but rather that he prioritized secular concerns in his rhetoric over religious matters.

While Salutati is labeled a transitional figure, Leonardo Bruni is considered civic humanism's chief representative, according to Hans Baron, Kenneth Bartlett, and many other scholars.²¹ Bruni was an intellectual and historian who received patronage from Salutati and became the chancellor of the city in 1415. Throughout his life, Bruni wrote many humanist texts directed at defending republican ideology and discrediting despotism. During his prolific career, Bruni saw civic humanism's zenith (the 1400s–1420s) and the rise of Medici hegemony. Bruni's *The Panegyric to the City of Florence*, composed around 1402, represents his developing civic humanist ideas. The document was composed immediately after Milan's defeat in 1402 and presents Florentine character and principal values, according to Baron and other historians.²² Some academics, including Jerold Siegel, have questioned Baron's dating calculations; regardless, when the document was first made and delivered does not affect my argument.²³ In his panegyric, Bruni discredited tyranny and praised republicanism, following Salutati's methodology. Like his mentor, Bruni focused on political realities.

He included references to God, but they are rare. For instance, he commenced his panegyric by thanking God for the opportunity to address the Florentine Republic.²⁴ Little nods such as this one are found in the text, but Bruni did not elaborate on God or religion in a substantive manner. His secular concerns dominated his religious beliefs throughout the text, as for instance when the ancient Romans took center stage in his discussion of Florence's gift of freedom, with brief commentary about God.²⁵

Similar to Salutati's rejection of Milanese tyranny, Bruni utilizes his historical knowledge to discredit Roman despots. The Roman Republic is Florence's great ancestor, not the empire. In clear, decisive language, *The Panegyric* reads: "Florentines find joy in freedom more than all other men, and that they are the enemies of tyrants. Florence feels a hate against aggressive powers and destroyers of republican liberty."²⁶ According to Bruni, Florence and cities like it not only should cultivate freedom, but must destroy tyrannies when they arise. Bruni, like Salutati, had a clear division of history. The Roman Republic brought greatness to Rome, while the Roman emperors ruined Rome's greatness: "Then after having been deprived of their legitimate freedom, they were torn apart by the most cruel beings, who, in the more valiant days of the republic, would have been found among the scum of society."²⁷ For the civic humanists, political liberty allowed the Roman Republic to conquer vast amounts of territory. For Bruni, political liberty or freedom meant scholars participating in politics and a republican state that allowed for free discussion of ideas. In a tyranny, monarchy, or principality, such desires were impossible, as liberty was stifled by the state.²⁸ Rome's decline began when the populace was subjected to imperial rule. Since Bruni's vision was modeled after Salutati's argument, it was incompatible with monarchy. In Bruni's eyes, the only acceptable political system was a republic. Furthermore, Bruni wanted "to prove this community of us made a justified choice by committing itself to democratic rule and the principle of law."²⁹ Again, Bruni condemned tyranny, but he was acting as an apologist for the republican system in which he currently lived. Civic humanism, therefore, was not only anti-tyrannical but also functioned as a propaganda machine for the republican state and called for the elimination of despotic regimes.

Bruni's *The History of the Florentine People*, composed from 1415 until the 1430s, further reveals the humanist's love for political liberty. It was modeled after Livy's history of ancient Rome. Bruni's history was clearly ideological and sought to elevate republicanism at the expense of tyrannies or principalities.³⁰ *The History* argued for political freedoms present not only at home, but abroad as well. Bruni condemned imperialism for its effects on conquered territories, and this included the actions of the Roman Republic. Bruni admitted a republic can exhibit imperial tendencies, a sentiment not found in his *Panegyric*. For instance, the Roman Republic was politically free in Rome but oppressed its subject territories. Such a position was inherently problematic: how can a polity claim to honor political liberty when it conquers other polities? We can conclude that Bruni's conception of political liberty evolved throughout his public career. For example, when Bruni commented in his *History* about the ancient Romans' conquest of the Etruscans and neighboring communities, he said: "Thus, when at the time domination had been transferred to the Romans, and men were no longer permitted to try to rise to public honors or spend their time in matters of great import, the Etruscan *virtus* faded away."³¹ While the Roman Republic honored liberty inside of Rome, democratic institutions were discarded throughout the rest of Italy. Bruni realized that to love liberty and republicanism fully, one has to honor them at home and abroad, something the Roman Republic did not do. For the civic humanists, republican government was an ideal to be practiced everywhere, not just in their own city. To be authentic, fifteenth-century Florence had to honor the liberty of Pisa, then a subject city to Florence, in addition to its own liberty.

The “Funeral Speech on Nanni de’Strozzi,” published in 1427, further elaborates on the civic humanist’s need for political freedom. This oration, which lamented the death of a Florentine general who fought against Milan, was as ideological as Bruni’s *History*. Bruni articulated a position as follows: “Equal liberty exists for all . . . the hope of winning public honors and ascending is the same for all . . . our commonwealth requires *virtus* and *probitas* in its citizens.”³² To the ancient Romans and Renaissance scholars, *probitas* signified honesty while *virtus* meant general virtues like temperance and mercy.³³ Bruni contends that moral virtue cannot exist without political freedom; political freedom produces a morally virtuous populace. Neither condition existed in monarchies or tyrannies. In despotic Milan or imperial Rome, only the ruler had true political freedom, making the acquisition of virtue impossible for his or her subjects. Instead of pleasing and flattering the imperial court, the people in a republic meritoriously served the state through elected positions. A republic demanded an active, free citizenry, which was not possible under monarchy or tyranny. This applied to both Florence and any foreign city. Here we see the civic, active component of civic humanism. Solitary, isolated humanism for personal intellectual fulfillment and satisfaction had been supplanted by civic engagement. Bruni contended that a successful republic needs its populace to be educated, active, engaged, and able to garner public honors. Since life in Milan and imperial Rome centered around the duke or emperor, Milan and imperial Rome obviously were ineligible, according to his model.

In sum, the civic humanists, here represented by Salutati and Bruni, clearly believed that a republican form of government best preserved the all-important principle of political liberty. Bruni’s thought process evolved over the course of his career: humanism should be used in the public arena to strengthen the existing republican structure. That means liberty should be respected abroad in addition to at home. Consequently, imperial Rome and the duchy of Milan were to be shunned as political models, as each was incapable of crafting political and moral virtue. To combat polities such as the Duchy of Milan, Florence had to become a fountain of political liberty, becoming the modern-day heir to ancient Rome, according to Salutati and Bruni. The age of civic humanism existed for roughly the first third of the fifteenth century; however, in 1434, the Florentine Republic would experience a fundamental alteration.

Medici Hegemony (1434–1494): Undermining Civic Humanism

Historians widely agree that Medici hegemony in Florence during the fifteenth century began circa 1434.³⁴ Before this date, Florence’s government was a power-sharing arrangement via elected membership to many different councils. Prior to 1434, the Medici clan was a prominent family that made a fortune in finance and banking sectors. In 1433, the Albizzi family gained considerable influence in the city and used their contacts to exile their great rival, Medici patriarch Cosimo de’ Medici, from Florence. The following year, Cosimo returned from exile and dismantled the Albizzi regime that had banished him.³⁵ Cosimo’s return began the regime that effectively put Florence under the thumb of one family until 1494. From 1434 to 1494, the Florentine Republic slowly became a possession of the Medici family.

Cosimo never formally assumed any formal or regal title, always stated he was merely a humble banker, and dressed as a merchant.³⁶ He wisely respected the Florentine laws and political customs, making sure that Florence maintained the facade of a republic during the period of his greatest influence from 1434 to 1464. To keep his family’s authority while appearing to respect Florentine political norms, Cosimo subtly altered election procedures.³⁷ Typically, candidates seeking political office had to pass scrutiny, indicating they met the necessary property and legal requirements for

a prospective position. Before 1434, the names of citizens eligible for public office were placed in purses and drawn by lot by the election monitors, the *Accoppiatori*. After 1434, Cosimo influenced the selection of names by filling the purses with those loyal to him.³⁸ Political offices were still technically filled by scrutiny; however, since Cosimo personally identified what names were placed in the purses, only the people loyal to him achieved politically powerful positions.

This arrangement was effective until 1458, when the Medici firmly consolidated their rule within the city.³⁹ Multiple primary sources of prominent individuals attested to the fact that Cosimo was the leader of Florence.⁴⁰ For instance, the future Pope Pius II wrote: "Political questions are settled in Cosimo's house. The man he chooses holds office. He it is who decides peace and war. He is king in all but name."⁴¹ By 1458, Florence was becoming akin to Milan, violating the civic humanist vision. There could not be political freedom, and consequently moral virtue, if one man could determine who held office in the republic. To the untrained eye, Florence was still a functioning republic under Cosimo's rule, but those in power both at home and abroad knew the reality of the situation. The political climate that Bruni and Salutati grew up in was no more. The support of Cosimo or the Medici family was required in order to obtain political office. Florence was transitioning into a principality, a system that did not allow for political freedom and thus was incompatible with civic humanism. Cosimo's son Piero the Gouty was received as his father's successor after the death of Cosimo in 1464. There was a brief attempt at military opposition by some prominent nobles shortly after Piero's ascension, but Piero and his supporters managed to crush it.⁴² The conspirators were not executed; instead, they were banished and exiled.

Some historians, such as Alison Brown, have asserted that Cosimo's behavior worked within the civic humanist framework.⁴³ It cannot be disputed that he patronized many humanistic endeavors, such as the painter Donatello's career, the collection of classical manuscripts, and many religious building projects, such as the dome for the Santa Maria del Fiore cathedral. While these activities certainly aided humanistic study, they simultaneously reinforced Cosimo's image as protector and father of his city. The artists directly glorified the city, but since their efforts depended on Cosimo's financial support, their achievements indirectly reinforced the idea that Cosimo was the one who made Florence's glory possible. The civic humanists insisted on political freedom, but Cosimo's support was contingent on the respective humanist activity presenting a favorable image of the Medici patriarch. According to the civic humanists, humanistic endeavors should not be dependent on enhancing someone who threatens a polity's political liberty, as Cosimo did.

Even though the power of Cosimo and Piero the Gouty was significant, Lorenzo the Magnificent, Piero's son, represented the Medici at the height of their power during the fifteenth century. Following the example set by his grandfather and father, Lorenzo held few official offices during his tenure. However, the transition in power was clear. From an early age, Lorenzo was groomed by his father and grandfather for political power. He received a strongly humanist education and was often sent on governmental business while a young adult.⁴⁴ His marriage to Clarice Orsini, who hailed from a wealthy Roman family, departed from the traditional norm for the Florentine aristocracy.⁴⁵ Most marriages of the Florentine upper class stayed within Tuscan families. Not for Lorenzo, whose marriage to a prominent Roman woman hinted at his princely ambitions. Luca Landucci, a Florentine apothecary, kept a diary of Florentine events in this period. Landucci only mentioned Cosimo and Piero a handful of times, but shared details of Lorenzo's daily activities and important family matters like marriages. Upon Lorenzo's death in 1492, Landucci exclaimed: "The most glorious man there was, possessed of greater wealth, state and reputation [than any other]."

Everyone declared that he ruled Italy, and truly he had a wise head, and his every cause prospered.”⁴⁶ Landucci openly declared Lorenzo to be the ruler not only of Florence, but of Italy itself. Hyperbole, no doubt, but such sentiments were never expressed about Cosimo or Piero in Landucci’s diary. For an ordinary apothecary, albeit one with some upper-class connections, to recognize Lorenzo as the *de facto* ruler of Florence means considerable changes had occurred since Cosimo’s day. Despite this attention, Lorenzo frequently denied he was anything close to a prince.

However, the Pazzi conspiracy demonstrated how false such pretense actually was. On April 26, 1478, several assassins hired by the rival Pazzi family and Pope Sixtus IV attacked Lorenzo and his brother Giuliano at High Mass in the Duomo cathedral. Lorenzo had refused offering financial support to Sixtus’s nephew to become ruler of Imola. As a result, the Pope began an alliance with the Pazzi family and the parties decided to eliminate Lorenzo.⁴⁷ Giuliano died, but Lorenzo survived and was never the same. After the event, Lorenzo and his associates ordered many executions of the conspirators and their allies. The actions taken by the Medici regime varied significantly from what had been done to political enemies earlier in the century. Upon Cosimo’s return in 1434, the Albizzi and their allies had been banished, not executed.⁴⁸ In the Pazzi conspiracy’s aftermath, no fewer than 80 people lost their lives.⁴⁹ During the period from 1434 to the 1450s, only a handful of the Medici regime’s opponents were killed.⁵⁰ Granting that the Pazzi conspiracy was an overall more serious, direct plot against the Medici regime, these numbers reveal some fundamental alterations to the Florentine state. An attack on the Medici was now an attack on Florence itself. For the next 10 years, all parties directly involved with the attack were hunted down and killed.⁵¹

Lorenzo additionally made ambitious constitutional reforms to cement his political place. The newly created Council of Seventy oversaw the other branches of government. For a more detailed summary of what the council meant, Renaissance historian Lauro Martines writes: “The powers of the Seventy were unprecedented. From 1480 onwards, they would pick successive teams of Lord Priors; control legislation by functioning as the decisive consultative group, thus stripping the Priors of one of their greatest powers.”⁵² Members were originally nominated by Lorenzo, and those members chose the remaining members.⁵³ As Italian historian Kenneth Bartlett states, “It was a clear instrument of Medici control; no longer was the exercise of power to be discreet and subtle; it was now clear and institutionalized. Lorenzo had become ruler of Florence.”⁵⁴ Now it was obvious to all, powerful or not, who was in charge. Political liberty was scarce under the new framework from 1480 on, when Lorenzo and his allies called the shots.

The civic humanist vision was now an impossible, distant memory, as made evident by the scholars who lived in Florence and were supported by the Medici at this time. Individuals such as Marsilio Ficino and the others who surrounded Lorenzo, often referred to as Neoplatonists, never articulated anything resembling civic engagement but rather discussed the need to remove themselves from public life. One of Ficino’s letters, entitled “The Usefulness of the Solitary Life,” argues that happiness is outside of society. Such a sentiment evoked the older humanist tradition, not the society-minded civic humanism. Additionally, Ficino wrote many letters praising Lorenzo, who as we have seen did the most to transition the Florentine Republic into a principality. The scholars of Lorenzo’s court utilized humanist texts for personal fulfillment, nothing more.⁵⁵

The period from 1434 to Lorenzo’s death in 1492 illustrates the Florentine Republic’s development into a near principality. Civic humanist rhetoric about spreading liberty both at home and abroad was no longer reflected in Florentine

politics. Florence was becoming like Milan, a despotism that both Salutati and Bruni reviled in their writings. The Medici, at first subtly and then more openly after the Pazzi Conspiracy, defied republican customs. Neoplatonists, such as Marsilio Ficino, desired to withdraw from the world, contrary to the activist civic humanism of Salutati and Bruni. Medici hegemony made civic humanism and its most important aspects, political liberty and republicanism, almost nonexistent in Florence. Electoral manipulation, promotion of loyalists who upset the old nobility, and identification of the Medici family as Florence itself all undid the civic humanist idea of Florence as a New Rome. Florentine exceptionalism thus had to adjust itself to such a development, as the 1490s demonstrated.

Medici Flight and Savonarola's Religious Exceptionalism

Lorenzo the Magnificent solidified Medici rule, so by the time of his death in 1492, his son Piero the Unlucky was his natural heir. Most nobles initially accepted the young Medici without question. However, Piero the Unlucky ruled for a tumultuous two years. He was not politically adept like his father and failed miserably at brokering arrangements between rival powers. A specific example of Piero's ineptitude was his diplomacy with Charles VIII of France. Charles planned on claiming Naples due to dynastic links, and after his invasion of the peninsula in 1494, he needed to pass through Tuscany to reach his goal. Florence's recent alliance with King Alfonso of Naples meant it was at war with France. Charles VIII demanded absolute surrender, and Piero conceded to all of the French king's demands, handing over large amounts of territory and all military installations. As a result of his failure, the Florentines drove Piero and his supporters out of the city in 1494.⁵⁶

The stage was now set for Girolamo Savonarola to tweak Florentine exceptionalism to his own advantage. Savonarola was a man who at a young age desired a religious life. Some of the earliest poetry he wrote lamented the evil world as he perceived it, and vowed to change the world to reflect Christian morals.⁵⁷ His sermons were so haunting that Michelangelo and Machiavelli recalled them many years after the friar's death.⁵⁸ After becoming a Dominican friar, Savonarola traveled around the Italian countryside, where he was stationed at multiple towns, including a brief stint in Florence in the 1480s. In 1490, Savonarola returned to Florence, where he remained, preaching fire-and-brimstone style sermons and gathering large crowds, until his death in 1498.⁵⁹ His death was painful, as he was burned at the stake for his radical religious messages. Even before Lorenzo's death, Savonarola challenged the existing Medici regime, narrowly escaping banishment.⁶⁰ Once the Medici left Florence in 1494, Charles VIII moved through the city, occupying it for several weeks. Savonarola had predicted there would be suffering for Florence in the future, and the French invasion made the Dominican friar seem like a prophet. Miraculously, the French army did not attack or destroy anything in the city. Savonarola, and many others, truly thought they had witnessed an act of divine mercy.

It is crucial to flesh out the friar's career before analyzing his religious exceptionalism. Savonarola did not simply talk about political and legal reform. Even though Savonarola was more concerned with religious matters, he helped enact crucial political legislation that furthered his fervent preference for a republic with elected officials and councils to ensure stability. Savonarola's suggestions partly created a newly envisioned Great Council. This lawmaking body extended suffrage to a larger portion of the Florentine population than had previously existed under the Medicean Regime and reflected Savonarola's belief that a republic was the best form of government. Of course, religious reform was Savonarola's major goal, and he undertook "bonfires of the vanities" to destroy what he labeled as pagan

influence in Florence. The friar's reputation in modern historiography is largely due to these bonfires that destroyed many pieces of art and other material items in the city. Savonarola's actions connect to his sermons, which, as we shall see, could have occurred only after Medici rule. Both of Savonarola's political and religious reforms were guided by the failed Medici experiment, which simultaneously ruined political freedom and religious morality, according to the friar.⁶¹

Immediately following the Medici's expulsion, Savonarola first articulated in public his Florentine religious exceptionalism in the Advent Sermons of 1494. Savonarola studies professor Donald Weinstein illuminates what the Medici's flight meant to Savonarola: "Florence was a chosen city, God elected her to help Him accomplish his great plan of renewal. Soon even this inspiration grew into one more thrilling; not only was Florence *a* chosen city but *the* chosen city, destined to become the center of a new, more glorious age."⁶² Weinstein further illustrates in his seminal study about the friar that Savonarola's message was influenced by older Florentine rhetoric, both secular and religious, that articulated Florence as either a New Rome or a New Jerusalem. However, Weinstein mainly focuses on the mystical and millenarian aspects of the friar's agenda for the Florentine state rather than making any direct connections between the Medici regime and Savonarola's religious exceptionalism. Thus, this paper addresses a missing link about Savonarola's message in the context of an altering Florence.

As Weinstein's analysis suggests, Savonarola's idea of Florence as the New Jerusalem was a parallel vision to the civic humanist call of Florence as New Rome. Savonarola agreed with the civic humanists that a republic was the ideal political system, but the similarities end there.⁶³ Salutati, Bruni, and Savonarola all thought Florence was a special city, but the civic humanists and Savonarola chose a unique role to highlight. According to Savonarola, Florence would now spread Christianity and religious reform first and foremost rather than republicanism and political liberty. The Dominican friar borrowed from Bruni and Salutati, altering Florentine exceptionalism from a New Rome to a New Jerusalem.

Savonarola's Florence as the New Jerusalem required attacking the Medici. The friar boldly stated in one of the Advent sermons:

There is a proverb, one among many, though it may be ill said, that states are governed neither with prayer or Our Fathers. But I want to prove to you this proposition: that every government and kingdom, the more spiritual it is, the stronger and more powerful it is, and the less spiritual it is, the weaker and more infirm it is.⁶⁴

The proverb that Savonarola mentioned is attributed to Cosimo de' Medici. Unlike the Medici, Savonarola contended that religion and politics should be closely linked. As historian Felix Gilbert demonstrates in his writings, proverbs were extremely important in Renaissance Florence.⁶⁵ Dismissing one of Cosimo's popular dictums was a rejection of Medici rule. At the same time Savonarola was arguing against the Medici, he also was arguing against the civic humanists. Salutati and Bruni, as mentioned above, had a secular political outlook. Savonarola was demonstrating the folly of Bruni and Salutati, who largely removed religion from their political conceptions. What was the result of their desires? Medici hegemony, which destroyed the republic and made Florence weaker. Medici rule of Florence enabled the civic humanists' New Rome ideal to become Savonarola's New Jerusalem message.

Savonarola continued to attack the Medici when he talked about tyrannical governments. It is crucial to remember that Salutati and Bruni lived at the beginning of the fifteenth century, before the Medici had fundamentally altered the Florentine Republic. They did not witness Cosimo's assumption of control in the city, nor that of

his descendants. The only tyranny they witnessed was outside the city's borders. On the other hand, Savonarola witnessed Lorenzo's rule in Florence. The friar consistently contended tyrants "are without the Grace of God," "have no good virtues," and are "the worst sort."⁶⁶ Salutati and Bruni condemned tyrannies and despotism because those political structures did not allow for political liberty, not because of any moral or religious aspect. Tyrants compromise the populace's free will, and the civic humanists reject tyranny for that reason. This is a sentiment that most individuals, religious or not, could comprehend and support. The civic humanist perspective reflected a secular understanding of the relationship between rulers and their subjects. Having experienced the Medici, especially Lorenzo after the Pazzi conspiracy, Savonarola did not place much trust in humans wielding vast amounts of political power. To him, tyrannies could not last long due to the leader's religious immorality. Savonarola went so far as to say that despots could lead the citizenry to Satan.⁶⁷ Furthermore, Savonarola's treatise on the government of Florence describes a tyrant who contained many similarities to Lorenzo.⁶⁸ Since the friar argued that Lorenzo and his family, who were secular authorities, ruined Florence, Savonarola's Florentine exceptionalism had to be highly religious. To avoid what Bruni and Salutati most feared, Florence had to be more religious than ever before, the opposite of what the civic humanists believed.

Finally, Savonarola's vision said Florence could become the City of God. It would be the center of the Christian world in this framework, much like it would be the center of the secular world under civic humanism. By making such a claim, Savonarola was again tapping into the long-established Florentine exceptionalist tradition. At the same time Savonarola called Florence the New Jerusalem, he criticized the Medici once more: "You say that cities and the state are not governed with 'Our Fathers' nor with prayers. You are greatly deceived and in the end you will find yourself deceived. Tyrannies do not want to be governed with prayers nor with doing good, but the state of the people of God has always been concerned with prayers and living a good life."⁶⁹ Savonarola again referenced Cosimo's popular saying and discredited it. The commentary about tyrants was another rejection of the Medici. Savonarola took what was left of the rhetoric of Salutati and Bruni and refashioned it for the particular circumstances of his time. This religious exceptionalism required harsh attacks on Medici rule to work properly.

To achieve this City of God, Savonarola argued Florence must discard earthly rulers once and for all: "But let yourself be ruled by Him, and do not behave as those Jews who demanded a King for Samuel."⁷⁰ The mortal and ineffective Medici failed in protecting Florence from the French just three weeks earlier. Secular kings ruined the ancient Jews, while the Medici almost ruined Florence. However, while public support for the Medici family had dried up, a desire for civil excellence had not. Savonarola knew this and crafted a message that honored the Florentine exceptionalism that survived Medici hegemony. The Florentine populace would now lean on religion and God to become the New Jerusalem, abandoning earlier desires to become the New Rome. Once more, the Medici's failure helped make such a message possible.

Conclusion

My paper examines the different forms that Florentine exceptionalism took in the fifteenth century. I discuss civic humanism, represented by Salutati and Bruni, and its most relevant parts. The civic humanists valued political freedom and liberty above all. A republican system, according to these scholars, was the most politically free. Moral virtue could only exist in a republic. Salutati and Bruni saw Florence as the New Rome spreading republicanism and freedom to the Italian Peninsula. However, Medici rule in Florence after 1434 violated the key values of civic humanism. Cosimo, Piero

the Gouty, and Lorenzo patronized certain humanistic endeavors, but transformed the city into a quasi-principality. The most important component of civic humanism, civic freedom, was absent during Medici hegemony. Later scholars such as Marsilio Ficino supported a removal from society.

Once the Medici fled Florence, Savonarola utilized the long-standing Florentine exceptionalism tradition to his own advantage. While the Florentine populace grew weary of the Medici, they still wanted to be exceptional. Although Donald Weinstein carefully details Savonarola's use of Florentine religious traditions, he skims over the political conditions that made Savonarola's message possible. The political history in the second half of the fifteenth century, most notably Medici hegemony, in conjunction with older Florentine religious attitudes, enabled the friar's success. Savonarola crafted a religious exceptionalism, discrediting the tyrannical Medici and arguing Florence was a New Jerusalem that would spread Christ's message throughout the world, which was the inverse of Salutati's and Bruni's idea of Florence as a New Rome. It may appear that Savonarola's exceptionalism was merely a rehash of civic humanism with some religious overtones. Upon further examination, that description is not accurate. Savonarola truly made a religious exceptionalism that inverted the trend the civic humanists established in the early quattrocento, and relied heavily on discrediting the Medici in that enterprise.

Examining Florentine exceptionalist rhetoric in conjunction with its political history during the fifteenth century hopefully raises further questions. While certainly not like the democratic systems we have today, republican Florence allowed for some political freedom and theoretically free elections. Medici hegemony made it impossible to support such political ideals, and humanists reverted to the isolated, earlier tradition. What role should intellectuals and educators play in a functioning republican system? Bruni and Salutati were highly politically active as chancellors and made their immense contributions to Florence while acting in the political sphere. Once the Medici assumed power, they destroyed the vibrant civic humanist movement, arguably depriving Florence of much needed leadership and guidance that had previously served her well in the early 1400s. The transition to Medici rule also saw enemies of the state put to death instead of banished. Next, all the political chaos in Florence allowed a religious fundamentalist like Girolamo Savonarola to assume authority in the city. Finally, all of the previous questions in this paragraph fall under the large umbrella of Florentine exceptionalism. Without the Myth of Florence, civic humanism and Savonarola would not have been possible. What are the consequences of viewing one's city or country as a shining exemplar, a light for all others to follow? This article traces how the civic humanists' articulation of spreading liberty across the fifteenth-century peninsula could lead to lack of freedom abroad, and similar charges could be made of Savonarola's message.

The United States of America is often criticized for perceiving itself as "exceptional." Perhaps our nation can learn from fifteenth-century Florence: to what degree should those conspiring against the state be punished? This is a question that rages on in the twenty-first century, often with divisive results. How can our ideas of modernity coincide with traditional, ancient traditions that have been practiced for many years? In our current age where Christian fundamentalism battles with Western secularism, and Islamic fundamentalism is intrinsically opposed to Western ways of life, this question is highly relevant. Perhaps the case of pre- and post-Medicean Florence can reveal how a tradition can be manipulated for many ends, some of them highly destructive.

Notes

1. Kenneth Bartlett, *A Short History of the Italian Renaissance* (Toronto, ON: University of Toronto Press, 2013), 93–95.
2. Hans Baron, *The Crisis of the Early Italian Renaissance* (Princeton, NJ: Princeton University Press, 1966).
3. Leonardo Bruni, *In Praise of Florence: The Panegyric of the City of Florence and an Introduction to Bruni's Civic Humanism*, trans. Alfred Scheeppers (Amsterdam: Olive Press, 2005), 35.
4. Bartlett, *Short History*, 101.
5. Lauro Martines, *The Social World of the Florentine Humanists: 1390–1460* (Princeton, NJ: Princeton University Press, 1963), 286–302.
6. Donald Weinstein, *Savonarola and Florence: Prophecy and Patriotism in the Renaissance* (Princeton, NJ: Princeton University Press, 1970), 43.
7. Paul Kristeller, *Renaissance Thought II: Papers on Humanism and the Arts* (New York: Harper Torchbooks, 1965), 178.
8. Bruni, *Panegyric*, 33.
9. Bartlett, *Short History*, 75.
10. *Ibid.*, 76.
11. Baron, *Crisis*, xxv–xxviii.
12. *Ibid.*
13. James Hankins, “The Baron Thesis,” in *The Renaissance: Italy and Abroad; Rewriting Histories*, ed. John Jeffries Martin (London: Routledge, 2003).
14. Bartlett, *Short History*, 80.
15. Coluccio Salutati, “Invective against Antonio Loschi of Vicenza,” in *Images of Quattrocento Florence: Selected Writings in Literature, History and Art*, ed. S. U. Baldassarri and A. Saiber (New Haven, CT: Yale University Press, 2000), 3.
16. *Ibid.*, 6.
17. Baron, *Crisis*, xxv–xxviii.
18. Bruni, *Panegyric*, 25; Baron, *Crisis*, 30.
19. Salutati, “Invective,” 6.
20. Bartlett, *Short History*, 78; Baron, *Crisis*, 45.
21. Baron, *Crisis*, xxv–xxviii; Hankins, “Baron Thesis,” 68.
22. Baron, *Crisis*, xxv–xxviii; Hankins, “Baron Thesis,” 68.
23. Jerrold E. Siegel, “‘Civic Humanism’ or Ciceronian Rhetoric? The Culture of Petrarch and Bruni,” *Past & Present* 34, no. 1 (1966).
24. Bruni, *Panegyric*, 77.
25. *Ibid.*, 72, 85, 98.
26. *Ibid.*, 95.
27. *Ibid.*, 97.
28. Baron, *Crisis*, 100.
29. Bruni, *Panegyric*, 98.
30. Bartlett, *Short History*, 74.
31. Leonardo Bruni, *History of the Florentine People*, vol. 2, *Books V–VIII*, The I Tatti Renaissance Library 16, trans. James Hankins (Cambridge, MA: Harvard University Press, 2004), 150.
32. Baron, *Crisis*, 419.
33. *Ibid.*, xxv–xxviii.
34. Bartlett, *Short History*, 102.
35. *Ibid.*

36. Nicolai Rubinstein, *The Government of Florence under the Medici (1434 to 1494)* (Oxford: Clarendon Press, 1997), 15.
37. *Ibid.*, 46.
38. *Ibid.*, 48.
39. Christopher Hibbert, *The House of Medici: Its Rise and Fall* (New York: Harper Collins, 1980), 62.
40. Hibbert, *House of Medici*, 62; Rubinstein, *Government of Florence*, 58.
41. Hibbert, *House of Medici*, 63.
42. *Ibid.*, 70.
43. James Hankins, "Cosimo de' Medici as a Patron of Humanistic Literature," in *Cosimo "il Vecchio" de' Medici, 1389–1464: Essays in Commemoration of the 600th Anniversary of Cosimo de' Medici's Birth*, ed. Francis Ames-Lewis (Oxford: Oxford University Press, 1992), 69–70.
44. Bartlett, *Short History*, 108–09.
45. Lauro Martines, *April Blood: Florence and the Plot against the Medici* (Oxford: Oxford University Press, 2003), 225.
46. Nicholas Scott Baker, "For Reasons of State: Political Executions, Republicanism, and the Medici in Florence, 1480–1560," *Renaissance Quarterly* 62, no. 2 (2009): 455.
47. Bartlett, *Short History*, 109.
48. Rubinstein, *Government of Florence*, 1–60; Baker, "Reasons of State," 465.
49. Baker, "Reasons of State," 468.
50. *Ibid.*, 471.
51. Martines, *April Blood*, 221.
52. *Ibid.*, 227.
53. Bartlett, *Short History*, 110.
54. *Ibid.*
55. Bartlett, *Short History*, 217–25; Marsilio Ficino, *The Letters of Marsilio Ficino*, vol. 1, trans. members of the Language Department of the School of Economic Science, London (New York: Gingko Press, 1975), 23.
56. Bartlett, *Short History*, 232–33.
57. Rachel Erlanger, *The Unarmed Prophet: Savonarola in Florence* (New York: McGraw Hill, 1988), 37; Lauro Martines, *Fire in the City: Savonarola and the Struggle for the Soul of Renaissance Florence* (Oxford: Oxford University Press, 2006), 10–11; Pasquale Villari, *Life and Times of Girolamo Savonarola*, trans. Linda Villari (New York: Charles Scribner's Sons, 1888), 12.
58. Weinstein, *Savonarola*, 270.
59. Martines, *Fire in the City*, 20.
60. *Ibid.*, 25.
61. Bartlett, *Short History*, 234–39.
62. Weinstein, *Savonarola*, 43.
63. Girolamo Savonarola, "Aggeus, Sermon XIII (The Venetian Model for Republican Florence): Third Sunday of Advent, 12 December 1494," in *Selected Writings of Girolamo Savonarola: Religion and Politics, 1490–1498*, ed. Anne Borelli, Maria Pastore Passaro, and Donald Beebe, trans. Anne Borelli and Maria Pastore Passaro (New Haven, CT: Yale University Press, 2006), 154.
64. *Ibid.*, 155.
65. Felix Gilbert, "Florentine Political Assumptions in the Period of Savonarola and Soderini," *Journal of the Warburg and Courtauld Institutes* 20, no. 3 & 4 (1957): 190.
66. Savonarola, "Aggeus, Sermon XIII (The Venetian Model for Republican Florence)," 160.
67. *Ibid.*
68. Girolamo Savonarola, "Aggeus, Sermon XXIII (Florence, God's Chosen City): 28 December 1494," in *Selected Writings of Girolamo Savonarola: Religion and Politics*,

1490–1498, ed. Anne Borelli, Maria Pastore Passaro, and Donald Beebe, trans. Anne Borelli and Maria Pastore Passaro (New Haven, CT: Yale University Press, 2006), 170.

69. Ibid., 169–70.

70. Girolamo Savonarola, “Treatise on the Rule and Government of the City of Florence: 1498,” in *Selected Writings of Girolamo Savonarola: Religion and Politics, 1490–1498*, ed. Anne Borelli, Maria Pastore Passaro, and Donald Beebe, trans. Anne Borelli and Maria Pastore Passaro (New Haven, CT: Yale University Press, 2006), 187–90.

Bibliography

Baker, Nicholas Scott. “For Reasons of State: Political Executions, Republicanism, and the Medici in Florence, 1480–1560.” *Renaissance Quarterly* 62, no. 2 (2009): 444–78.

Baron, Hans. *The Crisis of the Early Italian Renaissance*. Princeton, NJ: Princeton University Press, 1966.

Bartlett, Kenneth. *A Short History of the Italian Renaissance*. Toronto, ON: University of Toronto Press, 2013.

Bruni, Leonardo. *History of the Florentine People*. Vol. 2, *Books V–VIII*. The I Tatti Renaissance Library 16. Translated by James Hankins. Cambridge, MA: Harvard University Press, 2004.

———. *In Praise of Florence: The Panegyric of the City of Florence and an Introduction to Bruni’s Civic Humanism*. Translated by Alfred Scheeper. Amsterdam: Olive Press, 2005.

———. “Oration for the Funeral of Nanni Strozzi.” In *The Humanism of Leonardo Bruni*, translated and edited by Gordon Griffiths, James Hankins, and David Thompson, 121–27. Binghamton, NY: Medieval & Renaissance Texts & Studies, 1987.

Erlanger, Rachel. *The Unarmed Prophet: Savonarola in Florence*. New York: McGraw Hill, 1988.

Ficino, Marsilio. *The Letters of Marsilio Ficino*. Vol. 1. Translated by members of the Language Department of the School of Economic Science, London. New York: Gingko Press, 1975.

Gilbert, Felix. “Florentine Political Assumptions in the Period of Savonarola and Soderini.” *Journal of the Warburg and Courtauld Institutes* 20, no. 3 & 4 (1957): 187–214.

Guiccardini, Francesco. *History of Italy and History of Florence*. Translated by Cecil Grayson. New York: Twayne Publishers, 1964.

Hankins, James. “The Baron Thesis.” In *The Renaissance: Italy and Abroad; Rewriting Histories*, edited by John Jeffries Martin, 66–89. London: Routledge, 2003.

———. “Cosimo de’ Medici as a Patron of Humanistic Literature.” In *Cosimo “il Vecchio” de’ Medici, 1389–1464: Essays in Commemoration of the 600th Anniversary of Cosimo de’ Medici’s Birth*, edited by Francis Ames-Lewis, 69–94. Oxford: Oxford University Press, 1992.

Hibbert, Christopher. *The House of Medici: Its Rise and Fall*. New York: Harper Collins, 1980.

Kristeller, Paul. *Renaissance Thought II: Papers on Humanism and the Arts*. New York: Harper Torchbooks, 1965.

- Landucci, Luca. "Luca Landucci, a Florentine Diary: 16–29 February." In *Selected Writings of Girolamo Savonarola: Religion and Politics, 1490–1498*, edited by Anne Borelli, Maria Pastore Passaro, and Donald Beebe, 209–10. Translated by Anne Borelli and Maria Pastore Passaro. New Haven, CT: Yale University Press, 2006.
- Martines, Lauro. *April Blood: Florence and the Plot against the Medici*. Oxford: Oxford University Press, 2003.
- . *Fire in the City: Savonarola and the Struggle for the Soul of Renaissance Florence*. Oxford: Oxford University Press, 2006.
- . *The Social World of the Florentine Humanists: 1390–1460*. Princeton, NJ: Princeton University Press, 1963.
- Rubinstein, Nicolai. *The Government of Florence under the Medici (1434 to 1494)*. Oxford: Clarendon Press, 1997.
- . "Savonarola on the Government of Florence." In *The World of Savonarola: Italian Elites and Perceptions of Crisis*, edited by Stella Fletcher and Christine Shaw, 42–55. Aldershot, England: Ashgate Publishing, 2000.
- Salutati, Coluccio. "Invective against Antonio Loschi of Vicenza." In *Images of Quattrocento Florence: Selected Writings in Literature, History and Art*, edited by S. U. Baldassarri and A. Saiber, 4–11. New Haven, CT: Yale University Press, 2000.
- Savonarola, Girolamo. "Aggeus, Sermon VII (On Social Order): First Sunday of Advent, 28 November 1494." In *Selected Writings of Girolamo Savonarola: Religion and Politics, 1490–1498*, edited by Anne Borelli, Maria Pastore Passaro, and Donald Beebe, 139–50. Translated by Anne Borelli and Maria Pastore Passaro. New Haven, CT: Yale University Press, 2006.
- . "Aggeus, Sermon XIII (The Venetian Model for Republican Florence): Third Sunday of Advent, 12 December 1494." In *Selected Writings of Girolamo Savonarola: Religion and Politics, 1490–1498*, edited by Anne Borelli, Maria Pastore Passaro, and Donald Beebe, 151–62. Translated by Anne Borelli and Maria Pastore Passaro. New Haven, CT: Yale University Press, 2006.
- . "Aggeus, Sermon XXIII (Florence, God's Chosen City): 28 December 1494." In *Selected Writings of Girolamo Savonarola: Religion and Politics, 1490–1498*, edited by Anne Borelli, Maria Pastore Passaro, and Donald Beebe, 163–75. Translated by Anne Borelli and Maria Pastore Passaro. New Haven, CT: Yale University Press, 2006.
- . "Bonfire of Vanities II: 27 February 1498." In *Selected Writings of Girolamo Savonarola: Religion and Politics, 1490–1498*, edited by Anne Borelli, Maria Pastore Passaro, and Donald Beebe, 315–48. Translated by Anne Borelli and Maria Pastore Passaro. New Haven, CT: Yale University Press, 2006.
- . "Letter from Savonarola to Pope Alexander VI: 31 July 1495." In *Selected Writings of Girolamo Savonarola: Religion and Politics, 1490–1498*, edited by Anne Borelli, Maria Pastore Passaro, and Donald Beebe, 262–64. Translated by Anne Borelli and Maria Pastore Passaro. New Haven, CT: Yale University Press, 2006.
- . "Treatise on the Rule and Government of the City of Florence: 1498." In *Selected Writings of Girolamo Savonarola: Religion and Politics, 1490–1498*, edited by Anne Borelli, Maria Pastore Passaro, and Donald Beebe, 176–206. Translated by Anne Borelli and Maria Pastore Passaro. New Haven, CT: Yale University Press, 2006.

Siegel, Jerrold E. "'Civic Humanism' or Ciceronian Rhetoric? The Culture of Petrarch and Bruni." *Past & Present* 34, no. 1 (1966): 3–48.

Strathern, Paul. *Death in Florence: The Medici, Savonarola and the Battle for the Soul of the Renaissance City*. London: Random House, 2011.

Villari, Pasquale. *Life and Times of Girolamo Savonarola*. Translated by Linda Villari. New York: Charles Scribner's Sons, 1888.

Weinstein, Donald. *Savonarola and Florence: Prophecy and Patriotism in the Renaissance*. Princeton, NJ: Princeton University Press, 1970.

———. "Savonarola, Florence and the Millenarian Tradition." *Church History* 27, no. 4 (1958): 291–305.

———. *Savonarola: The Rise and Fall of a Renaissance Prophet*. New Haven, CT: Yale University Press, 2011.