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csurf@uncw.edu

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With special thanks and appreciation to the faculty mentors
and volunteer blind reviewers.

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Letter from the Editor

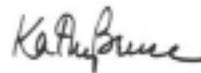
It was with pleasure that UNC Wilmington assumed editorial responsibility this year for the on-line and print journal *Explorations*. *Explorations* is a unique publication: many universities have their own undergraduate research publications, but I believe this is the only state-wide undergraduate journal. Truly this is due to the state-wide commitment to enhancing the undergraduate experience—evident from the several years of well-attended State of North Carolina Undergraduate Research and Creativity Symposia (SNCURCS).

In this transition year, we moved the editorial “home” for *Explorations* from East Carolina University to UNCW, and submission rates suffered a bit because of the loss of continuity; however, the quality of the articles remains quite strong. Three of the four articles in the Humanities section are thought-provoking essays on topics or books as diverse as *The Twilight Zone*, *Tess of the d’Urbervilles*, and *The Children of Hurin*. The fourth article in that section highlights empirical research on the use of technology in the English curriculum. The topics of the two articles describing empirical research in the Social Sciences range from learning in rats to emotional reactions to magazine ads. We look forward to increased submissions for volume V.

All the articles published in *Explorations* have been through several levels of review. Not only were faculty mentors reviewers for the articles, but the mentors obtained two “blind” reviews from colleagues in the field before the papers were even submitted. Further the members of the editorial board reviewed the submissions over the summer. I thank all of these mentors and reviewers for their time and dedication.

Several people helped make the transition from ECU to UNCW a smooth one. Former *Explorations* editor Dr. Michael Bassman and his team at ECU were quick to lend support and guidance—especially Ms. Kendra Harris, Ms. Sue Chapman, and Mr. Aaron Mickelson who responded so quickly to emails requesting help for the webpage. Thanks to several folks at UNCW for their support: Dr. Cathy Barlow, Interim Provost, Dr. Johnson Akinleye, Associate Vice Chancellor for Academic Programs, Ms. Emily Smith and her wonderful team at the UNCW Publishing Laboratory, Ms. Amanda Cosgrove, *Explorations* web page designer, Mr. Derick Poku, graduate assistant for CSURF, the Center for the Support of Undergraduate Research and Fellowships, and Mr. Bo Dean, Ms. Carole Reynolds, and Dr. Bill Atwill for unflagging support day-to-day in the Honors Scholars Program office. Dr. Courtney Thornton, UNC General Administration, has promoted undergraduate research at the state level and lobbied for both SNCURCS and *Explorations*. Finally, Dr. George Barthalmus at NCSU, an ardent advocate of undergraduate research statewide, has kept the mission of *Explorations* and SNCURCS strong.

Enjoy volume IV!



Katherine Bruce, PhD

Humanities

Tess of the d'Urbervilles: The Modern Date Rape Case Study

Ashley Gedraitis

Wake Forest University

Faculty Mentor: Melissa Jenkins, PhD

Department of English

Wake Forest University

RAPE: ALTHOUGH A DIRTY four-letter word in most cultures, unspoken outside of courtrooms and hospitals, many people still maintain a cogent idea of what it is—what it means “to rape” and “to be raped,” what it means to be the aggressor and to be the victim. From the infamous rape of Lucrece to the plague of date rapes on college campuses today, the legal definition of rape has been written and rewritten and its societal definition continuously altered and refined. Because of the capricious nature of rape’s definition, it becomes difficult to pinpoint rape in historical contexts; literature is no exception. From the beginning of its publication process, Thomas Hardy’s Victorian classic *Tess of the d’Urbervilles* functions as the perfect example of rape’s complexity. “The Chase scene,” the marked moment of the main character’s fall, has been scrutinized for any evidence of rape. Yet the question remains: was Tess Durbeyville raped?

By assessing the text of *Tess’s* rape in

conversation with the legal writings and court cases of the nineteenth century, William Davis, Jr. argues that *The Chase* scene in *Tess of the d’Urbervilles* was indeed criminal rape. The legal definition of rape in nineteenth-century England was “the offence of having an unlawful and carnal knowledge of a woman by force, and against her will” (Davis 223). A further examination of the law would yield the following disclaimer: “to constitute rape, it is not necessary that the connection with the woman should be had against her will; it is sufficient if it is without her consent” (Davis 223). Strikingly similar to various legal definitions of rape today, under English law, *Tess’s* rape was an actual criminal act. While the text does not include her protests, it is also absent of her consent. Because *Tess* was obviously asleep at the time when consent was needed, she physically could not give consent, tantamount to rape. However, despite the scene’s clear alignment with rape’s definition, Hardy’s

readers still debate Tess's role in *The Chase*. In fact, this rape pattern continues to soundly manifest itself in several of Hardy's revisions to the original edition, which further echo his own opinion on Tess's rape. These revisions, once affirming Tess's pure state, were removed to appease Hardy's readers, who were unreceptive to Tess's original depiction of purity even after her rape. The existence of the rape law, coupled with Hardy's forced revisions, gesture to a culture that similarly viewed rape as a dirty word, and thus, a dirty act. It appears to have been easier to write Tess off as yet another Victorian fallen woman.

Acclaimed Hardy biographer Michael Millgate asserts that the call for these revisions "constituted a rude reminder of [Hardy's] dependence" on his audience and their own views (Millgate 281). Millgate continues to observe that it "seems extraordinary that Hardy's awareness of the contemporary cultural climate should not have made him more attentive" to this discrepancy in his original text (Millgate 281). While many like Millgate speculate over Hardy's disregard for his audience and for the literary marketplace, it becomes duly important to note that, despite his "cultural awareness," Hardy originally adhered to his own belief that Tess remained pure. Thus, if Hardy—the puppet master of *The Chase* scene—maintained that Tess was a pure woman, she did not concede to any sexual acts. As author Jane Thomas observes, "Hardy's writings display antagonism towards the necessity of particular codes of social morality" (Thomas 23). Nevertheless, Hardy bowed to public and editorial pressure by acquiescing to "social morality," possibly indicating reservation in his own character construction. Like his own character of Angel, Hardy too "was yet the slave to custom and conventionality," even within his own novel (Hardy 208). This call for revision denotes the contemporary cultural interpretation of rape: regardless of her

consent, the rape victim still descends into immorality and impurity.

Yet by examining "*The Chase*" as a current case study of rape victims, one can draw precise parallels between Alec's sadistic pursuit and violation of Tess and current theory on sexual aggression and date rape. Proving that the institution of rape has remained unvaried for at least a century, these parallel constructions can also silence those who argue that Tess may have played a willing role in her own fall. Through the lens of an objective case study, Hardy's current audience can now clearly discern that Alec not only raped Tess, but they can also pinpoint the exact causal moments leading up to *The Chase*. Together with the call for revisions, readers can begin to realize the truly problematic nature of *Tess of the d'Urbervilles* as a "feminist text."

Interestingly, in Western culture today, Tess's rape would not simply be thought of as rape, but also as incest. Even while Alec counterfeits his connection to Tess and the d'Urbervilles, his rape of Tess would at least be deemed "emotional incest," usually considered to be rape by a step-parent or a good family friend—an individual to whom the victim felt a close, emotional attachment (Toufexis et al 57). However, because historically marriage and procreation were accepted between kinsmen—if not encouraged—Alec's act would be construed as date rape, not incest. When applying Tess's rape to modern rape theory, particularly theory on date rape, one can begin to draw many intersections between current rape models and Tess's own rape, set over a century ago.

In modern theory, a common precursor to sexual aggression includes sexual harassment. While, in the United Kingdom, "sexual harassment constitutes any unwelcome behaviour of a sexual nature," it is further defined by the U.S. Supreme Court as "any sexually oriented speech or behavior that makes it more difficult for one gender than

the other to perform in the work environment" ("Sexual Harassment at Work," Bargh et al. 256). This analysis will use the more detailed definition set by the United States, which directs the law's jurisdiction specifically to the workplace; while the United Kingdom's definition is very similar, it is more broadly articulated. Thus, most modern rape theory also utilizes the United States' definition. Because Tess works for Alec's mother tending her fowls, all conversations and transactions taking place between Tess and Alec would take place in context of "the work environment." While some theorists may maintain that considering Alec to be Tess's employer stretches the text too far, several remarks made later in the text refer to Alec's authority over her in the workplace. First, as Tess reflects on her current employer—a cruel farmer—she decides that "to have as a master this man of stone, who would have cuffed her if he had dared, was almost a relief, after her former experience [with Alec]" (Hardy 250). Referring to her former experience with Alec in an analogy of her masters and current job position, this statement reveals that the text itself argues for Alec's role as her master and employer. However, even if this example cannot sway current readers, for the purposes of rape theory, it is most important that Alec and Tess at least perceive Alec to be her employer. This understanding is communicated in the statement made by Alec to Tess near the end of the novel: "Remember, my lady, I was your master once; I will be your master again" (Hardy 261). When dealing with theories on sexual harassment, the veritable relationship is not as important as the perceived authority in the understood relationship. Although some may still contend that Alec was not her employer, both Alec and Tess acknowledge the relationship, forcing Tess to react accordingly.

In addition, sexual harassment consists of two general forms, the first being *quid*

pro quo. To constitute *quid pro quo*, "the woman is coerced into having sex with her supervisor or coworker under the threat of job-related reprisals" (Bargh et al. 256). As the son of her matron, Alec would likewise be considered an employer of Tess. After Tess rejects a kiss from Alec, he threatens, "you shall be made sorry for [your refusal]... Unless, that is, you agree willingly to let me do it again" (Hardy 41). While some may argue that demanding a kiss is very different from coercing sex, one must account for the increasing laxity in sexual norms; it is permissible to ascertain that a kiss to the devout Victorian woman may be comparable to sexual acts to the average twenty-first century woman. As Foucault argues the repression of sex in the Victorian era, a kiss is really the only sign of affection rooted in sexual desire a man was socially allowed to show a woman (Foucault 3). Thus, the stolen kiss functions as the ultimate disregard of a woman's conceding to sexual access; today's equivalent to this disregard would be forced sex. Regardless, Alec threatens Tess, purporting her regret of the incident unless she grants him this minimal sexual access. Also, as her employer, his threats dually carry a tacit job security undertone.

Moreover, sexual harassment can include the existence of a "hostile environment," where "female employees are subjected to repeated offensive and denigrating sexual comments and behavior" (Bargh et al. 256). For example, when Alec calls her a "young witch" and an "artful hussy," Tess becomes very disconcerted; in the work environment, distress is considered an impeding factor on job performance (Hardy 40–41). Furthermore, literally in her place of work—the fowlhouse—Alec exacerbates his harassment, saying "There was never before such a beautiful thing in nature or art as you look, 'cousin' Tess" (Hardy 45). While masked as a compliment, many physical accolades are considered to be explicitly

inappropriate in the work environment. Not only does he breach the separation of public and private realms with a gesture toward romance in the workplace, but he also aims to further fluster Tess, again inhibiting her job performance. Through his enjoinment for a kiss, defamation of her reputation through pejorative sexual terms, and his unsolicited flattery in the workplace, Alec's behavior perfectly fits into the sexual harassment paradigm.

Another important aspect leading up to sexual aggression is grooming. Sexual aggressors do not immediately begin their abuse; rather, they begin to desensitize the victim through smaller acts—testing the limits while simultaneously desensitizing the victim to their increasing advances. One researcher describes it as the process when the victim is “befriended by a would-be abuser in an attempt to gain... confidence and trust, enabling them to get the [victim] to acquiesce to abusive activity (Craven et al 288). Once the aggressor realizes that he can obtain what he desires as long as he continues to push the victim persistently, he is conditioned to become more aggressive and violating to the victim. He observes that with constant pressure, he can get his victim to acquiesce. Prior to threatening Tess, Alec had somewhat civilly requested a kiss from his ‘cousin.’ Taken aback, Tess initially agrees to the request, saying, “Oh, I don’t know—very well; I don’t mind” (Hardy 40). While she throws up a handkerchief between his kiss and her cheek, she still initially granted him this sexual access. From the very beginning of their acquaintance, Alec detects a malleability in Tess’s person, conditioning him to recognize that with increased force and persistence, he can obtain what he wants. Through his persistence, Alec grooms Tess for further sexual advances. In response to Alec’s grooming, Tess teaches Alec that he can gain sexual favor through violence and coercion—two methods used with rape.

In addition, Tess’s manipulability of character reveals itself in the opening lines of Chapter XXVII, when the narrator asserts that “[Tess’s refusal to Angel’s proposal], though unexpected, did not permanently daunt Clare” (Hardy 136). Now two separate men have commented and acted on Tess’s yielding personality. Because both are conditioned to remain steadfast in their different pursuits of her, the reader can reason that Tess’s reactions to grooming and her subsequent conditioning of both men are not coincidental—they are a stagnant construction of her character. However, as this atrophied will is solidified in her character, the reader must assume it to be a product of parenting, home environment, or most importantly, society, still rendering her faultless for the rape. As author Jane Thomas asserts, “Hardy recognized women’s physical, mental, and emotional susceptibility to convention” (Thomas 48). Because she is not aware of her conditioning and simply adheres to the “angel in the house” convention of being agreeable and accommodating, society and its expectations of women become partially accountable—not Tess.

Yet as Alec attempts to entice Tess romantically and sexually, Alec’s act of aggression becomes aligned with today’s conception of date rape. Hardy himself defines the act of dating as “the country custom of unreserved comradeship out-of-doors” (Hardy 151). Although only Alec acts “unreservedly,” Tess is compelled to spend time with Alec and appease him due to his status as her employer, still generally conforming to Hardy’s own definition of dating; thus, by meeting Hardy’s definition of “courtship” and the nineteenth-century definition of “rape,” The Chase scene indeed becomes date rape. The existence of rape in the nineteenth century, not to mention its denotative meaning, is validated through the OED definition: “To ravish, commit rape on (a woman),” cited in both 1861 and

1885. The OED thus confirms the ahistorical conception of rape from the nineteenth century to current theory.

Again, there are various precursors to the actual act. For example, in a recent college study on self-identified date rapists, "every case of rape followed a fairly intense bout of sex play" (Kanin 237). In the novel, at the neighborhood dance, "the movement grew more passionate... the panting shapes spun onwards" (Hardy 49). As Kaye asserts in *The Flirt's Tragedy*, "it is through the rituals of dance that Hardy's characters locate the symbolic distillation of flirtatious desires" (Kaye 144). Although Tess does not necessarily participate in this sensualized dancing, she is still present for the scene itself, as is Alec, who witnesses her there in this sexualized context. Her presence at a dance, to a sexual aggressor already primed for the act, can easily position her as a "flirt." While no sexual foreplay had actually taken place, Alec's ability to associate Tess with this sexual scene provides him with enough heightened arousal to justify this connection. This scene, focusing on the corporeal, arguably provides Alec with a physical, more aggressive motivation for that particular evening; he unconsciously connects Tess with the sensual movement.

Consequently, the town of Trantridge too emits a general immoral tone. At the beginning of Chapter X, the narrator describes its defining characteristics:

Every village has its idiosyncrasy, its constitution, often its own code of morality. The levity of some of the younger women in and about Trantridge was marked, and was perhaps symptomatic of the choice spirit which ruled The Slopes in the vicinity. The place had also a more abiding defect; it drank hard. (Hardy 46)

Again, a heightened sexualized environment provides an ideal context for Alec to be conditioned for sexual aggression; here, he receives encouragement not only from Tess

but from "some of the younger women" about the town as well. This description, arguing that Trantridge condones or even encourages loose behavior, reveals important information about Alec's character. He has lived in a place where sexual dissipation and drinking are not only common but normal; of course, he is bound to adopt some of these attitudes. Interestingly, later in the novel, Angel comments on the morality of small towns versus larger cities. When Tess suggests that they can stay together because several women her mother knew were able to overcome similar situations, Angel retorts, "Different societies different manners. You almost make me say you are an unapprehending peasant woman, who have never been initiated into the proportions of social things" (Hardy 182). Coupled with the above passage on Trantridge, Hardy infers that not only are these smaller rural towns more prone to both immoral activity and the acceptance of said activity, but these environments are what conditioned Alec's behavior for his pursuit of Tess and the night of *The Chase*.

Moreover, in many instances of sexual coercion, there is a power imbalance in place, favoring the aggressor (Murnen et al 279). This power imbalance helps to engage vulnerable victims, playing on their weaknesses, framing the aggressor as a necessary figure. In Tess's rape, Alec benefits from two distinct power imbalances, the first being her emotional vulnerability. Upon recognizing they are lost in the woods, tears slowly began to creep down Tess's cheeks, and eventually she "wept outright" (Hardy 57). Tears and affliction feed into vulnerability and the want of a protector, a position which Alec immediately retains. An even more significant power imbalance derives from Tess's exhaustion:

She was inexpressively weary. She had risen at five o'clock every morning of that week, had been on foot the whole of each day, and on this

evening had, in addition, walked the three miles to Chaseborough, waited three hours for her neighbors without eating or drinking, her impatience to start them preventing either; she had then walked a mile of the way home, and had undergone the excitement of the quarrel till, with slow progress of their steed, it was now nearly one o'clock. (Hardy 54)

Similar to sleep, alcohol—a reoccurring factor in date rape—provides a drugged, alternative consciousness, causing another power imbalance. These similarities between alcohol and sleep are reaffirmed by Tess's thought process after Angel's sleepwalking episode. She cannot reveal the events of the past night to him, asserting "it was too much like laughing at a man when sober for his erratic deeds during intoxication" (Hardy 197). With this statement, Tess further illustrates the congruence between an alcoholic stupor and an exhausted state. Thus, the tired victim is not in full possession of her faculties, rendering her situationally inferior to her aggressor. Like alcohol, sleep left Tess drifting in and out of an alert state, with little agency to effectively defend herself.

More importantly, Hardy continues this narration: "Only once, however, was she overcome by actual drowsiness... In that moment of oblivion she sank her head gently against [Alec]" (Hardy 54). This action—though remote and slight—acts as further training for Alec. Not only does he realize her drowsiness and subsequent physical vulnerability, but he observes that in this drowsy state, he becomes appealing to Tess. Through placing her head on his shoulder, Tess gestures that she desires his help and protection. He reads this gesture as the key to unlocking Tess's sexual acquiescence. Furthermore, Alec's grooming continues when he asks Tess if he may "treat [her] as a lover" (Hardy 55). Instead of overtly negating him, Tess murmurs, "I don't know—I wish—how can I say

yes or no—when" (Hardy 55). While the conclusion of this sentence may have provided telling insight into her justification for her uncertainty—possibly in *quid pro quo*, reflecting on how she cannot say yes or no when "[Alec] is [her] employer"—the reader does not need her to even finish the sentence. Tess does not object outright, giving Alec another glimmer of hope. Through her ambiguous answer, Alec discerns that tonight—unlike other nights—may be his chance.

Further into the night at the rape incident itself, the reader can clearly detect a threatening environment developing as nature lends its own endowment to the scene, providing a cosmic power imbalance. With "the webs of vapour which by this time formed veils between the trees," Tess lay hidden and alone, waiting for Alec to return to her—her safety solely dependent on him now (Hardy 56). "With the setting of the moon the pale light lessened, and Tess became invisible," allowing herself to become more vulnerable to physical intrusion (Hardy 56). Additionally, when Alec returns to The Chase, "the obscurity was now so great that he could see absolutely nothing but a pale nebulousness at his feet, which represented the white muslin figure he had left upon the dead leaves" (Hardy 57). Nature heavily helps to construct a hostile scene for Tess, providing the ideal milieu for the already-advantaged Alec.

The simple description of Tess as "the white muslin figure" further develops the typical rape scene. One significant characteristic studied sexual aggressors have in common is a candid lack of empathy for the victim (Bushman et al 1029). This lack of empathy can be transcribed in various ways, including the lack of acknowledgement of the victim as a real person—a living, breathing human being. By describing Tess by the clothes she is wearing and not by her actual person, Hardy situates Alec into a prime sexual aggressor position. He

now only views her as a pile of clothes, not a real person, and there is little guilt implicated by violating a pile of clothes.

Possibly the most well-known characteristic of sexual aggression, violence plays some sort of a role in the majority of rape. Through a close reading of the one paragraph where the literal act is mentioned, one can discern from the language that not only is Tess an unwilling participant in the rape but also that the rape was of a very violent nature (Hardy 57). The passage begins by reflecting on Tess's current need for a "guardian angel" to protect her from ensuing harm. Hardy would not call on the soldiers of heaven unless the situation is detrimental to Tess's well-being; moreover, if she had agreed to Alec's sexual solicitations, few would determine the act to be harmful. In a study on child sexual abuse, the researchers found that there was little immediate or long-term harm done to a victim who readily consented (Rind 46). While some may argue that Tess was no longer a child, Hardy makes several gestures toward her youthful, child-like state. Before the rape, he remarks that Tess has "a luxuriance of aspect, a fullness of growth, which made her appear more of a woman than she really was" (Hardy 30). This observation indicates that while Tess may be physically perceived as an adult, she is still very much a child. Interestingly, this adult-like appearance may position her as a more vulnerable rape victim—it is easier to justify sexual acts on a woman than a child. Hardy also notes that after the rape, "almost at a leap Tess thus changed from a simple girl to complex woman" (Hardy 77). While many other factors may contribute to this leap, it can be argued that the rape forced maturity upon Tess much sooner than it would have naturally occurred. Both statements speak to her newfound adulthood post-rape, placing her in congruence with the study that a lack of consent has a greater negative impact and consigning

her to a more vulnerable identity as a child before *The Chase*.

In continuation, the "course pattern" traced upon her and "the possibility of retribution lurking in the present catastrophe" further impart an ominous, sadistic tone in the scene (Hardy 57). Finally, the idea that Tess's "mailed ancestors...had dealt the same measure even more ruthlessly towards peasant girls of their time" explicitly infers that the act was both ruthless and indisposed. With these quotes providing the only true context the reader has for the rape itself, one is left to reconstruct the scene as a violent struggle, so harmful she needed her guardian angel.

The environment after *The Chase* scene—also laced with violent undertones—further presents Tess as a victim and not a participant in her misfortune. As Alec and Tess exchange their good-byes, he demands one last kiss from Tess. Acting out of his grooming, she turns her cheek and remarks, "See how you've mastered me!" (Hardy 60). This language of ownership constructs a master-to-servant relationship, rather fitting after Alec has unjustly seized control of Tess's body and sexuality. After raping her, he now owns part of her; Tess's comment helps to reveal his jurisdiction over her physical being after *The Chase*. As this scene continues, Alec comments on her obstinacy and reluctance to kissing him, declaring to Tess, "You don't give me your mouth and kiss me back. You never willingly do that" (Hardy 61). In this statement, Alec openly admits that Tess has never willingly kissed him. This observation—possibly a clue left for the readers by Hardy himself—can also be applied to other sexual acts. Tess has never "willingly" given Alec her cheek to kiss; why should one ascertain that she willingly gave him her entire body instead?

Tess's final comment of Chapter XII directly speaks to Alec's coercion and unjust advances. As she explains to her mother

why she returned home, Tess rebukes her mother's lack of teaching:

Oh mother, my mother! [...] How could I be expected to know? I was a child when I left this house four months ago. Why didn't you tell me there was danger in men-folk? Why didn't you warn me? Ladies know what to fend hands against, because they read novels that tell them of these tricks; but I never had the chance o' learning in that way, and you did not help me. (Hardy 64)

The first striking use of diction surfaces with Tess's identification as a "child" before she journeyed to Trantridge, inferring that a mere four months later, she is no longer a child but an adult. This accelerated maturity suggests that an event in her stay at Trantridge forced her to let go of her childhood. Furthermore, this event included "danger in men-folk." If she had willingly consented to Alec, Tess might have chosen the words "seduction" or "temptation" in men, but not danger. Danger again gestures toward Tess's role as a victim, particularly when applying "these tricks." Put into the context of *The Chase* scene, Tess lost her childhood to a dangerous man, full of tricks; this constructed scene does not support the notion of consensual intercourse. Consequently, after Tess reproves her mother's lack of "warning," the reader can now confidently infer that Tess was raped. Later in the novel, Alec too comments on Tess's ignorance, observing "that it is a shame for parents to bring up their girls in such dangerous ignorance of the gins and nets that the wicked may set for them" (Hardy 247). Not only does he place the responsibility of Tess's unawareness on her parents and not Tess, Alec also suggests he, "the wicked," had set a trap for the naïve girl. Exploiting this obvious disadvantage, Alec continues to affirm Tess's innocence.

Further in the text, Alec's language exposes more evidence to Tess's victimization and not participation in *The Chase* scene.

Employing language of "innocence versus guilt," Alec admits his wrongdoing "to foul [Tess's] innocent life" (Hardy 247). He later confesses to Tess that he "saw [her] innocent, and [he] deceived [her]" (Hardy 259). Alec goes a step further and assumes responsibility for the situation, stating "the whole blame was mine" (Hardy 247). This dialogue clearly places Tess in the role of a victim; she was not only an innocent life, but Alec deceived her and assumes "the whole blame." If Tess had consented to Alec's advances, then Alec could not call her innocent. Furthermore, he attempts to make amends with Tess, remarking, "I owe you something for the past, you know" (Hardy 280). Again, if Tess had been a willing and consensual partner in *The Chase*, then Alec would owe her nothing. He would not have taken anything which she had not willingly given. However, by maintaining that there is an unsettled debt which he owes her, Alec infers that he stole something from Tess—and she never received appropriate retribution.

However, some will maintain that Tess's language acts to contradict her innocence, such as when she calls Alec her "seducer." Yet it can be argued that Tess's diction can still function within the framework of her rape. While she did not acquiesce to Alec's sexual advances—she was not even conscious to do so—she still willingly accepted his offer to drive her home, placing herself in the rape environment. Therefore, he "seduces" her into *The Chase*, not into consensual sexual relations. Additionally, if Hardy must mask her rape for his readers, calling Alec her "rapist" or "aggressor" would blatantly assert her rape; therefore, her violation remains carefully nuanced behind selective language.

Redirecting the focus of the case study through another lens, one can study Tess's rape by examining the paradigmatic roles which Tess and Alec fulfill in the act. As the rapist, Alec portrays a common

characteristic of displacing responsibility for his behavior. He dilutes his own accountability, saying, "I suppose I am a bad fellow—a damn bad fellow. I was born bad, and I have lived bad, and I shall die bad" (Hardy 60). By allocating the responsibility to not his own nature or actions, but to genetics and birth, Alec distances his person from his actions. In addition to this disconnect, Alec's history also aligns itself with the typical sexual aggressor identity. The majority of men who identified as date-rapists "report[ed] that they had exerted greater efforts on dates with other women [previous to the rape]" (Kanin 237). Similarly, fragments of Alec's sexual past manifest themselves in the confrontation between Car Darch and Tess. Car, obviously referring to her own intimate past with Alec, becomes defensive and jealous, telling Tess "th'st think th'beest everybody, dostn't—because th' beest first favourite with He just now...I'm as good as two of such!" (Hardy 52). Indicating her own sexual knowledge of Alec, Car grants the reader access to her sexual history with Alec; as a result, the reader discovers that Tess is not the first woman Alec has actively pursued. Later in the novel, Alec himself alludes to his extensive sexual past, telling Tess that her rape "was the very worst case [he] ever was concerned in" (Hardy 247). Through Car Darch's rejoinder and Alec's own confession, the reader becomes privy to Alec's increasing sexual resumé, further espousing his violation of Tess, "the worst" he has committed.

Furthermore, as the chapter closes with Alec "rescuing" Tess from the angry Car Darch, Car's mother exclaims, "Out of the frying pan into the fire!" (Hardy 53). This statement too supports Alec's promiscuous, possibly even violent history with women. This particular scene molds perfectly two separate findings from a current study: 62 percent of self-identified rapists reported that they attempt to seduce a new date

"most of the time," and they all have had "considerably more heterosexual experience [and] have engaged in a more persistent quest for heterosexual encounters" (Kanin 238). Similar to the date-rapists in this study, Car Darch's outburst and Alec's personal revelation reveal his own heightened sexual experience.

Equally important to an examination of the rapist is the assessment of the victim. In the novel, Tess displays the quintessential rape-victim persona. Her first exhibition of post-rape characteristics is in her internalization for most of the blame, which can be detected by her reluctance and obstinacy to explain the incident to Angel, four whole years after the incident. When she finally builds up the courage to confess her past to him, she panics and confesses her lineage instead: "She had not told. At the last moment her courage had failed her" (Hardy 148). When Angel presses her, she simply tells him that she is "not good enough—not worthy enough" (Hardy 137). Furthermore, in her letter to Angel after their separation, Tess writes that "the punishment [he has] measured out to [her] is deserved" (Hardy 264). Yet legally, Tess has done absolutely nothing wrong. These feelings of inferiority and depravity are societal constructs—not legal sanctions. Unlike the centuries before, rape law in the nineteenth-century functioned as an empowering tool for women, not a death sentence. Women could take men to court on the basis of rape and actually win; they now had rights (Davis 224). However, "working-class women were almost wholly beyond the reach of civil law. With their lack of resources and legal 'know-how,' women were effectively outside the scope of the law" (Davis 227). Unfortunately for Tess, her internalized self-blame may be partially derived from her position, in both the gender and socio-economic hierarchies.

Regardless, by both law and religion, Tess remained a pure being; the guilt she felt was

reflexively inflicted and not from external sources. Her internalized self-blame is likewise demonstrated when she fails to report the incident. The narrator purports that when Tess leaves home to work at the dairy, she can look at her great family vaults and reminisce “that the individual innocence of a humbled descendant could lapse assilently [as Babylon]” (Hardy 78). Not only does Tess abstain from testifying against her rapist, this statement argues that her silence is premeditated, reflecting on the nature of her silence, not that it is problematic. Her silence is planned and accepted, further illustrating her self-blame.

In addition to blame and report, adjustment patterns can be very telling in an assessment of the rape victim. As aforementioned, Tess utilizes the coping mechanism of self-blame; in a study on rape adjustment, the researchers found that “both behavioral and characterological self-blame were associated with poor adjustment” (Meyer 244). Another pattern Tess demonstrates is remaining in her house and withdrawing from her community, both also associated with poor adjustment (Meyer 244). While some may contend that Tess does leave the house to work in the fields, there she still pulled “her bonnet...so far over her brow that none of her face is disclosed” (Hardy 69). Even while outside, she continues to remain hidden. The narrator also notes that “one reason why she seduces casual attention is that she never courts it,” maintaining that while people notice her, she goes out of her way to eschew others’ consideration (Hardy 69).

Yet after her baby dies—the only hard evidence of the rape—Tess makes a “big life change.” One of the only successful coping patterns found in the study, “big life changes” such as moving or switching jobs have been found to promote healthy adjustment after a rape (Meyer 244). In the novel, Phase the Third opens with, “On a thyme-scented, bird-hatching morning in

May, between two and three years after the return from Trantridge—silent reconstructive years for Tess Durbeyfield—she left her home for the second time” (Hardy 79). Not only does this opening negotiate a new beginning for the protagonist, but its language of “thyme-scented” and “bird-hatching” infer that sunshine lies ahead, as if the novel itself foresees this coping pattern to be effective. Moreover, “big life changes” are one of two strategies reported by Meyer and Taylor to cause less sexual dissatisfaction after rape (244). It is only after Tess makes this life change that she can move on and meet her new romantic interest, Angel. Tess overtly states the consequences of her life changes in her long letter to Angel, claiming that “the past [to Tess] as soon as [she] met [Angel]...was a dead thing altogether,” again illustrating how moving to the dairy helped her to overcome her rape; it became dead to her (Hardy 265). Tess’s life—now rejuvenated—could start anew with Angel. Dually functioning as both a literary device for the form of the novel and a catalyst for the function of Tess as a character, this “big life change” is undeniably necessary to the plot. Although Hardy refuses to ultimately allow Tess true happiness with his character of Angel, he does offer her a temporary opportunity to move on with transitory happiness.

Yet Angel equally presents an interesting pattern found in many individuals’ lives post-trauma. A key turning point for rape theorists happens when Angel divulges his own unscrupulous secret to Tess: “He then told her of that time of his life to which illusion has been made when, tossed about by doubts and difficulties in London, like a cork on the waves, he plunged into eight-and-forty hours’ dissipation with a stranger” (Hardy 177). After this revelation, the reader learns that both Tess and Angel have a socially unaccepted sexual past—pasts of which neither individual was aware. One marriage counselor observes that humans

"have a tendency to get into repetitive patterns of relationships" unknowingly, such "as when a woman whose childhood was damaged by her father's alcoholism finds herself marrying a man who turns out to be an alcoholic" (Scarf 46-47). Similarly, Tess—a female rape victim—finds herself "unconsciously stud[ying]" Angel—a man who potentially brought a similar fall to another woman (Hardy 101). Scarf continues this relationship phenomenon:

So often such similar issues—alcoholism, or the early loss of a parent, or even time spent in an orphanage early in life—pop out on both sides of the [partners'] family tree! We humans must... have powerful ways of knowing about each other and it is this knowledge which draws us, in an inexorable and almost hypnotic way, to the person who is to become the mate. It is the recognition, somehow, of what is familiar. (Scarf 68)

Not a coincidence, both Angel and Tess "unaffectedly sought each other's company" (Hardy 151). Indeed, Angel and Tess upheld this unexplainable occurrence: just as the daughter of an alcoholic married an alcoholic, the rape victim fell in love with and married a sexual aggressor.

Furthermore, Tess portrays the bodily disconnect many women who are victims of both physical and sexual abuse experience. In a study on sexual abuse and perception of one's body, "for [one woman,] her body was the physical entity that signified her outside status. When the sexual abuse occurred, [she] felt she had lost her body" (Thompson 357). Unlike Hester Prynne's large "A" to denote her isolated status, many women view their physical bodies as indications of their sexual abuse. As Thompson states, "As is true for many women who have been abused, the split that [one participant] described between her body and soul was an attempt to protect herself from the pain she believed her body caused her" (Thompson 357). This bodily

disconnect can be traced throughout many rape victims, blaming their body or physical appearance for their selection as targets. In Tess's case, she too no longer associates a connection between her body and soul, particularly after her pregnancy and birth of her late child, Sorrow: "...Tess had spiritually ceased to recognize the body before [Angel] as hers—allowing it to drift, like a corpse upon a current, in a direction disassociated with its living will" (Hardy 299). As the statement suggests, her body no longer served a purpose once it was violated; her spirit could not even recognize its corresponding physical sanctuary. The act of rape can mutilate and permanently sever the connection between one's self and one's body, as Tess's is nothing more than "a corpse upon a current."

Interestingly, Hardy initially made Tess's rape more strongly correlate with date rape in the 1891 publication. In this edition, Alec gives Tess a drink of a cordial from "a druggist's bottle" which he "held... to her mouth unawares" (Davis 226). The existence of this plot twist implies that Hardy too desired to frame the The Chase scene as a rape; he originally had Alec go to the extent of drugging Tess in order to gain sexual access. Moreover, this addition to the story would have construed Alec's actions as even more solidly premeditated, rather than a reaction to the moment created by quid pro quo, hostile environment, and grooming. Another revision—the removal of the original subtitle—lends itself to the argument that Tess was a victim of rape and not a participant in consensual intercourse: "In 1891, Tess of the 'Urbervilles' first appeared with the subtitle 'A Pure Woman, Faithfully Presented'" (Heffernan). The text originally, before receiving any criticism from the literary audience, positioned Tess as "a pure woman," again contending that the scene was not seduction or even consensual—it was rape. This subtitle further elucidates Hardy's own views on rape;

the victim, though losing her chastity, was forced into the act and can still remain pure.

A final revision, involving the length of Tess's stay after the incident, endorses Tess's purity. The original text situates her leave of Trantridge the morning after The Chase scene. In the 1891 edition, Hardy states that "it was a Sunday morning in late October, about four months after Tess Durbeyfield's arrival at Trantridge. The time was not long past daybreak" (145). However, the revised edition states that "it was a Sunday morning in late October, about four months after Tess Durbeyfield's arrival at Trantridge, and some few weeks subsequent to the night ride in The Chase" (Hardy 58). Positioning Tess in the role of the frightened victim, in the original text she leaves Trantridge directly after her rape. This immediate flight infers that she either felt too threatened or too frightened to stay; she had to remove herself from a dangerous situation. Yet Hardy again concedes to the contemporary public, with the revision delaying Tess's departure "some few weeks." Yet this prolonged stay can still be conducive to the argument of her rape. For example, her mother had not taught her the appropriate behavior and protocol and she was thus confused. Correspondingly, Alec comments at a future meeting that Tess "took [herself] from [him] so quickly and resolutely when [she] saw the situation; [she] did not remain at [his] pleasure" (Hardy 253). Possibly, Tess required time to fully comprehend what had happened to her; three weeks later, she finally understood and left. However, the original text's urgency greater supports her position as a victim and not a willing participant.

With the current information on rape today, the task no longer becomes determining whether The Chase was rape or seduction; rather, the next step would be to analyze Tess's rape in conversation with rape as a gendered institution. While,

arguably, her subsequent murder of Alec avenges her rape, Tess still is equally punished with a similar fate for herself-induced justice. Moreover, Angel's reaction to Tess illustrates another view of rape through a gendered perspective. After Tess divulges the details of her past, Angel tells her she is "not deceitful... but not the same" (Hardy 182). An incredibly problematic statement coming from a sexual aggressor, Angel cannot view Tess as "the same," while Tess can and assumedly must accept Angel's sexual decadence, which, ironically, was of a conscience nature. Angel is described as "a cork on the waves," somehow unaccountable for his own actions, while Tess—asleep at the time of her proposed dissipation—receives full blame for her actions.

With this gendered lens, a contemporary feminist audience can perceive why the book's acceptance after revision can be viewed as problematic. While the Victorian audience would not suffer through overt details attesting to Tess's purity, they received and even welcomed the text with Hardy's depictions of a sexual aggression double standard. This tolerance of male-initiated violence can also be explained with modern rape theory. As Emily Martin avers in *Evolution, Gender, and Rape*, Victorian science became heavily dominated by Darwinian theory, particularly with a strong emphasis on inheritance (Martin 364). From an evolutionary psychology standpoint, sexual aggression is an inherited trait in the male gene pool. Those men who successfully "spread their seed" remain represented in the gene pool; hence, the more seeds spread, the more seeds sown. Off that point, sexual aggressors who gain increased sexual access to a large number of women, even through force, are more likely to be widely represented in the gene pool, passing on their own tendencies toward sexual aggression. In other words, sexual aggressors will engage in intercourse with more women and father more children while

simultaneously passing on the inclination toward sexual aggression.

By applying Darwinian theory to sexual aggression, male sexual aggression and even the possible consequential violence toward women are natural proclivities for survival. While Darwinian theory does not address a male's morality, it does address a biological drive towards prodigious procreative acts—without boundaries. Thus, an interpretation of the theory may call for an objective acceptance of male sexual aggression, assuming sexual coercion is a key to survival. Therefore, in a society that so readily accepts evolutionary theory, the blame rests not on the man but on the woman. Women like Tess are somehow supposed to ward off more powerful men as well as biology while also sleep.

An analysis of Tess's rape in accordance with modern rape theory yields several results. First, Tess's rape—in the context of Alec's pursuit of her framed as date rape—perfectly adheres to the modern rape paradigm. With the addition of the cordial, her immediate leave of Trantridge, and Hardy's original subtitle, the reader can begin to piece together Hardy's own view of Tess: she remained, as the subtitle clearly states, "a pure woman." However, because his Victorian audience reacted so negatively to Tess retaining that title, Hardy erased several details that could explicitly attest to Alec's rape and negate the act as consensual. Furthermore, readers' acceptance and approval of the text once revised provides today's audience with a view of Victorian rape as a gendered institution. Alec and Angel are excused through an interpretation of evolutionary biology, while Tess is still held accountable for her rape, defined so by the legal system then and now as well as by the author himself. By conforming to his audience, Hardy elucidates the Victorian view on rape as well as his own, functioning in this volatile gendered institution. Poor Tess, the victim of both a

crime and an unjust institution, never lived to see her reflection as "a pure woman." Both she and Hardy needed at least a few more years, maybe even a few more decades, for society to catch up. j

WORKS CITED

- Bargh, John A., et al. "Attractiveness of the Underling: An Automatic Power to Sex Association and Its Consequences for Sexual Harassment and Aggression." *Social Psychology and Human Sexuality*. Ed. Roy F. Baumeister. Ann Arbor, MI: Sheridan Books, 2001.
- Bushman, Brad J., Angelica M. Bonacci, Mirjam Van Dijk, and Roy F. Baumeister. "Narcissism, Sexual Refusal, and Aggression: Testing a Narcissistic Reactance Model of Sexual Coercion." *Journal of Personality & Social Psychology*. 84(2003): 1027–1040.
- Craven, Samantha, Sarah Brown, and Elizabeth Gilchrist. "Sexual grooming of children: Review of literature and theoretical considerations." *Journal of Sexual Aggression*. 12 (2006): 287–299.
- Davis, Jr., William A. "The Rape of Tess: Hardy, English Law, and the Case for Sexual Assault." *Nineteenth-Century Literature*. 52(2)(1997): 221–231.
- Foucault, Michel. *The History of Sexuality, Volume 1: An Introduction*. New York: Vintage, 1990.
- Hardy, Thomas. *Tess of the d'Urbervilles*. New York: W.W. Norton & Co, Inc., 1991.
- Hardy, Thomas. *Tess of the d'Urbervilles: A Pure Woman Faithfully Presented by Thomas Hardy: In Three Volumes*. 1891 edition. Accessed from Nineteenth Century Fiction data base. http://collections.chadwyck.com.go.libproxy.wfubmc.edu/searchFulltext.do?id=Z100038033&divLevel=1&queryId=../session/1227576186_11197&trailId=11D36BF4CE2&area=ncf&forward=textsFT&warn=Yes&size=932Kb.
- Heffernan, James A. W. "Cruel Persuasion: Seduction, Temptation, and Agency in Hardy's Tess." *The Victorian Web*. 2005. 22 Nov 2008 <<http://www.scholars.nus.sg/landow/victorian/authors/hardy/heffernan.html>>.
- Kanin, Eugene J. "Date Rapists: Differential Sexual Socialization and Relative Deprivation." *Social Psychology and Human Sexuality*. Ed. Roy F. Baumeister. Ann Arbor, MI: Sheridan Books, 2001.
- Kaye, Richard. *The Flirt's Tragedy: Desire without End in Victorian and Edwardian Fiction*. Charlottesville, VA: UP of Virginia, 2002.

Martin, Emily. "What is 'Rape'?" Evolution, Gender, and Rape. Cheryl Brown Travis. Cambridge, MA: MIT Press, 2003.

Meyer, C Buf and Shelley E. Taylor. "Adjustment to Rape." Social Psychology and Human Sexuality. Ed. Roy F. Baumeister. Ann Arbor, MI: Sheridan Books, 2001.

Millgate, Michael . Thomas Hardy: A Biography Revisited. Oxford: Oxford UP, 2006.

Murnen, Sarah K., Donn Byrne, and "Hyperfemininity: Measurement and Initial Validation of the Construct." Journal of Sex Research 28 (1991): 479-489. "Rape." Oxford English Dictionary Online, 2nd ed. 1989. Oxford UP. 25 Nov 2008 <<http://dictionary.oed.com>>.

Rind, Bruce, Robert Bauserman, and Philip Tromovitch. "A Meta-Analytic Examination of Assumed Properties of Child Sexual Abuse Using College Samples." Psychological Bulletin. 124 (1) (1998): 22-53.

Scarf, Maggie. Intimate Partners. New York: Random House, 1987.

"Sexual Harassment at Work." Experts Advice to Stay Safe at Work. Safe Workers UK. 24 Nov 2008 <<http://www.safeworkers.co.uk/SexualHarassmentWork.html>>.

Thomas, Jane. Thomas Hardy, Femininity and Dissent. London: MacMillan Press, 1999.

Thompson Becky Wangsgaard. "A Way Outa No Way: Eating Problems among African- American, Latina, and White Women." Feminist Frontiers. Comp. Laurel Richardson, Verta Taylor, and Nancy Whitter. New York: MrGraw-Hill, 2004.

Toufexis, Anastasia, and Andrea Sachs. "What is Incest?" Time 31 Aug 1992: 57.

Composition 2.0 in the Classroom: Studying the Integration of New Media and Multimodal Composition

Sarah McKone

University of North Carolina Wilmington

Faculty Mentor: Anthony Arkins, PhD

Department of English

University of North Carolina Wilmington

TECHNOLOGY HAS ALLOWED writers to change the ways in which they compose texts. Because composition is such a fundamental part of human history and culture, this change is both important and interesting. The integration of technology to writing introduces not only new composition techniques, but also new methods for instructors to use in basic composition courses.

In this study, I collected data from the University of North Carolina Wilmington's English Department to assess the integration of new technologies into the composition classes' curriculum. The data, collected through an online survey and a series of in-person focus groups, provide a sample of student perceptions about composition classes to analyze whether students feel these technologies have been integrated into their curriculum and how effective students believe these new technologies are for composition instruction. The technologies

analyzed in this study include new media and multimodal composition.

PICTURE THIS: NEW TOOLS FOR
WRITING

In "Writing in Multimodal Texts: A Social Semiotic Account of Designs for Learning," composition researchers Jeff Bezemer and Gunther Kress make the argument that writing is "no longer the central mode of representation in learning materials," and that instead, learning resources are evolving through implementation of images and other forms of digital media (166). An argument, by composition researchers no less, that writing is being "displaced" by image may sound strange—almost like a mathematician arguing that numbers are being displaced by graphs. How can words be replaced by imagery? Are the two even similar?

In order to understand this idea readers have to look at the argument in a different

light: that images are not replacing text, but are changing, or even updating, text. Bezemer and Kress are not arguing that authors of textbooks have abandoned the written word for pictorial representations; instead, they are arguing that it is increasingly common for arguments to be communicated through the use of an image that can employ the same meaning and purpose as text but uses visual representation instead of the written word.

Some researchers argue that it is not only acceptable but also beneficial to employ other mediums to represent text. In *Effective Learning and Teaching of Writing: A Handbook of Writing in Education* Gisella Paoletti explores this debate in her chapter "Writing-To-Learn and Graph-Drawing as Aids of the Integration of Text and Graphics." She argues that when learners are required to "analyze verbal, as well as iconic, information," their comprehension increases. She is arguing that, because readers use different cognitive processes to interpret images and text, readers may find that it is easier to both understand and remember concepts when the explanatory text is paired with other media, such as images (588). These types of media are not replacing text, but are representing text through a different medium. Technological advancements allow text to be represented by not only images, but also through other mediums such as video, sound, web text and more.

DEFINING NEW MEDIA

When discussing compositions that integrate images, video, and sound into composition, it is important to understand the writer's tools, defined in the composition process as the materialities. Materialities can be very encompassing, including not only specific tools for writing (pen, keyboard) but also the conditions under which the composer is designing (public or private space in which composer is writing,

composer's background knowledge, access to computer, availability of software). Anne Wysocki, in *Writing New Media: Theory and Applications for Expanding the Teaching of Composition*, says that "new media texts" are "those that have been made by composers who are aware of the range of materialities of text and who then highlight the materiality: such composers design texts that help readers/consumers/viewers stay alert to how any text—like its composers and readers—doesn't function independently of how it is made and in what contexts. Such composers design texts that make as overtly visible as possible the values they embody" (15).

As Wysocki explains, composers can create new media texts by using a range of the available materialities. For example, a writer may be aware of his or her materiality by recognizing access to graphic design software and using it to convey messages, by placing ideas into the public sphere with the Internet, by employing the assistance of a colleague during the peer-review stage or by using media such as a video clip in order to make familiar his or her argument.

There are examples of new media texts that highlight this use of available materialities. In "Media Convergence: Creating Content, Questioning Relationships," researcher Jonathan Alexander examines one particular example: a widely used but extremely controversial "encyclopedia project" called Wikipedia. Wikipedia is an online encyclopedia that is free to use for those with Internet access. The Web site is unique because users can be both readers and authors, as they may also create a new article or edit the existing articles. Wikipedia provides some moderation over the site but the project truly offers the authorship of the articles to the public. Alexander defines Wikipedia as a "platform of multimodality," arguing that Wikipedia is an example of "converging media" (4). Using

Wysocki's idea about new media texts, we can explore with Alexander the many different materialities involved in Wikipedia. Wikipedia obviously integrates technology, but more importantly it integrates collaboration and shared authorship into its web text. Wikipedia is not only a new media text because of its use of technology; Wikipedia is an example of how texts can be manipulated, using technology, to form new meanings (4). Wikipedia houses materialities (the Internet, a wide range of participants) to construct its text (documents that employ collaboration, shared authorship).

FINDING AND USING NEW MEDIA

New media includes, but is not limited to, television or movie clippings, sound files, cartoons, animations, comic strips, pictures, graphics, graphs, video files, music files, and web text. These kinds of new media can be found through a wide range of Internet mediums, including podcasts, blogs, wikis, social-networking platforms and RSS feeds. These tools are categorized as "Web 2.0 technologies." This term was coined because the technologies allow users to move beyond conventional technologies such as Web sites and e-mail. Web 2.0 technologies are accessible materialities through which students can gain access to new media.

For example, a podcast is a Web 2.0 technology. Podcasts are auditory files that can integrate not only speech but also music or recorded noises. These auditory files can be downloaded and then listened to using mp3 players or computers. They may focus on topics such as politics, music, sports, entertainment, cooking, and more. Podcasts can be a great way for students to find sounds, in this case a relevant auditory argument, to integrate into their composition. Therefore, the Web 2.0 technology, in this case a podcast, may be used as a platform from which to collect new media. Students could find a weekly podcast which

relates to their research topic and then integrate some of the auditory source into their composition.

New media can be found through a variety of Web 2.0 technologies. Videos and images are constantly uploaded through social-networking sites like Facebook.com, where students can also post notes, documents or ideas. Videos can also be shared through blogs, which easily link to video platforms such as YouTube.com. Images are similarly shared through wikis, blogs, or a variety of other mediums. If students simply find a Web 2.0 that is geared toward their subject of interest, they can find many types of new media that specifically relate to their topic. In the words of Professor of Writing Arts Diane Penrod, "We are no longer bound to the constraints of the print medium. This point is important as computers increasingly affect the teaching of writing and the call to assess e-texts becomes greater" (29). This process of forming new media texts by using a range of available materialities can be defined as multimodal composition.

DEFINING MULTIMODAL COMPOSITION

With the introduction of new media to writing, it is natural to assume that there may be changes to the writing process. Alexander argues that "Students fluent with digital and new media communication technologies are often 'mixing and matching' media to produce complex 'multimedia texts'" (2). The process is a multimodal composition process. As students used different materialities and new media to design their texts, tools that are becoming available due to more advanced technology, they are not only changing their documents but also the process used to construct the documents. As multimodal composition becomes more integrated into composition, students need to be educated on how to write using a multimodal composition process.

Fortunately or unfortunately, depending

on one's vantage point, the integration of a multimodal composition process into the composition curriculum also means the integration of technology. For example, if students want to integrate images into their composition, they need to learn what constitutes a visual representation, how to best create or edit visuals to suit their message, and how to integrate those images into text. Daniel Anderson argues this point in "The Low Bridge to High Benefits: Entry-Level Multimedia, Literacies, and Motivation," explaining that the evolution from "alphabetic literacies" to other mediums in the composition classroom justifies the idea that composition professors use more technologies (his example being a digital image editor) in the composition classroom (48). Anderson's point supports the idea that professors who integrate multimodal composition into their instruction may also need to integrate the instruction of certain technologies.

An example of this complication can be seen through this article's previous example of a podcast as a materiality through which students can find new media. In order for a professor to encourage the use of that Web 2.0 technology as a materiality, the professor would first have to understand podcasts, how they are created, what they provide, where they can be found, and how to integrate them into the composition itself. However, there are other variables, such as whether or not students and professors have access to similar technologies and whether or not professors have access to technologies in classrooms where they are attempting to integrate new media and writing, that may influence a professor's ability, despite awareness or desire, to instruct students about these new technologies and how to integrate the technologies into their compositions.

The integration of new media provides a new way for students to engage the writing process. This integration of a new system

of arguments, a new group of mediums through which writers can communicate, and new designs with which writers can create arguments, is more than the integration of an additional step to the writing process; this is a new process altogether—a multimodal composition process.

After learning more about the many kinds of technologies students were using to complete assignments, I decided I wanted to know more about the relationship students perceived between English courses and technology, or more specifically, whether or not UNCW composition courses were employing new media and multimodal composition. With this research question in mind, the study also seeks to respond to the question/s: How much instruction do students receive on writing with new media in English classes? Do students perceive learning about the integration of technology in their writing as imperative to their education in English? Are students familiar with technologies, such as Web 2.0 technologies, that allow them to create new media texts? Do students expect to learn these technologies from their English professors? Do students perceive a change in their writing process? These research questions helped me understand student perceptions about the ways in which new media, multimodal composition, and new technologies are changing the environment of the English class.

COLLECTING DATA

In order to assess the current perceptions of UNCW English students, I used a sampling survey as a mode of quantitative research and focus groups to collect supplementary qualitative data. To ensure the research project fit both ethical and university required standards, I submitted the research methods and project to the Institutional Review Board. I received my IRB Certification for Human Research on August 28, 2008. After one week of review,

IRB approved the survey model on October 16, 2008.

The project used SurveyNet, an online survey tool created by UNCW's Information Technology Department, in order to target the sampling. The sampling included the following classes, which are courses in UNCW's English Department with a curriculum that focuses significantly on composition: College Writing and Reading I (ENG 101), College Writing and Reading II (ENG 201) College Writing and Reading Advanced (ENG 103), Introduction to Literature (ENG 110), and Introduction to Professional Writing (ENG 204). Professors received the link to the survey on October 16, 2008 and 470 respondents completed the survey. The survey was closed on November 12, 2008.

In this research design, qualitative data were also necessary because not all the research questions could be analyzed with statistics. For example, quantitative research can tell us how many students perceive a relationship between English and technology. Qualitative evidence was needed to document why students feel this way or how they came to feel this way. "qualitative methods can be used to obtain the intricate details about phenomena such as feelings, thought processes, and emotions that are difficult to extract or learn about through more conventional research methods" (Strauss 11).

Focus group sessions were conducted during Ms. Aimee Wilson's College Writing I class and during Mr. Drew Virtue's College Writing I class. The sessions were conducted during class time. Students were informed that there was no incentive for them to participate in the focus group, that their participation was purely voluntary, and that they were allowed to opt out of the focus group at any time. After the consent forms were signed I created a seminar-style atmosphere using broad discussion questions to prompt the students to discuss English, writing, composition, new

media, and technology. Each session lasted no shorter than 20 minutes but no longer than 25 minutes.

By recording the focus groups on video I was allowed to focus on the students and their responses during the discussion, instead of focusing on recording responses. The video footage was used as a means to quote student statements accurately. Video footage will not be used outside of this project, and if shown, will only be shown in reference to this project. The qualitative data generated by these two focus groups greatly impacted the analysis of the quantitative data; in analysis, the two types of evidence are heavily intertwined.

By using a research design that enabled collection of both quantitative and qualitative data, this project was able to describe the perceived prevalence of multimodal composition in specific composition classes as well as describe the individual reactions of students to the use of multimodal composition.

RESULTS

How much instruction do students receive on writing with new media in English courses?

The survey was designed to assess whether or not students perceive that they are receiving instruction on how to integrate new media into their composition at UNCW. The first question on the survey asked students to respond to the statement "I often include digital technologies, such as sound, movie clips, slideshows, videos, or animation, to complete homework or classroom assignments for English classes." Survey responses to this question indicated whether or not there is new media instruction in the classroom because only students who have integrated new media into their assignments would answer agree or strongly agree.

These data demonstrate that a large majority of students are not using digital

technologies to complete English assignments, and also that only a very small minority of students integrated digital technologies into their English assignments often. One concern with this item, however, was that it could not account for students who, despite their professors' use of technology, are not using technology themselves.

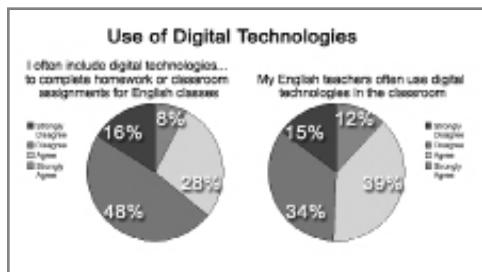
Survey question #2, "My English teachers often use digital technologies in the classroom," provided additional evidence to assess the research question, since the results showed students to perceive their use of technologies for English assignments as less common than their professor's use of technologies in the classroom.

The data from these two survey items reveal that more students perceive their professors as using digital technologies while fewer students assert that they themselves are using digital technologies. Also, it shows that only about half of students (51 percent) perceive that they are exposed to digital technologies in the composition classroom at UNCW. The data supports the idea that a majority of students do not consider their use of digital technologies in their English assignments as frequent. However, it also shows that the students perceive the technologies as more frequently used in English by the professors, not by the students.

In the focus groups, students were asked to discuss how they perceived their professors to be using technology in the classroom. Some students in one focus group classroom said that their professors often used online YouTube videos to represent visual arguments. One student stated that

these videos were useful, describing them as "visual learning that relates to what we are writing about." When asked if these videos helped students learn or if these videos helped to make class interesting, both questions received a chorus of yeses. The students' excitement about the digital technology in the classroom did not translate well into a discussion about digital technologies in assignments, though, and in both sessions students had little to say about their own use of digital technologies to complete coursework.

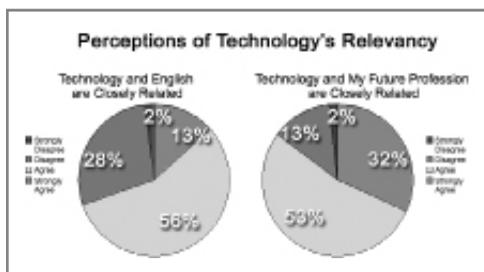
Students in another session said that their professors used Microsoft Word's Track Change and Comment tools, that allowed editors to insert noticeable comments within a document, to review and revise their papers. Also, Ms. Wilson's students said that their professors e-mailed their papers to them so that the digital copies, which include the track changes and comments, were available. The students assessed that this was an effective process. Many of them admitted that they had never used Track Changes before, but they were fond of the process and did want their professor to continue using Track Changes. However, when asked if the students themselves used Track Changes to edit their own documents or peer-review documents with classmates, the majority of the students said no. This response is an example of how, despite their professors' use of a technology, students themselves may not be using the technology. This discrepancy illustrates the finding that professors and students simply use technologies for different reasons on a daily basis.



DO STUDENTS PERCEIVE LEARNING ABOUT THE INTEGRATION OF TECHNOLOGY IN THEIR WRITING AS IMPERATIVE TO THEIR EDUCATION IN ENGLISH? Researchers may observe a change in writing due to the integration of digital technologies, new media, and a multimodal

composition process—but do students? Students were asked to respond to the survey question #11, “I see technology and English studies as closely related.” Most students (59 percent) saw a relationship between technology and English; however, many students did not see a relationship and either disagreed or strongly disagreed.

Importantly, more students felt that there was a relationship between technology and their future professions. In response to question #8, “I see technology and my future profession as closely related,” more students saw a relationship between technology and their future profession than saw a relationship between technology and English.



Students explained this relationship further in the focus groups, emphasizing that English relates to technology because of the relationship between technology and communication. Students recognized that communication skills were an imperative part of their English curriculum, and that the effect of technology upon the system of communication, in turn, affects their English classes. When asked, “Do you feel that there is or is not a relationship between English and technology?” the students in the first focus group responded “yes” in near-perfect unison. One student argued that all students needed to learn about technology in English classes so that they can “communicate...and get your point across in a personal format...but also in a professional format.”

One focus group question asked the

students if they felt technology was related to their future profession. In both focus group sessions, the students answered with a chorus of yeses. When asked in what ways they felt it would be related, the first student to speak in the first focus group session simply answered, “Every way.” Clearly, students feel that technology will be an integral part of their future profession.

The qualitative data indicated that students might observe a relationship between English and technology because they are aware that technology affects communication and that communication skills are necessary in the professional world.

DO STUDENTS EXPECT TO LEARN THESE TECHNOLOGIES FROM THEIR ENGLISH PROFESSORS?

When asked, “Do students expect to learn these technologies from their English professors?” the students in the focus groups seemed divided. Most students argued that technology would be related to their future professions and that, therefore, students need to be educated about technology through English courses. However, many students argued that technology is not directly related to English courses, so students should not expect English professors to teach about technology. Other students argued that technology does relate to English and that professors should integrate technology into their curriculum; however, even those students were divided, as different individuals had different ideas about what kinds of technology they felt students should learn about in English.

If a majority of students feel that they will need technology for their future profession, then is technology something they are hoping to learn at UNCW, or something about which they already know? When asked if students felt they needed to learn more technology or if they felt they already knew about technology, one student answered, “Kinda a little bit of both...you

learn the basics of, like, social communication on your own, just, like, the editing online and all that stuff... you have to learn here." Another student followed that statement with, "We know how to use computers more than our parents do so... we are going to have to learn more—but we already know a lot." The focus group responses show that, although students recognize that they need to have a good understanding of technology for their future profession, most students are confident that they already have a knowledge base.

In order to collect data to show who students felt should be responsible for technology instruction, the focus groups were also asked if they felt that technology should be taught in the "basic studies," or the courses that all UNCW students are required to take in order to earn their degree. One student responded that she felt basic studies should have required computer classes. Another student agreed, but took the argument a step further. "I don't think we should learn [about technology] from our English professors... if you want to learn about computers, go to a computer class." As students discussed this topic, they also began to debate whether or not English professors should be concerned with integrating technology into their curriculum. One student stated, "I think if you ask a professor for help [with technology] they should know how to do it... but an entire class period shouldn't be devoted to technology. That's not their job."

These statements promoted a dialogue within the focus group. Students began arguing about different levels of technological education in the English classroom. One student stated, "I think it's necessary to keep a balance in the classroom... if we start getting too into technology we're going to lose some of our writing skills." Another followed this response with his own idea, arguing "I think... basics. The teachers should tell you about technologies, things

you should have to use everyday... like Microsoft Office, the whole Office suite." One student simply said, "They're teaching us English. It's not a computer class." Not all the students agreed with this statement. One student pointed out, "You need to learn about technology... It should be more integrated, just so we're prepared, everything's continuously getting more technological so the more you use this stuff the better." Another student said, "[The professor's] job is not really to teach us technology. Their job is to teach us whatever the subject is, but if they feel comfortable teaching [about technology] I don't see why they shouldn't... If the technology is going to help them teach English, then they should teach it; if not, English should take precedent."

A majority of students did not seem comfortable asking English professors to teach about technology. They argued that technology was not a part of the professors' jobs but that they should have a knowledge base in case students have questions. Some students did argue that a required computer class for basic studies might be a good idea. Other students stated that, if the technology relates to the topic or helps the professor teach, then it should be taught, but that the course's subject matter takes precedent. However, all students did seem to agree that if the technology was applicable to the coursework then it should be taught—so if students knew more about new media and multimodal composition, would they encourage more technology in English courses?

ARE STUDENTS FAMILIAR WITH TECHNOLOGIES, SUCH AS WEB 2.0 TECHNOLOGIES, THAT ALLOW THEM TO CREATE NEW MEDIA TEXTS?

Web 2.0 technologies are mediums through which students can collect new media technologies, such as images, sound or video, to use with their writing. The data from survey

question #18, "I am proficient with blogs, wikis, or other Web 2.0 technologies," demonstrate that a majority of students do not feel that they are proficient with blogs or wikis, and only a small majority of students feel that they are very proficient. The results of this question are comparable to survey question #1, "I often include digital technologies, such as sound, movie clips, slideshows, videos, or animation, to complete homework or classroom assignments for English classes." In both questions, a majority of students answered strongly disagree or disagree and only a small percentage of students answered strongly agree. These data demonstrate that students who use Web 2.0 technologies may be more likely, willing, or able to integrate digital technologies into their English assignments, and that students who do not integrate technologies into their assignments may not be doing so because they are not aware of how to use these technologies.

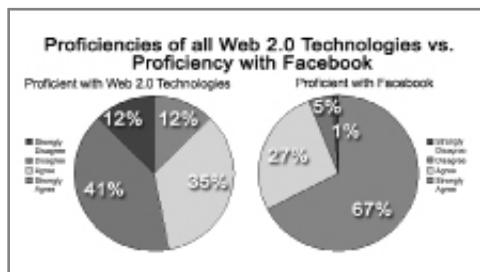
In both classes, the focus group sessions turned to the topic of digital technologies. When students were discussing the possibilities for technologies in the classroom they began to discuss certain Internet technologies that they felt professors could utilize in order to make class more interesting or accessible. A majority of the students referred to Instant Messaging technologies, such as AOL Instant Messenger (AIM) or chat rooms. Some students argued that these technologies would allow a class to collaborate; other students argued that these technologies would make professors more accessible when students needed them to answer questions. Other students brought up blogs, but only referred to this Web 2.0 technology as a useful tool for the professor to communicate to students, not as a tool which students could use to complete research or obtain materials for a paper. Other students argued that the introduction of these technologies into the classroom would be too distracting, but that

home use would not be distracting.

The survey data demonstrate that only a minority of students is proficient with these Web 2.0 technologies. The focus group data showed that most students are aware of these Web 2.0 technologies, as we discussed them freely, but a majority of students simply did not seem to use them on a regular basis. Also, when referring to Web 2.0 technologies, the majority of students seemed to perceive the only useful application of these technologies in the classroom as communicative tools, and did not view Web 2.0 technologies as mediums through which to collect new media or conduct fruitful research for academic courses.

There is one exception to this analysis: social-networking tools. Although social networks are similar to most Web 2.0 technologies in their interactive elements and novelty, the survey included a separate question about social networks such as Facebook and MySpace because, as an undergraduate, I hypothesized that students may be much more proficient with social networks than other Web 2.0 technologies. The evidence did demonstrate this point, as an overwhelming majority of students answered strongly agree when asked to respond to the survey question #17, "I am proficient with social-networking sites like Facebook or Myspace."

Clearly, there is a very high level of proficiency for social network use especially compared to the lower levels of proficiency students demonstrated toward Web 2.0 technologies in general.



While students are proficient with these social-network technologies, are they using them to complete their assignments? When asked to respond to survey question #5 "I often use social-networking sites, like Facebook or Myspace, when completing English assignments," more than three-fourths disagreed or strongly disagreed (78 percent). Previous evidence demonstrates that this low usage rate is not due to students' proficiency; in fact, students seem to be overwhelmingly proficient with social networks. There must be another reason for why these technologies are not being used in the classroom.

In the focus group sessions, students discussed the use of Facebook for classroom assignments. Many students admitted that, when they are asked to complete group work with other students, the most common form of communication is actually Facebook. However, they did not seem receptive to the idea of using Facebook for assignments. Students argued that they did not want all of their professors on their Facebook page because their social network was for personal use. In one focus group session, when I asked the students if they would talk to professors on Facebook, one student stated quickly, "That'd be creepy." The focus groups demonstrated that, although students are comfortable and proficient with social networks, they are not comfortable using social networks for coursework, because they believe that using Facebook with professors would be an infringement upon their personal space.

Despite student proficiency with social networks, a majority of students are not proficient with Web 2.0 technologies. Also, despite student proficiency with social networks, students may use Facebook to communicate with other students but are not using Facebook for classroom assignments. As an individual who used Facebook as an undergraduate and continues to use social networking tools today, I believe that if

students were shown various applications for using Facebook in the classroom they would be receptive. However, there will still be a few students who would see these lessons as an infringement upon their personal space, because Facebook can contain very personal content and not all students are aware of how to change the privacy setting on their page to make the content private.

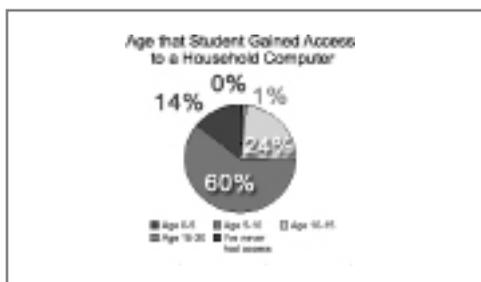
DO STUDENTS PERCEIVE A CHANGE IN THEIR WRITING PROCESS?

Overall, students do not perceive a change in their writing process due to technologies or new media. Due to the interactive nature of some of these technologies, it seemed logical that students would be willing, if not excited, to use them in the classroom and in their assignments. However, evidence did not support this hypothesis. Instead, students do not perceive digital technologies as commonly used in English assignments. Only about half of the students polled perceived their professors as commonly using digital technologies. Most students do not believe that they are proficient with Web 2.0 technologies. Students did recognize, however, that there is a relationship between English and technology, and that technology affects common communication.

One of the reasons students do not perceive a change in their writing process could be because of the way in which students have been exposed to technology. In the Demographics section of the survey students were asked in question #23, "At what age did you begin to have access to a household computer?" The question included instructions which read, "Choose the age at which you began to have regular access to a computer in your home, or access to a personal or family computer. Do not include access to a school, library or public computer when answering this question." Of the 425 students who answered this question, the majority of students (60

percent) answered age 5–10 and only two students answered that they have never had access to a household computer.

Access may be an important factor to consider when responding to this question. If a majority of students has had access to a computer since they were 10 years old, they may not perceive technology as changing the writing process because technology has always been an integral part of their writing process.



CONCLUSIONS

Initial research about multimodal composition made different technological advancements in composition sound interesting and applicable. That research promoted a hypothesis that students and professors at UNCW would be integrating new media and multimodal composition in their writing and classrooms. However, the data collected in this survey demonstrated that this usage is not widespread in composition courses, and that the majority of students are not integrating new media into their writing, are not familiar with Web 2.0 technologies, and are not sure that professors should be required to teach about these technologies in the classroom.

After reviewing both quantitative and qualitative data, I do not think that students are using a multimodal composition process at UNCW. However, throughout the course of this research, I have developed different conclusions about why students are not utilizing multimodal composition. During the beginning of this research project, I believed that at the center of new media use was the use of technology, and

that students who were not using new media in the classroom had simply not been exposed to those technologies by their professors. Certain composition researchers and some of their statements about new media and technology instruction greatly influenced my initial research. For example, researcher Craig Stroupe wrote “In teaching New Media Writing at the university... the necessity of using, and therefore teaching and learning, various information technologies foregrounds the instrumental mechanics of producing satisfactory texts” (244). Originally, when researching the use of new media in the classroom, I did not consider many factors outside of professors’ instruction. I viewed a professor’s introduction of new media as the sole factor responsible for the integration of new media in the classroom. I am aware that many professors may not be focusing their curriculums on new media or multimodal composition, may not be using digital or Internet technologies in the classroom, or may not be requiring that new media be used in their students’ assignments. However, after collecting data in the focus group sessions, analyzing the survey data, and continuing my research, I think that the minimal use of multimodal composition at UNCW may be due to many factors.

Students, who do not seem aware of the ways in which new media can be used in the classroom, are not asking that new media be taught in their composition classes. In turn, they do not expect for technology to be taught in their composition classes as they do not see technology as directly relating to the subject matter. If this is true, then composition instructors may not be given the tools they need to teach technology in a composition class, because students are not expecting or demanding to learn about those technologies. From an administrative perspective, there may seem to be no need for composition instructors to have access to expensive classroom technology.

If students were more aware of the effect

that new media can have on their writing and communication skills, they might ask for technology in all of their humanities-based classes. Students demonstrated in both their survey responses and focus group responses that they are willing to learn about technology and to use technology if it is related to the subject matter. Further, students overwhelmingly felt that technology would relate to their future professions. I think that as technology continues to develop and becomes more central to our daily lives, it will continue to become more integrated into writing and other forms of communication. While writing skills will always be crucial, other elements, such as understanding technologies that can enhance compositions, an awareness of materialities as a way to increase a reader's comprehension, or even the ability to communicate messages through modes other than text, may also become important to the writing process and students will need to learn how to incorporate these elements into their writing if they hope to succeed in the future.

In order to ask students to complete tasks using software, web editing programs, or other Internet technologies, professors will need a working knowledge of the technology so that they may field questions or demonstrate usage to students who are not proficient with the technology. However, knowledge alone is not enough for professors to teach applicable technologies. Professors also need access to technology in the classroom. In the UNCW academic building which houses the English Department, there is only one computer classroom with computers available to all students in the class. Also only a portion of the classrooms even have a computer and projector so that professors can demonstrate technology. This means that students will not be likely to have access to a computer in the classroom to practice or familiarize themselves with the technology. Some classrooms in the English Department do

not have computers at all. Without access to technology, it will be extremely difficult for students to learn how to integrate technology into their writing. It will be difficult for professors to demonstrate the usefulness of new media, the correct usage of new media in composition, or the ways in which students use Internet technologies to find new media.

If I were to continue this project, I would investigate these research questions further by looking at the integration of multimodal composition at other programs in other schools. I would like to investigate the ways in which new media is incorporated into composition classes by finding examples of specific assignments and lectures. I would like to research whether or not English professors feel that digital technologies should be included in instruction, how they feel it should be included, and also what types of access are needed from administrations in order to teach with a multimodal composition process. I would also like to research current trends in composition instruction to see how multimodal composition is being employed in the classroom and whether or not both students and professors feel it is successful. After researching Web 2.0 technologies, I would like to learn more about how these technologies can be used not only to find new media but also to integrate collaboration into the writing process. Finally, I would like to study the levels of access most composition instructors have to computers, projectors, and other technologies in the classroom, as this research project has shown me how important that factor may be to the relationship between English and technology. j

WORKS CITED

- Anderson, Daniel, Anthony Atkins, Cheryl Ball, Krista Homicz Millar, Cynthia Selfe and Richard Selfe. "Integrating Multimodality into Composition Curricula: Survey Methodolgy and Results from a CCCC Research Grant" *Composition Studies* Fall 34.2 (Fall 2006).
- Anderson, Daniel. "The Low Bridge to High Benefits: Entry-Level Multimedia, Literacies, and Motivation" *Computers and Composition*: 2008 Vol. 25: 40–60.
- Alexander, Jonathan. "Media Convergence: Creating Content, Questioning Relationships" *Computers and Composition*: 25 (2008) 1–8.
- Barlow, Tim. "Web 2.0: Creating a classroom without walls" *Teaching Science: The Journal of the Australian Science Teachers Association*: 54.1 (2008): 46–48.
- Bezemer, Jeff and Gunther Kress. "Writing in Multimodal Texts: A Social Semiotic Account of Designs for Learning" *Written Communication*: 25.2 (April 2008): 166–195.
- Kiefer, Kate and Mike Palmquist. "Adapting to the Classroom Setting: New Research on Teachers Moving Between Traditional and Computer Classrooms." *Effective Learning and Teaching of Writing: A Handbook of Writing in Education*, Ed.
- Gert Rijlaarsdam, Huub van den Bergh, Michel Couzijn. NY: Kluwer Academic, 2004. 417–426.
- Kirsch, Gesa. "Methodological Pluralism: Epistemological Issues." *Methods and Methodology in Composition Research*. Ed. Gesa Kirsch and Patricia A. Sullivan. Carbondale: Southern Illinois UP, 1992. 247–269.
- Kress, Gunter. "Visual and verbal modes of representation in electronically mediated communication: the potentials of new forms of text." *Page to Screen: Taking Literacy into the Electronic Era*. Ed. Ilana Snyder and Michael Joyce. NY: Routledge, 1998. 53–79.
- Marsh, Jackie. *Popular Culture, New Media and Digital Literacy in Early Childhood*. NY: Routledge, 2004. 240.
- Mason, Robin and Frank Rennie. *The E-Learning Handbook: Designing Distributed Learning*. NY: Routeledge, 2008. 194.

- Merchant, Guy. "Writing the Future in the Digital Age." *Literacy*: 41.3 (Nov. 2007): 118–128.
- Nelson, Mark Evan, Glynda A. Hull and Jeeva Roche-Smith. "Challenges of Multimedia Self-Preservation: Taking, and Mistaking, the Show on the Road." *Written Communication*: 25.4 (Oct. 2008): 415–440.
- O'Reilly, Tim. "What Is Web 2.0: Design Patterns and Business Models for the Next Generation of Software." Oct. 6th, 2008. <http://www.oreillynet.com/pub/a/oreilly/tim/news/2005/09/30/what-is-web-20.html>
- Penrod, Diane. *Composition in Convergence: The Impact of New Media on Writing Assessment*, NY: Routledge, 2005. 448.
- Strauss, Anselm and Juliet Corbin. *Basis of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. Thousand Oaks: Sage Publications, 1998.
- Stroupe, Craig. "The Rhetoric of Irritation: Inappropriateness as Visual / Literate Practice." *Defining Visual Rhetorics*. Ed. Charles A. Hill and Marguerite H. Helmers. Mahwah: Lawrence Erlbaum Associates, 2004. 243–258.
- Walsh, Maureen. "Worlds Have Collided and Modes have Merged: Classroom Evidence of Changed Literary Practices." *Literacy*: 42.2 (July 2008): 101–108.

APPENDIX A: SURVEY QUESTIONS

Usage

1. I often include digital technologies, such as sound, movie clips, slideshows, videos, or animation, to complete homework or classroom assignments for English classes.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

2. My English teachers often use digital technologies in the classroom.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

3. My English Professors often ask me to read or post assignments that are saved to a digital source, like SeaPort, WebCT, Blackboard or Randall Library's electronic reserve.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

4. I often use my English professors' personal Web sites to access course materials.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

5. I often use social-networking sites, like Facebook or MySpace, when completing English assignments.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

6. I often use blogs, wikis, or other Web 2.0 technologies when completing English assignments.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

Technology Relationships

7. It is likely that I will visit my professors' Web sites.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

8. I see technology and my future profession as closely related.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

9. I see technology and basic studies classes as closely related.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

10. I see technology and literacy as closely related.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

11. I see technology and English studies as closely related.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

Proficiency

12. I am proficient with Microsoft Word.
- 1- Strongly Disagree
 - 2- Disagree
 - 3- Agree
 - 4- Strongly Agree
13. I am proficient with Microsoft PowerPoint.
- 1- Strongly Disagree
 - 2- Disagree
 - 3- Agree
 - 4- Strongly Agree
14. I am proficient with Graphics Creation or Image and Photo Editing software, such as Adobe Photoshop and Adobe Fireworks.
- 1- Strongly Disagree
 - 2- Disagree
 - 3- Agree
 - 4- Strongly Agree
15. I am proficient with Web site design software such as Adobe Dreamweaver and Microsoft FrontPage.
- 1- Strongly Disagree
 - 2- Disagree
 - 3- Agree
 - 4- Strongly Agree
16. I am proficient with video editing software like Adobe Premier or Final Cut Pro.
- 1- Strongly Disagree
 - 2- Disagree
 - 3- Agree
 - 4- Strongly Agree
17. I am proficient with social-networking sites like Facebook or MySpace.
- 1- Strongly Disagree
 - 2- Disagree
 - 3- Agree
 - 4- Strongly Agree

18. I am proficient with blogs, wikis, or other Web 2.0 technologies.

- 1- Strongly Disagree
- 2- Disagree
- 3- Agree
- 4- Strongly Agree

Demographics

19. What is your gender?

- Male
- Female

20. What is your class rank?

- First-year, Sophomore
- Junior, Senior

21. In which of the following English classes are you currently enrolled? Check all that apply.

- English 101
- English 201
- English 110
- English 103
- English 204

22. What is your estimated GPA?

- 3.5 - 4.0
- 3.0 - 3.4
- 2.5 - 2.9
- 2.0 - 2.4
- Lower than a 2.0

23. At what age did you begin to have access to a household computer?

Choose the age at which you began to have regular access to a computer in your home, or access to a personal or family computer. Do not include access to a school, library or public computer when answering this question.

- 0-5
- 5-10
- 10-15
- 15-20

I have never had access to a household computer

APPENDIX B: FOCUS GROUP QUESTIONS

1. What kinds of technologies do you use the most in your English courses?
2. How comfortable do you feel using digital technologies when completing assignments for your English courses?
3. What kind of technologies do you want to learn more about in your English courses?
4. What kinds of technologies do you feel like you need to learn about before graduating in order to be marketable to your career field?

Subcreation as Synthesis of Language and Myth: The Power and Purpose of Names and Naming in Tolkien's *The Children of Húrin*

Stephanie Ricker

Campbell University

Faculty Mentor: Frank Vaughan, PhD

English Department

Campbell University

THE CHILDREN OF HÚRIN can be considered the genesis as well as the culmination of all of J.R.R. Tolkien's works. While *The Children of Húrin* is among the most recently published of Tolkien's writings, the various texts drawn together to form this tale are among his earliest written. The tale epitomizes the synthesis of ideas that Tolkien strove to express in the vast body of his mythopoeic literature. With his extensive knowledge of linguistics, mythology, and religion, Tolkien was well aware of the implications and the power behind names and naming. In *The Children of Húrin*, he utilizes archetypal principles of naming drawn from a variety of sources, and he uses the biblical Old Testament concepts of naming and the power of names themselves, forging the story into one of great mythological and linguistic significance by tying it to these religious traditions. In so doing, this story as myth becomes a form of subcreation, brought into being by the power inherent within the names of the characters in the myth.

Tolkien's mythopoeic texts, including *The Children of Húrin*, were written initially from a linguistic background; thus an analysis of these texts first requires an understanding of language, myth, and the interconnectivity between these two. For the purposes of this analysis, mythology is defined as creative narrative which expresses a deep, universal truth; myth is fundamentally true, even if the literal events in it never happened. Quoted in Cassirer's *Language and Myth*, Max Müller states, "Mythology is inevitable, it is natural, it is an inherent necessity of language, if we recognize in language the outward form and manifestation of thought; it is in fact the dark shadow which language throws upon thought, and which can never disappear till language becomes entirely commensurate with thought, which it never will" (5). For Müller, mythology is the natural outcome of language, which is itself insufficient to express thought. However, mythology is not subordinate to language; on the contrary, it is "the power exercised by language on

thought in every possible sphere of mental activity" (qtd. in Cassirer 5). Cassirer ce-ments the connections between thought, language, and myth. He believes that both language and myth emanate from the same point, from "metaphorical thinking; the nature and meaning of metaphor is what we must start with if we want to find, on the one hand, the unity of the verbal and mythical worlds, and, on the other, their difference" (84). The culmination of metaphorical thinking is naming: an object is called by a word, and the word equals the object. Thus the power of metaphorical thinking is the power of both myth and language, and both myth and language rely on this metaphorical thinking in naming.

Tolkien's approach to the connection between myth and language is balanced by his love for both of these concepts. As a philologist, he was fascinated not only by language, words, and their origins, but also by their effect in the past, as demonstrated by his love of history and his attempt to create a mythic history in such works as *The Children of Húrin*. His

unparalleled mastery of ancient tongues convinced him that words are rooted in reality because speech arises out of experience... For him, language and myth were inextricably linked and equally valid. Against the reductionist view that "language is a disease of mythology," therefore, Tolkien argued that in myth lies the real origin and continuing power of language. (Wood 33)

Tolkien's mythopoeic works illustrate this equal and vitalizing bond between language and myth. Language is the paintbrush Tolkien uses to create his myth. It is a powerful tool, and "for Tolkien, language is never neutral. As our most precious gift, it is always loaded with implication, always employed for either good or ill" (Wood 36). In mythology, the most important part of language is the name, whether of a god or a person or a thing, as is shown in *The Children of Húrin*. In studying myth

written by Tolkien, one must bear in mind "that for a medieval philologist the natural confluence of history, language, and personal thinking comes at the point of name" (Jeffrey 107). Jeffrey further argues that, from this perspective, language becomes the mediator of mankind's view of history and that "the very closest and most faithful mediation of language" is "made possible by the meaning of names" (111). Names are the links in the chain binding language and myth together, the most vital part of the connection between the two.

While Tolkien was undeniably in love with mythology and history, he viewed these things through the lens of Christianity. Though Tolkien's Christianity is not explicit in his works, the strong moral undercurrent and underlying themes of his stories lend a decidedly Christian flavor to his created mythology. For Tolkien, naming in mythology does not carry the same weight as naming in the religious tradition; mythology can never be more true or more important than the true Myth, that of the Bible. Thus, in Tolkien's view, naming in mythology is a reflection of biblical naming. Tolkien's created myths fall into the same category, as *The Silmarillion* and related texts mirror naming principles specifically from the Old Testament, to which they are closest in tone and scope. (The New Testament, while containing ample naming principles as well, opens up different concepts of naming which are beyond the scope of this analysis.) To understand the reflection (naming in *The Children of Húrin*), one must first understand what Tolkien saw as the original image (naming in the Old Testament).

To begin quite literally at the beginning, naming in the Old Testament is first introduced in terms of creation. In Genesis 1, as God creates the world, He "[calls] the light Day, and the darkness He call[s] night" (The New King James Version, Gen. 1:5). He names Heaven, Earth, and the Seas as He creates, equating the power of creation with the power of naming (Gen. 1:8,

10). In this instance, the word translated “called” literally means in the Hebrew “to call out,” calling something or someone by its proper name (Strong’s #7121). God, by knowing the name of the thing to be created, actually calls the thing into being. This concept of naming is shared by both religion and mythology, and in both the Word “becomes a sort of primary force, in which all being and doing originate. In all mythical cosmogonies, as far back as they can be traced, this supreme position of the Word is found” (Cassirer 45). Cassirer argues that “in the creation accounts of almost all great cultural religions, the Word appears in league with the highest Lord of creation... Thought and its verbal utterance are usually taken directly as one; for the mind that thinks and the tongue that speaks belong essentially together” (45–46). Therefore, creation through naming is a part of metaphoric thought, the connection between language and myth.

With this perspective, God’s creation of thinking, speaking man takes on new significance, for the newly-created man is also a namer. According to the biblical account, one of the first things God does after creating Adam is to bring all of the animals before him “to see what he would call them. And whatever Adam called each living creature, that was its name. So Adam gave names to all cattle, to the birds of the air, and to every beast of the field” (Gen. 2:19–20). In these verses, the Hebrew word translated “name” means “an appellation, as a mark or memorial of individuality; by impl. honor, authority, character” (Strong’s #8034). God allowed Adam to participate in subcreation, mankind’s creative action within the larger creation of God, as Adam was given authority to call the animals by their proper name for the first time. Cassirer argues that by “this act of appellation, man takes possession of the world both physically and intellectually—subjects it to his knowledge and his rule” (83). The concept of the namer having

power over the named is one that appears throughout mythology and Tolkien’s works. However, far from being merely an exercise in power over another, “Naming introduces distinction into chaos... On this principle, Adam names animals to define the world of creatures; Elohim (Genesis 1) designates the irreducible elements (day/night) of creation... Nomenclature establishes the place of the named, its right relationship to all about it” (Halpern 627). Naming thus becomes a form of moral order, a way to establish the true place of a thing within the universe.

The power of subcreation, the gift given to us by God to expand upon his creation, is the driving force behind Tolkien’s works as mythology. Wood states, “As Tolkien reiterates endlessly, we ourselves are makers because we have been made” (13). Tolkien desired to use his subcreative ability to make a new mythology, one that he thought his country lacked. In a letter he states, “I had in mind to make a body of more or less connected legend, ranging from the large and cosmogonic, to the level of romantic fairy-story—the larger founded on the lesser in contact with the earth, the lesser drawing splendour from the vast backcloths” (qtd. in Wood 19). While Tolkien called this dream “absurd,” feeling that he could never achieve such a creation, many would argue that he has indeed done so (Wood 19). Jeffrey posits that naming is the vehicle which has allowed this to come to pass, for “in the making of his subcreation and in the response it evokes, Tolkien invites us to see subcreation in Adam’s terms, as naming” (115). For Tolkien, naming is the root of all creation. “Names [are] also a source of inspiration and [provide] creative impulse” (Lee and Solopova 50). The name is the spark of all that is to come, as Tolkien explained in one of his letters: “To me a name comes first and the story follows” (qtd. in Lee and Solopova 50).

One of the building blocks of this foundation of naming is the idea that the name

of a thing and the essence of a thing are entwined. Cassirer argues that this concept is connected to the creation of myths: "the notion that name and essence bear a necessary and internal relation to each other, that the name does not merely denote but actually is the essence of the object, that the potency of the real thing is contained in the name—that is one of the fundamental associations of the mythmaking consciousness itself" (3). This concept is consistent with Adamic naming, as the name defines and imposes order and thus is closely linked to its referent. In mythology, the link is strengthened nearly to the point of the name becoming inseparable from the referent, as "even a person's ego, his very self and personality, is indissolubly linked, in mythic thinking, with his name" (Cassirer 49-50). The person literally is his own name. The name may become "an integral part of its bearer... As such it is in the same category as his body or soul. It is said of the Eskimos that for them man consists of three elements—body, soul, and name... And of all these three elements it is just the last-mentioned which becomes more and more the expression of a man's 'self,' of his 'personality'" (Cassirer 50). In other words, a person's individuality and personal expression are also embodied by the name, the one aspect of being that the person has the ability to create.

This idea is ubiquitous throughout nearly all mythologies and many cultural beliefs as well. In his analysis of the origins of mythology in relatively undeveloped cultures, Frazer states, "Unable to discriminate clearly between words and things, the savage commonly fancies that the link between a name and the person or thing denominated by it is not a mere arbitrary and ideal association, but a real and substantial bond which unites the two" (284). While Frazer misunderstands the deeper purposes behind mythology and considers such concepts of naming to be beneath

the civilized individual, his observation is valid as it relates to the cultures he studied. Cassirer comments that

[e]ven in far more advanced cultures this connection between name and personality continues to be felt. When, in Roman Law, the concept of the "legal person" was formally articulated, and this status was denied to certain physical subjects, those subjects were also denied official possession of a proper name. Under Roman law a slave had no legal name, because he could not function as a legal person. (50–51)

Possessing a name is vital to one's freedom and individuality; in this context, the nameless are less than people, as they are missing an essential part of their being.

The idea of a name being, at the very least, a personal possession and, at the most, the very essence of one's being means that the name of an individual must be protected at all times. If indeed "the name is what first makes man an individual," then no less than the individuality of the person is at stake if the name were to be misused (Cassirer 50). Frazer's analysis shows that many tribal peoples believe that an individual could be harmed if someone with evil intent gained the knowledge of his name. Nicknames become a way to fend off those who would do harm to a person's true name, as "these secondary names are apparently held to be no part of the man himself, so that they may be freely used and divulged to everybody without endangering his safety thereby" (Frazer 288). On the other side of the spectrum, loved ones remembering the name of an individual preserve that individual even after death because "the being and life of a person is so intimately connected with his name that, as long as the name is preserved and spoken, its bearer is still felt to be present and directly active. The dead may, at any moment, be literally 'invoked,' the moment those who survive him speak his name"

(Cassirer 52). This knowledge of another's name grants the deceased a measure of immortality; if the name survives in memory, so also does a portion of the person.

The power of names in mythology as illustrated by these concepts is also present in the Bible, and Tolkien's mythology draws heavily from both mythological and biblical sources to form a cohesive principle of naming. Dietrich, quoted in Cassirer's *Language and Myth*, states:

The fact that the name functions as proxy for its bearer ... that a name is feared because it is a real power; that knowledge of it is sought because being able to speak it bestows control of that power on the knower – all these facts indicate clearly what the early Christians were still feeling and trying to express when they said "In God's name" instead of "in God," or "In Christ's name" for "In Christ." (53-54)

Mary Zimmer expands upon this idea in her analysis of "word magic" and "name magic" in Tolkien's works: Middle-earth is subject to the same "conclusion advanced by Cassirer with regard to this earth, primarily that 'all word magic and name magic is based on the assumption that the world of things and the world of names form a single undifferentiated chain of causality and hence a single reality'" (50). This harkens back to Adamic naming and its establishment of the correct order of being. The single reality is uncovered by knowing the true name of the object or person.

The concept of the "right" or "true" name is a vital one to Tolkien's works in light of biblical and mythological understanding of naming. Zimmer goes so far as to say that "the true name is to human language what the divine idea is to the Word: both the true name and the divine idea express the intelligible form of the thing whose name or idea it is" (53). It then becomes exceedingly important to give a person, particularly a child, the right, true

name because the name establishes his or her place in the order of the world. All other considerations of naming must bow before this one. This belief is extant in Middle-earth, for "the fact that naming by 'true names' is common in Middle-earth is clear not only by the number of instances of such naming, but also by the characters' attitudes towards the practice" (Zimmer 55). In *The Lord of the Rings*, "Gandalf expresses the ancient belief that the relationship between names and what they signify ought to be one of 'right reasoning' rather than 'idle fancy.' The relationship between a word and its referent is based on 'right reasoning' if one is able to reason from the word to that which it denotes" (Zimmer 55). The giving of the true name illustrates wisdom on the part of the namer, establishing the position of the thing to be named.

This true name is of such importance to the inhabitants of Middle-earth that they will go to great lengths to protect it and keep it sacred; it is the true expression of who they are. The true names of Dwarves and Elves are in their own languages and are kept secret. Dwarves never reveal their true names to anyone of a different race and, according to Zimmer, do not even record their true names on their tombs (56). As in the mythologies noted earlier, the inhabitants of Tolkien's world practice "two forms of 'name magic': the tabooing of proper names and the changing of a person's name to signify a substantial change in the person" (Zimmer 50). The Dwarves hide their names, for in order "to protect oneself from the effects of magic, one must protect one's true name, preventing its use and employing false names instead" (Zimmer 56). As in myth, names in Tolkien's world must change as the person changes. In *The Lord of the Rings*, the names of the Ents "tell you the story of the things they belong to" (LR 3.4, 454). Because these names intelligibly resemble the things they denote, as those things grow and change, so too do

their names" (Zimmer 56). Renaming "is the taking on of a new name to signify a change in being," as will be clearly shown with the names in *The Children of Húrin* (Zimmer 57). This takes the concept back to that of biblical naming, where renaming "implies a new or renewed conformity of essence with nomenclature, a return to the magical precision of divine or Adamic language" (Halpern 627). The name may be changed to better reflect the person's place in the order of the world.

If creation, and certainly subcreation, proceed through naming, then the lack of a name becomes a sort of uncreation, a destruction of the unnamed thing. The name of the mouth of Sauron in *The Lord of the Rings* "is remembered in no story" and he himself has forgotten it, an example of the ultimate "loss of being concomitant with a loss in name" as he now has no individual identity (Zimmer 58). He is "absent from the divine mind," having become the product of uncreation rather than creation (Zimmer 58). With this concept in mind, "it is not surprising, then, that Sauron is referred to as the 'Nameless Enemy' (LR 2.2, 239); banished from the divine mind, evil things become nameless" (Zimmer 58). By not speaking his name aloud, the inhabitants of Middle-earth relegate him to an uncreated thing, diminishing his power. If "the practice of naming and renaming continually reaffirms the existence of the good, and in that sense, continually re-creates it," then not naming evil is a defense against it, "for to name is to create" (Crabbe 160). Naming, inherently powerful, easily becomes dangerous if right reason is not exercised.

Tolkien's works encompass these mythological and biblical principles of naming and combine them to form a synthesis of the conceptual power of names. The many names in Tolkien's cohesive body of work (there are over 800 names listed in the index to *The Silmarillion* alone) "foster the essential verisimilitude by grounding the story firmly

in a geographical and cultural context" (Turner 32). The depth behind them allows Tolkien to use "names as witnesses to the history and customs of different lands, races and peoples: names give evidence of ethnic and family origin of characters, position in society and personal qualities. Most names invented by Tolkien are meaningful and motivated by what is known about their owners" (Lee and Solopova 50). In older mythologies, "names were words of ordinary vocabulary and had the same relationship with their referents as any other words: their function was to describe a person or an object" (Lee and Solopova 50). Just as "names found in Old English poetry are usually meaningful and reflect the personality of the bearers," so too are Tolkien's names (Lee and Solopova 51). *The Children of Húrin*, a tale reconstructed from various finished and unfinished Tolkien texts, is the culmination of Tolkien's principles of naming. Tolkien wrote it as a true legend, following the principles of naming present in mythology, not out of an attempt to turn a carefully crafted story into a pseudo-myth, but instead as the natural outcome of a story that contained within it all the power of a genuine mythology.

The story of Túrin can be seen as the beginning of Tolkien's creation of Middle-earth; he began it before he began any of his other, more famous works. Tolkien found inspiration for the story of Túrin in the *Kalevala*, a book of Finnish mythology he read while a soldier in World War I. As early as 1914, he wrote to his future wife on the subject of the *Kalevala*, stating "Amongst other work I am trying to turn one of the stories—which is really a very great story and most tragic—into a short story somewhat on the lines of [William] Morris's romances with chunks of poetry in between" (Letters 7). Fifty years later, Tolkien wrote to Christopher Bretherton that "the germ of my attempt to write legends of my own to fit my private languages was the tragic tale of the hapless Kullervo

in the Finnish Kalevala" (Letters 345). The Finnish influence on names can be seen in the original draft notes for the poem that he composed that would later become *The Children of Húrin*. Tiranne, Vainoni, and Kuruki, all names that are Finnish in sound and meaning, would later become Morwen, Niënor, and Glaurung, names constructed from Tolkien's languages as his mythology developed (Lost Tales 138).

To understand the importance of names in *The Children of Húrin*, some background information is required on the names themselves within the created, mythological world of Middle-earth. The names in the tale are primarily derived from Tolkien's Elvish languages, but some also draw from Old English. The Elves "and others who took names in the Elvish languages, customarily used several different kinds of names" (Salo 339). The first of these was the "Father-name, a name chosen for the child at birth by his or her father and whose owner could not alter it. It often resembled the father's name" (Salo 339). The second was the "Chosen Name, a name chosen (usually newly invented) by a child at about the age of ten, expressing his or her own preferences in the language. Other chosen names might be added later in life" (Salo 339). After these, a variety of given or added names might be used, such as the "Mother-name . . . a special name given by a mother to her child, often expressing a special insight into the child's nature or foresight of its fate," or nicknames, "names by which a person was commonly known, but not his or her true name," including "names given by others, like Mormegil Blacksword," and "names of personal choice . . . chosen by a person either as a disguise or in reference to his or her own history" (Salo 339). The vast array of names within *The Children of Húrin* alone necessitates that this analysis limit itself to these types of personal names, excluding place and object names.

The first personal name of significance within the tale is that of Húrin, Túrin's

father, and Húrin's names give insight into his character and show how his influence will be felt throughout the story. Húrin is a powerful warrior of Dor-lómin, a land often plagued by Morgoth's evil forces. He and other Men go with the Elves to war against Morgoth in an attempt to defeat him. The battle is an utter disaster: Húrin manages to survive, but he is captured by Morgoth. In Sindarin Elvish, Húrin (Úrin in the earliest manuscripts) means "mind of vigor," and this name describes his character exactly (Salo 353). Though Húrin is captured, he will not bend to Morgoth's will; and he never gives in throughout the long years of his captivity. He is a lord of the House of Hador, a noble race of Men, and is sometimes called Hadorion ("son of Hador") as one of his nicknames. He is often referred to as Húrin the Steadfast, Thalion or Erithámrod in the Elvish tongue. "Thalion" is a Sindarin word translated "strong, steadfast, dauntless," a "hero, dauntless man," and such is Húrin, who does not allow himself to be daunted by Morgoth, a being immeasurably more powerful than he is (Salo 358). He rejects Morgoth's offer to become one of his captains, and he refuses to give Morgoth the information he seeks, though Morgoth promises to free Húrin if he will do so. Living up to his name, "Húrin the Steadfast [mocks] him, saying: 'Blind you are, Morgoth Bauglir, and blind shall ever be, seeing only the dark. You know not what rules the hearts of Men, and if you knew you could not give it. But a fool is he who accepts what Morgoth offers'" (Húrin 62-63). By remaining true to the meaning of his name, Húrin sets a standard of bravery and hope for his son to emulate later. Heroism and the power of his name become tools to overcome Morgoth.

Unfortunately, Húrin's actions, however brave, do not negate Morgoth's power. Morgoth vows, "Yet I may come at you, and all your accursed house; and you shall be broken on my will, though you all were made of steel" (Húrin 63). In *The Lost Tales*

version, Morgoth tells Húrin that “the life of Túrin thy son shall be accounted a matter for tears wherever Elves or Men are gathered for the telling of tales” (Lost Tales 71). Húrin does not quail before such a curse, and he speaks some of the most important words in the tale when he answers Morgoth: “You speak in vain. For you cannot see them, nor govern them from afar” (Húrin 63). Húrin retains his hope and his belief in free will, even in the face of Morgoth’s curse. He holds to his right name, Steadfast, and refuses to doubt. At the same time, he believes that heroism can alter the course of events, and when Melko (Morgoth) curses his son in The Lost Tales version, Úrin (Húrin) answers, “At least none shall pity him for this, that he had a craven for a father” (Lost Tales 71). Thus Húrin speaks the doctrine of indomitable will that Tolkien analyzes in his scholarship of Old English poetry: the idea of persevering in the face of inevitable defeat as the true definition of heroism.

Húrin is physically defeated but refuses to acknowledge it; he still retains his inner freedom. Though Morgoth can kill or torture him, he cannot break his spirit. Morgoth expands upon the curse he has placed on Húrin’s family as he claims that all will eventually bend to his will: “upon all whom you love my thought shall weigh as a cloud of Doom, and it shall bring them down into darkness and despair. Wherever they go, evil shall arise. Whenever they speak, their words shall bring ill counsel. Whatsoever they do shall turn against them. They shall die without hope, cursing both life and death” (Húrin 64). He condemns Húrin to see all that Morgoth sees and to hear all that Morgoth hears, forcing him to watch helplessly from Morgoth’s perspective all that occurs in the world. Nevertheless, Húrin clings to the philosophy of his name, believing that “Aurë entulva! Day shall come again!” (Húrin 59-60).

Thus, through the power of name, Húrin becomes the heroic ideal in this myth.

Húrin’s deeds in life had won a name for him; his defiance in what he thought was his death made him truly heroic, a thalion. Had his son followed in his footsteps in belief as well as in mighty deeds, Túrin’s life might have been a happier one. As a young boy, he is told that he possesses the seed of his father’s greatness: “For though you are yet small you have the makings of a valiant man, worthy to be a son of Húrin the Steadfast, if that were possible. For the name of Húrin was held in honor in all the lands of the Elves” (Húrin 76). Túrin feels a fierce love and admiration for both of his parents and defends their names, particularly that of his father. He shows that he understands his father’s philosophy, defending his father’s hopeless fight against Morgoth when he says, “The defiance of Húrin Thalion is a great deed; and though Morgoth slay the doer he cannot make the deed not to have been. Even the Lords of the West will honor it; and is it not written into the history of Arda, which neither Morgoth nor Manwë can unwrite?” (Húrin 161). Túrin recognizes within himself the ability to emulate his father’s decision to make the honorable decision in the face of his own death.

Húrin placed a name upon his son that gave him the power to do what was right. Húrin bestowed on his son the name of Túrin, his Father-name and his true, right name. Túrin means “having a mind (suitable) for victory” and is remarkably similar to Húrin’s name in sound as well as meaning (Salo 358). Túrin son of Húrin is how he is named when he is most himself. Húrin calls him the Heir of the House of Hador, passing on his noble lineage (Húrin 45). Húrin is a light-hearted, hopeful man, while his wife Morwen, the mother of Túrin, is of a graver and prouder disposition. Morwen’s name (Mavwin or Mavoinë

in *The Lost Tales*) means “dark maiden,” so called for her dark hair, but perhaps for the dark, unyielding side of her character as well (Salo 356). She is also known as Eledhwen (“maiden like an Elf”) for her great, distant beauty (Salo 347). Together Húrin and Morwen would have balanced out one another’s influence; but with Húrin in captivity, Túrin only has his mother’s influence, one of pride and vengeance, though she loves her son deeply. She addresses him as “son of Morwen” instead of “son of Húrin” when urging him to seek revenge against Morgoth for his crimes against their family (Húrin 40). In so doing, she calls Túrin after her vengeful side rather than his father’s calmer personality.

The giving of Túrin’s rightful, true name establishes his place in the world, just as in biblical naming. The naming of children is an extremely important concept in terms of how the child will live his life because the name chosen by the parents expresses the child’s purpose. Sometimes the name of the child is an attempt to name the future and to shape it. Mirroring this concept, the name of Túrin expresses the purpose that Húrin hoped his son would achieve. In the Old Testament, the child’s name is often associated with important or emotionally-charged events happening near the child’s birth. While in Egypt, far from his kin, Joseph named his sons Manasseh (“Making Forgetful”) and Ephraim (“Fruitfulness”), saying, “God has made me forget all my toil and all my father’s house,” and “God has caused me to be fruitful in the land of my affliction” (Gen. 41:51-52). Túrin was also born during a dark time for Húrin and Morwen, but his name expresses the hope that he will surmount the challenges of his era. Clearly, names in mythological and biblical tradition, even when improperly given, still carry a good deal of power, as shown in the story of Jabez (“He Will Cause Pain”), so named because his mother “bore him in

pain” (1 Chron. 4:9). When he was older, “Jabez called on the God of Israel saying, ‘Oh, that You would bless me indeed, and enlarge my territory, that Your hand would be with me, and that You would keep me from evil, that I may not cause pain!’ So God granted him what he requested” (1 Chron. 4:10). Jabez felt that his name was indicative of his fate, and he wished to change that fate. That he was successful with God’s help is significant, showing that free will is not negated by one’s name. This is an important concept to note; Tolkien’s Christianity deeply impacts his writing, and finding the balance between fate (often connected to name) and free will is one of the central issues in *The Children of Húrin*.

One of the most significant incidences of naming in *The Children of Húrin* is that of Túrin’s younger sister. She is named Urwen at birth, meaning “maiden of heat” (Salo 359); however, she is called Lalaith, meaning “laughter,” by all who know her (Húrin 34). So merry is she that the spring near her home is known as Nen Lalaith, the spring of laughter (Unfinished Tales 58). Both Túrin and Lalaith fall ill when a plague, sent by Morgoth, sweeps the land. Urwen dies, but Túrin recovers. When he asks after Lalaith, his nurse tells him, “Speak no more of Lalaith, son of Húrin; but of your sister Urwen you must ask tidings from your mother,” showing the difference in significance of the two names the child had been called (Húrin 40). Túrin asks his mother about Urwen and why he must “not say Lalaith any more” (Húrin 40). Morwen replies, “Because Urwen is dead, and laughter is stilled in this house” (Húrin 40). The death of the bearer of the name brings about the death of the named characteristic, both literally and figuratively. In her grief, Morwen gives no comfort to her son, who “[weeps] bitterly at night alone, though to Morwen he never again [speaks] the name of his sister” (Húrin 40). The

power of this disappearance of Lalaith from Túrin's life cannot be underestimated: after her death, laughter is stilled; the name and the named disappear. Morwen did wrong to banish the name of her daughter; destroying or forgetting a name is always a terrible fate in biblical and mythological naming. In her sorrow, Morwen cannot bear to hear the name of her child spoken and thus does not preserve the name, yet in so doing she harms both her deceased daughter's memory and also her living son. Forever afterwards, Túrin seeks "in all faces of women the face of Lalaith," a search that would come to haunt him (Unfinished Tales 147, note 7).

After Lalaith's death, Túrin's only friend is Sador, a crippled vassal of Húrin. He brings a touch of kindness to Túrin's life, and Túrin in turn names him, calling "him Labadal, which is 'Hopafoot,' though the name [does] not displease Sador, for it [is] given in pity and not in scorn" (Húrin 41). This marks the first of Túrin's naming of others, and it is a point in his favor that the name is given in love. As with the difference between Urwen and Lalaith, so is the difference between Sador and Labadal; the names almost seem to reflect different people. One denotes the vassal who has pledged to do his duty by his lord, and the other denotes the friend of a young boy. When Túrin is preparing to leave home to escape the predations of invaders, Sador tells him, "Labadal does not want you to go; but Sador servant of Húrin will be happier when Húrin's son is out of the reach of the Easterlings" (Húrin 74). The change in name refers to two different sides of Sador's personality.

The hardness of Túrin's character, a quality that will shape his fate, is forged early in his young life. One day when Túrin asks Sador why Men fled here from over the Mountains, Sador is unable to give account of their coming, for "even their names are forgotten" (Húrin 43). He tells

Túrin, "It may be that we fled from the fear of the Dark, only to find it here before us, and nowhere else to fly but the Sea.' 'We are not afraid any longer,' said Túrin, 'not all of us. My father is not afraid, and I will not be; or at least, as my mother, I will be afraid and not show it'" (Húrin 43). With that, "it seemed then to Sador that Túrin's eyes were not the eyes of a child, and he thought: 'Grief is a hone to a hard mind'" (Húrin 43). Early on, Túrin equates fear with namelessness and those of weak will, viewing these qualities with contempt. He knows himself to be brave, and he becomes prideful in this knowledge, thinking it alone will be enough to overcome anything he might face.

The hardening of Túrin's character becomes clearer when he is forced to flee his home. In her pride, Morwen is reluctant to ask the Elves of the hidden kingdom of Gondolin for help, as her husband had advised her to do before his capture. Finally, however, she sees no other way to keep her son from thralldom. She herself refuses to go, being close to delivering her next child and not wishing to lower herself before King Thingol, ruler of Gondolin. Túrin leaves his mother, but "this [is] the first of the sorrows of Túrin" that will harden him (Húrin 75). Thingol and his wife Melian hospitably send word to Morwen to join her son, but she still refuses; and "Melian [is] moved with pity, perceiving [Morwen's] mind; and she [sees] that the fate which she foreboded could not lightly be set aside" (Húrin 78). This becomes "the second sorrow of Túrin," and the example of his mother's pride and unbending will is one that would affect the rest of his life, as Melian, with powers of her own, foresaw and tried to avert through kindness (Húrin 78).

As soon as he is old enough, Túrin goes forth with the Elves in skirmishes and battles against Orcs, earning himself a reputation as a warrior and preferring the wilds

and a life of battle to the gentle halls of Thingol and Melian. He wears the famous Helm of Hador, a Dragon-helm passed down from his father's line; so fiercely does he defend the lands surrounding Gondolin that Orcs shun that region and flee at the very sight of the helm. He becomes known as Gorthol, the Dread Helm; and "one only [is] mightier in arms among the march-wardens of Thingol at that time than Túrin, and that [is] Beleg Strongbow," Túrin's best friend among the Elves (Húrin 86). "Beleg and Túrin [are] companions in every peril, and [walk] far and wide in the wild woods together" (Húrin 86). Many saw in Túrin the characteristics of his father, as "word [runs] through the woods" that "the Dragon-helm of Dor-lómin was seen again," "saying: 'Can the spirit of any man return from death; or has Húrin of Hithlum escaped indeed from the pits of Hell?'" (Húrin 85-86). By taking on the helm of his father and gaining his first nickname by it, Túrin links his name to that of Húrin. He becomes a fearsome warrior, yet he has little of his Húrin's lightness of heart or eternal, unquenchable hope, and his bonds with the peaceful things of this earth are being dissolved.

When Túrin returns to Gondolin from campaigning in the wilds, an incident occurs that marks the beginning of his re-naming of himself, as well as one of the first steps towards the fate which is linked to his name. Though Túrin is well-liked by most, Saeros, the counselor to the king, is contemptuous of him and sees his position as a foster-son of Thingol as a dishonor to Thingol and to the Elves. In the earlier versions, Saeros' name is Orgof or Orgol, related to the Old English word *orgol* or *orgel* meaning pride, the characteristic that will later become, quite literally, the bane of Túrin (Húrin 95). Saeros taunts Túrin and makes the mistake of insulting Morwen. In a rage, Túrin throws his drinking cup at Saeros. Depending upon the version of

the story, Saeros is either grievously hurt or accidentally killed by the force of the blow. In *The Children of Húrin*, Saeros, only wounded, cries, "How long shall we harbour this woodwose? Who rules here tonight? The King's law is heavy upon those who hurt his lieges in the hall; and for those who draw blades there outlawry is the least doom. Outside the hall I could answer you, Woodwose!" (78).

Thus Túrin is given his second nickname, a word derived from the Old English word *wasameaningaforlorn* or abandoned person, similar to "orphan" in German and Dutch (*waise* and *wees*) (Guide 175). In a way, this name fits Túrin, as he is all but orphaned. In the finale version, he is later attacked by Saeros in the woods; when he retaliates, Saeros flees in fear and is accidentally killed as he attempts to leap across a ravine. Túrin is greatly saddened by Saeros' death but refuses to defend himself to those who find Saeros' body; in his pride, he is offended that it even occurs to Thingol that he killed Saeros intentionally or that the King might dare to pass judgment on him for the crime, and he tells no one that Saeros first tried to kill him. Thingol's men try to convince Túrin to return and seek justice and the King's favor, but Túrin refuses and flees into the wild, convinced the King will attempt to capture him.

Túrin will not return to be judged because of his pride; yet if he had done so, his judgment would have been light. Thingol opens court on Túrin's case, hearing all the information "before [he] [speaks] [his] doom" (Húrin 92). The importance of doom or fate in *The Children of Húrin* cannot be overemphasized; Túrin sees it as an implacable force set in motion by Morgoth, seeking his ruin, but Thingol sees the idea of doom as justice. Had Túrin returned to seek that justice, all would have yet been well. Instead, his pride leads him astray into the very curse that he seeks to avoid. The Elves who witnessed the event tell

Thingol the true story. Though Thingol believes that Túrin's actions show "a heart hard and proud," he gives him a fair doom; he proclaims, "Such fault as can be found in Túrin I now pardon, holding him wronged and provoked . . . he shall not seek for this pardon, but I will send it to him, wherever he may be found; and I will recall him in honour to my halls" (Húrin 93, 95). Messengers are sent to find Túrin and give him this pardon, but he remains hidden, though his friend Beleg continues to search for him tirelessly.

Here Túrin renames himself for the first of many times. He falls in with a band of outlaws roaming the woods. When asked his name, he replies, "Neithan, the Wronged, I call myself' . . . and Neithan he was afterwards called by the outlaws; but though he claimed to have suffered injustice (and to any who claimed the like he ever lent too ready an ear), no more would he reveal concerning his life or his home" (Húrin 101). Túrin abides "long among the outlaws," becoming their captain (Silmarillion 239). A variant of the story in *The Unfinished Tales* posits that the knowledge that Neithan was really Túrin son of Húrin led those outlaws to accept him as leader of the band: Túrin cannot escape his true name. At last his friend Beleg Cúthalion (Beleg meaning "Mighty" and Cúthalion meaning "Strongbow," so named for his skill as an archer) finds him at his camp and tells him he has named himself wrongly: "Now at last I can tell my tidings. You are no outlaw, and Neithan is a name unfit. Such fault as was found in you is pardoned. For a year you have been sought, to recall you to honour and to the service of the King. The Dragon-helm has been missed too long" (Húrin 114). Yet Túrin's pride still will not allow him return to Thingol. Beleg calls Túrin a stubborn man and departs, leaving Túrin with the injunction, "If you wish indeed to have the Strongbow beside you, look for me in Dimbar" (Húrin 118). Beleg's strong loyalty

and friendship to Túrin do not outweigh his feelings of duty to his own people and repugnance at the outlaws Túrin leads. Interestingly, the name Cúthalion contains within it the same word, thalion, as in one of Húrin's names. Like Húrin, Beleg is steadfast in doing what is right. Túrin, however, will not give up his name Neithan, holding tightly to his grievances.

Name changing or renaming is an expression of a change in a person's life. Cassirer states that "the mythic consciousness does not see human personality as something fixed and unchanging, but conceives of every phase of a man's life as a new personality, a new self; and this metamorphosis is first of all made manifest in the changes which his name undergoes" (51). Renaming oneself is common in biblical naming as well, often the result of a traumatic or life-changing incident, as in Túrin's case. For instance, after the death of her sons, Naomi ("Pleasant") refuses to be called by that name any longer: "Do not call me Naomi; call me Mara ["Bitter"], for the Almighty has dealt very bitterly with me" (Ruth 1:20). She feels that her name is no longer an accurate representation of who she is, just as Túrin no longer feels that his name is representative of who he is.

During his time with the outlaws, Túrin hides himself from Morgoth under the guise of his new name; however, events are soon set in motion which reveal what Túrin would rather keep hidden. Though against his better judgment, Beleg returns, using his great skill to find Túrin in his hiding place at Amon Rúdh. Túrin is overjoyed to see his good friend again and regrets their previous unfriendly parting. Beleg brings with him the Dragon-helm and offers it and gifts from Melian and Thingol. Túrin kindly accepts the helm, but tells Beleg, "I will not receive gifts out of Doriath" (Húrin 140). In exasperation with Túrin's pride, Beleg retorts, "Then send back your sword and your arms. . . . Send back also the teaching

and fostering of your youth. And let your men, who (you say) have been faithful, die in the desert, to please your mood!" (Húrin 140). Túrin's ever-ready ire is aroused, but he humbles himself for the first time and answers, "I wonder, friend, that you deign to come back to such a churl. From you I will take whatever you give, even rebuke. Henceforward you shall counsel me in all ways, save the road to Doriath only" (Húrin 140). The two friends once more go to war against the forces of Morgoth as Beleg draws Túrin back to a nobler, more hopeful path: "Túrin [puts] on again the Helm of Hador; and far and wide in Beleriand the whisper went, under wood and over stream and through the passes of the hills, saying that the Helm and Bow that had fallen in Dimbar had arisen again beyond hope" (Silmarillion 245). The region becomes known as Dor-Cúarthol, the Land of Bow and Helm, where Túrin at last is happy again for a brief time (Silmarillion 245).

The whisper of the Dragon-helm resurrects Túrin's old name, and he can no longer hide from Morgoth's curse. All across the land, "the fame of the deeds of the Two Captains [is] heard; and in Angband also they [are] known. Then Morgoth [laughs], for now by the Dragon-helm [is] Húrin's son revealed to him again; and ere long Amon Rúdh [is] ringed with spies" (Silmarillion 246). The outlaws are betrayed by one in their midst, and the Orcs capture Túrin alive to take to Angband, leaving Beleg for dead. However, Beleg recovers from his wounds to hunt the Orcs who have taken Túrin. He comes across Gwindor, an Elf of Nargothrond who was captured in the great battle in which Húrin also fought and was captured. Gwindor had managed to escape his captivity; he helps Beleg sneak into the Orc camp and carry Túrin, unconscious from exhaustion and pain, from their camp.

Circumstance and Túrin's own hasty actions, not the curse of Morgoth, are what

makes this portion of the story tragic. Both Gwindor and Beleg, being in a weakened state, can carry Túrin only part of the distance away from the camp. Beleg draws his sword Anglachel (meaning "Iron of the Star of Flame," given to him by Thingol) to cut Túrin's bonds, and in so doing accidentally nicks Túrin's foot in the darkness. When the pain wakes Túrin from his haze of exhaustion, he sees a figure bending over him with a naked blade. Leaping up, he seizes Anglachel and slays "Beleg Cúthalion thinking him a foe" (Silmarillion 248). Lightning flares, revealing to him his mistake, and Túrin is horror-stricken, for "thus ended Beleg Strongbow, truest of friends, greatest in skill of all that harboured in the woods of Beleriand in the Elder days, at the hand of him whom he most loved; and that grief was graven on the face of Túrin and never faded" (Silmarillion 249). Gwindor buries Beleg and leads Túrin, lost in darkness of sorrow, away towards Nargothrond, Gwindor's home. Túrin is consumed by sorrow and self-loathing at the slaying of his friend; the death of Beleg Cúthalion is also the death of all hope of reconciliation with the Elves of Gondolin.

The grief of this event prompts Túrin to take up his next name. Gwindor travels with him to Eithel Ivrin, the Crystal Springs. Gwindor tries to pull Túrin from his grief by calling him by his true name and reminding him of his father's steadfastness: "Awake, Túrin son of Húrin Thalion! On Ivrin's lake is endless laughter. She is fed from crystal fountains unfailing, and guarded from defilement by Ulmo, Lord of Waters, who wrought her beauty in ancient days" (Silmarillion 250). Perhaps the endless laughter Gwindor speaks of reminds Túrin of his long-dead sister Lalaithe, or the purity of the springs drives the shadow from his mind, for he recovers. When the two reach Nargothrond and Gwindor begins to introduce Túrin, Túrin stops him, saying instead, "I am Agarwaen, the son of Úmarth

(which is the Bloodstained, son of Ill-fate), a hunter in the woods.' But though the Elves guessed that he took these names (not knowing other reasons), they questioned him no more" (Húrin 159-160). Agarwaen (Iarwaeth in earlier versions) now expresses Túrin's true nature as he sees it, stained by the blood of his friend, but he also seeks to conceal his name to hide from his ill-fortune.

Túrin bears many new names in Nargothrond, each illustrating a different facet of his personality. He becomes known as Adanedhel, Elf-Man, for his Elven speech, a trait carried over from his days in Gondolin. This name also illustrates the dichotomy within Túrin's character; though he is a Man, he has grown up with the Elves, a being caught between the two worlds. Though Túrin mourns for Beleg, he soon grows accustomed to living in Nargothrond and gains position and power in that city, befriending Orodreth the King. As he has work to do that he enjoys and as his life runs more smoothly, Túrin is "courteous to all, and less grim than of old, so that well nigh all hearts [turn] to him" (Húrin 164). Finduilas, a beautiful Elf maid who had been betrothed to Gwindor before he was captured, aids in the recovery of the two men; and she and Túrin become fast friends. Finduilas personifies the laughter and hope that has been gone from Túrin's life for so long. Gwindor had "named her Faelivrin, which is the gleam of the sun on the pools of Ivrin," the place where Túrin was healed of his shadow, and she brings light again into his life (Silmarillion 251). He refuses to divulge his true name, though he does tell her, "I had a sister, Lalaith, or so I named her; and of her you put me in mind"; and he says, "I would I had a sister so fair" (Húrin 164, 165). Finduilas rekindles a bit of happiness in Túrin's life which has not been present since Lalaith's death. Finduilas replies, "I would I had a brother so valiant. And I do not think that Agarwaen

is your name, nor is it fit for you, Adanedhel. I call you Thurin, the Secret" (Húrin 165). Thus Finduilas, while also recognizing the mystery in his personality, gives Túrin yet another name, one more positive than Agarwaen and one very similar to his right name.

Túrin is startled that she has come so close to his true name, but tells her nothing, living up to his close-mouthed new title. Finduilas finds herself falling for Túrin against her will. Gwindor is sadly changed from his time in captivity, but nonetheless she will not renounce her word to him, nor will she speak of her love to Túrin. Gwindor, knowing the truth about Túrin's identity and the calamity brought down on him by Morgoth and by himself at every turn, warns her against him: "A doom lies on him; a dark doom. Enter not into it! And if you will, your love shall betray you to bitterness and death.... Though he be indeed agarwaen son of úmarth, his right name is Túrin son of Húrin, whom Morgoth holds in Angband, and has cursed all his kin. Doubt not the power of Morgoth Bauglir! Is it not written in me?" (Húrin 168). Gwindor seeks to protect Finduilas from Túrin's destructiveness; influenced by his own misery at the hands of the Evil One, he sees these qualities in Túrin as a result of Morgoth's curse.

Thus Túrin's true name is named in Nargothrond for the first time, an event that Túrin sees as a betrayal that will bring him to the attention of Morgoth. Seeing himself as a danger to those around him if his identity were known, he names himself Thuringud, "the hidden foe" (Salo 358). This name may also mean that he is a secret danger to himself; in the past, his own actions have been the cause of his misery. Finduilas, though knowing that her love for Túrin is unrequited, refuses to believe that his curse or his fate is unavoidable. She replies to Gwindor, arguing that "Adanedhel is mighty in the tale of the World, and his stature shall reach yet to Morgoth in some

far day to come" (Húrin 169). She believes that he possesses the qualities needed to overcome his own fate, just as his true name, Túrin, means that he has a mind suitable for victory. At last she confronts Túrin about his true name: "Thurin Adanedhel, why did you hide your name from me? Had I known who you were I should not have honoured you less, but I should better have understood your grief" (Húrin 169). In puzzlement, Túrin asks, "Whom do you make me?" and she answers, "Túrin son of Húrin Thalion, captain of the North" (Húrin 169). Túrin fears that speaking his true name will bring the curse down upon Finduilas as well as himself, and in wrath he tells Gwindor, "In love I hold you for rescue and safe-keeping. But now you have done ill to me, friend, to betray my right name, and call down my doom upon me, from which I would lie hid" (Húrin 169–170). Gwindor answers, "The doom lies in yourself, not in your name" (Húrin 169–170). This statement is key to understanding Túrin as a character; the choices he makes are the cause of his downfall, not his fate or the curse of Morgoth.

As Túrin grows in status in Nargothrond, he takes on yet another name. He soon becomes an advisor to Orodreth on the question of whether to wage open or secret warfare on Morgoth. Advocating open fighting, Túrin builds a bridge over the river leading to the city to facilitate the passage of arms, a deed that Gwindor counsels against. Messengers sent by Cirdan warn of the dangers to Nargothrond if the city persists in this course of action, but "Túrin now [commands] all the forces of Nargothrond, and [rules] all matters of war; indeed he [is] become stern and proud, and would order all things as he wished or thought good" (Húrin 171). The messengers advise the King to "[cast] the stones of your pride into the loud river, that the creeping evil may not find the gate," referring to the bridge that Túrin had built,

thinking to send troops across it to quell Morgoth's forces (Húrin 173). Túrin does not take kindly to the implied rebuke of his authority. The occasion gives rise to another incidence of renaming, in which one of Túrin's most well-known names is created. One of the messengers asks if Túrin is of the House of Hador, to which Túrin replies, "Here I am named Agarwaen, the Black Sword of Nargothrond," naming himself after the black sword Gurthang, the reforged Anglachel (Húrin 174). Thus Túrin seeks to deflect evil from himself by yet another change in name, angrily saying, "A man's name is his own, and should the son of Húrin learn that you have betrayed him when he would be hid, then may Morgoth take you and burn out your tongue!" (Húrin 174). Seeing the seeds of Túrin's doom within him, the messenger answers, "You, it seems, will take counsel with your own wisdom, or with your sword only; and you speak haughtily. And I say to you, Agarwaen Mormegil [Bloodstained Black Sword], that if you do so, other shall be your doom than one of the Houses of Hador or Bëor might look for" (Húrin 175). Here Túrin's ill-fate is proclaimed to be his own fault, the side effect of his own character rather than the curse of Morgoth.

The taking of the name Mormegil (also called Mormael, Mormaglir, Mormagli, Mormakil), the Black Sword, is significant because prior to this point, Túrin refused to bear the sword Anglachel in token of his grief over his friend's death. Túrin names the blade Gurthang (also known as Gurtholfn, the Blacksword of the Rodothlim), Iron of Death. "So great [is] his prowess and skill in warfare on the confines of the Guarded Plain that he himself [becomes] known as Mormegil, the Black Sword; and the Elves [say], 'The Mormegil cannot be slain, save by mischance, or an evil arrow from afar'" (Silmarillion 251). He puts the grief of Beleg behind him in renaming himself and takes up the sword

again in defense of Nargothrond, his new home. Unfortunately, Túrin's counsel of open war again proves ill, as the fame of the Black Sword, well known and feared by Orcs, spreads; "thus Nargothrond was revealed to the wrath and malice of Morgoth, but still at Túrin's prayer his true name was not spoken, and rumour only spoke of Mormegil of Nargothrond" (Jewels 84). Morgoth sends Glaurung the fire drake, one of the dragons of old, to Nargothrond to wreak his vengeance. Glaurung becomes the touchstone for Túrin's fate, the embodiment of the curse of Morgoth and Túrin's difficulty in overcoming it.

Túrin's warlike name *Agarwaen* becomes more accurate than he had foreseen when he first named himself thus. The sack of Nargothrond makes Túrin rue his counsel to Orodreth. Morgoth sends innumerable forces against the city; during the battle Orodreth is killed, and Gwindor is fatally wounded. Glaurung plunders the city, slaying or capturing those left behind in the city while the warriors are kept busy by the Orcs. Grief-stricken by the plight of the Elves and feeling that he has their blood on his head as a result of his ill-given advice, Túrin manages to draw Gwindor from the fight, who urges him to find Finduilas. Speaking with the foresight brought on by near death, he tells him, "And this last I say to you; she alone stands between you and your doom. If you fail her, it shall not fail to find you. Farewell!" (Húrin 177). By saving Finduilas, Túrin can redeem his past actions, keeping light and laughter alive in spite of his curse.

Túrin's true name plays an important role in the confrontation with the dragon. Túrin races back to Nargothrond, fighting his way through until he reaches the great beast. Glaurung mocks him, saying that he wears the Dragon-helm in honor of him. Túrin bravely defies him, and an unused note in one of the versions records that he says, "Thou liest, and knowest it.

For this image was made in scorn of thee; and while there is one to bear it doubt shall ever assail thee, lest the bearer deal thee thy doom.' 'Then it must await a master of another name,' said Glaurung; 'for Túrin son of Húrin I do not fear'" (Unfinished 155). Glaurung knows Túrin's true name and calls it insufficiently powerful to master him, saying that "a fate of evil is woven about thee, and thou mayst not untangle thy footsteps from it whitherever thou goest" (Lost Tales 86). In The Lost Tales version, Túrin shrugs off Glaurung's evil glance and cries, "Nay, from this hour shall none name me Túrin if I live. Behold, I will name me a new name and it shall be *Turambar!*" (86). This time Túrin seeks not to hide from Morgoth's curse but to create a new fate by renaming himself; as *Turambar*, Master of Fate, he comes closest to this goal. So strong is Túrin's will that he is able to strive with the dragon's insidious power longer than any other man has done, though he finally succumbs to the dragon's spell. Glaurung holds him immobile as the prisoners, including Finduilas, are marched past Túrin. They depart along the very bridge that he himself ordered built, one that led to Nargothrond's downfall as it was too sturdy to be destroyed quickly when the enemy had drawn too near to fend off. Truly, his pride was in those stones, and now they are a torment to him as he hears Finduilas crying his name. Yet "not until her cries and the wailing of the captives [are] lost upon the northward road [does] Glaurung release Túrin, and he might not stop his ears against that voice that haunted him after" (Húrin 179). The sound of Finduilas calling his true name and urging him to do what is right rings forever in his ears.

The dragon cunningly withholds death from Túrin, giving him what is even more damaging: false names with enough of truth in them to cause him to despair. Glaurung releases Túrin, and the warrior tries to slay his foe; Glaurung admires

his courage, but laughs at his attempts. Though Túrin now believes himself free of the dragon's spell, it is not so; the dragon twists the truth to bend Túrin to his will. He names him, "Thankless fosterling, outlaw, slayer of thy friend, thief of love, usurper of Nargothrond, captain foolhardy, and deserter of thy kin" (Silmarillion 256). He spins a lie of Morwen and Niënor, the sister Túrin never met, claiming that he has abandoned them, "and Túrin being under the spell of Glaurung [hearkens] to his words, and he [sees] himself as in a mirror misshapen by malice, and [loathes] that which he [sees]" (Silmarillion 256). Túrin thinks himself strong enough to see the truth; and, though in anguish because of his desire to rescue Finduilas, he sees "ever in his mind the Orcs burning the house of Húrin or putting Morwen and Niënor to torment" (Húrin 181). Glaurung allows Túrin to go, doing more evil to him by releasing him than by killing him. He throws a last taunt at Túrin: "if Elf or Man be left to make tale of these days, then surely in scorn they will name thee, if thou spurnest this gift" of freedom (Silmarillion 257).

Túrin cannot bear to be held in scorn; his pride will not allow it. He feels he must seek his mother and sister, even if it means doing the dragon's will. As Gwindor had warned, his decision to do so and to abandon Finduilas seals his fate, "for of his abandoning of Failivrin in danger that he himself could see [comes] the very direst evil upon him and all he loved; and indeed his heart [is] confounded and wavered, and he [leaves] those places in uttermost shame and weariness" (Lost Tales 87). In his heart, Túrin knows that he is doing wrong; in believing he has overpowered the dragon he is overestimating himself, when in reality the dragon is manipulating him through his own pride into abandoning the right course of action. Túrin reaches the home of his mother, only to find that Morwen and Niënor are long gone, having left at last

for the safety of Gondolin several years before. Finally, Túrin sees the truth as the last of the dragon's spell falls from him, and he goes immediately to seek Finduilas, though by now all trails are cold. He reaches the Eithellvrin, the crystal pools which laughed like his long-dead sister Lalaith and served as inspiration for Finduilas' name, but they have been defiled by Glaurung in his rampage across the lands, and Túrin can drink and be refreshed there no more. When he rescues a group of men from Orcs, he names himself again, saying, "I do but follow my trade, which is Orc-slaying... and I dwell where my trade is. I am Wildman of the Woods" (Húrin 194). He disavows all lineage and all purpose in life beyond blind vengeance; his is the mechanical revenge of a nameless predator.

Túrin bitterly regrets his previous, prideful decision, falling into despair when the men tell him of the end of Finduilas. They say that, on the edge of death, "she looked upon us as though seeking one whom she had expected; and she said: 'Mormegil. Tell the Mormegil that Finduilas is here.' She said no more. But because of her latest words we laid her where she died" (Húrin 197). She does not call Túrin by his true name, or by her name for him, but by his war name, the only one of his old names that he will retain after her death. Gwindor warned Túrin that Finduilas stood between him and his doom; with her death, Thurin (the Secret) dies, and there is no hiding from Morgoth. Just as Lalaith's death meant the end of laughter in Túrin's life, so Finduilas' death means the end of the possibility of overcoming his fate. Brought down by grief and contempt at his own failings and bereft of will to live, Túrin goes to Haudh-en-Elleth, Mound of the Elf-maid, burial place of Finduilas. Now he knows the answer to the question Glaurung asked him, "Wonderest thou not wherefore I have withheld death from thee, O Túrin Mormakil, who wast once named brave?"

(Lost Tales 86). He was kept alive to suffer a more fearsome fate than a simple death by dragon fire.

Túrin, however, cannot be held down for long; he finally concludes that he must put the past and its names behind him if he is to survive. At last, “the courage of the House of Hador [awakes] in him,” and he says “in his heart: ‘All my deeds and past days were dark and full of evil. But a new day is come. Here I will stay at peace, and renounce name and kin; and so will I put my shadow behind me, or at the least not lay it upon those that I love’” (Húrin 196). With this new approach, he takes “a new name, calling himself Turambar, which in the High-elven speech signified Master of Doom; and he [dwells] among the woodmen, and [is] loved by them, and he [charges] them to forget his name of old” (Húrin 196). In *The Lost Tales*, he calls himself Turambar son of the weary forest (Turumart go-Dhruathodauros or Turambar Rusitaurion), giving himself no parentage other than the wilds (89). But the individual cannot be changed by the name; the name changes to suit the individual, and “with the change of a name he could not change wholly his temper” (Húrin 196). The old warrior spirit arises again in Túrin, and he goes to war against the servants of Morgoth again, though Brandir, the leader of the men of Brethil, hopes “rather to preserve his people by silence and secrecy. ‘The Mormegil is no more,’ [says] he, ‘yet have a care lest the valour of Turambar bring a like vengeance on Brethil!’” (Húrin 197). So Túrin puts down Gurthang, using bow and spear only; yet he will allow no Orcs near Haudh-en-Elleth out of respect for Finduilas’ memory, and the Orcs learn to shun the place.

Meanwhile, the notoriety of Túrin’s war name leads his mother and sister to seek Túrin. Word of the Black Sword comes to Morwen; not having heard definite word of her son in years, Morwen wishes to go seek

him and will not be dissuaded by Thingol and Melian. Niënor refuses to be left behind, and together they go with Thingol’s men to seek word of Túrin near the sacked city of Nargothrond, now become Glaurung’s lair. The Elves think this a dangerous errand, but admire the women’s bravery, saying: “Truly, it is by lack of counsel not of courage that Húrin’s kin bring woe to others! Even so with Túrin; yet not so with his fathers” (Húrin 203). Like Túrin, Morwen and Niënor possess the reckless courage and pride in their own abilities that make them heroic but also lead them to much of their misery. Niënor’s naming, like Túrin’s, is indicative of her situation in life. In the days of blackness during which she was born, some time after Túrin’s departure for Gondolin, Morwen “named her Niënor, which is Mourning” (Húrin 75). Yet Niënor will not be ruled by this name, and when her mother attempts to dissuade her from coming to seek Túrin, she tells her, “Mourning you named me, but I will not mourn alone, for father, brother, and mother. But of these you only have I known, and above all do I love. And nothing that you fear not do I fear” (Húrin 202). When Morwen and Niënor reach the hills near Nargothrond, Glaurung approaches, scattering the searchers’ party as their horses panic. He catches Niënor alone; as she comes over the top of the hill, she comes eye to eye with Glaurung. Because Niënor’s will is as strong as her brother’s, she is able to withstand Glaurung for a time. In the *Lost Tales* version, Morwen (there called Mavwin) is caught by Glaurung as well, and she asks if he knows anything of Túrin.

Glaurung’s answer is as twisted and deceitful as his character, and his words are fraught with the hidden power of naming. He replies,

“Lo! the names of all who dwelt here before the taking of the caves of my wisdom I know, and I say to thee that none who named himself Túrin went

hence alive." And even so was Túrin's boast subtly turned against him, for these beasts love ever to speak thus, doubly playing with cunning words. "Then was Túrin slain in this evil place," [says] Mavwin, but the dragon [answers]: "Here did the name of Túrin fade for ever from the earth—but weep not, woman, for it was the name of a craven that betrayed his friends." (Lost Tales 98)

Whatever names Túrin might be called, coward was not one of them; Niënor replies, "You lie...The children of Húrin at least are not craven. We fear you not." Then Glaurung [laughs], for so [is] Húrin's daughter revealed to his malice. 'Then you are fools, both you and your brother,' [says] he. 'And your boast shall be made vain. For I am Glaurung!'" (Húrin 208-209). The dragon knows Túrin's true name and is able to use it against him, catching his family in the same web of power. Glaurung places a spell of forgetfulness on Niënor, causing her to forget speech: the names for everything, including her own. In blind panic, she flees into the wilds, unaware of what she is doing and separated from all of her friends. In her namelessness she is one that does not exist; she has no memory and no personality. The courage and strength of character that she possessed flee with her name. Just as the animals were nameless before Adam named them, so she has no words to name the things of her surroundings. Finally, she comes into the land of Brethil, hungry and cold. Exhausted by her long wandering, she collapses on Haudh-en-Elleth, Finduilas' burial place.

In keeping with the concept that the name is equated with the personality, her renaming and relearning of the names of the world almost literally makes Niënor into a different person. Túrin still defends Haudh-en-Elleth in memory of Finduilas, and there he finds Niënor. He comforts her and questions her concerning her origins, but she cannot remember and weeps in frustration. Túrin tells her, "I will give

you a name, and call you Níniel, Maid of Tears.' And at that name she [looks] up, and she [shakes] her head, but [says]: 'Níniel,'" the first word she speaks "after her darkness, and it [is] her name among the woodmen ever after" (Húrin 215-216). As when Finduilas came near to Túrin's true name when she named him Thurin, Túrin comes close to Niënor's true name by calling her Níniel. Níniel quickly relearns speech and often asks, "What is the name of this thing? For in my darkness I lost it" (Húrin 217). Above all, she seeks to learn the names of things once more, re-establishing their place in her world. Like Túrin, she has the feeling that she has been dogged by a shadow, a nameless fate she has escaped only with difficulty. She and Túrin become friends, and one day Níniel says,

"Of all things I have now asked the name, save you. What are you called?" "Turambar," he [answers]. Then she [pauses] as if listening for some echo; but she [says]: "And what does that say, or is it just the name for you alone?" "It means... Master of the Dark Shadow. For I also, Níniel, had my darkness, in which dear things were lost; but now I have overcome it, I deem." (Húrin 217-218)

Turambar echoes Túrin's true name, and Túrin hopes the name is powerful enough to overcome the curse of Morgoth. Thus Túrin, by naming himself the master of his fate, hopes to master it in reality as well; and while his humble attitude lasts, he indeed seems to do so, or at least to achieve a brief happiness.

Brief indeed, for before too long a time, each unaware of the other's true name and identity, Níniel and Túrin begin to fall in love. Brandir, the leader of Brethil, reveals to Níniel "that Turambar was Túrin son of Húrin, and though she knew not the name a shadow fell on her heart" (Jewels 96). Something about the name still strikes a chord within the blank space of her memory, but Túrin asks for her hand

in marriage, and she gives it in spite of her sense of foreboding. Then Túrin “[says] in his heart: “Twas well that I did name myself Turambar, for lo! I have overcome the doom of evil that was woven about my feet” (Lost Tales 102). Túrin promises not to go to war unless their home is threatened, for Níniel is gentle and fears to see him go to battle. Feeling he has found victory in his new name, he thinks “to put his fate forever from him and live out his life there in the woodland homes with children about him” (Húrin 101-102). Yet Túrin muses to himself, “Haudh-en-Elleth! From the green mound she came. Is that a sign, and how shall I read it?” (Húrin 218). Gwindor’s words about Finduilas standing between Túrin and his fate ring throughout Túrin’s life, but not until the end will their meaning become completely clear.

Túrin is not permitted to live for long with his fate left unfronted; by hiding his true name, he is hiding his true self, which cannot long remain covered. Soon the lands of Brethil are threatened again by Glaurung, and the Black Sword must go to war once more. Then Túrin says to himself, “Now comes the test, in which my boast shall be made good, or fail utterly. I will flee no more. Turambar indeed I will be, and by my own will and prowess I will surmount my doom—or fall. But falling or riding, Glaurung at least I will slay” (Húrin 223). Killing Glaurung becomes the test for Túrin’s ability to overcome the curse by re-naming himself. He will overcome his fate once and for all, or he will die. Fate plays an exceedingly important role in naming in *The Children of Húrin*, and Tolkien has strong views upon the subjects of fate and free will. A name can be seen as a fate, a destiny to achieve. At the same time, “as a Christian writer, Tolkien also modifies the pagan conception of fate to imply its providential direction” (Wood 15). Doom in Tolkien’s works (in the sense of fate, not necessarily a negative sense) has “the triple meaning of destiny, calamity, and

judgment. As destiny, it signifies that every living thing has its own peculiar mortality; as calamity it means that many things end ill; but also as judgment it betokens everyone’s final state as determined by the just and merciful verdict of Iluvatar” (Wood 15). Morgoth’s curse is fate in the sense of calamity, but the overarching definition of fate as judgment, consistent with Thingol’s view of fate but not with Túrin’s, ensures that the end will be well. This is the fate that Húrin trusted, and he believed that Morgoth’s curse could be overcome. Húrin does not fear death because he does not view it as a defeat. Though man’s fate is to die, he is free to choose the manner of his life, and even his death can be seen in terms of catastrophe, the positive end. Fate and death can be a victory, as Húrin recognizes but Túrin does not.

Tolkien leaves hints that Túrin possessed everything required within himself and within his true name to choose a different destiny, though Tolkien does imply that it would be difficult for Túrin to overcome his circumstances. Nevertheless, the possibility remains; there is always a chance that he could have chosen differently. As he wavered between seeking Finduilas and seeking his mother and sister, *The Lost Tales* suggests that, had he chosen to seek Finduilas, “maybe in that desperate venture he had found a kindly and swift death or perchance an ill one, and maybe he had rescued Failivrin and found happiness yet not thus was he fated to earn the name he had taken anew, and the drake reading his mind suffered him not thus lightly to escape his tide of ill” (87). Túrin blames the circumstances of his life for how he turned out, saying he has been made “a hard man by [his] fate” (Húrin 115). Melian gives great insight into Túrin’s character when she warns, “greatness is in you, and your fate is twined with that of the Elven-folk, for good or for ill. Beware of yourself, lest it be ill” (Húrin 85). Melian is able to see that the cause of his downfall lies within himself, not in his fate

or within his name. The curse makes his life difficult, but it does not control his life; he still retains responsibility.

Túrin's pride holds him back from changing his fate. Renaming himself, while a powerful event, is not enough; he must change his character and overcome his faults, as Thingol warns, "If in days to come you remember the words of Melian, it will be for your good: fear both the heat and the cold of your heart, and strive for patience, if you can" (Húrin 85). Over and over again, Túrin's pride and his temper are what cause the misery in his life, not the curse of Morgoth, as he is warned by many. Yet Túrin will not humble himself, saying there is "a curse upon me, for all I do is ill" (Lost Tales 76). Before Saeros attempts to kill Túrin, Thingol warns him, "Indeed I feel that some shadow of the North has reached out to touch us tonight. Take heed, Saeros, lest you do the will of Morgoth in your pride" (Húrin 88). Thingol wisely sees that these men, in their pride, are working not against but rather for Morgoth, for pride is of Morgoth. They are not choosing right over wrong, and thus are enslaving their own wills. This is true thralldom, the servitude that Túrin so fears, not understanding that he is forging his own chains through his decisions.

Túrin blames his problems on Morgoth's curse, feeling it to be inescapable; he changes his name often to avert the curse, but each time Morgoth finds him. Undeniably, "the malice of that Vala does create hard circumstances that blight his life," but it is also undeniable that Túrin, like most people, plays a large part in creating his own misery (West 242). In The Lost Tales version, Glaurung warns Túrin, "Nay, get thee gone, O Turambar Conqueror of Fate! First thou must meet thy doom and thou wouldst o'ercome it" (86). In this the deceitful dragon speaks truth for a change. Túrin's constant renaming is hiding from, not confronting through free will, his doom. Wood ties Tolkien to Paul and Augustine,

those "who argue that real freedom is the liberty to choose and do the good, and that to do evil is to act unfreely, to exercise an enslaved will" (70). Free will and the ability to choose our own fate is the greatest gift of God. Interestingly, one of the versions of Turambar's name (Master of Fate) is Turúmarth, Master of Evil Fate (Salo 358). Túrin's renaming gives himself a name that should give him the mastery to choose good over evil. In The Lays of Beleriand, he is called Túrin Thaliadrin (son of Thalion) and even Túrin Thalion (Steadfast), just as his father was called. Húrin Thaliadrin, possessing the same name and given the same curse, manages to choose rightly regardless of the cost. By contrast, Túrin, with the same name and under the same curse, feels he cannot do so.

Túrin consistently overestimates his strength, and when it is found to be insufficient, succumbs to despair. Despair itself is a form of pride, for only one with the power to know all ends would know when there is cause to give up hope. Túrin's bravery is undeniable, yet that is not enough for true heroism. He must also have hope—not hope that he will survive, for that undermines bravery, but hope that what is good will prevail over what is evil. The tale of Túrin is undeniably sad with a very unhappy ending, but a happy ending is not the goal of true heroism. The true Quest requires real heroism, requires the character "to struggle with hope, yet without the assurance of victory. Good endings may signal a too-easy victory that does not deepen our souls, while an unhappy conclusion reached nobly may be the mark of real character" (Wood 147). Húrin's story is undoubtedly tragic, but it is a triumph regardless; Túrin's story is more difficult to evaluate.

Túrin finally attempts to overcome his fate by his own strength through defeating Glaurung. He hides in a crevasse called Cabed-en-Aras, waiting for the dragon to cross it. As he does so, Túrin stabs upwards

with Gurthang, piercing Glaurung's vulnerable belly. As the worm lashes in his death throes, the sword is pulled from Túrin's hand. At last Glaurung lies still, and Túrin climbs out of the ravine. He speaks to Glaurung who watches him balefully, using his true name to proclaim the victory: "Die now and the darkness have thee! Thus is Túrin son of Húrin avenged" (Silmarillion 267). With that, he pulls Gurthang from Glaurung, but the black blood pouring forth burns his hand, and the evil breath of Glaurung causes him to faint.

Níniel too must confront Glaurung, the personification of the curse of Morgoth. She refuses to wait for news of her husband and begins to journey towards Cabed-en-Aras, for she says, "The Master of Doom is gone to challenge his doom far hence, and how shall I stay here and wait for the slow coming of tidings, good or ill?" (Húrin 231). Running ahead of Brandir, Níniel finds her husband unconscious next to the dragon. As she bandages Túrin's burned hand, Glaurung opens his eyes for the last time and speaks "with his last breath, saying: 'Hail, Niënor, daughter of Húrin. We meet again ere the end. I give thee joy that thou hast found thy brother at last. And now thou shalt know him: a stabber in the dark, treacherous to foes, faithless to friends, and a curse unto his kin, Túrin son of Húrin! But the worse of all his deeds thou shalt feel in thyself'" (Silmarillion 268). With that, the foul beast dies having revealed the truth about the names of the children of Húrin. The last of his spell falls from Níniel, and she remembers all the days of her life and her true name. She cannot live with this truth, however; in horror at what she and Túrin have inadvertently done, she cries, "Farewell, O twice beloved! A Túrin Turambar turunambartanen: master of doom by doom mastered!" (Silmarillion 268). Níniel runs swiftly to the brink of Cabed-en-Aras, crying, "Water, water! Take now Níniel Niënor daughter of Húrin; Mourning,

Mourning daughter of Morwen! Take me and bear me down to the Sea!" (Húrin 244). She will not strive against her name anymore. Before those who followed her can stop her, she casts herself into the deadly ravine, and "Cabed-en-Aras was no more: Cabed Naeramarth, the Leap of Dreadful Doom, thereafter it was named by men; for no deer would ever leap there again, and all living things shunned it, and no man would walk upon its shore" (Húrin 244). Níniel returns to her true name, Niënor, Mourning; there is no hope or joy for her left in this world, and she cannot reside in it any longer.

The truth of the children of Húrin must yet be revealed to Túrin. Túrin wakes, finds his hand bandaged, and thinks that the people of Brethil cared for him. Brandir, who saw all that had passed but was too late to stop it, tells him the truth about Níniel. Túrin refuses to believe him. In anger and pain, "Yes, I am Túrin son of Húrin," Túrin cries, and "so long ago you guessed. But nothing do you know of Niënor my sister" (Húrin 251). Brandir cries "out upon Turambar with the last words of Glaurung, that he was a curse to his kin and to all that harboured him" (Silmarillion 269). In a blind rage, Túrin kills Brandir and runs to Haudh-en-Elleth, not knowing where else to go. One of Thingol's men, who has been searching for Niënor ever since she fled under the spell of the dragon, finds him there to warn him against Glaurung. Túrin replies bitterly that it is too late to warn him of that, but he asks news of Morwen and Niënor. When he hears the story of how they were lost, "Then Túrin's heart [stands] still, hearing the feet of doom that would pursue him to the end. 'Say on!' he [cries]. 'And be swift!'" (Húrin 254). Túrin still sees fate as the curse of Morgoth, and he dreads what he will hear. When he hears the description of Niënor, Túrin knows there is no mistaking it: she was indeed Níniel. In agony, Túrin cries "I am blind! Did you

not know? Blind, blind, groping since childhood in a dark mist of Morgoth!" (Húrin 255). With what Túrin sees as his doom fulfilled and all chance at happiness gone, he has no desire to live. He runs to Cabed-en-Aras, now Cabed Naeramarth, but he will not soil the waters where Niënor has cast herself. He draws Gurthang and asks the sword if it will kill him. Then, "from the blade rang a cold voice in answer: 'Yea, I will drink thy blood gladly, that so I may forget the blood of Beleg my master, and the blood of Brandir slain unjustly. I will slay thee swiftly'" (Silmarillion 261). Túrin dies, following Niënor beyond where their curse can follow them.

So end the children of Húrin, and so ended "the name most tearful / Of Niënor the sorrowful, and the name most sad / Of Thalion's son Túrin o'erthrown by fate" (Lays of Beleriand lines 5-7). Yet Túrin was given one last name: on his gravestone was written Túrin Turambar Dagnir Glaurunga, or Túrin Master of Fate Slayer of Glaurung. Dagnir Glaurunga (Bane of Glaurung) becomes Túrin's final name; and insofar that Glaurung embodied the curse that shadowed his short life, Túrin did master his fate and win a new, true name for himself. In the end, Túrin wins fame by slaying Glaurung, the embodiment of his wrong choices and his curse; thus he did right by atoning for his previous wrongs, even as he was unable to overcome his own pride, the true bane of his existence.

Though *The Children of Húrin* is a tragic tale, there is still hope within its pages. In the early versions of the story of Túrin, the storyteller adds some information about the ultimate fate of the children of Húrin. After death, Húrin and Morwen (Úrin and Mavwin in this version) request that Túrin and Niënor be allowed to enter the blessed realm. Their prayers are answered, and "the Gods had mercy on their unhappy fate, so that those twain Túrin and Nienori entered into Fos' Almir, the bath

of flame...and so were all their sorrows and stains washed away, and they dwelt as shining Valar among the blessed ones" (Lost Tales 115-116). At last these two of the sorrowful names have peace; and it is said, at the ends of the world, "Turambar indeed shall stand beside Fionwe in the Great Wrack, and Melko and his drakes shall curse the sword of Mormakil" (Lost Tales 116). Morgoth will ultimately be defeated, and the "redeemed Túrin is fated to cast down Melko-Melkor-Morgoth with his great sword" (West 244). Truly, Túrin will become Master of the Shadow, playing a vital role in the defeat of Morgoth, the Enemy, the shadowy evil. There is hope even for the hapless one.

This created myth, full of the power of naming, awakens something long left to slumber in the modern world. Quoting Philip Wheelwright, Hopper argues that the "loss of myth-consciousness" is "the most devastating loss that humanity can suffer;... myth-consciousness is the bond that unites men both with one another and with the unplumbed Mystery from which mankind is sprung and without reference to which the radical significance of things goes to pot" (114-115). Myth is essential to meaning in our lives because it opens us up to the true meaning to be found within spiritual belief. Kelsey agrees, stating that, "Lacking any use of myth, man becomes only a partial human being, because he has lost his principal means of dealing with spiritual reality" (5). In the imbalance of an age where the historic, the mythic, and the religious are considered inferior to the technological and scientific, "there are heights and depths to man and the world around him that twentieth century men have overlooked, and it is these reaches that may be experienced and expressed in myths which can give meaning and reaction to our loss and confusion" (Kelsey 5). For Tolkien, myth creation and naming bring us closer to God through subcreation, the God-given

right and gift of mankind made in the image of God.

Thus the thread of connections unwinds, from the foundation built upon language and myth to the culmination of Tolkien's vision. Language and myth are inseparable, being connected by metaphoric thinking which finds its purest expression in name. Tolkien views this expression through the lens of Christianity; name in myth is sub-creation, a reflection of biblical naming. Names themselves are the source of sub-creation for Tolkien. Creation itself is naming, further expression of metaphoric thought linking language and myth to the creation process. Man is also a namer, having been created in God's image, and naming brings order, establishing the place of a thing in the universe. When we name ourselves, we define our own place in the universe. The name of a person is linked to the essence of the person; we are our names, the one aspect of being that we can create. A right or true name is one that correctly expresses the established place of our essence in the universe. A new name signifies a change in personality; one must be renamed to renew conformity of essence with name.

Tolkien takes these principles and combines them in a synthesis of ideas, illustrated by the names in *The Children of Húrin*. Húrin's name is indicative of his inherent heroism and hope by which he is able to overcome in mind the curse of Morgoth. He does not hide from it, as Túrin does from what he perceives as his fate. Húrin believes in free will and the power of the indomitable will to overcome the curse on the family. He gives Túrin his Father-name, the right and true name which should give Túrin the power to overcome the curse as well. Morwen gives Túrin a different view on life through the Mother-name, one of not only pride and vengeance but also of unconquerable bravery. Lalaith's death is also the death of the named characteristic, laughter, and this lack causes Túrin to seek

one like her in all women that he meets, finding aspects of her character in both Finduilas and Niënor and ultimately losing all three women.

Túrin's names exhibit the changes in personality that he experiences. As the Dragon-helm, he possesses one half of what he needs to overcome the curse; he has bravery (like his mother Morwen), but no hopeful outlook, nor belief in his inherent freedom (unlike his father Húrin). As the Woodwose, he is a forlorn outcast from society. As Neithan (the Wronged), he is prideful and refuses to accept Thingol's doom, one of merciful judgment. The name is unfit for him because his pride blinds him to his own flaws, leading him to blame his failures on the curse. When Túrin slays Beleg Cúthalion, he slays thalion within his own name (son of Húrin), the steadfast, hopeful legacy of his father. The endless laughter of the pools of Ivrin heals him of the grief of this friend-slaying; the pools remind him of his sister Lalaith and are the origins of Finduilas' name, who is symbolic of hope and joy in Túrin's life. Had he embraced all that Finduilas represented, she would have stood between him and his curse; the choices that lay along that path would have changed his character so that he might have overcome his flaws. As Thurin (the Secret), he might have lived peacefully and humbly with her. Instead, as Agarwaen son of Úmarth (Bloodstained son of Ill-fate), his pride and violent actions continually lead to sorrowful outcomes. As Thuringud (the Hidden Foe), he believes that, under the curse, he is a secret danger both to himself and to those around him. As the Mormegil (Black Sword), Túrin is the bane of evil but is also trapped in a world of war, never of peace. As the Wildman of the woods, nothing is left to him but the slaughter of evil. As Turambar (Master of Fate), Túrin ceases renaming himself with the purpose of hiding from the curse and instead re-names himself to create a new fate, one in

which he conquers his ill-fate through sheer strength of will.

Yet is bravery, force of will, and renaming to reflect these qualities enough for Túrin to prevail? Glaurung, as the curse of Morgoth personified, hides the truth by his use of lies and false names. He causes Niënor to forget her name, making her lose a part of herself. By renaming her Níniel, Túrin seeks to establish a new place for her in the order of the world, but he does so with incomplete knowledge, leading to tragedy. Thus she shares in the curse, but she also is part of Túrin's fate in terms of judgment. Her life is inextricably bound to his; by being together, they feel that they have overcome the shadow, but until they are aware of the truth of their own names, this is untrue. By killing Glaurung, Túrin overthrows the curse, though it is too late for him to redeem his life. He had the qualities within himself, the "mind suitable for victory," to overcome the curse, but not himself. Pride is his true bane, not Glaurung. Both children of Húrin find the truth about their names to be unbearable in this life; their true names show them where they should be in the order of the world, but they cannot make their way back to that place. Túrin's return to the burial mound of Finduilas, the place of truth that has played such a vital role throughout the events of the story, ties the narrative of naming together, back to Lalaith and Finduilas and the endless search in his life for lost hope and what he would have needed to be truly the Master of Fate. Yet Túrin and Níniel both found hope beyond the circles of this world, under the merciful judgment, the true fate, of Iluvatar.

From the many names of Túrin to the role names play in our fate to the reasons why we bestow names on anything at all, Tolkien's vision of the power of names resonates through our lives today. The importance of naming cannot be underestimated, both to our past with its mythologies

and to our future. Language is the power by which we can create wonders or horrors, and names are the most powerful words in language because they give us the power to recreate ourselves. Mythology is the vessel we are given to express timeless ideas of great meaning, and names are the most important part of mythology because they shape the meaning of those ideas. Subcreation is the ability we are given as a gift from God; created mythology, the story that we tell, is the gift that we can bestow upon all who come after us. j

WORKS CITED

Campbell, Joseph. *The Hero with a Thousand Faces*. Princeton: Princeton UP, 1949.

Cassirer, Ernst. *Language and Myth*. Trans. Susanne Langer. New York: Dover, 1946

Crabbe, Katharyn W. "The Quest as Legend: The Lord of the Rings." *Modern Critical Interpretations: J.R.R. Tolkien's The Lord of the Rings*. Ed. Harold Bloom. Philadelphia: Chelsea House, 2000.

Frazer, James George. *The Golden Bough: A Study in Magic and Religion*, Abr. ed. New York: Macmillan, 1951.

Halpern, Baruch. "The New Names of Isaiah 62:4: Jeremiah's Reception in the Restoration and Politics of 'Third Isaiah.'" *Journal of Biblical Literature*, 117.4: 623-644. EBSCOhost. Carrie Rich Memorial Lib, Campbell U, Buies Creek. 12 Dec 2008. <<http://www.search.ebscohost.com>>.

The Holy Bible. New King James Version. Nashville: Broadman and Holman, 1996.

Hopper, Stanley Romaine. "Myth, Dream, and Imagination." *Myths, Dreams, and Religion*. Ed. Joseph Campbell. New York: E.P. Dutton, 1970.

Jeffrey, David L. "Recovery: Name in 'The Lord of the Rings.'" *Tolkien: New Critical Perspectives*. Lexington: UP of Kentucky, 1981.

Kelsey, Morton T. *Myth, History, and Faith: The Remythologizing of Christianity*. New York: Paulist Press, 1974.

Lee, Stuart D., and Elizabeth Solopova. *The Keys of Middle Earth: Discovering Medieval Literature through the Fiction of J.R.R. Tolkien*. New York: Palgrave Macmillan, 2005.

Salo, David. *A Gateway to Sindarin: A Grammar of an Elvish Language from J.R.R. Tolkien's Lord of the Rings*. Salt Lake City: U of Utah P, 2004.

Strong, James. *Strong's Exhaustive Concordance of the Bible*. Peabody: Hendrickson, 1986.

Tolkien, J.R.R. *The Book of Lost Tales*, vols. 1 and 2. Ed. Christopher Tolkien. Boston: Houghton Mifflin, 1984.

- . *The Children of Húrin*. Ed. Christopher Tolkien. Boston: Houghton Mifflin, 2007.
- . "Guide to the Names in The Lord of the Rings." *A Tolkien Compass*. Ed. Jared Lobdell. La Salle: Open Court, 1975.
- . *The Lays of Beleriand*. Ed. Christopher Tolkien. New York: Ballantine, 1985.
- . *The Letters of J.R.R. Tolkien*. Ed. Humphrey Carter. Boston: Houghton Mifflin, 1981.
- . *The Silmarillion*, 2nd ed. Ed. Christopher Tolkien. New York: Ballantine, 1999.
- . *Unfinished Tales of Numenore and Middle-earth*. Ed. Christopher Tolkien. Boston: Houghton Mifflin, 1980.
- . *The War of the Jewels: The Later Silmarillion, Part Two: The Legends of Beleriand*. Ed. Christopher Tolkien. Boston: Houghton Mifflin, 1994.
- Turner, Allan. *Translating Tolkien: Philological Elements in The Lord of the Rings*. Frankfurt: Peter Lang, 2005.
- West, Richard C. "Túrin's Ofermod: An Old English Theme in the Development of the Story of Túrin." *Tolkien's Legendarium: Essays on The History of Middle-Earth*. Ed. Verlyn Flieger and Carl F. Hostetter. Westport, CT: Greenwood, 2000.
- Wood, Ralph. *The Gospel According to Tolkien: Visions of the Kingdom in Middle-earth*. Louisville: Westminster John Knox, 2003.
- Zimmer, Mary E. "Creating and Recreating Worlds with Words." *Tolkien and the Invention of Myth: A Reader*. Ed. Jane Chance. Lexington: UP of Kentucky, 2004.

The Twilight Zone: Rod Serling's Stage for Social Criticism

Michael Tildsley

Campbell University

Faculty Mentor: Donna Waldron, PhD

English Department

Campbell University

NEARLY FIFTY YEARS AFTER its television premiere, Rod Serling's *The Twilight Zone* remains pertinent, groundbreaking television. When it arrived on the CBS network in 1959, Serling's show was only one of two science fiction or fantasy programs to premiere on television that year. This same year saw the production of eight new private detective shows and a massive twelve new programs from the Western genre. Facing these staggering numbers, a show presenting science fiction and fantasy elements stood out in a crowd of otherwise uniform television programs. In addition, besides their thematic connection, the majority of shows featured on television were joined by another common thread: commercial-driven censorship.

Television in the mid 1950s primarily consisted of realistic television dramas performed live. Such programs as *The United States Steel Hour* and *Playhouse 90* dominated the prime time airwaves. It was toward the end of this movement that Rod

Serling emerged as a writing talent for television and achieved a fair amount of success in that realm. In fact, by the time "Rod Serling created *The Twilight Zone*, he was one of television's hottest writers. He had already won Emmy awards for his dramatic teleplays for *Patterns* (1955) and *Requiem for a Heavyweight* (1956),"two teleplays he wrote to be performed in this live format (Phillips and Garcia 467). However, Serling and other writers were faced with a similar plight: not with a lack of creative source material for their writing, but with pressures by networks and sponsors to alter their scripts prior to airing in the economic interest of the products being advertised. Laurence Venuti, Professor of English at Temple University describes this phenomenon:

Since the networks were dedicated to pursuing the most profitable course with this new mass medium, the sponsors and ad agencies exerted a dictatorial control over programming... their power

in television was comparable to that in radio, where not only did they decide where and when a commercial would be run, but agencies actually created many programs as vehicles for their commercials. (360)

The fact that some shows were created by product companies specifically for the purpose of advertising speaks to the cheapness and lack of depth in a portion of the medium.

By and large, television was still relatively young as a medium and lacked the identity that both radio and film had attained. As a halfway house between the two mediums, having the mass availability of radio and the visual elements of film, television struggled to find its own middle ground between the purposes of its parent presentation methods. Whereas radio had primarily placed advertising in the forefront of its business, major motion pictures usually had entertainment as the primary focus, with ticket sales being the market commodity. As of the mid-1950s, the commercial purpose of television dictated the content of the medium, as “[the] TV studio executives of the time saw themselves primarily as promoters of their advertisers’ products. Entertainment was a second criterion, with public service lagging behind as a distant third” (Wolfe 17).

With television in this deplorable state, it was considerably challenging for a writer to discuss current political or social issues. Put simply, the view of most “sponsors and ad agencies [was to] regard a program not as a work of art or a vehicle of responsible social criticism, but primarily as another device which could be useful in selling a product. To the sponsors and ad agencies, a program is merely another commercial” (Venuti 361). Most companies were so fixated on pushing a product or series of products in their formulaic shows that they did not even consider contemporary issues. However, for the shows that featured

serious writers, another reason surfaced for wanting to disallow or at least veil the issues presented. Bringing current social issues literally in front of the eyes of millions of Americans, though undeniably an effective way of transmitting a message, was thought by sponsors to have the potential for controversy and unpleasantness among consumers. No agency or sponsor of a product line wanted potential offensiveness, or a problem of any kind connected to their product in the minds of their consumers. Making people realize that they were unhappy with the state of the world around them would not positively influence consumer buying.

It would stand to reason that the television writer and the sponsor would want to work together, considering that they have a common goal. Success for both parties meant achieving and keeping an audience, because “[television] is both an art and a popular industry. Whereas the stage dramatist writes for an audience measuring in the hundreds, the TV playwright has to please millions. His very career depends on his ability to win mass appeal” (Wolfe 17). It can be argued that the same is true for commercial sponsors. Should they fail to present their product to the consumers in an enticing manner, the company would fail. However, rather than create camaraderie, these difficulties set writers against the advertising agencies and sponsors. This struggle between a group determined to appeal to the status quo versus another group attempting to write criticism about the dire state of society was much too large to recount here; suffice to say that the sponsors of television shows had the upper hand with monetary backing, such that “[writers] were torn between the desire to present compelling and timely plays and the fear of incurring the wrath of sponsors and network executives” (Cochran 196).

Television sponsors gained additional leverage when live teleplays began to be replaced by serial situational comedies

and anthology shows. The reason for this is that the writing on a sit-com or anthology show generally consisted of formulaic writing, to which most self-respecting writers would decline to commit because of the lack of creative and artistic freedoms. Part of the reason for this shift from live drama to pre-recorded TV was due to significant network management changes. Specifically, the vice presidency of CBS changed, as James Aubrey took the position, a man described as “an executive firmly dedicated to the bottom line [...] one who at once set about canceling everything that was not the sort of light, sit-com amusement he thought the viewers wanted” (Rabinowitz par. 4). Not only were television shows being reduced to mere parodies of each other, but the network staff from the top purposefully made the effort to make viewing TV as unsophisticated as possible, perhaps pandering to the lowest common denominator of society.

The push away from live TV dramas took with it a good deal of the writing talent of the era. Rather than abandon the medium, Rod Serling decided to stay in the arena in which he had gained his acclamation and fame. However, because of writer’s limitations, this proved to be challenging: “when those live plays disappeared from television, a writer like Serling soon became subservient to everyone else on the production line. The programming became less ambitious—and, with the emphasis on crime shows, Westerns, and parable sit-coms, it soon became far less dependent on words” (Stark 88). Whereas the live dramas displayed the abilities of both the actors and the writers, the networks viewed pre-recorded TV programs as a means of further watering down entertainment, in an attempt to highlight the sponsors. Also, with only a few cliché genres dominating the broadcast time, writing became even more mediocre.

Perhaps one reason for the success of

Serling’s *Twilight Zone* was its difference from contemporary and past shows. Most notably, “[in] a TV era where the most popular shows were westerns, *The Twilight Zone* offered a refreshing switch” (Phillips and Garcia 470). Rather than maintaining focus on the past, antiquated and untouchable as it was, Serling chose to study the present and future. This shift would mark the beginning of the end for the idolization of the American past and the declaration of pressing issues that needed addressing in the present. By selecting a genre not typical of mainstream television audiences, Serling was taking a risk in order to receive attention. Luckily for him, this risk paid off. Another dangerous decision that Serling made in creating *The Twilight Zone* was to make it an anthology show. This means that each episode is an independent story from other episodes, and generally there are no recurring characters. In a TV era in which the conservative and realistic were celebrated, this was another huge risk that paid unseen dividends, making “[the] series was one of the few successful anthology shows, with no common character, writer, or plot running through the episodes” (Bertonneau and Paffenroth 132).

Just as the switch from live TV drama to pre-recorded shows had run off a good number of the talented writers of the era, so too did a good number of the famous actors and actresses begin to refuse to do a television series. The result, of course, was two-fold: poorer overall acting and the rise of previously unknown stars. Since the show was created as an anthology series, “*Twilight Zone* [...] attracted a wider range of top stars, including Ida Lupino, Ed Wynn, Robert Cummings and Mickey Rooney,” because being featured in one episode required far less acting commitment than signing on for a full series (Phillips and Garcia 468). The appearance of such stars undoubtedly would have attracted audiences to watch *The Twilight Zone*, as they could view film

quality acting at no additional cost from the comfort of their own homes. Because of the decrease in quality parts in television, many actors and actresses feared that accepting a television role would be the equivalent of being demoted. However, the quality of Serling's *Twilight Zone* proved to be such that celebrity actors and actresses gladly accepted the invitations to be part of a show. The anthology format of the show also "benefited from offering such a wide variety of premises and experiences to its viewers," unlike the ceaseless Westerns and crime dramas, which featured clichéd plot lines (Bertonneau and Paffenroth 132).

In addition, the cinematography of Serling's *Twilight Zone* drastically differed from its contemporaries, while differing even from itself in every week's episode. The show used a wide variety of camera techniques for filming, taking many artistic risks for the goal of achieving a series of quality and rising above the sea of mediocrity that television had been allowed to become. Also, the set design can only be described as radically different from most other shows on television at that time. The series as a whole incorporated set designs from multiple genres, including: contemporary urban environments, crime show film noir, Western fantasy, and science fiction. As the show's set differed from week to week, a wide range of resources, as well as a creative staff, were a necessity. In comparison, "[hammering] together a set for a crime show is simple: Go to the studio's storage lockers and pull out a used table, desk and chair. In *The Twilight Zone*, set 'between the pit of man's fears and the summit of his knowledge,' the crew had to make not only their own props, but often their own worlds" (Phillips and Garcia 467). This required that the set designers understand the storyline that Serling was creating in order to accurately portray the episode's message. In doing so, these designers were given a fair amount of creative freedom to

explore their own gifts in a nurturing environment. The result was an overall noticeable increase in quality and effectiveness of set usage for the series.

Although all of the preceding differences were important in making Serling's series stand out from among its competition, arguably its great thematic difference proved most problematic to sponsors and network executives. Rather than shying away from contemporary issues, "many *Twilight Zone* [...] episodes exude the dominant political ideals and broad social anxieties of their time" (Worland 104). While he could have chosen to create a unique anthology series of speculative fiction that dealt with otherworldly or nonsensical subject matter, Serling intentionally chose to address contemporary issues, albeit under the veil of fiction. In many ways, while being artistically deceptive, Serling's show did not hide the truth from or talk down to his audience, but engaged them in the themes and motifs that other shows and networks compulsively avoided. Though this may seem like a diminutive accomplishment, virtually no other television programs of the era were willing to address, either directly or indirectly, contemporary social and political issues. Sponsors and network executives were extremely hesitant to delve too deeply into the existing problems for various reasons, including a network belief that people watched television merely for simple and light-hearted entertainment. Also at risk by discussing these issues were the reputations of the sponsoring companies and product sales. Sponsors simply wanted to offer a mildly entertaining commercial to their consumers, with bland and often repetitive programming. Rod Serling saw two problems with this: members of the audience were not being personally engaged by the current television programming and, therefore, they were not being entertained.

So how was it that *The Twilight Zone* was able to break the sponsor barrier in

conveying social and political messages to the audience? The answer to this question rests in the experience of the show's creator. Rod Serling had had several negative encounters with sponsors and network executives in the years of live, realistic television dramas, prior to *Zone*. In fact, Serling found that sponsors held little regard for him "[as] a television playwright," and because their primary concern was not for the quality of the show but rather for their products, "he was constantly forced to run the gauntlet of corporate sponsors, who directly financed the show and, concerned that no segment of the buying public be alienated, took a close interest in the content of the programs" (Cochran 196). That his scripts retained any quality at all is a testament to Serling's constant defense of his work. His two Emmy awards, while bringing in more writing opportunities, also garnered interest from network executives and sponsorship, who knew that Serling's talent would draw a large audience. As a result of this gratuitous sponsor interest, Serling was often forced into alterations of his scripts. These alterations could range from the immense, which changed the entire message of the story, to the most insignificant miniscule details, which to all appearances were benevolent. What bothered Serling was that the censorship he was forced to work under "was not based on morality and did not involve deletions of objectionable material like obscenity and sensational violence. Rather, the grounds for complaint were purely economic: network executives, advertising agencies and sponsors often forced him to alter scripts they thought would offend American consumers and decrease the sale of products" (Venuti 354). This would later prove an important distinction, as sponsors, being so interested in maintaining economic integrity, would overlook the deeper messages in Serling's *Twilight Zone* episodes.

Several examples of this flagrant censoring of Serling's searly television writing exist,

and have been heavily documented. For instance, in Serling's teleplay, "Requiem for a Heavyweight," which consequently won an Emmy, the line, "Got a match?" was removed from the final cut of the show because the sponsor happened to be Ronson lighters (Zicree 14). Though the line does reflect a preference for matches over lighters, the reference seems minute enough not to have warranted censorship from the sponsor. When the press leaked that Serling's "Noon on Doomsday" was to be loosely based on the Emmett Till case, the sponsor, the United States Steel company, ordered heavy revisions to be made due to the delivery of thousands of letters threatening to boycott. When Serling questioned the company, he was told that United States Steel was not concerned about the possibility of boycott, but rather a strain on their public relations (Zicree 14). Extensive changes were made to the teleplay, including the change of setting from nonspecific to New England, as well as changing the personality of the murderer in the story from a "vicious" and "neurotic killer" into "a good, decent, American boy momentarily gone wrong" (Zicree 14). However, with these monumental changes, the sponsor also chose to alter ridiculously obscure references to the South, such as removing all Coca-Cola bottles from the set. The alterations were so extensive that when the show "was finally aired in April of 1956 [it] was so watered down as to be meaningless" (Zicree 14).

Altering the personality of a show's characters would certainly seem like more than enough hassle, but the sponsors continued to meddle. Serling also became the victim of sponsor interference of the very actions his characters were scripted to do. For instance, in perhaps the most fantastic stretch of reasoning for alteration thus far recounted, the sheriff of Serling's 1958 script, "A Town Has Turned to Dust," was not allowed to commit suicide. The reason for this was that one of the sponsors, an

insurance company, claimed that suicides led to complications in settling their policy claims (Zicree 15). Though this may very well be true, the relevance of the sponsor's problem in relation to the show's usage of the incident is so far removed as to be laughable. Serling was infuriated with this degree of needless censorship. As Pulitzer Prize winning American Journalist, Dorothy Rabinowitz, states, "There had always been trouble with sponsors worried about controversial subject matter, trouble that ended with Serling in a fury over enforced revisions that mangled the entire point of his script. Sponsors, Serling learned, did not want scripts to have any point in the first place, and they certainly wanted none that dealt with political or similarly delicate matters" (par. 5). His frustrations mounted with each mutilated script, and it was not unforeseeable that he would search for an alternative to the ludicrous demands of network executives and sponsors.

With the pressures from sponsors and network executives to revise his scripts continually, as well as pressure by companies offering him writing work on shallow and ultimately unfulfilling shows, Rod defied both parties, by creating and producing his own show. However, because other great television writers had retreated to film and Broadway, "Serling's decision to begin working on his own series in 1959 was widely derided as a sellout" and a concession to the television medium (Cochran 204). Even before *The Twilight Zone* premiered, Serling was questioned and doubted about his daring decision to step away from mainstream television and realistic fiction in order to write a science fiction and fantasy based anthology show. Most major critics felt that this new series would be much weaker in theme and quality than Serling's earlier work and that *Twilight Zone* may even have been his sign of giving in to the mediocrity surrounding television.

To answer these growing concerns, Serling agreed to be featured on the Mike

Wallace Interview, which proved to be a very telling meeting. Wallace assumes the role of critic, appraising Serling's decision to work with science fiction and fantasy as a step down from the quality of writing that had won him three Emmy awards. After discussing the censorship and position of sponsors in television, Wallace asks, concerning Serling's new project, *The Twilight Zone*, "Who controls the final product, you or the sponsor?" to which Serling replies, "We have [...] a good working relationship, where, in questions of taste, in questions of the art form itself, in questions of drama, I'm the judge, because this is my medium and I understand it. I'm a dramatist for television [...] the sponsor knows his product, but he doesn't know mine" (Serling). This stern answer by Serling indicates both his previous stresses of working with sponsors and his determination to be victorious in his newest writing endeavor. By stating that the medium belongs to the television writers and not sponsors, Serling is indicating a power shift that he aims to accomplish with the quality of his new series. Also, by calling himself a television dramatist, Serling reiterates that he holds his position in high regard and would not damage his reputation on a show he did not believe would help his career.

Later in the interview, Serling states, "I don't want to have to battle sponsors. I don't want to have to push for something that I want and have to settle for second best. I don't want to have to compromise all the time, which, in essence, is what a television writer does if he wants to put on controversial themes" (Serling). Here, Serling's stress over sponsorship confrontations is brilliantly illustrated with the tone of a man who has become weary of his failure at achieving greatness because of the mistakes of others. To this emotional diatribe, Wallace poses the question, "Why do you stay in television?" which Serling responds to as soon as the words have left the interviewer's mouth, "I stay in television

because I think it's very possible to perform a function. Of providing adult, meaningful, exciting, challenging drama without dealing in controversy necessarily. [...] I think it's criminal that we are not permitted to make dramatic note of social evils as they exist, of controversial themes as they are inherent in our society" (Serling). In a sense, this response highlights Serling's artistic goals for his upcoming series, *The Twilight Zone*, as well as for his overall career.

In the closing minutes of the interview, Wallace begins to discuss the issue of money with Serling. When he asks how much money Rod anticipates making with *The Twilight Zone*, Serling replies with the following explanation:

This sounds defensive and it probably sounds phony, but I'm not nearly as concerned about the money to be made on this show as I am with the quality of it and I can prove that. I have a contract with Metro-Goldwyn-Mayer which guarantees me something in the neighborhood of a quarter of a million dollars over a period of three years. This is a contract I'm trying to break and get out of so I can devote time to a series which is very iffy, which is a very problematical thing. It's only guaranteed twenty-six weeks and if it only goes twenty-six weeks and stops I'll have lost a great deal of money. But I would rather take the chance and do something I like, something I'm familiar with, something that has a built-in challenge to it. (Serling)

These comments cement Serling in place as a writer who was driven by lack of fulfillment to create a show of quality, with depth and meaning beyond the reach of the shallow, financial, and career-oriented sponsors. In this statement, Serling illustrates a deep understanding of the risks he is undertaking by producing *The Twilight Zone*. Throughout the interview, he makes it very clear to Wallace that as creator, writer, and executive producer Serling has undertaken a tremendous amount of work

for this project. Consequently, by stating the amount of money he has given up in order to pursue artistic freedom, Serling is demonstrating an immense degree of faith in the quality of his work on the fledgling *Twilight Zone*. Add to this the risk of writing in an under-explored genre and it becomes clear that Serling was staking his career, both his financial stability and his reputation, on the work he put into creating this series.

Rod Serling understood that, with three Emmy awards in his favor, he could have lived comfortably off of his reputation, coasting through the rest of his career with low-quality shows and films and thereby maintaining a comfortable standard of living. However, Serling likely would have seen such actions as those of a tired sellout. Serling's decision to make his own show was so unprecedented that critics stumbled to understand his intentions, other than monetary, for leaving the realm of realistic fiction in favor of science fiction and fantasy. Lawrence Venuti sheds further light on the misunderstanding by critics in an article for the *Western Humanities Review*:

What was so difficult for his critics to accept was his sudden and bewildering shift from realistic drama, in which social commentary and moral issues were the writer's main concern, to fantasy, which seemed pure escapist entertainment devoid of serious import. The fact is that *The Twilight Zone* was Serling's calculated response to the growing oppressiveness of television censorship, and in many of his screenplays for this series he continued his critical examination of American society—but in an oblique and perhaps more inventive way. (355)

Before viewing *The Twilight Zone*, critics were ready, because of the thematic precedent, to denigrate Serling's work. Previous entries in the science fiction and fantasy genres for television and radio had, indeed, been primarily escapist and commercial products, lacking the thematic depth of live teleplays.

ABC's show, *Alcoa Presents One Step Beyond*, aired nine months before and shared the thirty minute anthology structure of *The Twilight Zone*. Although the show presented tales of the supernatural, it did so in a straightforward style and ultimately lacked the character depth, audience connection, and relation to current social themes of its successor. Also, *One Step Beyond* shied away from presenting the science fiction motifs that had made a name for the genre, such as alien invasions and space travel. Its creators chose instead to look at the past for mysteries and disasters to explain and explore theatrically. As a result, the episodes became less science fiction and more like a predecessor of *Unsolved Mysteries*.

Lack of a successful precedent led critics to misjudge *The Twilight Zone* in that, before its creation, no other program of speculative fiction had been implemented as a vehicle for contemporary social criticism. Serling's earlier television dramas had relied on their realism and character development to convey social messages to the audience. For *The Twilight Zone*, while the importance of character development remained, "[instead] of relying on realism to convey his message, Serling embodied it in fantasy and managed not only to avoid the censorship which had plagued his earlier writing, but also to maintain his integrity as a socially concerned writer" (Venuti 355). He managed to write a commercially acceptable product while clearly slipping moralistic elements and social commentary into his scripts.

That *The Twilight Zone* was allowed to become a groundbreaking series for television was primarily the effect of Rod Serling's tedious work to become a groundbreaking television writer. Venuti goes so far as to claim that *The Twilight Zone* was "Serling's greatest achievement," stating that "its combination of sophisticated dramatic techniques with social criticism has rarely been equaled in the history of television"

(355). By combining interesting and different dramatic and cinematographic methods with meaningful storylines, Serling created a stylish show in an era of mediocrity. Truly, if Serling had not become "a master hand at getting around sponsors" in order "[to] ward off [sponsor] leering about works dealing with the supernatural," the series would have never been possible (Rabinowitz par. 6). However, even with an economically acceptable vehicle to transport his social message, without believable performers for his scripts, Serling's show could have flopped.

In spite of the fictional genres employed in creating *Twilight Zone*, the depth and believability of Serling's characters allow the audience to become personally involved with each episode, a powerful effect of vital necessity in transmitting his subtle social commentaries. A factor paramount to the show's popularity was Serling's development of "characters firmly in the everyday world—which tactic also served, of course, to produce a series of unique power" (Rabinowitz par. 6). Serling's political and social observations had a varying range: from small, seemingly insignificant details to wide-ranging and daring social statements.

A detailed analysis of Serling's episodes reveals the specific social commentaries intended. In "Walking Distance," Serling introduces the audience to Martin Sloan, a middle-aged businessman shown to be exceptionally stressed over the way his life has turned out. The first time the viewer sees Sloan he is violently backing into a gas station and repetitively honking his horn for service, as if in an extreme hurry. Though he immediately apologizes for his rude actions, the audience has witnessed the pace and mannerism of the lifestyle from which Sloan is fleeing. Sloan reveals that he is from the nearby town, *Homewood*, and that he has not been back in twenty-five years. When he learns that his oil change is

going to take an hour or so, Sloan decides to walk to Homewood in order to pass the time. It is at this moment that the creative cinematographic technique, vital to this episode's meaning, commences. Instead of pointing toward Sloan, the camera is focused on his reflection from the glass in the cigarette vending machine, and it is from this vantage point that the viewers witness Martin's trek up the road towards Homewood. Though extremely subtle, this cinematographic technique is implemented to convey Sloan's journey into his own past. "Rather than using a time machine," by "employing a visual allusion to *Through the Looking Glass*," the show becomes fantasy rather than science fiction (Zicree 43). This camera choice selection by Serling connects the audience with the story and character to a greater degree with simplicity. The view from a mirror image "cuts to [another] reflection of Martin in a drugstore mirror in the past, just as he enters," though this is not immediately revealed to be a reflection (Zicree 43). By these irresolute camera visuals, Serling seems to be indicating that appearances cannot always be trusted.

To be sure, though he seemed to be near the verge of a mental breakdown as he pulled into the gas station, Sloan's "mile-and-a-half walk to Homewood rejuvenates" him so much that "[when] he's next seen, downing a three-scoop chocolate soda in a soda fountain he had recalled from his youth, he's sharp and bright" (Wolfe 57). Serling shows a different side of Sloan in this soda shop, a side that remembers and longs for the better days of his youth. Rather than sympathizing with his mistreatment the audience is encouraged to identify with Sloan in this episode. For instance, as Sloan enjoys a three-scoop ice cream soda, the camera is in extreme close-up of his face so that it dominates the screen. In this way, the audience is invited to share the moments of remembered joy that Sloan is feeling.

Though Sloan does not catch on to the hints, the audience is early and often invited to speculate that Sloan has indeed traveled into his childhood past. From his recollection of the soda jerk's appearance to the unchanged price of the ice cream soda, Sloan's missed hints at his travel through time build suspense. It is not until Sloan departs from the soda shop that his travel through time is revealed. A comment that Sloan makes about remembering the deceased owner of the shop is given as evidence of his journey, as by "[violating] the established point of view (Sloan's) for a single shot, the camera remains inside, Charlie ascends rickety stairs and speaks to his elderly boss, fanning himself in a stuffy office. If we have guessed that Mr. Wilson awaits before Charlie arrives at the dark at the top of these stairs, our shared premonition adds to the impact" (Brode and Serling 3). Interestingly, though Serling's show often stunned its viewers with revelations, in this case the revealed fact is positive: someone thought to be dead is actually alive. In a television series that generally hides information from the audience, this rare moment is provided by Serling to allow viewers to know the truth far earlier than the protagonist, thus endearing Sloan to the audience.

Sloan's moment of revelation comes when he sees his younger self carving his name into the bandstand, just as he has described to a young woman in the park. Though he chases his younger self in an attempt to have a conversation, the middle-aged Sloan appears no match for the young Martin. After going through such an amazing incident, "Sloan [is left] with one option: to confront his parents. He approaches the house where he was raised only to be rejected by his father and mother (Brode and Serling 4). The screen door which separates the two parties is shown by the camera from both sides, another clever usage of cinematography. Serling shows

his knowledge of complex camera work in this scene, because when Martin Sloan first rings the doorbell, the camera is pointed facing him such that he appears blurred by the screen door, while his parents, with their backs to the audience, appear clear. This texturing suggests that Sloan is an unreal apparition from the future and that his parents are rightful beings in their own present time. However, when the camera is reversed the audience views Sloan's parents "behind the screen door, its hazy surface lending an otherworldliness to their presence," as if they are specters from Sloan's past (Brode and Serling 4). While remaining realistic, this technique provides another fantasy element to Serling's story, maintaining its dream-like subtlety.

"Walking Distance" also made hazy some of the standard structural elements that comprised Twilight Zone episodes. Rod Serling's prologue and epilogue narrations were standard to every episode of *The Twilight Zone*. In addition to these, Serling also provided a middle narration for this episode, a rarity for the series. This narration is implemented to advance the storyline from day to night and imply that Sloan has wandered around the town thinking before returning to his childhood home to confront his parents for a second time. He does so this time from the backyard rather than a direct approach to the front door. Much like his travel through time has allowed him access to the setting of his childhood, this change in approach gains Sloan direct access to his parents, removing the hazy barrier. As he tries to convince his mother of his identity with his identification cards, she slaps him, which momentarily stupefies Sloan. Critics have said a good deal about this violent action, particularly that it "happens so unexpectedly, yet seems so right in its wrongness that it never fails to shock a first-time viewer. [...] But this vaguely familiar stranger threatens the fragile order of her world. She does so not

because she still believes him to be an imposter, but because, on some unconscious level, Mrs. Sloan senses that he speaks the truth" (Brode and Serling 6). If she does sense truth in his words, Mrs. Sloan's action suggests a vulgarity in Martin's return to his childhood past. Though he somehow mysteriously was able to return to the past, Mrs. Sloan's defense mechanism poses the question from Serling, "Does she have a right to return?" Through the remainder of the episode, the actions and consequences of Sloan serve to answer this question.

After he recovers from the shock of being slapped by his mother, Sloan hears the distant music of a merry-go-round and decides to follow it, hoping to corner his younger self. Spotting himself on the ride, he boards and a chase ensues. Here, again, the cinematography shifts "from simple camera set-ups to oblique angles, turning a relatively realistic setting into something quite surreal" (Brode and Serling 7). Each shot in this sequence is at an off-balanced angle, as if Serling is commenting that Sloan's desire to converse with his younger self is crooked and unjust. Certainly, should Sloan discuss his stress-filled, unhappy future with his childhood self it would likely taint the boy's existence. As it happens, Sloan is not rewarded this chance, as the chase results in young Martin falling off of the merry-go-round and injuring his leg. Both characters' agony upon this occurrence is conveyed through screams of pain. When the boy is being carried away by the merry-go-round attendant, the camera still tilted in an oblique angle, Sloan stands spot-lighted in the background as the shadowy figures of children pass by him. This effectively highlights Sloan as the cause of the boy's injuries. Sloan's mere presence has caused his younger self a considerable amount of pain. Serling's original script symbolizes this injury further than the actual televised version, having young Martin's leg caught in the machinery of the merry-go-round

(Walking 29). By attempting to warn his young counterpart of the stresses he is to face in the future from societal machines, in this alternate script Sloan has succeeded only in bringing those injuries on much sooner.

Arguably the most touching portion of this nostalgic episode occurs when Sloan's father approaches his emotionally exhausted son, convincing him to return to his own time. His father, being the first person in the episode who admits knowing his son is who he claims to be, warns Sloan that he must leave the past behind him and look to the future for his joy and relief. It is this lesson that Serling wants Sloan, and the audience, to take from his negative exploration of his past. Bertonneau and Paffenroth explain in describing this hard-earned lesson:

Martin limps back into the present, but there is hope that the chance he's been given to see the past has done something more than just physically maim him: it has alerted him to the beauty that has been all around him all along, but which a sick combination of cynicism and nostalgia have dulled or obscured. Our reveries about the past may not be as literal and physical as Martin's, but if reminiscing about the past sensitizes us to the present's beauty and the infinite possibilities for happiness therein, then it is not too incredible to call it a graced moment. (149)

The lesson to be taken from "Walking Distance" is to enjoy the present pleasures of existence around oneself, understanding that traveling to the past is futile in changing the conditions of the present. Here Serling punishes a likable protagonist in order to teach the audience a lesson. Sloan has retained a slight limp to remind himself of the dangers of living in the past. A message the audience should understand with ease, as Martin Sloan was a character with which the viewers could sympathize and identify. His desires are those of humanity: to return to an easier, more enjoyable existence and

escape the stressful adult world. Serling's portrayal of Sloan's past as realistic, rather than the idealistic one most people envision when recalling their own past, adds power to his story and conviction to his message. While both characters are punished for their methods of escapism, Serling is less severe with Sloan's penalty because of the all-too-human motivation behind it.

Unlike the previous episode featuring a character study of a singular protagonist, Serling's "The Monsters Are Due on Maple Street" features a collective protagonist, namely the residents of a street. These residents are shown performing various normal activities on a summer afternoon at the onset of the episode. When a flashing light passes in the sky over the street, the residents of Maple Street take notice and stop their activities. They soon learn that all of their machines and appliances requiring a power source have stopped working. As Serling says in his opening narration to the episode, this is "Maple Street in the last calm and reflective moment. . . . before the monsters came" (Monsters 3). Though the residents of Maple Street are at first only mildly annoyed by the power failure, when they learn that cars, telephones and portable radios have stopped working as well, a few decide they should go to other parts of the neighborhood to search for the reason behind these events. One man in particular is shown departing the street to go one block over and see if Floral Street shares their dilemma. Serling provides a close-up shot of a hammer on his belt loop, which will later provide the audience with information unknown to his cast of characters, much like he did in "Walking Distance."

Two characters, Steve and Charlie, decide to walk downtown to look for information. Before they can leave the street, however, a young boy makes the insidious suggestion that aliens were responsible for shutting all the power off and these aliens do not want the citizens of Maple Street to

leave. At first, this suggestion itself is taken as ridiculous—one woman even comments, “He’s been reading too many comic books or seeing too many movies or something”—but when he continues his explanation by stating that aliens always send human look-alikes ahead of their invasion, the street’s occupants look uneasy (Monsters 8). The camera pan shows close-ups of each person’s worried reaction to the boy’s outlandish claim. This camera movement works to convey the overall sense of uneasiness setting in, but their expressions also make the audience suspect that perhaps one or more of these people may indeed be an alien, human look-alike. Rather than creating an endearing protagonist, as in the previous episode, here Serling invites the audience of this episode to join in on the mystery and suspense created in the witch-hunt-like atmosphere boiling over on Maple Street.

When another of the street’s inhabitants, Les Goodman, has his car crank by itself, the group of people goes through a quick barrage of confusion, anger, and irrationality in mere moments. Goodman has not shown interest in the flying object, and after hearing Charlie’s comment, “He always was an odd ball. Him and his whole family,” the irrational insistence that Goodman and his family are outsiders has the group ready to confront Les as a mob. The group’s hasty descent into a mob is highlighted by camera angles that show the group from the waist down. This thematically represents the loss of personal identity and morality in the chaotic mob structure, as no one’s face, arguably the identifying feature of a person, is depicted. It is here that “Monsters” portrays most unforgettably the suddenness with which fear can lurch into hysteria and violence” (Wolfe 128). The fact that it took such small accusations and bizarre occurrences to turn the group of people collectively against an individual is shocking. Steve’s quick warning to calm the crowd is enough to stop the complete formation of

the mob at this point, but the group’s sudden magnetism to chaos will inevitably lead to destruction.

When Les is unable to provide an explanation as to why his car starts by itself, coupled with an accusation from the crowd that Goodman often stares anxiously at the sky at night, the group becomes fearful and suspicious of him. Serling uses the commercial break to indicate a lapse in time, as when next the viewer sees Maple Street, darkness has fallen. Though Serling could have done this simply to add suspense to the story, more than likely this darkness is symbolic of the light of truth leaving the occupants to their own darkness. On a shot of Mr. and Mrs. Goodman, low-key lighting is used to make their appearances frightening and different than the well-lit figures of their neighbors in the background. This suggests that the Goodman family is still under suspicion by their neighbors, but also that Serling wants the audience to suspect this couple is different from the group as well. Instead of enlightened and rational individuals, the neighborhood has deteriorated into a status akin to “the dark ages,” which Charlie inconsequentially invokes in a conversation with his wife (Monsters 16). Without their technologies, the citizens of Maple Street have fallen back on suspicion and the supernatural as a form of government, feeling that those who differ from the group must somehow be evil. When word gets out that Steve has been working on a radio that no one else has seen, each person’s face is shown to be half lit and half in darkness, suggesting that the residents of Maple Street are on the verge of falling into violent chaos. Up until this point of the episode, Steve has been the voice of rationality and reason on Maple Street, stifling the mob’s early outbreak. The fact that Steve is under suspicion himself suggests a hint of misplaced trust to the audience in understanding the motive of Steve’s previous actions. If Steve were an

alien invader it would stand to reason that a calm neighborhood would make invasion easier. Steve's angry, sarcastic rant that he talks to aliens on the radio in his basement does nothing to help his case, only serving to remove suspicion from the Goodman family.

The flow of blame and doubt is about to change again on Maple Street, as a shadowy figure approaches the group from the other end of the street. His distance from the group, as well as the darkness that cloaks all but his feet, identify this figure as an outcast: the scapegoat for which the crowd has become hungry. One of the neighbors hands Steve a shotgun, which he refuses to use, to repel what is perceived as an invading enemy. Charlie, arguably highlighted as Serling's antagonist in this episode, grabs the gun and aims it at the figure. It is at this point that Serling provides the viewer with a camera close-up shot of a hammer hanging from the figure's pants. For the first time in the episode, rather than having the viewer play along with the "blame game," Serling reveals the horror and chaotic power of the mob, as Charlie kills his returning neighbor, Pete Van Horn. Of course, by killing an innocent man, Charlie places the mob's suspicion on himself. The mob members think that Pete may have come back with information about the turn of events and, knowing this, Charlie killed him before they could receive it.

Chaos dominates the episode from this point forward, as lights go on and off in various houses, and suspicion of being an outsider is tossed about in rapid succession to various members of the community. The audience, no longer preoccupied with solving the mystery is now subjected to the chaotic outbreak that the rising suspicions have created, and "[while] the story appeals for social reform by condemning irrational fears and intolerance, the penultimate scene describes total social breakdown. Lit for night, the tale's final minutes

convey a chaotic nightmare rendered with madly tilted camera angles, rapid cutting, and distorted close-ups of screaming faces in a stampeding frenzy of violence" (Worland 107). Normalcy and everyday activity, which began the episode, have now completely left the citizens of Maple Street. At the mere suggestion of the presence of an outsider and the inexplicable flickering of lights and appliances, the people of Maple Street have degraded from rationality to hateful distrust of their neighbors and finally into chaos. By this slow and steady decline, "Serling comments effectively on the human condition here, saying that man's worst enemy is not necessarily bombs and explosions, but himself" (Presnell and McGee 54).

Whereas the previous episode dealt with rather small issues, making comment about individual human behavior in relationship to society, this episode deals with the nature of society itself. Should this episode have been created under a realistic premise of a communist invasion, which no doubt Serling had in mind when writing the episode, the sponsors and network executives would have heavily scrutinized and edited its content. Therefore, on a larger scale, Serling's "The Monsters Are Due on Maple Street" illustrates an artistic freedom to discuss social evils as he is able to construct "a fantastic plot to communicate a theme that he would have treated realistically in the fifties; he uses a science-fiction device, the alien invasion, not as a source of pure excitement, but rather as a tool to reveal the existence of blind hatred and cruelty where they might not be expected—in suburbia" (Venuti 364). Not only are we the unexpected monster of our own nightmare in this scenario, but the episode proves that once the seeds of suspicion and doubt have planted, chaos will rule the day.

Serling's epilogue to this episode further exemplifies that science fiction has been implemented as a vehicle by which

to arrive at a real world social and political lesson. In Serling's script for this episode, the epilogue reads as follows:

The tools of conquest do not necessarily come with bombs and explosions and fall-out. There are weapons that are simply thoughts, attitudes, prejudices—to be found only in the minds of men. For the record, prejudices can kill and suspicion can destroy and a thoughtless, frightened search for a scapegoat has a fall-out all of its own for the children ... and the children yet unborn. (a pause) And the pity of it is ... that these things cannot be confined to ... The Twilight Zone. (26)

The fact that Serling admits his science fiction tale cannot contain the irrationality and prejudice that exists in the real world suggests an existing social problem. After hearing this epilogue, it is hard not to imagine Serling's "intent to link domestic politics to the larger dangers of the Cold War through the explicit mention of bombs and fallout" (Worland 106).

In connection with his shift from discussing small social ills to large national issues, Serling also abandons the singular protagonist formula he is known to be loyal to in order to provide an individual antagonist, Charlie. Douglas Brode, Professor of Film at Syracuse University, actually goes as far as calling Charlie a "reactionary bigot," and claiming that he physically "looks like Senator Joe McCarthy" (169). Charlie prompts others to follow his example because he acts on impulses rather than cowering in fear. Everything about his character makes Charlie the episode's antagonist: "[his] stoutness, his loud, tasteless sport shirt worn as an emblem of defiance, and a voice that wavers between a simper and a screech convey his zeal for quick, easy answers; his melodrama and his loss of control are both functions of his insecurity" (Wolfe 130). The truly sad part about this episode is that the rest of the street's population, with the exception of Steve, are not

strong enough in their own convictions to deny Charlie's method of handling situations. Rather, they join his illogical witch hunt out of "their common 'fear of the unknown,'" and with "no firm political beliefs" they fall victim to "rabble rousers and [are] manipulated by demagogues with strong prejudices but weak minds" (Brode and Serling 169). The mob of Maple Street fails to see Serling's message about people like Charlie until it is too late, that sometimes having no answer to a problem is better than the consequences of choosing the wrong one. The date of the episode's first airing comes a few years after the McCarthy trials, making an interpretation of this episode a tale of warning against a future "Red Scare." Though this reading does help to put a character like Charlie into social perspective, the chaos created on "Maple Street" need not have something as complex as political dogma as its primary cause. The chaos was created from simple, common causes, with the smallest pieces of doubt and suspicion snowballing into an uncontrollable force.

Though a formula common to *The Twilight Zone*, Serling does not always seek to relate the audience to a single character through shared emotions. In "The Obsolete Man," Rod Serling places two individuals against one another in an intellectual quarrel, a rare one-on-one conflict for *The Twilight Zone*. Serling does this in order to display the two opposing ideologies that each man symbolizes. The Chancellor, a character named only by his occupational role, symbolizes unforgiving fascism and close-mindedness. Romney Wordsworth, a librarian by profession, symbolizes free will and the individual human spirit. Also, with the religious undertones of the episode, his self-sacrifice, and because his secondary occupation is revealed to be carpentry, Romney Wordsworth can also be considered a Christ figure (Brode and Serling 197). In addition to these, the character's

connection to English Romantic poet, William Wordsworth, should not be overlooked either. Both Romney and William show the poetic individualism and refusal of conformity which causes this episode's conflict.

The episode takes place on only two relatively basic film sets, which are representative of the two characters. For instance, the show's opening scene is in a vast and exaggeratedly tall court room, where the Chancellor's state tries people on charges of obsolescence. Marc Zicree describes this room in his *Twilight Zone Companion*, stating that it "is quite unlike anything seen before on *The Twilight Zone*. The walls are completely covered with black velvet. There is a single, long, narrow table. At the end of it is an immensely tall, narrow lectern, behind which the Chancellor stands elevated and apart" (209). Serling defines the court room in this way to coincide with the nature of the Chancellor himself. The state's Chancellor is not accepting of lifestyles deviant from those socially accepted to be of value. He is as oppressive and aloof as the podium from which he addresses the court room. His socially high position is physically manifested in the degree of height his podium is above everyone else, and no one below him, physically and socially, speaks or moves without his consent.

The two settings featured in this episode are vital, as the man who is in his own corresponding set has the upper hand in the intellectual battle between them. The cinematography used in this opening scene to express the dialogue between the two women is so rich with meaning that it is challenging to recount every detail. The court room scene "manipulates distance and perspective to create the bleak and gloomy atmosphere," for both Wordsworth and the audience (Presnell and McGee 98). For instance, while in the court room, the Chancellor is a high-ranking state official with supreme power. In this setting, though, Wordsworth

is nearly defenseless. The Chancellor sits perched high above Wordsworth with a microphone nearby to create an artificially loud voice. Wordsworth, on the other hand, stands roughly fifteen feet lower on ground level at the end of a long table. The way in which the table and podium are shot in this scene creates an interesting parallel between the two characters: while visually maintaining the Chancellor as higher than his adversary, there are a few moments in which the podium and table look nearly identical from the angular perspective given.

The camera angles featured in the men's argument scenes are used by Serling to dictate their feelings and reactions toward each other at that given moment. For instance, when Wordsworth is speaking in his own defense, the camera angle is generally close-up at eye level, creating a sense of individualized humanity for his character's predicament. The Chancellor's response to Wordsworth's argument can be noted by the camera angle implemented in the given situation. When his response to Wordsworth's defense is a close-up and eye-level camera shot, the Chancellor is attempting to explain rationally the fallacy of a part of Wordsworth's defense that the Chancellor has taken personally. This sequence of camera angle dialogue occurs both when the two women are discussing books and the existence of God.

The more common sequence of camera angle dialogue between the two characters involves a close-up eye-level shot of Wordsworth's defense met with a low-angle shot of the Chancellor looking down on him. By being physically above Wordsworth, the Chancellor creates a sense of his dominance over their mutual setting. In these shots, the Chancellor is generally calling Wordsworth names to express worthlessness or denying the truth of his defense in order to make an example of him. The distance between the two men indicates that his verbal abuse is meant to be callous and impersonal. At the

end of this scene, the Chancellor feels that he has won the dispute, as the court finds Wordsworth to be obsolete with a punishment of death forthcoming. However, the creative freedom allowed to the condemned in method and location of his own execution will prove fatal to the state in the episode's concluding scene.

In the small apartment where he has chosen to be executed at midnight, Wordsworth quickly gains the upper hand on the Chancellor. Like the man, the apartment is small in size but filled with knowledge and creativity, physically manifested in the form of shelves filled with books and artistic sculptures. Also, the haphazard placement of his books indicates a free will not shown in the extremely structured courtroom. Besides being smaller in square feet, Wordsworth's room is also much shorter, and he and the Chancellor are on an even level with each other. Without his large podium to hide behind, the Chancellor is forced to share the same floor with Wordsworth. This levelness coincides with Wordsworth's system of belief: all men are equal, and no man is obsolete. The high-ranking state official decides to comply with Wordsworth's request to meet with him before the hour of his death is to occur. Here, as previously stated, both men are literally on the same level and their intellectual argument continues. The Chancellor continues his attempt to belittle Wordsworth, going as far as saying that the condemned man should cry to the camera because some government official may take pity on him. Wordsworth reveals at this point that his chosen method of execution was to have a bomb go off in his room, a quick and rather sad ending for the only humane character in the episode.

Though it seems that all is lost for him, Wordsworth finally reveals his plot, asking the Chancellor the hypothetical question, "And yet... knowing that you are going to be blown to smithereens in twenty minutes is not the happiest of thoughts, is it?" to

which the Chancellor replies, "That depends on the individual, Mr. Wordsworth" (Obsolete 24). The Chancellor's response reveals a costly betrayal to his chosen ideology, as in the state's totalitarian form of government there should be no individualized thought but rather a mechanized collective process of thinking. It is ironic that he should make such a statement illogical to his ideology just before learning that he is to share in Wordsworth's demise.

Despite the fact that the door is locked, the Chancellor mistakenly believes that he retains the upper hand, calling for guards or anyone around to come to his aid. Wordsworth explains that people scheduled for termination are isolated from others. The only ones that can hear his pleas are the television audience tuning in for Wordsworth's termination, which, Wordsworth is quick to point out, would find it embarrassing to have to save a high-ranking state official from an obsolete librarian. Only now does it become clear to the Chancellor that he "overreached himself by visiting the man he condemned to death in order to make him grovel" (Wolfe 73). The Chancellor had belittled Wordsworth so much that he underestimated, in his own mind, Wordsworth's intellectual abilities. Perhaps if he had known of Wordsworth's resourcefulness, the Chancellor would not have become trapped, or even declared the man obsolete. It stands to reason that "[the] reluctance of the Chancellor's colleagues to save him shows that his duping by the lowly Wordsworth has made him obsolete. The creed he serves demands his death. He has become the obsolete man of the teleplay's title" (Wolfe 74).

While the clock ticks toward midnight, Wordsworth reads his Bible and the Chancellor is shown to be a nervous wreck, smoking cigarettes and sweating. Finally, a minute before midnight, the Chancellor loses all composure and begs "in the name of God, let me out" (Obsolete 29). By

invoking the name of God, the Chancellor has gone against his ideology once again, this time affirming the existence in God he had outright denied while in his courtroom. When he gives the Chancellor the key, Wordsworth becomes the ultimate victor. Peter Wolfe, Professor of English at Bowling Green University, describes this event as the official statement of Wordsworth's superiority to the Chancellor, as he states:

Enacting a perfect stroke of justice, Wordsworth gives the desperate Chancellor his key, allowing his foil to flee the room that will explode within seconds. Wordsworth meanwhile stays put. He dies a hero's death, dignifying his last minutes by reading aloud from the 23rd Psalm. The Chancellor's atheism, on the other hand, has made him Wordsworth's inferior. Sweating and panicky, he shrinks in dignity as his death moment approaches, begging Wordsworth to spare his life and then grabbing Wordsworth's door key so that he can flee. (74)

But fleeing does not save the Chancellor. When he returns to the court room, the Chancellor discovers that he has been removed from office and has been found obsolete. The Chancellor has become a victim of his own inhumane ideology. His system of beliefs is so rigid and unforgiving that all people under its power find themselves equally dominated.

The Chancellor's plea for his own life in the name of God exemplifies Serling's message in this episode: the strength of an individual is not based on their socially accepted beliefs, but rather on their personal ability to pursue truth and liberty. When both men are tested on the area of personal faith in something greater than their individual lives, Wordsworth's religious and social morality proves stronger than the Chancellor's belief in his domineering tyrannical government. Although there are strong political overtones in the episode, Serling's message can also be seen in a non-political manner. Metaphorically, his portrayal of Wordsworth as victorious over the

Chancellor's all-powerful government can be interpreted as Serling's illustration of his own triumph over his powerful and impersonal enemies: network sponsors.

Rod Serling's groundbreaking series, *The Twilight Zone*, survived five seasons and 156 episodes on CBS. Though he would eventually win two more Emmys for his series, perhaps his greatest success with this show was his ability to succeed with the notion of quality writing that involves the television audience mentally. Because the nature of his scripts were speculative and used elements of science fiction and fantasy, Serling found artistic space in which to create memorable and quality works of television, something he had not had in his early television career. His *Twilight Zone* scripts ran the gamut from critique of too much individuality to too much conformity. To some extent, the episodes chosen for discussion are representative of the early years of the series. They each deal with social and political themes in a roundabout way in order to entertain the audience while educating them. For the first three seasons of the show, Serling wrote the majority of the scripts and the quality was kept at a relatively constant level; however, the fourth and fifth seasons were much weaker than the previous years of the show because Serling had much less involvement with each intricate part of the episodes, and he had actually gone back to teaching at Antioch College.

Rod Serling made several creative choices in the series that were not genre-related, but whose significance is worthy of discussion. Being not only a writer for the show, but also its creator, 40 percent owner, and final editing executive, Serling held power over even the episodes he did not write. In the episode, "The Invaders," Serling encouraged writer Richard Matheson's selection of a single woman cast for his script. In their era of television, to have a woman as not only the lead role but also the only role on a show was unheard of. Serling's entire crew was comprised of these types of innovators

and risk takers, adding to the series' overall quality. In addition to the crew, the quality of the acting also helped the series maintain its position in television history. While showcasing the big-name stars, like Mickey Rooney and Ed Wynn, the series would also feature virtually unknown actors, such as William Shatner, Leonard Nimoy, James Doohan, and George Takei. This group of men would continue their careers in science fiction, starring in the original and highly influential *Star Trek* series. In this way, not only can the *Twilight Zone* be remembered for its outstanding merit as show of serious drama, but it also retains its place in science fiction history for spawning consumer interest in the genre and starting the careers of those who would continue the evolution of the genre.

The *Twilight Zone* is far from dated, unlike the majority of television programs that its era produced. The issues and themes explored in Serling's series continue to be relevant to this day. Perhaps this is because, unlike the writers of Westerns, Serling chose a genre that was willing to erase the idolization of the past. The majority of *Twilight Zone* episodes are set either in the contemporary present or the future. Because of this, the issues discussed were not those resolved in the past, but those that Serling foresaw as being pertinent for the future of mankind's existence. When episodes were set in the past, the past itself was not the focus of the episode, but rather the deeper human concerns. The human element has not become outdated in Serling's show, as two reincarnations of the series, one in 1985 and the other in 2002, were created, indicating a continued fan base for the type of series that Serling pioneered. The fact that they were less successful than the original series is a testament to Serling's standard of quality and the readiness of his television audience to see something new and different. These reincarnations merely rehashed the ideas that Serling and his crew had already breeched, going as far as redoing some of

the episodes in color with a new cast. If imitation is the greatest form of flattery, the fact that imitators do exist gives the original series additional merit.

Rod Serling's creation, *The Twilight Zone*, redefined the genre of science fiction, placing it in the conversation for meaningful television drama. His understanding of the human condition was far reaching and universal, as fifty years after its original broadcast, *The Twilight Zone* retains its critical acclaim and can still be seen in syndication. Serling's hard work and dedication to the high quality and audience appeal of his series have ensured it a place among the greatest television programs ever made. To this day, Serling's series is shown in syndication on various television stations and is sold at roughly the same price as DVD box sets for current television programs. The term, "Twilight Zone," has seeped into the popular culture to identify an odd or creepy occurrence in an otherwise routine life. It is only one of two television shows to have won both an Emmy Award and an Academy Award. Perhaps more telling is the Unity Award that Serling won in season two of *The Twilight Zone* for "Outstanding Contributions to Better Race Relations." It indicates that, although Serling was unsuccessful in illustrating the social ills that created the Emmett Till case in his early work for television, his science fiction series was recognized as attempting to better society, an achievement Serling was proud to obtain. In addition, his series was not critically rejected as television garbage, or even slighted for being science fiction. The series won three Hugo Awards for "Best Dramatic Presentation," becoming the only three-time recipient in the award's history. Though the show did have its share of gimmicky, strictly-for-entertainment science fiction episodes, *The Twilight Zone* shone brightest when Serling wrote about contemporary social ills. j

WORKS CITED

- Bertonneau, Thomas and Kim Paffenroth. *The Truth is Out There: Christian Faith and the Classics of TV Science Fiction*. Grand Rapids: Brazos Press, 2006. 132, 149.
- Brode, Douglas and Carol Serling. *Rod Serling and The Twilight Zone: The 50th Anniversary Tribute*. Fort Lee: Barricade Books Inc., 2009. 3, 4, 6, 7, 169, 197.
- Cochran, David. "Another Dimension: Rod Serling, Consensus Liberalism, and The Twilight Zone." *American Noir: Underground Writers and Filmmakers of the Postwar Era*. London: Smithsonian Institute Press, 2000. 196, 204.
- Phillips, Mark and Frank Garcia. *Science Fiction Television Series: Episode Guides, Histories, and Casts and Credits for 62 Prime Time Shows, 1959 through 1989*. Jefferson: McFarland & Company Inc., 1996. 467-68. 470.
- Presnell, Don and Marty McGee. *A Critical History of Television's "The Twilight Zone," 1959 1964*. Jefferson: McFarland & Company Inc., 1998. 54, 98.
- Rabinowitz, Dorothy. "TV: From the Surreal to the Ridiculous." *The Wall Street Journal*. 27 Nov. 1995: A16. ProQuest Newspapers. ProQuest. Campbell University, Buies Creek, Carrie Rich Memorial Lib. 17 Feb. 2009 <<http://proquest.umi.com>>. par. 4, 5, 6
- Serling, Rod. Interview. *The Mike Wallace Interview*. 20 Sept. 1959. *Treasures of The Twilight Zone*. Image Entertainment, 1999.
- . "The Monsters are Due on Maple Street." *As Timeless As Infinity: The Complete Twilight Zone Scripts of Rod Serling*. Ed. Tony Albarella. 1st ed. Vol. 4. Colorado Springs: Gauntlet Publications, 2007. 3, 8, 16.
- . "The Obsolete Man." *As Timeless As Infinity: The Complete Twilight Zone Scripts of Rod Serling*. Ed. Tony Albarella. 1st ed. Vol. 4. Colorado Springs: Gauntlet Publications, 2007. 24, 29.
- . "Walking Distance." *As Timeless As Infinity: The Complete Twilight Zone Scripts of Rod Serling*. Ed. Tony Albarella. 1st ed. Vol. 2. Colorado Springs: Gauntlet Publications, 2005. 29.

Stark, Steven D. "16. The Twilight Zone: Science Fiction as Realism." *Glued to the Set: The 60 Television Shows and Events that Made Us Who We Are Today*. New York: The Free Press, 1997. 88.

Venuti, Lawrence. "Rod Serling, Television Censorship, The Twilight Zone." *Western Humanities Review*. 35 (Winter 1981): 354-55, 360-61, 364.

Wolfe, Peter. *In the Zone: The Twilight World of Rod Serling*. Bowling Green: Bowling Green State University Popular Press, 1997. 17, 57, 73-4, 128, 130.

Worland, Rick. "Sign-Posts Up Ahead: The Twilight Zone, The Outer Limits, and TV Political Fantasy 1959-1965." *Science Fiction Studies*. 23.1 (Mar. 1996): 103-122. Academic Search Premier. EBSCO. Campbell University, Buies Creek, Carrie Rich Memorial Lib. 17 Feb. 2009 <<http://search.ebscohost.com>>. 104, 106.

Zicree, Marc Scott. *The Twilight Zone Companion*. 2nd ed. Los Angeles: Silman-James Press, 1989. 14-15, 43, 209.

Social Sciences

List Linking as a Tool to Test Transitive Inference in Rats

Leah Jordan

University of North Carolina Wilmington

Faculty Mentors: Katherine Bruce, PhD and Mark Galizio, PhD

Department of Psychology

University of North Carolina Wilmington

Abstract

Transitive inference, along with other abstract concepts, has been considered a characteristic unique to humans. Transitive inference is demonstrated when one learns that A is related to B and B is related to C, and then infers that A is related to C. Rats have been shown to demonstrate transitive inference after being trained on four overlapping simple odors or discriminations; when trained only on odor pairs $A > B$, $B > C$, $C > D$, and $D > E$, they spontaneously show transitive inference (e.g., $A > C$ and $B > D$; Davis 1992; Dusek & Eichenbaum 1997). In the present study, we extend these findings to a novel apparatus and a list-linking procedure similar to that studied by Treichler et al. (1996) in monkeys. Rats are trained on two separate lists of odor pairs (A-E and F-J) and then the lists are linked through training on EF. Using two lists allows testing for transitive inference using many novel combinations of pairs across and within lists (for example B-H and G-I). Three rats have responded with transitive inference consistently (over 90% of the time) when tested with novel combinations of pairs within lists and two rats have completed the final test after list linking, performing above 75% on between list novel combinations and 70% or above on within list combinations. Transitive inference has been seen across several species and may be evidence of an adaptive process used in establishing social hierarchies among non-humans.

WHAT COGNITIVE ABILITIES do non-humans possess? In what ways are human and non-human cognition similar and different? These questions are central to our understanding of the basic processes of learning and higher order

thinking. Based on a comprehensive review of the research, Lewis and Smith (1993) proposed the following definition: "Higher-order thinking occurs when [one] takes new information and information stored in memory and interrelates and/or

rearranges and extends this information to achieve a purpose or find possible answers in perplexing situations” (p. 136). Concept learning is a type of higher-order learning because it requires subjects to integrate the rule they have learned with the information being presented to solve the task (Lewis & Smith, 1993). A concept may be defined as a cognitive process of classifying elements into categories (Lazareva & Wasserman, 2008). For example, identity is a concept in which the elements are classified based on their similarity in physical or functional features. A concept becomes abstract when the subject is able to apply the rules learned in training to novel objects or tasks.

One abstract concept is transitive inference. Transitive inference (TI) is exhibited by using previous training of relationships between stimuli to determine a relationship between stimuli that have not been presented together. This task is considered an abstract concept because the inferences that are made can only be deduced from the relations learned previously and applied to the novel situation. TI, according to some (Dusek & Eichenbaum, 1997; Lazareva & Wasserman, 2006; Ayalon & Even, 2008), requires deductive reasoning because it requires the subject to deduce or determine a relationship between stimuli that is not explicitly presented. TI tasks require the subject to accept the premises given and complete the task at hand given those premises.

Research on Transitive Inference

Researchers initially believed that TI tasks could only be solved by humans. It was argued that TI requires verbal feedback from subjects to determine if they indeed can solve the task (Vasconcelos, 2008). However, Bryant and Trabasso (1971) showed that children below age 7 were actually capable of the TI task. The stimuli used in Bryant and Trabasso’s (1971) study were five sticks of different colors and sizes,

labeled A-E. Stimuli are trained in four overlapping pairs: for example, AB+, BC+, CD+, and DE+. The plus sign indicates the reinforced choice. Five items are used because in order for the test to be truly transitive all other explanations for a choice must be eliminated. If only three items are used, the only transitive test would involve the stimuli on the end of the list which have absolute reinforcement histories (either 0% or 100%). With five items, there is one pair within the list (B-D) that is both novel and the choice cannot be made based on absolute reinforcement histories since both have been reinforced 50% of the time.

Bryant and Trabasso (1971) presented two sticks of different colors, stuck out from a box at equal heights, and the child was asked which one was taller. After the choice was made the child was shown the actual sizes of the two sticks. This feedback process allowed the child to order the stimuli along a physical dimension but still required the child to identify the transitive relationships from the memory of the hierarchy at the test instead of comparing sizes. Once the child showed proficient performance at picking the longest stick for each pair during training, a probe (or test) was given to test for transitive inference. The child was shown the stimuli labeled B and D and asked which stick was longer. Children ages 4 and above were capable of solving the transitive test. The children’s inability to solve TI problems previously (as in Piaget, 1928) was in part due to forgetting the relationships between the elements (Bryant & Trabasso, 1971; Vasconcelos 2008). When measures were taken to ensure that the children could recall the premises prior to training, the children below age 7 could perform the transitive task.

This finding led researchers to investigate whether non-human animals were capable of TI. The first study of TI in a non-human subject was that performed by McGonigle and Chalmers (1977). Their

study with squirrel monkeys was fashioned after the study of Bryant and Trabasso (1971) with children. Monkeys were trained on four overlapping simple discriminations that created a 5-item hierarchy (A-E) using cylindrical tin containers that were either "heavy" or "light" and varied in color. Once the monkeys had shown proficient learning of the premises, they were tested on the BD pair. McGonigle and Chalmers (1977) found that the seven out of eight monkeys were able to infer transitive relationships (the eighth subject failed to complete training and did not get to testing of TI). A number of species have revealed TI abilities: macaque monkeys (Treichler & Tilburg, 1996), pigeons (Steirn, Weaver & Zentall, 1995; von Fersen, Wynne, Delius & Staddon, 1991), fish (Grosenick, Clement, & Fernald, 2007), hooded crows (Lazareva, Smirnova, Bagozkaja, Zorina, Rayevsky, & Wasserman, 2004), and rats (Davis, 1992, Dusek & Eichenbaum, 1997). One question that arises is why should non-humans show TI?

One reason may relate to living in social groups. Rats living in social groups set up dominance hierarchies (Calhoun, 1963). These hierarchies are set up by interactions with other individuals in the group. When a new rat joins a colony it may not interact with every individual in a group but rather with a few. If it were to interact with every individual, that would be energetically costly and could result in death. Instead the new rat may observe those rats' interactions with other individuals in the group that the new rat has not been associated. From these observations, the new rat could then determine his own social position within the colony if he were capable of using TI. In other words, TI could be one way of determining a social hierarchy in a rat colony. Many other species that establish dominances are capable of TI, such as monkeys (Treichler & Tilburg, 1996) and pigeons (Lazareva & Wasserman, 2006).

One way of studying TI in the lab is with preference conditioning (Russell, McCormick, Robinson, & Lillis, 1996). Preference conditioning involves training a subject to prefer or choose one stimulus over another, through reinforcement, thus creating a hierarchy of stimuli. These tasks are also referred to as associative tasks because they require the subject to find a relationship between stimuli (such as reinforcement) that is not apparent on physical dimensions (for example, logical tasks used frequently with humans). Ordered lists for associative tasks are formed via trial and error, when the subject determines in what cases a stimuli is correct or incorrect.

Dusek and Eichenbaum (1997) trained a hierarchy of five scents in rats through a series of overlapping single discriminations. Olfactory stimuli are often used in rat studies and there is much evidence to show that rats can perform many cognitive tasks better when using olfactory rather than visual cues (Slotnick, 2001). In Dusek and Eichenbaum's (1997) study five scents were randomly ordered into a hierarchy (labeled A-E), with the one scent at the top of the hierarchy reinforced 100% of the time and the one at the bottom never reinforced. The stimuli were in no way orderable along a physical dimension such as size. This list was trained by pairing stimuli together that are adjacent to each other in the list making four training, or baseline, pairs (AB, BC, CD, DE). The list was trained by overlapping simple discriminations composed of the elements in the list. The first element of each pair was reinforced and the pairs were presented in increasingly randomized order (i.e., A+B-, B+C-, C+D-, D+E-; where + indicates reinforcement and - indicates no reinforcement for a choice). Each element was presented equally in each session, referred to as intermixed training (Vasconcelos, 2008).

After increasingly randomized phases of baseline pairs to create the list, Dusek and

Eichenbaum (1997) tested the rats on the classic B vs. D transitive probe test. The pair BD has been used with many species across many studies involving a 5-item ordered array. This pair is tested because B and D are the only stimuli that have not been paired together in training and have the same reinforcement history. Both B and D have been reinforced 50% of the time, compared to A and E which have 100% and 0% reinforcement histories, respectively. A and E are referred to as end-anchors because they are on the end of the lists and any pairs containing A or E (e.g. CE or AC) could be solved with reinforcement histories instead of learning a hierarchical list. Solving tests containing A or E are still transitive tests but could be solved with reinforcement histories instead of their sole relationship with other elements, as in the BD example. The elements B and D's relationship can only be deduced if the subject has integrated the elements of the list into a hierarchy. If the rats were not able to form a hierarchy or infer transitive relationships, then they would be expected to perform at chance on the BD task. If they are able to infer a transitive relation, then the rats would perform above chance on the BD task, that is chose B over D since B is "higher up" in the hierarchy (based on the associations with the differentially reinforced end-anchors). Dusek and Eichenbaum found evidence that rats are capable of TI by performing above chance on the BD comparison.

Extending TI Studies: List Linking

These studies, however, are limited in their ability to test for TI. While more than one pair in a five-item list would qualify as a transitivity task (e.g., AC, BE, etc.), only one, BD, can be used to truly test transitivity. The BD task is the only transitive task that can not be solved using reinforcement histories. In essence, there is only a single trial that can reveal to a researcher if the subject is capable of solving transitivity

tasks. This limitation led other researchers to design experiments that extended the list to include more stimuli and thus, more pairs to test transitivity. Many researchers simply added stimuli to the five-item list to make longer lists, such as that by Roberts and Phelps (1994) who extended the training to six items (A-F).

A novel approach was used by Treichler and Tilburg (1996) who designed a study for macaque monkeys that linked two five-item lists together. This procedure attempted to solve two problems. The first was the problem mentioned above, that five-item lists only provide one single trial test of transitivity. Linking two lists together essentially gave researchers a ten-item list and thus, many more tests of transitivity. With a ten-item list there are more than two stimuli that have both been reinforced 50% of the time and have not been trained with the end anchors, thus not allowing reinforcement histories to be a way to solve the task. Treichler et al. (2007), extended list linking to three lists of five items, studying macaque monkeys with visual stimuli. This extended the testing pairs to those combining 15 items (A-O). Three different five-item lists were linked by combining training of all the pairs in one session.

The second goal with linking the lists together was to allow an attempt to test the value transfer theory. Value transfer theory was proposed by von Fersen et al. (1991) to account for TI of the BD pair by reinforcement history. The idea was that each stimulus in the list received a certain value and that value was the product of its pairing with another reinforced stimulus as well as its direct reinforcement. Thus, values increase or decrease down a list. With two different five-item lists, the values of stimuli in the same position across lists are theoretically identical since stimuli in the same position in each list have been reinforced in the same manner and are paired with stimuli in the same way. If value transfer were

indeed in effect, then the subjects would perform at chance for stimuli that are in the same position across the lists because the stimuli would have the same value (e.g. B and G).

Treichler and Tilburg (1996) trained monkeys on two five-item lists separately by training each pair individually and tested for transitivity on both lists. He then linked the five-item lists together by using the last stimulus of the first list (E) and the first stimulus of the second list (F). Following the transitive test on the individual lists, the subjects were trained on a single pair composed of the first and last stimuli from the lists, E and F, and thus changing their reinforcement histories to 50% rather than 100% or 0%. Following proficiency on the linking pair, subjects reviewed the first list along with the linking pair to ensure that the rats could still perform accurately on the pairs prior to testing. He found that macaque monkeys were capable of linking the two lists together and did above chance on transitive tasks on the ten-item list. The test of transitivity included all possible combinations of the ten-item list including stimuli that had not been presented together within and between lists. Interestingly, he discovered that pairs that contained stimuli that had more stimuli in between them on the hierarchy (e.g., BI, CH), yielded fewer errors than those pairs containing adjacent stimuli (e.g., AB, FG).

The Current Study

The current study used Sprague-Dawley rats in a systematic replication of Dusek and Eichenbaum (1997) and Treichler and Tilburg's (1996) work. Rats were trained on two separate five-item lists and then trained on a linking pair to link the two lists together to form a ten-item list (similar to Dusek and Eichenbaum, 1997). After one list was trained to criterion, the subject was tested for transitivity on that list and then trained on the second list and tested

again for transitivity. The subject was then trained on the linking pair that contained the last stimulus of the first list and the first stimulus of the second list. Following linking pair training, the subject went through review of the past lists to ensure good baseline performance on the first list. Rats were then tested for TI using stimuli between lists.

List linking was done in this study for two reasons, similar to the rationale of Treichler and Tilburg (1996). The first reason was to extend the five-item list to include more possibilities to test transitivity. The ability of rats to infer transitive relations among stimuli on a five-item list has been widely studied (Dusek & Eichenbaum, 1997; Davis, 1992; Roberts & Phelps, 1994). With more combinations of stimuli to test transitivity, it could be determined whether the subject is learning a few simple discriminations or if the stimuli have been organized into an ordered array by the subject. Further, using list-linking allows for some tests of value transfer theory.

During the final test of list-linking, the focus was on the pairs that contained stimuli from both lists, or between list pairs (e.g., BH, DI), and pairs that contained stimuli from only one list, or within list pairs (e.g., AC, FH). If rats are capable of list linking, percent correct between list pairs on the final test of list linking should be equal to or above that for within list pairs (Dusek & Eichenbaum, 1997; Davis, 1992). If the rats are not capable of list linking, then percent correct between list pairs should be at chance or below that of within list pairs.

METHOD

Subjects

Three naïve male Sprague-Dawley rats were received at 60 days of age and initial training began at about 75 days of age. Rats were kept at 85-90% of their free-feeding body weight at the start of training

and had free access to water. Subjects were fed between 10-15 g of Purina® Rat Chow daily about 30 minutes after completion of the daily sessions. Rats were housed individually and kept on a 12 hour reverse light/dark cycle with testing done during the dark cycle.

Apparatus

The apparatus (see Figure 1) was a modified operant chamber. The front wall had a gap, approximately 5.08 cm. high, which was large enough for a Plexiglas tray to slide through. The stimuli were placed in a Plexiglas tray with two holes cut out 1 cm apart. The holes were 5 cm in diameter, large enough for a 2 oz. condiment cup to fit. Two screws on both sides of each hole acted as a ledge for the Plexiglas lid to slide through and cover the cups in the holes. Play sand was placed in clear plastic cups to about 1-1.5 cm below the lip of the cup. Lids, Plexiglas sheets 2 mm thick, were cut into rectangles 7 x 6 cm.

To scent the lids, they were placed in Tupperware containers holding powdered spice (two slides for each spice) for at least 24 hours between sessions. The containers held various powdered scents in full concentration in a thin layer covering the bottom with the lids positioned above but not

touching the powder directly. Spices used in this study were: dill, clove, nutmeg, cumin, turmeric, ginger, beet, fennel, tomato, worchestershire, carob, bay, coriander, savory, garlic, cinnamon, thyme, raspberry, paprika, onion, sage, anise, lime, allspice, mustard, celery, marjoram, and caraway. Reinforcers were sucrose pellets weighing .45 mg.

Procedure

Each rat was eventually introduced to 10 scents that were labeled stimuli A-J to make up a hierarchy. Each rat had his own scent list, so no two rats received the same scents in the same order. The procedure used was a combination of the procedures from Dusek and Eichenbaum (1997) and Treichler and Tilburg (1996). Each stimulus was paired with the stimulus before it in the hierarchy and after it to make up four training pairs or baseline pairs (BL). For example, stimulus B was paired with A, then in the next set of trials with C. Each phase consisted of six trials of each of the pairs that made up the lists. All pairs were represented equally in each session and they appeared in order for Phases 1-3 and randomly in Phase 4. For example in Phase 1, the first set of trials was AB, the next set was BC, followed by CD, then DE. Training was completed for

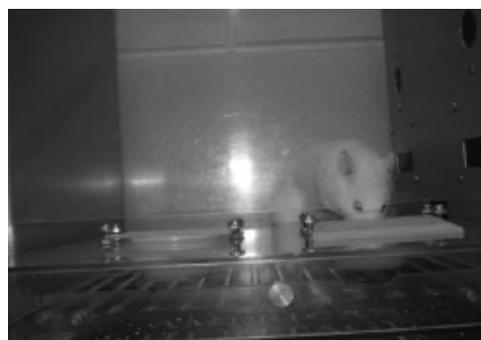


Figure 1. (left) Photograph of the apparatus, or modified operant chamber, used for the procedure. (right) Photograph of a subject making a response inside the apparatus.

first 5 stimuli before introducing the second 5 stimuli. The second stimulus in each pair was reinforced making the list of 10 stimuli a hierarchy, with J being reinforced 100% of the time, therefore the "highest" in the rank order.

Shaping

Rats were trained to first dig in the sand in the plastic comparison cups for a sugar pellet buried below the surface of the sand. They were then trained to push the Plexiglas lids back in order to expose the sand to dig for the pellet.

Acquiring the First Five-scent List: List 1

Phase 1 consisted of six trials of each pair of odor stimuli starting with A and ending with E for a total of 24 trials (Refer to Table 1 for an outline of all the phases). There were six trials of AB+, where B was reinforced with a sugar pellet, followed by six trials of BC+, etc. The position of each stimulus in a pair during a trial was randomly placed in right and left sides with the constraint that the reinforced stimulus was never on the same side more than two trials in a row. Identical trials could not occur more than twice in a row.

Sand cups were placed in the holes in the comparison tray and a sugar pellet was buried in the correct comparison about .5-.8 cm below the surface of the sand. The appropriate scented lid was then slid over the top of the cup of sand between the two sets of screws. To begin the trial, the experimenter placed the edge of the tray only 1 in. inside the chamber and held for 3 sec. After 3 sec, the tray was then pushed completely inside the chamber. Once the tray was placed in the chamber the rat was allowed to make a choice. A choice was defined as the rat using either the nose or front paws to move the lid past the first set of screws.

A non-correction procedure was used throughout the entire procedure. If the

rat chose the correct scent, the rat was allowed to dig for the pellet. However, if the rat chose the incorrect scent, the tray was immediately removed from the chamber, minimizing the ability of the rat to dig in the sand, and not allowing the rat to move the other lid at all. If a rat did not make a choice within two minutes it timed out, the trial was terminated and the rat moved onto the next trial. If the rat timed out three times in a row, the session was terminated. The intertrial interval was about 15 seconds. The initial choice was recorded on a data sheet. Two sets of lids and sand cups were alternated between trials. After each session the percent correct was calculated for each pair. For Phase 1, the criterion for a rat to move onto Phase 2 was to reach 80% or better on each of the four training pairs on 2 consecutive days.

Phase 2 was similar to Phase 1, except only blocks of 3 trials of each pair were given in sequenced blocks, then those 12 trials were repeated. For example, the first 3 trials were AB then trials 13-15 were also AB. The same randomization procedures used in Phase 1 were used in Phase 2 throughout the entire 24 trials. The criterion for Phase 2 was 80% or better for 2 consecutive days.

Phase 3 used the same pairs as in Phase 1 and 2, but pairs were presented in blocks of four. The block of four consisted of each type of pair in order. For example, trials 1-4 might be: 1)AB, 2)BC, 3)DC, 4)DE, and then trials 5-8 might be: 5)DE, 6)CD, 7)BC, 8)BA. The blocks were counterbalanced over six blocks (24 trials/six presentations of each pair). Identical blocks could not appear more than twice in a row. The same criterion was used: 80% or better on two consecutive days.

Phase 4 consisted of six trials of each pair randomly mixed with no two identical trials appearing more than twice in a row. Reinforced side was also randomized with left or right not being reinforced more than

Phase	Criterion	Trials (in order)
1	≥80%; 2 consecutive days	6 AB+, 6 BC+, 6 CD+, 6 DE+
2	≥80%; 2 consecutive days	3 AB+, 3 BC+, 3 CD+, 3 DE+ (repeat x1)
3	≥80%; 2 consecutive days	1AB+, 1BC+, 1CD+, 1DE+ (counterbalanced, repeat x6)
4	≥80%; 2 consecutive days	6 of each pair; randomly mixed
Probe	1. ≥80%; 2 consecutive days 2. none	1. 2 of each pair; random -continue session with phase 4 if does not reach criterion (24 trials total) 2. 2 of each: BD+, AE+, AC+, AD+, BE+, CE+, XY+ & 1 of each BL
5	2 days	2 of each baseline & 2 trials of each of AC+, AD+, AE+, BE+, CE+ (random) & 3 trials of BD+, XY+
2nd list	Repeat Phases 1-5 with items F-J	
List- Linking	1. ≥80%; 2 consecutive days 2. Variation: 4/5 on all pairs 2/3; 2 consecutive days or 2/3 & 1 1/3; 3 consecutive days	1. 24 EF+ 2. Variation of combination training: 5 trials of each pair of 1st list trained on plus EF+ (random) 3 trials of all baseline pairs of both lists plus EF+ (random)
Test	Three days	3 x 26 trials: every possible combination of items* *3 trials of BI, CH, DG, QR every session

Table 1. Summary of the Procedural Steps to Complete the Training and Testing of the 10-Item List.

twice in a row. Trials of the same pair could not occur more than twice in a row either. The criterion for Phase 4 was 80% or better on each training pair for two consecutive days. Once this criterion was reached, the rat moved on to the test of the five-scent list (probe session).

In the probe session, the rat first had to demonstrate reliable performance on the reinforced trials. Eight trials of baseline pairs were presented; each pair was represented equally and the second stimulus in

the series continued to be reinforced. That is, the stimuli that had been reinforced up till this point continued to be reinforced. The rat had to get at least 7/8 correct to move on to the test of transitivity. If the rat did not reach criterion, the rest of the session consisted of Phase 4 trials, for a total of 24 trials with each training pair being represented equally. The next session began with the test of reliable performance again. If the rat met criterion in the first eight trials, then the subject moved onto probe trials.

The probe trials consisted of two of every new possible combination of the five-item list, an unfamiliar pair of scents to control for learning, and one of each baseline pair. To maintain the hierarchy, reinforcement histories were maintained. All trials during the probe were double-baited, but the non-correctional procedure remained in place. Altogether with the eight baseline trials and then the probe trials, there were 26 trials. The test for TI on the five-item list occurred over one session. The choice made on the first novel presentation of BD+ was recorded. The number of correct trials for BD+ as well as all probes was calculated.

Further training (Phase 5) of the first scent list was introduced the day after the probe test and was done for only 2 days. This training consisted of 24 trials: 2 trials of each baseline training pair and 3 trials of BD+ and XY+, and 2 trials each of AC+, AD+, AE+, BE+, and CE+. All comparisons were randomly mixed with no same trial appearing more than twice in a row. A non-correction procedure was used. Once the further training was completed, the rat moved on to acquire the second list of five scents to complete the 10 stimuli list.

Acquiring the Second Five-scent List: List 2

The acquisition of the second set of five scents was done in exactly the same manner as the first, with no exceptions. Once the rat completed the 2 days of further training, he moved on to linking the two lists.

List Linking

Once criterion on List 2 was met, we trained the EF+ comparison that would link the lists. Twenty-four trials of EF+ comparison were given to a criterion of 80% or better for 2 consecutive days. A noncorrectional procedure was used. Once that task was completed, the rat moved on to one of two types of EF+ combination sessions.

Variation 1. The combination sessions combined the EF+ pair with all other eight baseline pairs trained previously. A session included three trials of each pair (nine

pairs in total) to make a 27 trial session. A noncorrectional procedure was used and criterion was 2 out of 3 on every pair, except one pair may be 1 out of 3, for 3 consecutive days. However, if this condition was not met and the subject completed 55 sessions, then the subject moved on to the final test.

Variation 2. During Variation 1 combination training, we realized that the training was actually training a 10-item list instead of maintaining the two lists as two separate lists. So, Variation 2 was designed to keep the two lists separate by just reviewing one list and not training all nine pairs at once. The combination sessions combined the EF+ pair with the first list that the rat learned. For example, if the rat began with the A-E list, then the rat would add the fifth training pair of EF+ to the A-E list baseline pairs. Five trials of each pair were randomly mixed together with no two identical trials appearing more than twice in a row. The initial choice was recorded and the non-correction procedure was used. Criterion was four out of five on each pair for 2 consecutive days or until 20 sessions had been completed. Once criterion was reached, the rat moved on to the test of list linking.

Test of List Linking

This test consisted of 45 trials of every possible combination of the elements randomly mixed (e.g., AJ+, DG+, CH+, etc.). The 45 trials contained old training pairs as well as novel comparisons. The final test stretched over 3 consecutive days with 26 trials in each session. Three comparisons of particular interest were presented three times in each session: CH+, BI+, and DG+. A novel comparison was also done three times in a session to control for learning of novel combinations. All other possible combinations were only represented once throughout the 3-day test. Prior reinforcement histories were maintained and the noncorrectional procedure was used.

The initial choice was recorded. The test was then repeated once with a new random order for all pairs, but still keeping the same distribution of pairs.

Simple Discrimination

Once the subject had completed the 6 days of final testing, the subject was trained on a simple discrimination task to compare EF+ training performance to a simple discrimination task with unfamiliar scents.

Timing-Out

For each trial, the rat had 2 minutes to make a choice. If the rat did not respond within 2 minutes, or "timed out," the trial was terminated and the rat moved onto the next trial. If the rat timed out on 3 consecutive trials, the session was terminated. The following session began with those trials that were not given at all from the timed out session (trials after the 3 timed-out trials) and then continued with the day's normal session all in 1 day. When this occurred, the percent correct for each pair and the total session were calculated with only the trials that were presented that day. Timed-out trials were counted as incorrect. Such instances are marked in the Appendix next to the session in which time-outs occurred.

Control Procedures

Double-bait days were done at least twice every week. A double-bait day consisted of 2 trials in the session that had both comparison cups baited to detect if the rat was tracking the pellet to make the choice. The noncorrectional procedure was still used on these trials. A dependent sample t-test was conducted to see if trials with double-bait were significantly different from the performance on regular or non-baited trials.

Reliability

Inter-rater reliability was done to ensure reliable scoring between experimenters. Inter-rater reliability was performed on List

1 and List 2 probes, one random session from either list training, the session prior to List 1 and List 2 probe session, and 1 of the 3 days of the final test by video taken during the sessions. Since S16 did not complete List 2 training, inter-rater reliability was done for List 1 probe, the day before List 1 probe, and 4 other days during List 1 training. This was a total of six sessions for each rat. Observed performances were compared to the recorded video performances for percentage of agreement.

Data Analysis

Percent correct values were averaged across phases for each training pair and each subject. Binomials were completed to test for significance on probe trials and an alpha level of $p < .05$ was used, however, all p values are identified within the results.

RESULTS

Baseline pair training

Three subjects completed training of List 1. Figure 2 (top) shows the number of sessions to reach criterion on each phase for List 1 training. The average number of sessions to criterion for List 1 was 74.67 sessions (1776 trials). Individual subject data are also presented in Figure 2 (bottom).

Only two subjects completed the training of the List 2. Again, the raw data for each subject are located in Appendices B-D. Figure 2 (bottom) shows the number of sessions to reach criterion on each phase for List 2 training. The average number of sessions to criterion for List 2 was 82 sessions (1968 trials). Individual subject data are presented in Figure 2.

Five-item List Probe Testing

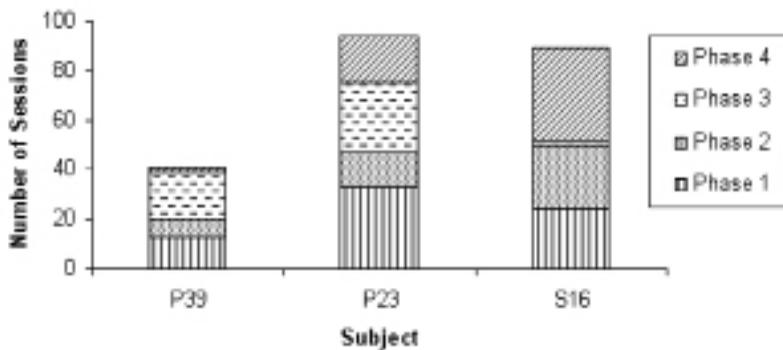
The 3 subjects that completed the List 1 training received probe testing on all possible combinations within the five-item list. Table 2 shows the number correct out of the number of presentations of each pair

for each subject for the List 1 probe test. The total percent correct is out of 22 trials, which includes the 8 trials prior to the probe trials that established strong baseline performance (excludes the 2 presentations of the unfamiliar pair). All subjects achieved above 90% correct on the entire probe session. A binomial test for P39's performance on the novel transitive probes for List 1 including BD was significantly above chance (12/12, $p = .0002$). A binomial test for P23

on novel transitive pairs of List 1 including BD revealed significance above chance (11/12, $p = .0032$). S16's performance on the novel transitive pairs of the first list and BD revealed performance significantly above chance (12/12, $p = .0002$).

Table 3 shows the number correct out of the number of presentations on the probe for List 2 of each pair for P23 and P39. The only pairs that were missed were baseline pairs. Binomial tests for performance on

LIST 1 TRAINING



LIST 2 TRAINING

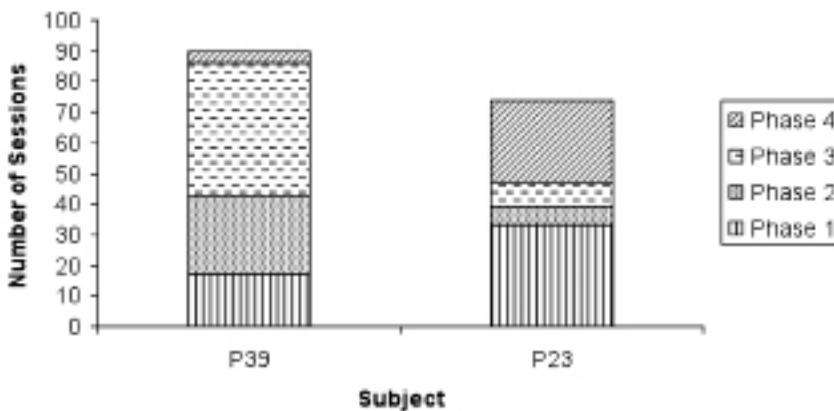


Figure 2. Number of sessions to reach criterion for each subject on each phase for List 1 training (top) and List 2 training (bottom). Data from subjects who went through therapy phases are all grouped with the corresponding phase.

the novel transitive probes for List 2 including GI revealed performance significantly above chance (12/12, $p = .0002$ for both P23 and P39).

Rats performed better on the transitive tests than on the unfamiliar scents used to control for learning of the transitive pairs. For the List 1 transitive test, as seen in Table 2, subjects got 4/6 unfamiliar pairs correct, which is not significantly different

from chance ($p = .3438$), and 35/36 of the transitive pairs correct, which is significantly higher than chance ($p < .0001$). For the List 2 transitive test, as seen in Table 3, subjects correctly responded to 2/4 (not significantly different from chance, $p = .6875$) unfamiliar pairs and 24/24 transitive pairs (significantly higher than chance, $p < .0001$).

Subject	BD+	AD+	AC+	BE+	AE+	CE+	BL ^a	All novel transitive pairs	XY (unfamiliar)	Total
P39	2/2	2/2	2/2	2/2	2/2	2/2	3/4	12/12**	2/2	90.91%
P23	2/2	2/2	2/2	2/2	2/2	1/2	4/4	11/12**	1/2	90.91%
S16	2/2	2/2	2/2	2/2	2/2	2/2	4/4	12/12**	1/2	100.00%

Table 2. Results from the List 1 probe test for each subject.

Note. Table does not display the first 8 baseline trials, but values are included in the total percentage. + = hypothesized outcome if subject is solving the task transitively.

^aBL=Baseline/Training pairs

** $p < .01$

Subject	GI+	FJ+	FH+	FI+	HJ+	GJ+	BL ^a	All novel transitive pairs	XY (unfamiliar)	Total
P39	2/2	2/2	2/2	2/2	2/2	2/2	3/4	12/12**	1/2	90.91%
P23	2/2	2/2	2/2	2/2	2/2	2/2	4/4	12/12**	1/2	100%

Table 3. Results from List 2 probe test for each subject on each pair

Note. Table does not display the first 8 baseline trials, but values are included in the total percentage. + = hypothesized outcome if subject is solving the task transitively.

^aBL=Baseline/Training pairs.

** $p < .01$

List Linking

Subject P39 met criterion on EF+ training in 5 sessions and P23 met criterion in 4 sessions. P39, who went through the first variation that reviewed all training pairs (essentially creating a 10-item list) prior to the final list-linking test, never reached criterion prior to the 55 session cutoff. P39 did achieve 2/3 correct at least once on each pair, but never all in one session. The average percent correct for P39 on the list review was 68.62% correct. During the review training, overall performance on pairs AB (157/165), CD (102/165), FG (115/165), GH (123/165), HI (119/165), and IJ (140/165) was significantly above chance ($p < .0001$, for all pairs except CD, $p = .0015$). Overall performance on the EF+ linking pair was also above chance, 97/165, $p = .0145$. Overall performance on BC and DE were not significantly above chance, $p = .4382$ for BC (81/165) and, $p = .2668$ for DE (87/165).

P23 went through the second variation of the list review and he also did not reach criterion prior to the cutoff of 20 sessions. P23 also performed at criterion on each pair at least once throughout the review,

but never all in one session. P23's average performance on the review was 67.31% correct. A binomial test for the overall performance on AB, CD, and EF revealed significantly above chance performances (AB, 100/100, $p < .0001$; CD, 67/100, $p = .0004$; EF, 88/100, $p < .0001$). The pair BC also had performance different from chance (32/100, $p = .0020$). Binomials conducted for DE revealed performance not significantly above chance (50/100, $p = .5398$).

Final list-linking test

P39 and P23 made it to the final test of all possible combinations of the 10-item list. The results of the 3-day test are displayed in Table 4. Neither rat correctly responded to the DG pair on the first presentation but did to the CH and BI pairs (Table 4). P39 performed higher on the between list transitive pairs, for example BH or EG (81.82%), than the within list pairs (e.g., AE or FI), which includes the baseline pairs (70.00%). For P39, performance on the within list transitive pair only, was significantly above chance (10/12, $p = .0193$). The between list performance for P39 was significantly above chance with a binomial test (18/22,

Subject	CH+	DG+	BI+	Within list transitive pairs	Within List %	Between list pairs	Between List %	QR+ (un-familiar)
P39	1/1	0/1	1/1	10/12*	70.00%	18/22**	81.82%	0/1
P23	1/1	0/1	1/1	10/12*	85.00%	17/22**	77.27%	1/1

Table 4. Results from the final test of list linking and transitivity for each subject

Note. Number correct for CH, DG, and BI are based on the first presentation during the test EF pair considered a between list pair. + = hypothesized outcome if subject is solving the task transitively. Within list percentages based on baseline/training pair and within list transitive pair results on final list-linking test.

** $p < .01$

* $p < .05$

Subject	Within List 1-Transitive Pairs	Training Pairs-List 1	Within List 2-Transitive Pairs	Training Pairs-List 2
P39	5/6	2/4	5/6	2/4
P23	6/6	3/4	4/6	3/4

Table 5. Results for within list transitive pairs and training pairs during the final list-linking test for each subject.

* $p < .05$

$p=.0022$). Subjects did not perform different from chance on the unfamiliar pairs on the final list-linking test (1/2, $p = .7500$) but did perform different from chance on all transitive (within and between) pairs (55/66, $p < .0001$).

Further evaluation of the different parts of the final test was done to evaluate the performance of P39 on each list (Table 5). Performance on within List 1 pairs (baseline and transitive) was not significantly above chance (7/10, $p=.1719$) and neither were the transitive pairs alone (5/6; $p = .1094$). Performance on List 2 pairs was not significantly above chance (seven out of ten, $p=.1719$) and neither were the transitive pairs alone (5/6, $p=.1719$).

P23 performed lower on the between list pairs (77.27%) than the within list pairs (85%). A binomial test on within list transitive pairs for P23 revealed significantly above chance performance (10/12, $p=.0193$). Performance on between list pairs for P23 with a binomial test showed that performance was also significantly above chance (17/22, $p=.0085$).

Table 5 shows that performance for P23 on within List 1 pairs was significantly above chance (10/10, $p=.0010$) as were the within List 1 transitive pairs alone (6/6, $p = .0156$). Performance on within List 2 pairs (baseline and transitive) was not significantly above chance (7/10, $p=.1719$) and neither were the transitive pairs alone (4/6, $p = .3438$).

A record was kept of every response made on every pair during the final test. Binomials calculated for the BI and CH pairs for all presentations revealed performance significantly above chance (8/9, $p = .0195$, for both). P39's performance on the DG pair was not significantly above chance (7/9, $p = .0898$). P23's performance on the BI pair was significantly above chance (9/9, $p = .0020$). Performance of P23 on the DG pair was lower than chance (0/9, $p = .0020$). Performance on CH was not significantly above chance (7/9, $p = .0898$).

The post-study simple discrimination test using unfamiliar scents revealed that it took P39 one session to reach 80% and P23 two sessions to reach 80% correct. The EF training, in comparison, took P39 five sessions to meet criterion and P23 four sessions to meet criterion. A t-test analysis of dependent samples of the double-bait trials versus non-double baited trials revealed no significant difference between performances on either type of trial over 55 samples/sessions, $t(88) = -0.31$, $p = .3786$ (one-tailed).

Inter-rater reliability with a sample of 6 sessions each for P39, P23, and S16 revealed 100% agreement with video of the sessions.

DISCUSSION

The results for TI on five-item lists obtained in the current study are similar to those of previous studies performed with

rats (Dusek & Eichenbaum, 1997; Davis, 1992). Transitivity was observed in all three subjects for each individual list during the probe sessions (see Tables 2 & 3). The choice of D over B was seen in all the subjects for List 1 and the choice of I over G was seen in all subjects for List 2. Both P39 and P23 performed significantly above chance on both the between transitive pairs and the within list pairs on the final list-linking test. This is true regardless of the fact that P23 went through Variation 2 of the list review, which only reviewed the first list. These results suggest that the hypothesis that rats are capable of list linking should be accepted. The fact that the unfamiliar pairs were not different from chance and the transitive pairs were suggests that the subjects were not learning the novel transitive pairs.

The number of sessions to criterion for the current study proved to be much higher than what has been observed in previous studies. Specifically, Dusek and Eichenbaum (1997) showed around 400 trials (or about 100 sessions) on average for the control subjects to reach criterion to be tested for transitivity on a five-item list. Subjects in the current study on average took over 1000 trials to reach criterion to be tested on either of the five-item lists. In Dusek and Eichenbaum's study, there were more trials per session (40 trials/session) than in the current study (24 trials/session) which could have afforded more practice for subjects in the Dusek and Eichenbaum study.

Results of the list linking final test revealed that both P39 and P23 were capable of inferring transitive relationships across lists (see Table 4). However, the results for the probe of list linking and transitivity on the 10-item list did not yield quite as high percentages as those of Treichler and Tilburg (1996).

For example, only P23 achieved significance on the within list pairs during the final list-linking test. When the within list

category of the final list-linking test was broken down into the two individual lists, calculations revealed that P23 performed significantly above chance only on pairs that were contained in List 1 (see Table 5). This outcome could be due to the recent review of only List 1 prior to the final test. In contrast, P39 reviewed every baseline pair before the final list-linking test. P39's performance was not significant on either of the lists during the final test. While both P39 and P23's percent correct for the list linking review phase of training was comparable (68.62% and 67.31%, respectively), P23 only had to review and master four pairs. Subject P39 had to review and master nine pairs which may have exceeded memory capacity. P23's poor performance on the within list TI pairs for List 2 could be attributed to the lack of review prior to the final test. Even though the review of List 1 prior to the test was brief (to ensure that the second list was not forgotten) List 1 was more recent. So, the lack of significant performance by P23 on the within list transitive pairs for List 2 could be due to a more recent presentation of List 1 stimuli (proactive interference).

Serial Position and Symbolic Distance Effects

Vasconcelos (2008) presented two phenomena of TI tasks: the serial position effect (SPE) and the symbolic distance effect (SDE). These two effects are found across many studies and seem to be characteristics of any TI task. Beyond the classic evaluation of transitive inference itself, researchers have begun to look into the meaning behind why these outcomes occur. Given the results of my study, I chose to re-examine the data in light of the serial position effect and the symbolic distance effect.

Instead of all baseline pairs having similar average percent correct across the study, there is a general "flat U" shape: Some pairs were mastered better than others. This is the serial position effect (Vasconcelos, 2008). Specifically, the pairs containing

end-anchors (elements on the end of the list that are either always or never reinforced) have higher percent correct values than those pairs that lie within the list (see Figures 3 & 4). As seen in Figures 3 and 4, the serial position effect was observed for this study.

The second phenomenon Vasconcelos (2008) discusses is the symbolic distance effect. The symbolic distance effect is the observation that novel transitive pairs given to the subject during testing that have more intervening items between them, have higher percent correct than those with only

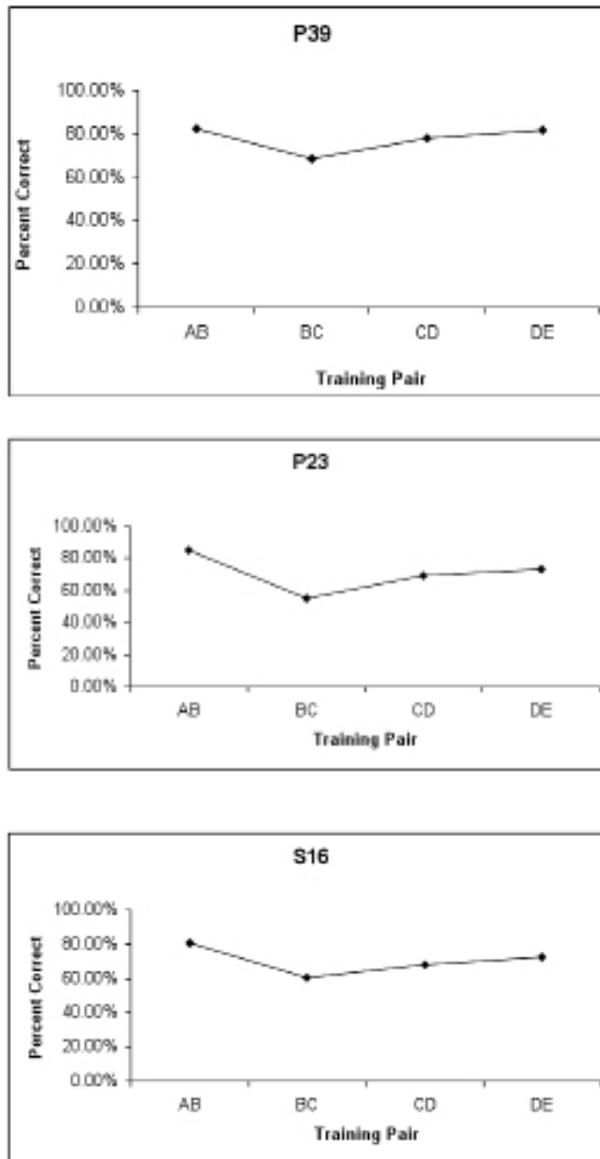


Figure 3. Percent correct on List 1 training for each baseline/training pair averaged across all the phases for each subject, demonstrating evidence of the serial position effect.

a couple of intervening items. For example, the novel transitive pair given during testing might be B and I. This pair has six intervening items between them: C, D, E, F, G, and H. The pair DG, however, only has two intervening items: E and F. The hypothesis, based on review of past literature, would be that pairs with more items in between them would yield higher percent correct during the probe (Treichler & Tilburg, 1996; Vasconcelos, 2008). In the current study, I found these same results (see Figure 5). First, in the test of transitivity for each list, the novel transitive pairs had higher percent correct than the baseline pairs (see Tables 2 & 3). Second, on evaluation of the

final test, percent correct for pairs that contained fewer than four items had somewhat variable, yet low, percent correct values (see Figure 5). Pairs that had four or more intervening items yielded better percent correct values. In fact, at the point at which there were four intervening variables and above, both P39 and P23 had equal percent correct values. With five intervening items percent correct reached 100% correct. It is interesting to note that subjects performed poorly on the presentations of the training pairs during the final test of list-linking compared to the other test pairs.

P23 and P39 both responded incorrectly to the first presentation of the DG pair

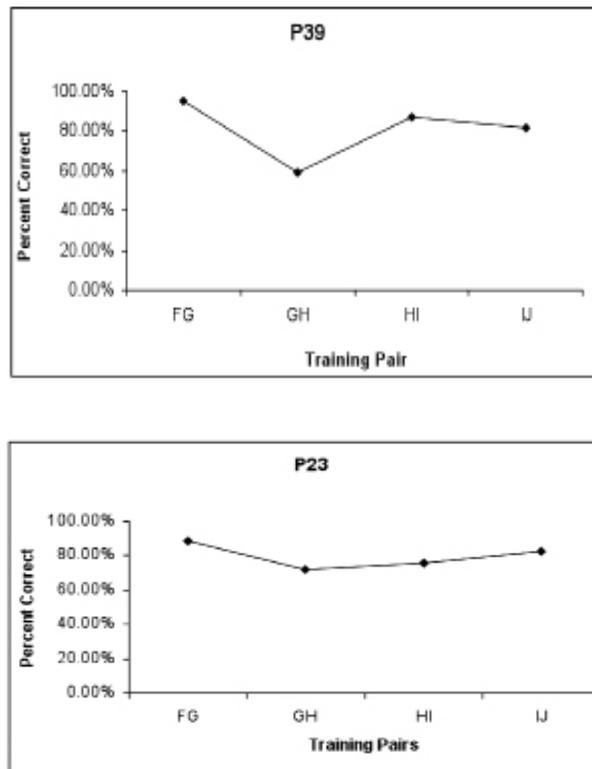


Figure 4. Percent correct on List 2 training for each baseline/training pair averaged across all the phases for each subject.

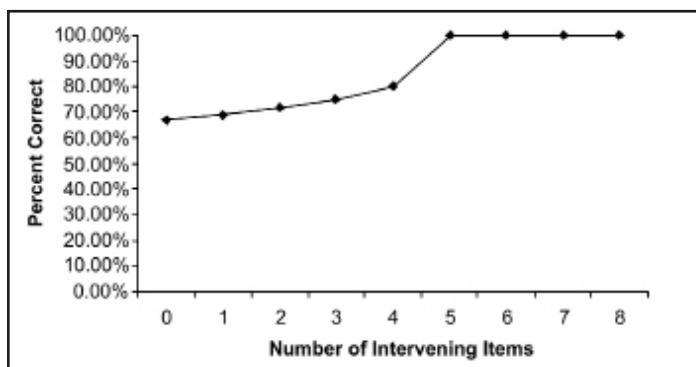


Figure 5. Percent correct for increasing number of intervening items between stimuli averaged for P39 and P23 on the final test of transitivity of the 10-item list.

during the final list-linking test (see Table 4). This could also be due to the symbolic distance effect. Performance on the BI pair, or the pair with the most intervening items, was above 85% correct and performance on the CH pair, while not significant for P23, was still between 75% and 89%. This shows a gradual decline in performance on the specially selected pairs as the number of intervening objects decreased. However, P23's poor performance on the DG pair was significantly different from chance. That is, the chance of a subject missing every presentation of that pair by chance alone is very low. Possible third variables that would cause this significance could be aversion to the G scent or the more recent review of List 1 containing the D stimulus.

Many have argued why the symbolic distance effect and serial position effect occur. To argue why they occur begs the question how animals integrate these baseline pairs into accessible memory. Multiple theories exist; these have roots in either cognitive or non-cognitive approaches, such as reinforcement-based theories. Cognitive accounts of TI include the organization of the items into a mental spatial array (Vasconcelos, 2008). Supporters of this theory (Roberts

and Phelps, 1994) argue that subjects mentally arrange the items into a spatial "line" that can be accessed at any point. Critics of this theory (Vasconcelos, 2008), however, claim that if a mental representation of the lists were available, it would be continuously accessible and the subjects would perform near perfection. The symbolic distance effect could account for the lack of perfection on the transitive tests because items that are close together may be more complicated to decipher, even if there is a mental model. Objects further apart in a spatial array are easier to tell apart than those sitting next to each other.

Both P39 and P23 performed significantly above chance on the between list transitive pairs (see Table 4). These results could be due to the fact that the pairs contain stimuli that are further apart from each other in the hierarchy and have more stimuli between them. The within list transitive pairs had lower performance, with P23 being the only subject to perform significantly above chance on List 1 within list transitive pairs (see Table 5). These pairs have fewer stimuli between them than most of the between list pairs. Thus, the symbolic distance effect could be the reason for the

significant performance on the between list pairs and not on most of the within list transitive pairs.

Application to Value Transfer Theory

Non-cognitive theories are numerous and some involve reinforcement theories while others involve values of each item. The value transfer theory, which was briefly discussed earlier, predicts that the animal solves the TI task by assessing the value of the items being presented (von Fersen et al., 1991). These values are acquired through training of the baseline pairs and are a combination of the direct reinforcement history of the item and the positive value of the item with which it is paired. The positive value of an item is transferred to the other item with which it is being presented (Cohen et al., 2001). For example, in a hierarchical list in which A is always reinforced, A would have the highest value. The stimulus B is essentially neutral until it is presented with A. When presented with A, some of the positive value of A is "rubbed off" onto B but the value of B is still less than the value of A. This continues on down the hierarchy with a little positive value being transferred to each stimulus until the fifth element has the lowest value of all the elements (von Fersen et al., 1991; Vasconcelos, 2008). This model does not require a mental model of spatial arrangements. While it might seem that the value transfer theory is an organization of values across a hierarchy, much like the spatial model, instead the subject has learned a specific value for each element. When the subject is presented with a novel comparison, it references the specific value for each individual element, independent of the other elements of the list not present. With this model, the subject ends up following a logical rule instead of using relations or associations as with spatial models (von Fersen et al., 1991; Lazareva et al., 2004; Vasconcelos, 2008).

The results of this study do not show overwhelming evidence for value-transfer theory. The items across lists that are in the same position in the list were evaluated based on their first presentation: AF, BG, CH, DI, and EJ. If value-transfer theory were at work, then these pairs would be at chance levels because they have the same value and the subject would be unable to decipher which was greater. Both subjects P39 and P23 got 4/5 of the value-transfer pairs, incorrectly responding to the BG pair. While there are not enough samples of value-transfer pairs to test significance statistically, it is evident by percent correct that both subjects performed well on these pairs, showing that they were able to make a choice and not confused about the similar values of the items. The choices made were in the direction hypothesized by this study.

Secondly, value-transfer implies the animal is capable of cardinality. Cardinality is thought to be the second requirement for counting (Lazareva & Wasserman, 2008; Davis, 1992). Cardinality assumes that the animal assigns each stimulus with a value. The stimulus gets its own value, independent of the other stimuli. Cardinality comes into play because value-transfer assumes that stimuli in the same position across lists will acquire the same value. For example, B and G should acquire the same value when the lists are trained separately because they are both second in the lists. So, regardless of what the stimulus is or what it is labeled, any stimulus in that position should acquire the same value. Performing above chance on the pairs that, according to the value-transfer theory, should have equal values does not mean that they are not assigning values to stimuli. Perhaps with the review of lists, the values became altered from their original value during the training of the list that aided their choice making in the final test.

Initially, I hoped with the current study to find a possible way to test the value-transfer

hypothesis. However, some changes in the current procedure would be necessary. Each stimulus in the list was not reinforced equally during training due to a non-correctional procedure. The results obtained could be due to uneven reinforcement histories across stimuli. In the present study, noncorrectional procedures were used throughout. Although measures were taken to ensure that each pair was represented equally throughout the study, the noncorrection procedure prevented each element from being reinforced equally. So, for example, some of the rats had difficulty learning the second pair, BC or GH, in List 1 and List 2. Since these pairs had higher errors than the other pairs, C or H would have been reinforced less than, say, the always reinforced J stimulus (see Figures 3 & 4). Thus, a theory based solely on reinforcement histories instead of value-transfer theory could not be ruled out.

Another change that would be useful to test value-transfer theory was procedural: the review of the entire list with P39. The review of the 10-item list could have created new values based on the 10-item list instead of two separate five-item lists. Values for stimuli in a 10-item list would decrease as the 10 stimuli decreased in the hierarchy. In two separate five-item lists, however, the value of stimuli in the same location across lists would have the same value. So the procedure was changed for P23 to only review List 1.

At first glance, it may seem as though two stimuli in the same location in a list in this study would have the same value. However, it is possible that the linking of the two lists via the EF pair could have altered the values of the stimuli adjacent to the stimuli E and F. In training the List 2, the stimulus F had a value equal to that of A, which was the lowest of the stimuli because it was reinforced 0% of the time. The stimulus E had the highest value in List 1, equal to stimulus J, because it was reinforced 100%

of the time. When these two stimuli were linked and the lists were reviewed in combination training, E and F were reinforced 50% of the time instead of 100% and 0%, respectively. The lists are linked to create a relation between the stimuli in the same position. If the lists were not linked, chance performance would be expected because there is no relation between the two testing stimuli for the rat to assess. Thus in this study, value-transfer could be assessed since there was some relation between elements; expecting chance performance for stimuli with in the same position across lists. When tested, though, P39 and P23 did not perform at chance levels. In fact, P39 and P23 together performed correctly on 8 out of 10 value-transfer pairs ($p = .0547$). However, value-transfer can not be ruled out completely because, as stated above, the values for E and F could have been altered with the linking procedure. Stimulus E's value may have decreased and F's value increased since the value of an item is directly affected by its reinforcement history, making, for example, F and A no longer equal. With unequal values, value-transfer cannot truly be tested with the current procedure.

Limitations and Future Studies

There are many adjustments that could be made to this design to improve its quality. One modification that could be made would be to use correctional procedure in order for all of the stimuli to be reinforced with the same frequency. In order to speed up the training process, more trials per session might show quicker performance as was observed by Dusek and Eichenbaum (1997). More trials in a session would give the subject more practice with the training pairs. To keep List 1 and List 2 separate lists and prevent them from becoming a 10-item list, I would suggest keeping Variation 2 of the procedure in which only the first list was reviewed with the linking pair prior to the final list-linking test. One

other element that would improve the quality of this study would be to have more subjects. More subjects would increase power and provide more opportunities to replicate the results. This study did not have enough power in some cases to detect an effect. For example, on the first presentations of the value-transfer pairs or the three pairs singled out during the final list-linking test, there simply were not enough trials or subjects to detect any effect. The apparatus also posed some problems at times during training. Sometimes the lids would get stuck as the rat was trying to make a choice and would disrupt the session. An apparatus that was more automated (such as the olfactometer) or didn't require the subject to move a lid might be more suitable for smooth procedures.

Finally, there were two pairs that had very low percent corrects during training and then during the final list-linking test for P23, yet, were significantly different from chance: BC and DG, respectively. These results suggest that a third variable is at work and further investigation into these differences would be needed. Possibly, the location of the stimulus in the hierarchy is difficult for the subject to learn or the specific scents are aversive to the subject.

While this study is not the perfect evaluation of the value-transfer theory for TI, it is a good pilot study for list linking abilities in rats. The results from the current study do show evidence for TI across lists which imply a linking of two separate lists. Subjects were able to infer transitive relations between lists at significant values.

Phylogenetic trees once implied intelligence scale to cognitive scholars and that animals higher up on the tree were more intelligent and had more cognitive abilities (Healy et al., 2009). While some might argue that rats are not "high enough" on the tree, this study is additional evidence that rats are indeed capable of a task referred to as higher order learning and once thought to only

be a human ability. The fact that rats are capable of solving TI tasks could imply a strong evolutionary basis for TI since it has been found across so many species, many that are not evolutionarily related to the rat (primates, Treichler & Tilburg, 1996; pigeons, Lazareva & Wasserman, 2006). The fact that these animals tend to be social creatures could imply a need for TI abilities in order to adapt in a new social situation. However, it might be interesting to investigate whether animals that do not set up dominance hierarchies are capable of inferring transitive relations. In the field, in animal societies that do set up hierarchies, there may not be large differences in size in individuals in which to determine the social hierarchy. The current study reveals that rats are still able to transitively infer without the aid of a physical dimensional difference but instead using relations, or associative methods. Currently there are no known studies that test whether rats are capable of using physical dimensions or a logical method to infer transitively, but further studies on this might indicate that rats are indeed capable of the logical processes so attributed to humans.

The processes used by rats, or any species, may be as intricate as value-transfer theory but they could also be less complex, as with a cognitive spatial array. It is important to point out that not all animals solve TI tasks in the same way (Premack, 2007; Batsell, 1993) and that this adds to the amazing diversity of cognitive strategies of the animal kingdom. j

REFERENCES

- Ayalon, M. & Even, R. (2008). Deductive reasoning: in the eye of the beholder. *Educ Stud Math*, 69, 235-247.
- Batsell, W.R., Jr. (1993). A classroom simulation of transitivity problems in animals. *Teaching of Psychology*, 20, 228-230.
- Bryant, P.E. & Trabasso, T. (1971). Transitive inferences and memory in young children. *Nature*, 232, 456-458.
- Calhoun, J.B. (1963). *The Ecology and Sociobiology of the Norway Rat*. Bethesda, Maryland: US Department of Health, Education, & Welfare.
- Cohen, J.S., Drummond, C. & Terrelonge, N. (2001). Value transfer in simultaneous object discriminations by rats. *Animal Learning & Behavior*, 29, 326-335.
- Davis, H. (1992). Transitive Inference in Rats (*Rattus norvegicus*). *Journal of Comparative Psychology*, 106, 342-349.
- Dusek, J.A. & Eichenbaum, H. (1997). The hippocampus and memory for orderly stimulus relations. *Proc. Natl. Acad.*, 94, 7109-7114.
- Grosenick, L., Clement, T.S. & Fernald, R.D. (2007). Fish can infer social rank by observation alone. *Nature*, 445, 429-432.
- Healy, S.D., Bacon, L.E., Haggis, O., Harris, A.P., & Kelley, L.A. (2009). Explanations for variation in cognitive ability: Behavioural ecology meets comparative cognition. *Behavioural Processes*, 80, 288-294.
- Lazareva, O.F., Smirnova, A.A., Bagozkaja, M.S. Zorina, Z.A., Rayevsky, V.V., & Wasserman, E.A. (2004). Transitive responding in hooded crows requires linearly ordered stimuli. *Journal of the Experimental Analysis of Behavior*, 82, 1-19.
- Lazareva, O.F. & Wasserman, E.A. (2006). Effect of stimulus orderability and reinforcement history on transitive responding in pigeons. *Behavioural Processes*, 72, 161-172.
- Lazareva, O.F. & Wasserman, E.A. (2008). Categories and concepts in animals. *Learning and Memory: A Comprehensive Reference*, 1, 197-226.

- Lewis, A. & Smith, D. (1993). Defining higher order thinking. *Theory into Practice*, 32, 132-137.
- McGonigle, B.O. & Chalmers, M. (1977). Are monkeys logical? *Nature*, 267, 694-696.
- Piaget, J. (1928). *Judgment and Reasoning in the Child*. New York: Harcourt, Brace and Company.
- Premack, D. (2007). Human and animal cognition: Continuity and discontinuity. *PNS*, 104, 13861-13867.
- Roberts, W.A. & Phelps, M.T. (1994). Transitive inference in rats: A test of the spatial coding hypothesis. *Psychological Science*, 5, 368-374.
- Russell, J., McCormack, T., Robinson, J., & Lillis, G. (1996). Logical (versus associative) performance on transitive reasoning tasks by children: implications for the status of animals' performance. *The Quarterly Journal of Experimental Psychology*, 49B, 231-244.
- Slotnick, B. (2001). Animal cognition and the rat olfactory system. *TRENDS in Cognitive Sciences*, 5, 216-222.
- Steirn, J., Weaver, A., & Zentall, T. (1995). Transitive inference in pigeons: Simplified procedures and a test of value transfer theory. *Animal Learning & Behavior*, 23, 76-82.
- Treichler, F.R., Raghanti, M.A. & Van Tilburg, D.N. (2007). Serial list linking by macaque monkeys (*Macaca mulatto*): List property limitations. *Journal of Comparative Psychology*, 121, 250-259.
- Treichler, F.R. & Van Tilburg, D. (1996). Concurrent conditional discrimination tests of transitive inference by macaque monkeys: list linking. *Journal of Experimental Psychology*, 22, 105-117.
- Vasconcelos, M. (2008). Transitive inference in non-human animals: An empirical and theoretical analysis. *Behavioural Processes*, 78, 313-334.
- Von Fersen, L., Wynne, C.D.L., Delius, J.D., & Staddon, J.E.R. (1991). Transitive inference formation in pigeons. *Journal of Experimental Psychology*, 17, 334-341.

Intimate Advertising: A Study of Female Emotional Responses Using ZMET

Evelyn Siergiej

Mars Hill College

Faculty Mentor: Kathryn Eason, PhD

Department of Fashion and Interior Merchandising

Mars Hill College

FOR DECADES, WOMEN OF all ages have been targeted in intimate apparel advertising by means of erotic and racy images (Reichert, 2003). Past studies have focused primarily on consumer response to specific advertisement techniques as well as advertisement responses to consumer lifestyles (Buhl & Mick, 1992; Arnould & Thompson, 2005). The study of consumer marketing in relation to human responses has distinct gaps in understanding a specific target market's emotional response to selected imagery. This research investigates the emotional reactions and responses of female college students toward erotic images of intimate apparel advertising. The study is based on Coulter and Zaltman's (1995) research in which images presented in print-based advertising are emotion-laden metaphors for the products and brands offered for sale. The Zaltman Metaphor Elicitation Technique (ZMET; Coulter, Coulter, and Zaltman, 2001) was used because it offers a creative format to examine the emotional

responses of female college students to intimate apparel advertising.

DRESSED IDENTITY AND ADVERTISING

When considering female emotional responses to intimate apparel advertising, it is important to begin with the issue of self-concept. Self-concept is a perception of who a person is as a whole. People internalize and integrate their own personal qualities to define the self. An important characteristic of self-concept is that it is ever-changing. Kaiser (1997) found that people mold their self-concept through both individual experience and social interactions. When clothing has the power to reveal something about one's self-concept, it is called "dress" (Kaiser, 1997).

Individuals are influenced by experience or social norms as they associate with positive and negative images. Sexual identity overlaps with elements of social norms and culture beliefs (Young, 2005). In addition, if an individual experiences a certain

positive or desired outcome in one situation, he or she may be inclined to repeat certain factors of that environment to produce another advantageous outcome (Crane, 2000). Therefore, individuals react to these factors and these reactions, and in turn, shape self-identity.

CONSUMERS AND ADVERTISING

Companies are able to meet the desired results of their consumers through different forms of advertising, such as print media by addressing consumers' identity needs through dress. Advertisements largely represent what the product image can do for consumers and are one way that companies are able to lure their customers with promises of positive results on self-perception and appearance (Giuntini, 2007).

As in any advertisement campaign, there may be the use of images in print media. Changes in relation to how images are intended to be seen and then absorbed by consumers are subject to an "exterior reality" of perception (Mirzoeff, 1999, p.7). Consumers may call on this exterior reality from cultural and individual experiences. According to Weissberg, "Like a fetish, this element—the shoe or dress of the person depicted—expresses and stands for the viewer's desire and, metonymically, for his or her experience of the photograph itself" (1997, p.109). Companies strive to reach a goal of creating an advertising platform that influences the change of disposition towards a positive outlook of a product which will in turn achieve a positive outlook on the customer once that product has been purchased and used (Lambiase, 2003; Wolfe, 2003).

Advertising has a social influence on those whom it aims to persuade through the message, purpose, and values that it conveys (Olsen, 2003). Advertising should serve the purpose of highlighting a product to provide the consumer with personal satisfaction and a positive inward and

outward semblance of self (Manca, 1994). The popular culture of consumer-driven buying and spending choices relies largely on the consumers' actual practice of free choice purchasing (Arnould & Thompson, 2005). Advertisements in the media are one specific form of an influencing factor which can be perfected to persuade the consumers' decision-making process through research and analysis of consumer culture. The persuasive symbols, when implemented into a specific form of advertising media, underpin the theme of a company's "advertising platform" (Wolfe, 2003, p.869), which defines a target market and expresses how a product can satisfy that target market.

Market-oriented symbols forge themselves into the awareness of consumers, and in turn, create a codependent environment wherein the two symbols draw information from the other, both cognitive and tangible. Company-created symbols are represented through advertisements to suit the needs and wants of a target market. When in sync, the symbols frame consumer perceptions causing some actions and thought patterns to be more likely constructed by the symbols influencing capacity (Arnould & Thompson, 2005). Traditional consumer theory suggests that these two symbols affect consumers' representation of self-concept (Belk, 1988; McCracken, 1986). Thus products are bought from a specific retailer or supplier who will fulfill the image of self that was ultimately contrived by influencing businesses (Wolin, 2003). In the case of apparel, specific retailers will use their knowledge of their customers' relationships with the market-oriented symbols to further encourage involvement in the brand. One such example of this type of relationship is with intimate apparel retailers advertising campaigns.

INTIMATE APPAREL ADVERTISING

Although there are numerous categories,

sub-categories, classifications, and markets of intimate apparel firms, one common definition is “companies that design, manufacture, market, and/or license brands for underwear, intimate apparel, and lingerie” (Intimate Apparel Overview, 2008). Underwear, intimate apparel, and lingerie are all separate garment categories, yet tend to overlap each other in form and use. Two popular intimate apparel companies are Victoria’s Secret and La Senza, which are large subsidiaries of the Limited Brand. Both have consistently top-selling products and launch numerous advertising campaigns each year (Chang, Lin & Mak, 2004; Mui, 2008). For the past few years Victoria’s Secret has been pushing toward a more risqué presentation of advertisement campaigns. This has been achieved through the creation of product lines which fit their desire to generate a sexier store image, despite criticism from a multitude of quickly-growing conservative consumers. Specifically, the Very Sexy and Sexy Little Thing product lines are being forced into the spotlight (Mui, 2008). The Sexy Little Thing product line depicts images not only of presumptuous intimate apparel like that of the Very Sexy line, but also depicts many of the models in a childish light: with everything from ringlet curls and bows in their hair, to holding round mirrors that mimic lollipops. This leaves many asking what visual messages are Victoria’s Secret really trying to send, and what are people really perceiving about these images emotionally and mentally (Boteach, 2008)?

THEORETICAL FRAMEWORK

The study of practical semiotics explores the basic symbols and signs found in specific media for the purpose of discovering what the particular piece(s) of media is trying to evoke. A study of socio-semiotics calls further for the investigation of symbols in coordination with material processes (Gottdiener, 1995). The goal of this

research was to discover what the consumer’s emotional involvement in perceiving and relaying the underlying symbols found in intimate apparel advertising adds to their own image and psyche. Thus, the purpose of this research was to explore female emotional responses to intimate apparel advertising. Specifically, how do these advertisements connect consumer self-concept and market experience with intimate apparel?

METHODOLOGY

Journaling

To conduct in-depth research, primary data were collected from the selected group of participants in a research process utilizing two distinct, yet complementary methods. In the first method, participants were asked to complete a series of journals. These journals were prompted through a series of four questions:

- 1) When purchasing intimate apparel, what do you expect out of the products (ex: how it functions, how you expect to feel when wearing the garments, etc.)?
- 2) What was your last experience buying intimate apparel? Where did you go and what did you buy? Describe, in as much detail as possible, the entire purchase experience.
- 3) How do you emotionally respond to wearing specific intimate apparel garments? Do you have intimate apparel wardrobes for separate occasions? Explain why or why not.
- 4) Free write (no specific topic) on your feelings toward intimate apparel.

Each question was open-ended with ample room for reasonable interpretation (Zaltman, 1970). The purpose of question one was to discover the expectations of intimate apparel in relation to customer thought, opinion, and previous experiences; question two explored emotional response based on direct statement or implied through actions from the participants’ last

experience of purchasing intimate apparel; questions three and four prompted answers from the subject that were personal and gave precedence for a qualitative examination. The participants were given two weeks to write in their journals, after which a collection of the journals took place. Each journal was read, analyzed, and all data were further examined in conjunction with the method described by Coulter & Zaltman (1995). Subjects were given a chance to review the interpretations of the research findings at a later focus group in order to provide internal validation for the findings.

ZALTMAN METAPHOR ELICITATION
TECHNIQUE

The method used was a review of print advertisements chosen by the researcher as being representative of the particular Victoria's Secret advertising line discussed. The review of print advertisements has traditionally been the media of choice for consumer marketing research. Print media, already one of the earliest forms of advertisement, is readily accessible for economic and technological reasons (Coulter & Zaltman, 1995). ZMET, the Zaltman Metaphor Elicitation Technique, was used in this research as a focus group method designed for the purpose of extracting both

positive and negative consumer perceptions of print advertising. ZMET bridges the gap between concrete advertising and intangible emotional responses through the use of imagery (Coulter & Zaltman, 1995). The research process consisted of the following steps:

1) Images were selected from a current Victoria's Secret line that has been the subject of wide-ranged debate and criticism (Boteach, 2003 ; Mui, 2008) regarding the sexual nature of the products depicted. The Sexy Little Things line depicted four advertisements with the models featured being in varying states of dress; the first two only had panties on while the second two were wearing both upper and lower garments.

2) Intimate apparel advertisements from a specific Victoria's Secret product line were presented to a target group of female college students in order to evoke a response (See Images 1-4).

3) The subject group then selected images from physical sources (ex: magazines) that reflected emotional feelings aroused from viewing the intimate apparel advertisements (Images 1-4).

4) The pictures were arranged by the subject group to create a summary image, or contrived composite of total group emotions towards the advertisement (Coulter, Coulter, & Zaltman, 2001). The composite

Image 1



Image 2



Image 3



Image 4



(Victoria's Secret Sexy Little Things, 2008)

images created by the focus group resulted in the selection of three response images in addition to the four images selected by the researchers.

5) The ZMET was followed by a focus group discussion to explore, in more depth, the emotional responses on an individual level, as well as connections found through group consensus (Zaltman, 1997).

The ZMET, in addition to the non-threatening environment of a focus group, provided a basis for validity when addressing the differences that were measurable only through qualitative examination of the images gathered (Coulter, Coulter, & Zaltman, 1995; Coulter & Zaltman, 2001).

PARTICIPANT SELECTION

After obtaining appropriate IRB approval from the Mars Hill College board, participants were solicited for participation in the study. A total of twelve female participants were selected. Each of the twelve research participants was a college student majoring in Fashion and Interior Merchandising and enrolled in a visual merchandising course. The visual merchandising course was an upper-level course. Thus, most of these participants had more advanced knowledge of the use and marketing of apparel products than their junior counterparts, and in fact, they were chosen because they had specific knowledge in marketing and were more attuned to the use of visual appeals in practice. The depth of knowledge among the participants allowed for an in-depth understanding of the participants' response to the advertisements that complemented the descriptive nature of the Zaltman Metaphor Elicitation Technique. Participants were directed to complete the journal process for two weeks prior to the focus group meeting in order to allow the individuals to more fully reflect upon the research topic prior to group discussion. The journals were then collected by the research prior to the focus

group utilizing the Zaltman technique in order to analyze for thematic similarities and differences to be used as prompts for leading discussion during the focus group discussion, and to allow for future comparison of individual responses in journals and group responses in the focus group. Upon the completion of the journals, students met during assigned class time to complete the ZMET portion of the study. The students were given a copy of the prompt images (Images 1-4) to view and were provided with a variety of additional print images to use while constructing an individual visual response, in the form of a photo collage. After completing their individual collages, the participants were asked to come together as a focus group to discuss their individual collages and how they interpreted the prompt images. The focus group was then asked to come up with "group images" that represented the overall interpretation of the prompt images. The focus group was videotaped throughout this discussion process and then transcribed by the researcher to further analyze, refine, and if necessary, expand upon the themes which developed in the journaling process. Before interpreting any of the transcriptions or journals, the participants were given copies of the transcripts to verify the accuracy of the recordings. In addition, the reflective process was completed as participants were asked to confirm the correct representation of their journal and focus group comments in the ultimate thematic interpretation of findings.

INTERPRETATIONS

After the collection and analysis of data, the results were grouped into three conceptual areas of attention: advertisements as fantasy, perceptions of reality, and the emotional bridge between the two. These conceptual areas were selected based on emergent concepts revealed the majority

of participants' in their own journals and focus group comments.

Advertising as Fantasy

The two most commonly interpreted variables expressed as fantasy roles in the Victoria's Secret print images were sexual romanticism and innocent fantasy ideals. Sexual romanticism is the use of warm, soothing colors and pictures for the purpose of evoking sensual emotions. The theme of innocent fantasy ideals is characterized by the depiction of implied youth and quixotic imagery.

A.W.: It's like these first two [garments] have a more romantic, classic appeal, and the second two are trying to be baby-doll cutesy.

A.K.: Yeah, the second two are looking like outfits that you wouldn't wear on a regular basis. Probably only if someone would see them, you know, you're wearing them for someone. The last one really looks like an apron, maid role-play. I don't think older women wear those.

Two main marketing themes presented by Victoria's Secret are their two lines of intimate apparel: Very Sexy and Sexy Little Things. Very Sexy was described as warm in tone, more mature, and sensual in emotional expectations, as well as more calm and professional. In addition, the Very Sexy line tended to be the norm for each subject's overall view of Victoria's Secret's company theme.

The Sexy Little Things line, which was the physical print media used for the ZMET, employed responses that the specific line was appealing to younger and more innocent fantasy ideals. Innocent fantasy ideals were described as the sum of both the portrayal of what is viewed as symbols of youth and what is viewed as apparel with no functional protection:

A.W.: It took me awhile to notice, but the lollypop and hair ringlets really look like something a little

kid should be wearing. Plus the whole innocent housewife outfit. It looks like the age target of the 20-somes is really put out there for the age appeal of 8 year-olds.

A.M.: It seems like they're just for show. Could you really comfortably wear those under your clothes?

Perceptions of Reality

Discussion of individual view and group consensus yielded insight into the participants' particular expectations of intimate apparel and what Victoria's Secret's intimate apparel actually does to meet their expectations. The first issue, what the female consumers expect intimate apparel to do for them, was separated into two categories: to meet physical needs and to satisfy emotional expectations. As stated by numerous members of the subject group, it must provide some tangible function. More specifically:

A.L.: When I go shopping for intimate apparel the expectations I expect out of the products I am purchasing is protection, comfort, appearance, and I also look for it being reliable. I do not want to buy things that are not going to last or are going to fall apart on me.

A common notion was that intimate apparel should be able to stand up to regular wear and laundering, though there was no specific point of distinction as to what normal wear and care would encompass.

Emotional Expectations

The third conceptual area of concern was that intimate apparel needs to fulfill emotional expectations. For some, it was clear that emotional expectations outweighed the needs of functionality, whereas others simply stated that they would not purchase a garment if they did not like the appearance. Upon further questioning, it was clear that there was a very strong connection between emotional satisfaction and garment appearance:

A.K.: It is very important for it to be the right fit and I often select them on their appearance as well.

K.D.: It must first appeal to me aesthetically, then it must meet my requirements when it comes to comfort. Even though no one else sees the undergarments that I buy, they can affect my mood and my confidence. That self esteem boost is something that I've come to expect out of the intimate apparel that I purchase. If I don't feel that, then on an emotional basis, the product has failed me.

When purchasing intimate apparel, the participants agreed that, as with any other purchase, there is the view that when either emotional or function expectations are missing, product satisfaction would be low. Statements implying how not only appearance, but tangible attributes, can add to a product's emotional value were given:

A.W.: When you're wearing something that feels good you definitely feel more confident.

Victoria's Secret appeals to many of the participants' needs by providing functional garments that look sexy or cute. Through this research, it was possible to explain bridges of connection between fantasies advertisers sell and how consumers emotionally react to specific advertisements as a form of reality. Fantasy is generated through images of what is pleasurable and desirable to consumers, whereas reality can be measured by looking at to what extent the product is actually capable of meeting the portrayed or implied fantasy for each consumer.

For each individual participant, it was recognized that the different body types and different body images of participants correlated with their emotional reactions to both the physical garments and intimate apparel advertising. Throughout the journals, it was clear that each participant enjoyed wearing intimate apparel that was able to make their confidence and self-esteem levels rise. Different garments were

often selected by the participants based on self-knowledge:

A.L.: For some people it is definitely their body type and body image. Others think they can pull that off, but for me I know that style doesn't look right.

Other participants indicated confusion about their own body image and what a garment would actually contribute to their own image; this led to a discussion about the external and internal forces of intimate apparel advertisements. An image selected from the ZMET collage created by the focus group displayed a vast array of fresh vegetables, fruits, and grains (See Image 5). It was selected to describe particular feelings towards each intimate apparel image:

C.D.: You see pictures like this in a magazine, especially with food. The ad makes it look good but in reality it's disgusting. I think everyone tries to make-pretend that there is some hope for their own look whenever they see these (intimate apparel) ads, but in reality it just doesn't happen.

Participants responded to a variety of elements presented in the advertisements including: the product, props, and models selected. When intimate apparel was viewed through advertisements, interpretations shifted from a focus on what the



(Bon Appétit Test Kitchen, 2008)

actual garment would do for the individual to what the advertisement implied what the garment would do for the individual.

The photo in which models wore torso and lower garments evoked negative emotional responses. Selection of imagery and group discussion uncovered feelings based on the use of props and bodily expression that conveyed a sense of youth, to a point of extremeness. The use of what was interpreted by the participants as a lollypop, though it was in actuality a mirror, in one of these images removed a sense of connection between the participants and the advertisements; the participants felt they could not relate to the image presented in the advertisement. The major question was what particular market the advertisement was geared for:

A.L.: They're appealing to guys; obviously it's not just for us. The lollypop won't help us look like that.

K.D.: It's like what's happening in society: younger ages are trying to look sexier while older women are starting to age down.

N.D.: Is it right to be thinking that younger is sexier?

One image selected by the focus group displayed a measuring tape around a human waist (See Image 6). It was determined that even though all four prompt images (See Images 1-4) images were designed to look cute; only the first two appropriately connected with the participants. The explanation of the measuring tape was a negative response to these second two advertisements:

A.W.: I don't need to be a little girl. I am who I am: a woman.

Further discussion between the group participants revealed that the measuring tape showed how we are not all one size and that the advertisements depicted extremely skinny models.

A.M.: I do have harsh feelings towards advertisements and huge posters in stores of girls with perfect bodies in the intimate apparelyou are about to buy. I do not like walking into Victoria Secrets and being bombarded with images of what I am not. I always end up feeling a bit inadequate.

CONCLUSIONS

From a utilitarian perspective, an intimate apparel garment is an article or collection of clothing that serves the purpose of providing basic, body coverage, traditionally worn under an outfit. Yet these physical garments can greatly affect emotional expectancy. This research illustrated the importance of buying patterns and customer self-image. It suggested that the psychological factor related to intimate apparel dress may be more important than the physical requirements of the garment. The emotional affects on the consumers self-worth and confidence was determined by apparel generally viewed by only the wearer.

Many intimate apparel advertisements depict unrealistic, yet desirable, body images that create negative emotional reactions which, especially for women, can cause consumers to focus on often unachievable image-related goals (Pollay, 2000). Throughout the research it was shown that emotions can be greatly affected in negative ways. That is why print media advertising is a vital form of marketing; advertisements are designed to increase consumer buying by reinforcing product image in accordance to the demands of target markets (Ambler & Vakratsas, 2006).

Although ZMET is a fairly new concept, it has been used with increasing popularity in other advertising studies; it serves as an extended measurement for emotional response and acts as a follow up to previous research on consumer attitudes towards advertisements (Bauer & Greyser, 1968; Coulter, Coulter, & Zaltman, 2001). The research conducted provided two distinct tests on emotional response, through

which all were measured using a different medium (i.e., journaling and ZMET). The use of different techniques increased the possibility of discovering more aspects of specific advertisement study response than most other general techniques permit (Coulter, Coulter, & Zaltman, 2001). Through ZMET, companies can get answers through visual responses discussed further with participants during focus groups to issues which concern visual ideas. Ultimately, this can benefit market segmentation and research for companies.

IMPLICATIONS FOR FURTHER RESEARCH

The research findings provide implications regarding advertisers' use of visual communication in the form of print media, the use of the ZMET to explore responses to visual prompts, and, more specifically, the use of the ZMET in consumer research to explore the relationship between interpretation of visual stimuli and purchase motivation. In this research, it was noted that not all of the participants felt that each garment viewed as an image would have met their needs for emotional fulfillment. This research raised the question: Why, if intimate apparel images may be viewed negatively, are they so often used by the companies to sell products? In addition to the ZMET, quantitative research might provide insight into the number of companies, specific lines, or particular ads that are adequately bridging the emotional gap between fantasy and reality. Due to correlations between clothing and self-concept satisfaction, companies can efficiently advertise products that positively affect the ways that identity is created through dress. Additionally, the ZMET can be used to further explore the use of different products (i.e., sportswear or formal wear), especially those that have strong emotional connections to their markets (Coulter, Coulter, & Zaltman, 1995; Coulter & Zaltman, 2001). Since personal experience and social interaction are able

to affect one's self-concept, research on target markets through ZMET can provide greater insight into how the consumers feel, what they desire to feel, and what types of advertising can achieve this goal. j

BIBLIOGRAPHY

- Ambler, T. & Vakratsas, D. (2006, October 27). The Pursuit of Advertising Theory. *Business Strategy Review*, 7(1), 14-23. Retrieved from <http://www3.interscience.wiley.com/journal>.
- Arnould E.J., & Thompson, C.J. (2005). Consumer Culture Theory (CCT): Twenty Years of Research. *The Journal of Consumer Research*, 31(4), 868-882. Retrieved from Business Source Premier.
- Bauer, R. A. & Greyser, S. A. (1968). *Advertising in American: The Consumer View*. Boston, MA: Division of Research, Graduate School of Business Administration, Harvard University.
- Belk, R. W. (1988). Possessions and the Extended Self. *Journal of Consumer Research*, 15, 139-168. Retrieved from JSTOR.
- Bon Appétit Test Kitchen. (2008, March). Marinated Baby Vegetables. Retrieved November 12, 2008 from http://www.bonappetit.com/magazine/fasteasyfresh/2008/03/marinated_baby_vegetables.
- Boteach, S. (2003, December 8). Victoria's Not-So-Secret Pandering to Lecherous Men. *Insight on the News*. Retrieved from FindArticles.com
- Buhl, C. & Mick, D. G. (1992). A Meaning-Based Model of Advertising Experiences. *The Journal of Consumer Research*, 19(3), 317-338. Retrieved from <http://www.jstor.org/stable/2489392>
- Chang, C. C., Lin, A. & Mak, C. (2004, May 28). The Silky Strategy of Victoria's Secret. Retrieved October 17, 2008 from <http://www.mcafee.cc/Classes/BEM106/Papers/2004/Victoria.pdf>
- Coulter, K. S., Coulter, R. A. & Zaltman, G. (2001, Winter). Interpreting Consumer Perceptions of Advertising: An Application of the Zaltman Metaphor Elicitation Technique. *Journal of Advertising*, 30(4), 1-21.
- Coulter, R. H. & Zaltman, G. (1995, July/August). Seeing the Voice of the Customer: Metaphor-Based Advertising Research. *Journal of Advertising Research*. 35-51.

Crane, D. (2000). *Fashion and its Social Agendas*. Chicago: The University of Chicago Press.

Giuntini, P. & Hagen, K. (Eds.). (2007). *GARB: A Fashion and Cultural Reader*. Upper Saddle River, NJ: Pearson Prentice Hall.

Gottdiener, M. (1995). *Postmodern Semiotics: Material Culture and the Forms of Postmodern Life*. Cambridge, MA: Blackwell Publishers.

Intimate Apparel Overview. (2008). Retrieved September 19, 2008, from Hoovers: http://www.hoovers.com/intimate-apparel/--HICID__1165--/free-ind-fact-sheet.xhtml

Kaiser, S.B. (1997). *The Social Psychology of Clothing: Symbolic Appearances in Context*. (2nd ed.). New York: Fairchild Publications.

Kuchler, S. & Miller, D. (eds.). (2005). *Clothing as Material Culture*. New York, Berg Publishers.

Lambiase, J. & Reichert, T. (2003). *Sex in Advertising: Perspectives on the Erotic Appeal*. Mahwah, NJ: Lawrence Erlbaum Associates.

Manca, A. & L. (Eds.). (1994). *Gender & Utopia in Advertising*. Lisle, IL: Procopian Press.

Mirzoeff, N. (1999). *An Introduction to Visual Culture*. London: Routledge.

Mui, Y. Q. (2008, February 29). *Victoria's Revelation*. *The Washington Post*, p. D01. Retrieved from WashingtonPost.com

Olsen, B. (2003). *The Revolution in Marketing Intimate Apparel: A Narrative Ethnography*. In Malefyt, T. D. & Moeran, B. (Eds.), *Advertising Cultures* (pp. 113-138). New York: Berg Publishers.

Pollay, R.W. (2000). *The Distorted Mirror: Reflections on the Unintended Consequences of Advertising*. *Advertising & Society Review*, 1(1), 18-36. Retrieved from http://muse.jhu.edu/journals/advertising_and_society_review/.

Reichert, T. (2003). *The Erotic History of Advertising*. Amherst, NY: Prometheus Books.

Victoria's Secret Sexy Little Things. (2008). Retrieved November 12, 2008 from http://www2.victoriasecret.com/collection/?cgname=OSPTYXYZZZ&cgnbr=OSPTYXYZZZ&rfnbr=2692&page=all&cm_mmc=Google_-_BrandProduct%20II_Sexy%20Little%20Things_-_Broad_-_Sexy%20Little%20Things

Weissberg, L. (1997). *Circulating Images: Notes on the Photographic Exchange*. In J.-M. Rabate (Ed.), *Writing the Image After Roland Barthes* (pp. 109-131). Philadelphia: University of Pennsylvania Press.

- Wolfe, M. (2003). *The World of Fashion Merchandising*. Tinley Park, IL.: Goodheart-Wilcox Company, Inc.
- Wolin, L. D. (2003). Gender Issues in Advertising - An Oversight Synthesis of Research: 1970-2002. *Journal of Advertising Research*, 43(1), 111-129. Retrieved from Business Source Premier.
- Young, I. M. (2005). *On Female Body Experience: Throwing Like a Girl and Other Essays*. New York: Oxford University Press.
- Zaltman, G. (1970, July). Marketing Inference in the Behavioral Sciences. *The Journal of Marketing*, 34(3), 27-32.
- (1997, November). Rethinking Market Research: Putting People Back In: *Journal of Marketing Research*, 34(4), 424-437.

About the Authors

Ashley Gedraitis

is currently an undergraduate at Wake Forest University, where she is pursuing a double major in English and sociology with a minor in women and gender studies. In addition to earning dean's list while at Wake Forest, Ashley serves as a presidential aide to the university's president, Dr. Hatch, and as an editor for the student-run online magazine. She is currently studying abroad in London where she is concentrating on expository writing, and looks forward to returning to Wake Forest to begin work at its university press. Ashley hopes to pursue a career in publishing or in editorial work following completion of her BA.

Leah Jordan

was born and raised in Cincinnati, Ohio, and has always been interested in animal behavior. She graduated from the University of North Carolina Wilmington with a BA in psychology and a minor in biology in May 2009. The research presented in this volume was completed as an honors thesis and was presented at several research conferences. She is currently completing an internship at the Dolphin Conservation Center at Marineland in Florida where she assists with dolphin care and training. She hopes to achieve a dolphin training or research position in the near future.

Sarah E. McKone

graduated magna cum laude from the

University of North Carolina Wilmington in 2008 with a Bachelor of Arts in English and history. She is currently seeking a Master of Science in technical communication at North Carolina State University and plans to graduate in May of 2011. She was awarded a teaching assistantship from NC State's professional writing department and will be teaching communication for business and management in the fall of 2010. Sarah plans to continue her research of technology in the classroom by focusing her graduate capstone project on the development of teaching personas in online learning environments.

Stephanie Ricker

is a recent summa cum laude graduate of Campbell University in Buies Creek, North Carolina, where she majored in English and minored in history. During her senior year, she was editor-in-chief of the *Lyricist*, the university's creative writing publication, and she was the president of the Mabel Powell English Club. She is a member of various honor societies, and her research on the works of J.R.R. Tolkien was the result of her year-long honors senior thesis project. Since graduating, she is working in the e-book editorial industry. Stephanie enjoys reading, writing, and climbing trees in her spare time. Stephanie's mentor, Dr. Frank Vaughan, is the chair of the English department at Campbell University, and he specializes in the romantic period, particularly the poet and artist William Blake.

About the Authors

Evelyn Siergiej

graduated from Mars Hill College in 2008 with a Bachelor of Science in fashion and interior merchandising. Since graduating she has settled in the Pittsburgh area and is pursuing a career in business and retailing.

Michael S. Tildsley, Jr.

was born in Goldsboro, North Carolina, but has many hometowns. He graduated magna cum laude in May 2009 from Campbell University with a BA in English. Michael presented an unabridged version of this research at the first annual Walter S. Barge Honors Colloquium in April 2009. He was vice president of Sigma Tau Delta, a Presidential Scholar, member of Phi Eta Sigma and Circle K, College of Arts and Sciences Honors Program graduate, and Lyricist staff member. Michael worked a great deal with Student Support Services in his time at Campbell University, serving as writing center coach and tutor for several subjects. He attributes his collegiate success and academic vigor to remarkable friendships, supportive family, and amazing faculty mentors. Michael is profoundly interested in creative writing, the evolution of speculative fiction, and its acceptance in society and the maturation of the human spirit.

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