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Lucy Wortham James and the Gospel of Wealth: A Case Study of Female Philanthropy in Rural Missouri During the Progressive Era

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Abstract

Various historical scholars have examined the role of Andrew Carnegie's Gospel of Wealth on philanthropic attitudes and endeavors of affluent Americans during the Progressive Era. Modern developments, driven by post-structural feminist theory, have shown that rural-born Missouri women, exemplified by Phoebe Apperson Hearst, acted as complementary equals to Carnegie through their humanitarian efforts by uniquely interpreting and implementing his social doctrines. However, the existing scholarship has focused substantially on coastal developments, neglecting the role of this benevolence in rural Missouri communities. By examining the philanthropic endeavors of Lucy Wortham James, both during her life and post-mortem through her endowment of the James Foundation of the New York Community Trust, I will demonstrate how her philanthropic endeavors classify her as a complementary equal to Carnegie and that the Gospel of Wealth Ideas prominent on both the East and West coasts during the Progressive Era were made relevant, by James, to her rural hometown of St James, Missouri.

Introduction and Historiography

The Gospel of Wealth, industrialist steel mogul Andrew Carnegie's 1889 apologetic for philanthropic attitudes of the new self-made American aristocracy, ascribed responsibilities for public welfare to the prosperous elite, whom he believed could administer funds to superior public benefit than government programs or charitable institutions.[1] In response to the growing wealth inequality subsequent to the capitalist industrialism that consecrated Carnegie as the premier paradigm of American affluence, he advocated that the monetary gains of prosperous Americans were beneficial to society, as they could apportion aid amongst the common masses with limitations to promote individual advancement towards substance, instead of fostering continual reliance on alms, an effective rebuttal against calls for increased taxation and forced monopolistic breakups. These programs aimed to produce permanent gifts instead of consumable handouts, advocating social evolution over individual advancement. Accordingly, the Gospel of Wealth ideology became increasingly popular among many of America's economic elite, igniting debates over attitudes regarding individual wealth during the period.

Though no single philanthropist could touch Carnegie's monetary, social, and philanthropic influence, conversations arose around the nation, identifying notable contributors to and advocates of the *Gospel of Wealth* nationwide. One of these assertions was a 1901 article published in *Success* magazine by Iowa Republican Senator Jonathan Prentiss Dolliver, entitled *Phoebe Apperson Hearst and the New Gospel of Wealth.* In this writing, Dolliver argued that Hearst, a rural-born Missouri woman, now wife (widow) of successful businessman and California Democrat Senator George Hearst, was a "new type of millionaire," exemplified by her benevolent giving to aid public schools and address problems of widespread poverty and addiction in urban areas.[2] Though her work was on a considerably smaller scale, thus easier to overlook, Dolliver argued that Hearst was a noteworthy and identifiable participant in American philanthropy during the Progressive Era.

Despite Dolliver's profound conclusion, his status as a Senator, not an academic, led his work to be insufficiently analyzed by the historical field for nearly a century until Alexandra M. Nickliss, a professor at the City College of San Francisco, published an article in the November 2002 edition of the Pacific Historical Review entitled *Phoebe Apperson Hearst's "Gospel of Wealth," 1883-1901.* In this article, Nickliss reignites the discussion of female philanthropists during the era, claiming that Hearst reimagined *Gospel of Wealth* concepts in her image to support the distribution of financial aid by wealthy American women to support Progressive causes and marginalized communities. Thus, insofar as Hearst's wealth and influence did not equal that of Carnegie, this was more of a reflection on social norms and economic limitations placed on women during the period instead of a reflection on her inability or unwillingness to donate more abundantly. Accordingly, her ability to fund various causes and institutions she supported despite these limitations classifies her as a "complementary equal" to Carnegie.[3]

[1] Andrew Carnegie, "The Gospel of Wealth," *The North American Review* 183, no. 599 (1906): 526–37, http://www.jstor.org/stable/25105641.

[2] Alexandra M. Nickliss, "Phoebe Apperson Hearst's 'Gospel of Wealth,' 1883–1901," *Pacific Historical Review* 71, no. 4 (2002): 575–605, https://doi.org/10.1525/phr.2002.71.4.575, 575.

[3] Alexandra M. Nickliss, "Phoebe Apperson Hearst's 'Gospel of Wealth,' 1883–1901," *Pacific Historical Review* 71, no. 4 (2002): 575–605, https://doi.org/10.1525/phr.2002.71.4.575, 576.

Nickliss's publication revolutionized the future of Progressive Era historical scholarship by providing a lens to view the influence and unique contributions of female philanthropists to the Gospel of Wealth ideology. However, since this scholarship is still in its primitive stages, there remains a plethora of unexplored individuals and contributions. This paper will build on the existing scholarship by highlighting the historical and continual impact of Missouri native Lucy Wortham James's philanthropy on her rural hometown of St. James, Missouri. In doing so, it will show how the legacy of her philanthropic endeavors reflects her unique understanding and application of the Gospel of Wealth, solidifying her legacy as a complementary equal to Phoebe Apperson Hearst and, thus, Andrew Carnegie.

This work engages with the broader scholarship of female philanthropist advocates of the Gospel of Wealth through two works written by Alexandra M. Nickliss on Phoebe Apperson Hearst, a rural-born Missouri native female philanthropist during the era who had a personal relationship with Lucy Wortham James. Regarding the existing scholarship on James, most existing secondary works are biographical, covering aspects of her life for educational, not analytical, purposes. With help from the James Foundation, Nancy Genet published *Lucy Wortham James, 1880 1938, Founder of the Lucy Wortham James Memorial in the New York Community Trust* in 1971, the pinnacle work of existing scholarly work on James. James D. Norris is another important cultivator of the James historical narrative, though his works focus more on the Ironworks than James herself. Finally, Ken Vogel and his brief 1969 work *Maramec Iron Works, 1825-1876, Chronological Listing, Explanation of Listings, and Supplements* offers unique insights into the history of the James family before Lucy's birth and in her adolescence. This work does not challenge this existing scholarship. Instead, it connects observations within to broader historical contexts by examining similar philanthropic advocates and activities in the United States at the turn of the 20th century.

For the purposes of this paper, the term Meramec is spelled Maramec. Maramec was the original spelling used for both the creek and the ironworks. However, due to widespread misspelling of the term by members of the St. James community, the incorrect terminology rose to prominence and was later used by the state government for official spelling. Throughout her life, Lucy wished to preserve the original spelling, as evident in a May 8, 1934, telegram in which she states, "Maramec is the original & correct spelling, & that Meramec is a local corruption taken up by the Gov't...."[4] Since the purpose of the work is to bring to light the life and legacy of Lucy, it is only fair to refer to things on her terms. Accordingly, unless in a direct quotation or source citation, her preferred spelling of Maramec is implemented throughout.

The James Family and Lucy's Childhood

The story of Lucy Wortham James begins with her grandparents, William, and Lucy (Dun) James. William, an iron industrialist from Chillicothe, Ohio, assumed control of the Maramec Ironworks (located on the outskirts of modern St. James, Missouri) in 1844 following a schism between William's father, Thomas, and Samuel Massey, which encouraged Massey to sell his stake in the company they founded together in 1826 due to philosophical differences.[5] Attempting to populate the local area, William founded Scioto, Missouri, in 1859, part of the newly dedicated Phelps County. In 1860, the town received a post office and a railroad and was renamed St. James in honor of the family's local contributions.[6] The James family quickly rose

[4] "Maramec vs Meramec," Maramec Spring Park, Accessed February 15, 2024, https://maramecspringpark.com/about/maramec-vs-meramec/.

[5] Ken Vogel, *Maramec Iron Works, 1825-1876, Chronological Listing, Explanation of Listings, and Supplements.* St James, Missouri: The James Foundation, August 1, 1969, 11-12.

[6] Vogel, 12.

to monetary success as the Ironworks produced cannonballs and metal siding for the newly created "ironclad" warships on the Mississippi River used in the American Civil War. The influx of money encouraged the James family to move from Maramec to St. James, resulting in the construction of the Dunmoor estate, the staple of James's affluence.[7]

Despite the ironwork's initial success, transportation issues and a lull in business debilitated the once-booming industry. In February 1878, William James declared bankruptcy, effectively ending the Maramec Ironworks, causing the family to vacate the pristine Dunmoor estate.[8] Despite the downfall of Maramec, thanks to monetary influence from the James family, the St. James community transformed from a pioneer town to an incorporated community through the funding of multiple institutions, such as the St. James Chapel, currently the St. James United Methodist Church, and the use of the grounds of the former Dunmoor Estate in creating a retirement home for Missouri veterans. Despite William's financial difficulties, "the respect held for him by the citizens of St. James was still high," encouraging the family to remain in the region.[9]

In 1880, William's son Thomas and his wife Octavia Bowles gave birth to their daughter, Lucy Wortham James.[10] Baptized in the local Trinity Episcopal church, James began the first of many journeys, spending her infancy with the Sioux tribe in the Dakotas. However, her ailing mother returned to St. James, where Lucy would spend her childhood.[11] Her childhood was far from the aristocratic grandeur of the Dunmoor days, albeit an enjoyable experience, until her family moved to Kansas City, Missouri, following her father's employment under her great-uncle Robert G. Dun at a primitive Dun and Bradstreet Incorporation.[12] This employment opportunity drastically changed the James's family fortune, allowing them to retain portions of the Maramec property and provide a life of affluence Lucy had never previously experienced.

James's status as a contemporary to Carnegie may face unbridled opposition, but her status alongside Phoebe Apperson Hearst is nothing short of historical fact. In the 1971 comprehensive biography *Lucy Wortham James, 1880 1938, Founder of the Lucy Wortham James Memorial in the New York Community Trust,* Nancy Genet describes the personal relationship between the two women. Placing his family's education at the utmost importance, William James, Lucy's grandfather, hired Phoebe Apperson as a private tutor.[13] Furthermore, Nickliss notes that the James family became "in essence... Phoebe's surrogate parents," learning from them a domestic skill set and aristocratic social customs, propelling Phoebe into the high society of 19th-century mid-Missouri. According to Nickliss, during her time with the James family, Phoebe "became aware of and gained an appreciation for the relationship and interplay between religion, money, and class" and that she "could see how wealthy, elite Protestants operated," both essential components of Carnegie's Gospel.[14] Her time with the James family gave Phoebe Apperson the physical and social knowledge necessary to be an impactful woman of wealth at the turn of the 20th century, a lifestyle which introduced her to her husband, future

[7] Vogel, 14.
[8] Vogel, 18.
[9] Vogel, 17.
[10] Vogel, 19.
[11] Nancy Genet, *Lucy Wortham James, 1880 1938, Founder of the Lucy Wortham James Memorial in the New York Community Trust,* Edited by Klaus Gemming and Hermann Zapf, St James, Missouri: The James Foundation, 1971, 28.
[12] Genet, 31-32.
[13] Genet, 22.
[14] Alexandra M. Nickliss, *Phoebe Apperson Hearst: A Life of Power and Politics,* Lincoln, NB: Bison Books, 2018, https://search.ebscohost.com/login.aspx?direct=true&AuthType=sso&db=e000xna&AN=1737412&site=ehost-live, 22.

California Senator George Hearst of Sullivan, Missouri. Though scholars have long noted the impact of the James family on Phoebe's intellectual development, both Dolliver and Nickliss overlook the primitive benevolence concepts of affluent American Protestants at the turn of the century, specifically the endowment of local institutions, taught to Phoebe during her stay with the family. Accordingly, her unique contributions to American philanthropy are due, in large part, to her time spent in St. James, not in California.

Lucy's Philanthropic Activities in St. James

Lucy Wortham James Estate

Throughout her life, Lucy Wortham James donated to various causes and institutions that supported her worldview. Though many donations in her lifetime occurred on the East Coast, she directed the noticeable sum toward her hometown of St. James. Following her death in 1938, James's estate established a $2,000,000 trust fund ($44,000,000 in 2024) to support the St. James community. This fund, entitled the James Foundation, is allocated through the New York Community Trust, a grant-making foundation supporting non-profit organizations.[15] Throughout the subsequent decades, the James Foundation funded various projects in and around the St. James area, promoting the well-being of the community. This paper uses these donations, done at the direction of and through the financial means of the Lucy Wortham James estate, to demonstrate their enduring effects on the local populace, cementing James's legacy as an efficacious female philanthropist of the early 20th century, demonstrating the similarities between her benevolence and those of Phoebe Apperson Hearst, and highlighting fundamental principles shared with Carnegies Gospel of Wealth ideology.

Trinity Episcopal Church and the James Chapel

Like her father, Lucy Wortham James placed a heavy emphasis on accessibility to the Protestant religion in the St. James community. As previously noted, upon the creation of St. James, the James family founded James Chapel for united Protestant religious services, a building still in operation today as the St. James United Methodist Church. While the James family and Lucy herself attended another congregation (mentioned below), the James Foundation was still involved in the renovation and upkeep of the building via her endowment. A letter from Ford Hughes, director of the James Foundation, to Herbert B. West, president of the New York Community Trust, in February 1970 highlights the allocation of requested funds in the St. James community. The letter notes that the Foundation donated $18,000 ($140,500 in 2024) to the St. James United Methodist Church, of which $11,000 financed a new addition with a fellowship hall and classrooms, $1,500 purchased a new roof, while the remainder supported general building renovations.[16] Though this donation is comparatively modest to those made to other local institutions, it nonetheless highlights the importance placed by Lucy and her estate on maintaining access to Mainline Protestantism in St. James.

Despite financing the James Chapel in the primitive community, the James family subsequently helped build Trinity Episcopal Church, similarly located in St. James, where they were congregants. Lucy held this congregation of greater importance than the Methodist meetinghouse, as she was a lifelong Episcopal parishioner, baptized in the church as an infant.[17] Accordingly, the congregation was a beneficiary of her benevolence multiple times. During her life, in memory of her uncle Robert Graham Dun, who saved the James family from destitution, Lucy hired the Whitefriars Guild to make a stained-glass window depicting the Tree of Life located at the north end of the building.[18] In 1923, Lucy financed a stone shell around the

[15] Mrs. Robert Doub, *The James Foundation Story #392 I'm Proud of my Town,* James Foundation papers, State Historical Society of Missouri (R1316), *F104.*

[16] Ford Hughes, *Churches in St James to Herbert B. West,* February 17, 1970. James Foundation papers, State Historical Society of Missouri (R1316), F.59.

[17] Nancy Genet, *Lucy Wortham James, 1880 1938, Founder of the Lucy Wortham James Memorial in the New York Community Trust,* Edited by Klaus Gemming and Hermann Zapf, St James, Missouri: The James Foundation, 1971.

[18] Genet, 32.

original church frame from 1893.[19] The most drastic overhaul, however, came in December 1928, when blueprints from the James Foundation Collection indicate that Lucy financed new carved wooden doors for the front entrance to the building, a new stone bell tower, and a stone cross for the church's facade.[20]

The support of Trinity Episcopal did not end with her death, however, as a June 1941 telegram emphasizing the initial works of the James Foundation notes, "... a contribution has been made toward the salary of the minister at Trinity Church."[21] Furthermore, an undated excerpt from the St. James Leader Journal highlights a total sum of $220,000 of donations from the James Foundation to the community over the previous calendar year. Among these were an undisclosed amount given to the parish house (rectory) of Trinity Episcopal and $500 to each church in town to support ground improvements as part of the city beautification effort.[22] The aesthetic contributions from her lifetime transformed Trinity Episcopal from a humble house of prayer in a forgotten Midwestern hamlet to a source of pride in the local community. The congregation remains active (as of 2024), and its exterior has become a popular spot for local students to take photographs for school dances and graduation. However, the donations from her estate prove that James's benevolence went beyond aesthetic contribution by ensuring the longevity of Anglican Christianity in her hometown.

While Carnegie remained religiously unaffiliated throughout his life, religion nonetheless played an essential role in the development of Carnegie's philanthropic ideology. The Gospel of Wealth strongly opposed the Social Gospel, an alternate form of benevolence, which viewed the affluent as oppressors instead of liberators and sought to replace secular philanthropic streams with religious ones, which would inadvertently spread Protestant Christianity. Concerning the relationship between his ideology and Christianity, Carnegie states,

> The highest life is probably to be reached, not by such imitation of the life of Christ... but, while animated by Christ's spirit, by recognizing the changed conditions of this age, and adopting modes of expressing this spirit suitable to the changed conditions under which we live; still laboring for the good of our fellows, which was the essence of his life and teaching, but laboring in a different manner.[23]

Thus, while not a religious endeavor, Carnegie argues that the newfound American elite of the industrial age ensured the peace and prosperity of their fellow men, just as Christ Jesus. Hearst followed similar trends, as Nickliss observes her wish to act as God's agent to the poor to diminish her economic and social reliance on men.[24] In contrast, James was unequivocally devout and self-sufficient, allowing her philanthropy to reflect personal

[19] "Our History," Trinity Episcopal Church, St. James, MO, Accessed February 15, 2024, https://www.trinityepiscopalstjames.org/about-1.

[20] James Foundation papers, State Historical Society of Missouri (R1316), Frederick R. King Trinity Episcopal blueprints, December 1928.

[21] Ralph Hayes, *Telegram to Ina F. Chambers,* June 9, 1941, James Foundation papers, State Historical Society of Missouri (R1316), F17.

[22] The James Foundation Story, *#351 James Foundation pays $220,000 last year,* James Foundation papers, State Historical Society of Missouri (R1316). St James Leader Journal, F104.

[23] Carnegie, 534.

[24] Nickliss, 580.

attributes, such as the Trinity Church Dun window, without the need to invoke a higher cause for reasoning.

Maramec Springs Park

The most influential endowment from Lucy Wortham James to her hometown was the donation of former family land to spur local economic opportunities. Following her death, the James Foundation took control of various properties within her estate in and around the St. James area. The largest of these was the Maramec Springs and former iron works. Over time, the vast 1,600-acre property, with heavy investment from the foundation, became the current Maramec Springs Park, independently owned and operated by the James Foundation.

The property, formerly the Maramec Iron Works, served as the source of James's family wealth. Founded by her father as a capitalist enterprise, technological advancements and logistical difficulties resulted in bankruptcy and the closure of the Ironwork in 1871. James bought the plot years later to ensure its upkeep and provide public access. During her lifetime, the land served primarily as farmland, providing hay to local farmers. Thus, achieving the aim of preservation from industrial or residential development.

Posthumously, the James Foundation played an essential role in transforming the plot into the current park. An August 1946 map indicates nine standing structures on the property (left over from the Maramec township) and roughly 130 acres of farmland harvested for hay.[25] A decade later, in 1953, a map of the Maramec Spring Basin highlights extensive renovations to the property, including the removal of the Muller Cabin, Dolly Cabin, Fort Cabin, Shop, log barn, and implement shed. The map also indicates the creation of a garage, employee residences, bridges, maintenance roads, shelters, parking spaces, multiple picnic units, a relocated poultry plant house, and a large playground.[26] An August 1969 map illustrates further development, including a carwash, lumber shed, athletic area (tennis courts), greenhouse, pump house, rearing pool, holding pool, and increased access to the river for cars and camper trailers.[27] Finally, a map from December 1971 indicates a new observation tower, a Missouri Conservation Commission tag shack at the park entrance, entrance bars, gravel walkways, and large group shelters, clearly dividing the park into recreational areas and buffer zones following the Maramec River and State Highway 8.[28]

Infrastructure was not the only donation given by the Foundation to the Springs property, however, newspaper articles indicate the creation and promotion of events in the park. An October 18, 1979, article in the *St. Louis Post Dispatch* details the first annual "Old Ironworks Days," a celebration of local culture and historic preservation of the Ironworks. Available activities include blacksmithing, chair-caning, tie hacking, weaving, quilting, furniture carving, fiddling, cross-cutting, and buck sawing, available to the public for a $1 per day parking fee.

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[25] James Foundation papers, State Historical Society of Missouri (R1316), Map of the Maramec Spring Property of the Estate of Lucy W. James near St. James Missouri, August 1946.

[26] James Foundation papers, State Historical Society of Missouri (R1316), Map of Maramec Spring Basin, November 1, 1953.

[27] James Foundation papers, State Historical Society of Missouri (R1316), Map of Maramec Springs Park, August 1, 1969.

[28] James Foundation papers, State Historical Society of Missouri (R1316), Map of Maramec Springs Park, December 1971.

This festival is held annually to this day and is a staple of the local culture.[29] To further preserve the park's history year-round, the James Foundation opened a new museum in the park in 1979, accredited by the American Association of Museums, available to the public for 25 cents, with free admission for children six and under. Activities in the museum included detailed scale models of the old blast furnace, casting house, forges, tub and cylinder blowers, waterwheels, and pounding hammers, as well as various dioramas and displays on early transportation, trails, local Indigenous culture, the Trail of Tears, and geology.[30] These donations indicate an intentional preservation of local history by the Foundation through historic and contemporary structures available through the Maramec Springs property.

These donations signify a differentiation from Carnegie due to James's social opportunities in the mid-20th century. Carnegie, a white male Protestant, given the social norms of the times, was uniquely apt to produce the philanthropy he became famous for. While many groups within American society faced social and economic limitations, Carnegie's demographic composition allowed him to avoid these entirely. This observation does not and cannot limit his philanthropic impact. Rather, it accentuates the importance of philanthropists who gave despite limitations and acknowledges their role in the Gospel of Wealth ideology. Though James was also a white Protestant, she was notably a woman. Despite her relative social and economic independence from patriarchic influence, exemplified by her perpetual affluence and willing divorce from her husband, famed diplomat, and former Assistant Secretary of State Huntington Wilson, James nonetheless faced the social limitations of 20th-century America. Though American women had gained the right to property by 1938, they still faced a gender financial bias and disproportionate ownership rates. James's family possessions empowered her to break this narrative by giving her vast amounts of land, which she donated to the local community in line with her philanthropic ethos. James's position as a landowner equipped her with unique opportunities for philanthropic benevolence not available to most female philanthropists engaging in the Gospel of Wealth during this era. Accordingly, her donations in this regard signify her notable and unique contributions to the ideology.

Nickliss notes that property ownership was an essential element to Phoebe Apperson Hearst's Gospel in her 2002 work, *Phoebe Apperson Hearst's "Gospel of Wealth" 1883-1901.* For both Hearst and James, philanthropy gave them opportunities to solidify themselves within society that they were denied elsewhere, a noteworthy component of female philanthropic attitudes and endeavors during this period. They also notably differentiated their ethos from Carnegie, as Nickliss states, "Unlike Carnegie, Hearst provided the property and the financial means to buy books and pay staff salaries. In 1894, she donated her first free public library as a Christmas gift to Lead, South Dakota, where large numbers of Homestake miners, their families, and immigrants lived."[31] Like James, Hearst's donation of land, supplies, and salaries made education accessible to communities that could not otherwise afford it. Hence, noting that both

[29] James Foundation papers, State Historical Society of Missouri (R1316), *St Louis Post-Dispatch,* 19c, f.43, October 18, 1979.

[30] James Foundation papers, State Historical Society of Missouri (R1316), Museum to Open Feb. 24, *St James Leader Journal*, F35, February 7, 1979.

[31] Nickliss, 586.

women used their donations to promote self-sufficiency within benefited communities, a stark contrast to Carnegie, who supported intrinsic communal dependence to expand his sphere of influence.

James's donations also sought to protect the environment by enshrining the springs in a nature park, ensuring large industrialist corporations could not acquire and destroy the land. Historian James D. Norris notes the importance James placed on the Maramec Springs property in his 1996 work *The James Foundation in Missouri 1941-1991*, authored with Timothy K. Malone. In the fifth article of her Last Will and Testament, from October 16, 1936, James articulates the importance of and her wishes for the Maramec property when stating,

> It is a spot of great natural beauty, which has been in the possession of my family for generations, and through our permission, the Spring basin has been and now is used by the public as a pleasure ground under such regulation and supervision as to insure that the public shall be seemly and shall not mar its natural beauty. I wish to continue such permissive use by the public and to keep the natural beauty unmarred.[32]

James highlights how her love for natural beauty initiated her purchase and endowment of the Maramec plot into the current park, actively preserving native environmental structures and wildlife from development. This ideological component of James's philanthropic ethos staunchly opposes that of Carnegie, whose industrialist endeavors famously inflicted an egregious volume of environmental damage in the urban American Northeast. In his 1908 work *The Inner Life of the United States,* Monsignor Peter Vey de Vaya recalls the hellish scene of Pittsburgh, Pennsylvania, resulting from Carnegie's industrialism. Regarding the environmental desecration, he states

> Words fail adequately to describe Pittsburg, this city of dreadful night... Everything and everybody are black and gloomy; black is the place, and black is the air; the sky itself is black. Day and night these fourteen thousand chimneys pour forth their noisome vomit of smoke, steam, soot, embers, and sparks, killing everything that grows and blooms, vegetation grass, flowers, and shrubs, in a territory of a day's journey in extent.[33]

In contrast to the pristine environmental beauty actively preserved by James through Maramec Springs Park, Carnegie's defilement of natural beauty highlights a salient area in which his gospel failed to adhere to the societal amelioration it claimed to promote. In contrast, by saving cherished environmental and historical structures from development,

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[32] James D. Norris and Timothy K. Malone, *The James Foundation in Missouri, 1941-1991,* New York, New York, New York Community Trust, 1996.

[33]Peter Vay De Vaya, *The Inner Life of the United States,* New York, New York, E. P. Dutton and Company, 1908, https://books.googleusercontent.com/books/content?req=AKW5QacbqVJbg563InuvujPDyw8CeGcoV-jpbzsBsdamkK0V9e-iC3ltvuOWGB-eHhitOMujUYH1QUGhk3DoAT5bYJ_5sMcIbSWQSQJdUbKuLKIOIZoAmHIqCy6Fk_NRADRecu0FocXJ1WKxGqU90qe5Kjsrnw7hD8y-rgaIqBqP-I6fJDJBX4EhEgCL7owNyfqzP9rnxEbW3poT210_-XpUUKmnWeH3wjpKoR8KR-ObIfZBhiOLdQdRXzQ1AGt9LBS9tkeDy4jWwJVuS6ettLIY_CX5xP7stA, 377.

James demonstrates a more genuine approach to affluent protection of the lower social classes.

Landownership/Education/Park

James's focus on landownership continued to impact her philanthropy outside of Maramec Springs. An undated article in the *James Foundation Story* notes how a $30,000 donation from the James Foundation to purchase a Dillon family property promoted local education by providing space for a new elementary school named in her honor. The article also notes that the Foundation's support continued beyond land purchase, stating, "Over a period of several years, the James Foundation has made several contributions to the St. James Schools - teacher scholarships, shop machinery, physical education equipment, playground equipment for the elementary schools, Blue Cross assistance to teachers, and library books."[34] Thus, noting the continual support of local educational institutions by the James Foundation.

Upon her death, James left a 54-acre estate near the edge of town by the Masonic Cemetery. In the 1940s, the James Foundation proposed the creation of a city park on the land for community recreational purposes. A map from 1946 details the proposed arrangement, including a library, maintenance buildings, parking lots, croquet, badminton, basketball courts, a fieldhouse, volleyball courts, horseshoes, a softball diamond with bleachers and backstop, a nature trail, an outdoor theatre, and multiple grilling stations and picnic shelters.[35] A later map from 1969 indicates the creation of a library, parking spots, a bathhouse, a public swimming pool, a diving pool, playground areas, a softball field, maintenance sheds, individual and group picnic shelters, comfort areas, a nature trail, and a field and cabin for the local Boy Scouts troop.[36] Despite these substantial renovations, the Foundation believed much more could be done to increase the recreational opportunities available at the park, prompting the creation of Lake Scioto, titled in homage to the original town name. A resolution from the St. James City Council in November 1969 commends the project as a "valuable contribution to the recreational facilities for the people of St. James."[37] Like Maramec Springs, the James Foundation used James family property to provide recreational spaces for the community. Though not stipulated as part of her will, such as the Maramec plot, the creation of the St. James City Park and the continual extensive renovation thereof highlight the communal focus of James's benevolence.

One of the often-forgotten donations from the James Foundation to the St. James community is the creation of the town flag, presented to the community by Ralph Hayes, acting as the Foundation's representative. The article notes that to promote usage of the flag throughout the community, the Foundation financed city and U.S. flags with display holders from the I-44 overpass to the Lucy Wortham James Elementary across town.[38] Though not comparable to land donations or institutional endowments, the creation and

[34] James Foundation papers, State Historical Society of Missouri (R1316), The James Foundation Story #307 Board of Education Names New School Building St James Leader Journal F.104.

[35] James Foundation papers, State Historical Society of Missouri (R1316), Map of St James City Park, 1946.
[36] James Foundation papers, State Historical Society of Missouri (R1316), Map of St James City Park, 1969.
[37] James Foundation papers, State Historical Society of Missouri (R1316), St James City Council resolution #303, Lake Scioto Construction, F.60, November 5, 1969.

[38] James Foundation papers, State Historical Society of Missouri (R1316), The James Foundation Story #368 St James to have city-wide flag display. St James Leader-Journal, F.104, 1962.

promotion of the town flag indicates the primary focus behind James's philanthropy, the sustainment, advancement, and preservation of the St. James community.

This aspect of James's philosophy differs from Carnegie's, who usurped local communities into an institutional conglomerate. In a publication for the Federal Reserve Bank of Richmond, Aayush Singh describes the creation and purpose of Gary, West Virginia, a famous company town tied directly to Carnegie. Singh notes,

> Its creation was no accident: U.S. Steel, the brainchild of J.P. Morgan and Andrew Carnegie, needed the coal in the area to supply its blast furnaces. The gargantuan corporation owned and operated the city... and it was the typical company town. The company owned the factory, the houses, the schools, and the government.[39]

Singh demonstrates that the purpose of Carnegie's financial endeavors in Gary was only to promote his own company, expand his influence, and increase his wealth. Contrarily, James's donations highlight her willingness to work alongside local officials, not over them, to implement plausible, reasonable, and impactful aid in the community.

City Beautification

The endowment and preservation of land, institutions, and local historical structures, defined the St. James community from an academic standpoint, providing establishments not accessible to other rural Missouri communities. However, the most distinguishable impact on the community for commoner citizens and transient passerby visitors is the preeminence placed by the foundation on city beautification. Local citizens understood the charming elegance of their community was not by happenstance but by the intentional and predetermined efforts of Lucy Wortham James. These sympathies are highlighted in a 1967 telegram from St. James Mayor Ira Wilson to Ralph Hayes, the chairman of the James Foundation, in which Wilson attributes the advancement of the local community to James herself. According to Wilson, "As one drives around the city of St. James, he is becoming increasingly aware of the changes and improvements made in recent years. Most noteworthy is the fact that the majority of these improvements are the direct result of the foresight and generosity of Lucy Wortham James."[40] Accordingly, Wilson does not attribute the donations to the Foundation itself but rather to the generosity and foresight of Ms. James, highlighting that those participating in and receiving the foundation's philanthropic aid gave all credit to James herself, not the institution.

Primary documents indicate multiple projects supported by the James Foundation to promote beautification. Firstly, a compressive urban planning grant, compiled by Hartland Bartholomew and Associates from St. Louis, Missouri, highlights plans to pave

[39] Aayush Singh, "The Rise and Fall of Company Towns," Federal Reserve Bank of Richmond, 2023, https://www.richmondfed.org/-/media/RichmondFedOrg/publications/research/econ_focus/2023/q3/economic_history.pdf, 10.

[40] James Foundation papers, State Historical Society of Missouri (R1316), F.55, Mayor Ira Wilson and the St. James Board of Aldermen to Ralph Hayes and the James Foundation, March 20, 1967.

all major streets within city limits and install curbs and gutters.[41] Though not seemingly as impactful as other endowments, this donation differentiates the St. James experience from other rural Missouri communities, which often struggle to allocate funds for infrastructure projects. Conversely, the James Foundation's benevolence provided the community with advanced amenities that, while not promoting self-help, aligned with James's wishes for town beautification.

A May 1969 article published in the St. James Leader Journal details the tremendous expanse of the project. According to the article, the James Foundation financed 19 new flower beds ranging from 15' by 20' to 35' by 60' by the train station downtown. Furthermore, the document highlights a nearly incomprehensible flowering effort, in which 400 roses, 17,500 tulip and daffodil bulbs, 1,200 irises, 250 peonies, 100 clump daylilies, 75 clump Shasta daisies, 500 mums, and 5,000 summer blooming flowers (including, petunias, periwinkle, salvia, geraniums, zinnias, marigolds, asters, and snapdragons), financed by the Foundation, were planted across town. The article also details the city reforestation effort, in which 8,000 dead trees within city limits were replaced with 3,700 new ones from the James Foundation tree bank at Maramec Springs.[42]

The massive extent of this project details the immense importance of the James Foundation to the aesthetic beauty of the local community. The *James Foundation Story* notes the national success of the program, as, in 1962, St. James was selected as the winner of Flower and Garden magazine's Community Achievement Award. A commemorative plaque was presented to the Forrest City committee from the managing editor and chairman of the Flower and Garden Foundation to commemorate the occasion.[43] Another issue of the same publication recounts St. James as one of four communities across the United States to win the Plant America Award from the American Association of Nurserymen, "In recognition of achievement in landscaping and beautification contributing to greater pride in our American Heritage."[44] Both awards demonstrate how the beautification program differentiated St. James from other rural communities and provided opportunities not possible without affluent investment and promotion.

A limited contrast can be noted between James's beautification to Carnegie's industrialized development, but her allegiance to St. James remains a more essential component of her philanthropic ideology. Unlike Carnegie, whose philanthropic endeavors varied across multiple areas to increase his influence, James's posthumous benevolence hyper-focused on St. James, not with the intent of monetary or social gain, but to improve and maintain the community entirely at her own expense. Without children or a husband to inherit her immense wealth, James supported local institutions, allowing them to remain open despite the economic hardships of rural communities. Furthermore, James specifically allocated funds toward city

[41] James Foundation papers, State Historical Society of Missouri (R1316), F.53, The Future of St James Missouri, the Comprehensive Plan, Hartland Bartholomew and Associates (St Louis, Missouri) Urban Planning Grant Project number Missouri P-39, June 1967.

[42] James Foundation papers, State Historical Society of Missouri (R1316), F47, St James' Beautification Story is Unique in State, St James Leader Journal, May 15, 1969.

[43] James Foundation papers, State Historical Society of Missouri (R1316), F.104, The James Foundation Story #368 St James to Have City-Wide Flag Display, St James Leader-Journal, 1962.

[44] James Foundation papers, State Historical Society of Missouri (R1316), The James Foundation Story #354 Tree-Town Project Wins Local Forest city Project National A.A.N. Award Wins National Award F.104.

beautification, a monetary endeavor too large for a small community to ever hope to achieve on its own.

Libraries and Self-Help Ideology

The most identifiable aspect of Carnegie's Gospel of Wealth was his endowment of libraries across the United States to promote his self-help ideology via the accessibility of academic resources to common citizens. Regarding these contributions, Nickliss notes that Carnegie had financed 204 libraries across the United States by 1903. However, she states, "Towns with a population over 1,000 received his library gifts, but they needed to provide the property for the structure and the financial backing for building maintenance, buying books, and staff salaries."[45] Nickliss demonstrates how Carnegie used his philanthropic endeavors to cement his ideology into the communities he donated to by attaching strings to his donations. Regardless, his donations had an unsurpassed impact on American education for the common masses.

Following his influence, Carnegie's contemporaries placed a similar importance on library endowments. Inspired by Carnegie, Phoebe Apperson Hearst also financed free public libraries, such as the public library of Lead, South Dakota. Regarding this donation, Nickliss notes that while it is considerably smaller than those of Carnegie, the money came with fewer strings attached, including property provided by Hearst and extra financing to support salaries and purchase books.[46] This contribution had the longest-lasting impact of any other era-specific philanthropic giving in the area. Nickliss notes, "Hearst's Free Library gave Lead's miners and other immigrants access to broader education while helping them retain their racial and ethnic identities and values" and "introduced immigrant miners and their families to American middle-class values and way of life."[47] Thus, highlighting Hearst's unique application of Carnegie's Gospel of Wealth, argued by Nickliss to be the foundation for her status as a complementary equal to him, even though her philosophy departed from his teachings regarding individual rights and decentralized structure.

Lucy Wortham James's endowment of the St. James community library likewise reflects a unique approach to the philosophy that did not simply mirror Carnegie but reflected the values of the individual by providing perpetual access to the institution to members of the local community. Upon her death in 1938, James allocated $700 per year (roughly $15,000 in 2024) to ensure local citizens did not have to pay a library tax, providing free public access to local literary facilities.[48] In 1941, in line with the wishes of her will, the New York Community Trust via the James Foundation proposed a city park for the town of St. James on a 54-acre plot of James family property near the edge of town, adjoining the Masonic cemetery. Among other things, such as a softball field and nature trail, the plan included a new town library.[49] Furthermore, the James Foundation continued to support improvements within the library across the subsequent decades. A shelving plan from January 1970 indicates that the foundation donated new wooden book shelving below windows, new end panels on existing steel interior double-

[45] Alexandra M. Nickliss, "Phoebe Apperson Hearst's 'Gospel of Wealth,' 1883–1901," *Pacific Historical Review* 71, no. 4 (2002): 575–605, https://doi.org/10.1525/phr.2002.71.4.575, 585.
[46] Nickliss, 585.
[47] Nickliss, 586-87.
[48] "About the Library," James Memorial Public Library, Accessed February 16, 2024, https://www.jmpl.net/about-the-library.
[49] James Foundation papers, State Historical Society of Missouri (R1316), F 37, Maps, blueprints and plans for James Foundation properties.

faced bookshelves, new phonograph record display cases, new "resilient tile flooring," air conditioning and electrical revisions, duct/piping insulation, and a wall-mounted thermostat to the building.[50]

Over time, the $700 yearly donation became the primary source of funding for the local library. A new building was built in 1953, renamed the Lucy Wortham James Memorial Library in honor of her contributions, located in St. James Park on the land donated by the James Foundation.[51] Furthermore, blueprints from January 1970 indicate interior renovations, including new wooden shelving below windows, new end panels on existing steel interior double-faced bookshelves, new phonograph record display cases, new "resilient tile flooring," air conditioning and electrical revisions, duct/piping insulation, and a wall-mounted thermostat by Schmidt Elam Architects, financed by the James Foundation.[52] In line with Lucy's philanthropic spirit, the James Foundation gifted the library to the city of St. James on May 1, 2013, with a stipend for first-year expenses. As of 2024, the library remains in the city's care, supported by a city property tax, under the city's direction with guidance from a board of directors. It has since been renamed the James Memorial Public Library.[53]

James's support of local literacy institutions is the most direct link between Carnegie and Hearst's Gospel of Wealth ideology and her own. While all three philanthropists donated to causes and institutions that sparked their personal interests or met the needs of those communities receiving donations, the focus on libraries remained constant, as these fell directly in line with the self-help ideology promoted by affluent American benevolence during the period. Underlying this concept, Carnegie argues,

> In bestowing charity, the main consideration should be to help those who will help themselves; to provide part of the means by which those who desire to improve may do so... Neither the individual nor the race is improved by alms-giving. Those worthy of assistance, except in rare cases, seldom require assistance.[54]

His proposition to provide common citizens with methods to improve their lives is met most effectively by libraries, which would be embraced by the academic community while ignored by those uninterested in literature, whom Carnegie was unwilling to support. In a 1969 letter to the New York Trust, Nancy Genet notes how James "felt worthy children and young people should be helped – with emphasis on that adjective."[55] As the premier historian of Lucy Wortham James, Genet underlies how James's philanthropic ideology mirrors Carnegie's, albeit without concluding so herself.

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[50] James Foundation papers, State Historical Society of Missouri (R1316), *New Shelving Plan,* Schmidt Elam Architects, January 20, 1970.

[51] "About the Library," James Memorial Public Library.

[52] Schmidt Elam Architects, *Library Blueprints*, January 1970, James Foundation papers, State Historical Society of Missouri (R1316).

[53] "About the Library," James Memorial Public Library.

[54] Carnegie, 536.

[55] Nancy Genet, *Letter to Mr. Herbert West New York Community Trust,* March 14, 1969, James Foundation papers, State Historical Society of Missouri (R1316), F23.

Conclusion

Through her works in the St. James community in her life and posthumously through the endowed James Foundation, Lucy Wortham James exemplifies her own unique application of affluent self-help philanthropic attitudes and endeavors in a rural Missouri community, dispelling the notion that classifies the movement as a coastal urban phenomenon instead of a national movement applicable to rural communities. Moreover, her unique adoption of these ideals departed radically from the despotic and self-serving aspects embedded in Andrew Carnegie's Gospel, which scholars argue served to justify his prosperity and further increase his influence under the guise of societal advancement. Notably, while this work provides an in-depth analysis of James through the lens of Carnegie, there remain multiple unexplored areas of her philanthropic attitudes, specifically relating to her views on race relations and her promotion of eugenics. Accordingly, this work does not deny these complexities. Instead, it seeks to leave the scholarship open for later, more comprehensive works to give these topics the attention they deserve in the James historical narrative. Furthermore, this work acknowledges the work of various James Foundation employees, across multiple decades, acting in place of Ms. James to best implement her wishes in the community. While their mention in this work is mitigated due to the intended focus, it is essential to note their actions in continually acting as the living voices of Lucy Wortham James, cementing her philanthropic legacy and impact far beyond her lifetime.

Though this work is only the beginning of the scholarly historical analysis regarding James's philanthropic endeavors, it highlights her place among her argued contemporaries. While her philanthropy occurred on a smaller scale, in a different region, guided by differing principles, seeking to achieve different aims, Lucy Wortham James's donations to the city of St. James through maintaining historic Protestant churches, endowing Maramec Springs Park, creating the St. James City Park, financing city beautification, promoting education, and safeguarding the local library exemplifies her application of the Gospel of Wealth and demonstrates how she reimagined these concepts and made them applicable to her rural hometown of St. James, Missouri.

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A Tiny Battle: Conflict, Structure, and Satire in "The Rape of the Lock"

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Abstract

Writing in London during the eighteenth-century, the poet Alexander Pope earned an enduring reputation in literary canon as a master of satire. His well-loved poem The Rape of the Lock exemplifies his biting wit and characteristically satirical heroic rhyme couplets. In my article, I use a formalist literary approach to examine Pope's stylistic, literary, and rhetorical strategies throughout the climactic third canto of the poem. Performing a close reading, this essay analyzes the intricacies of the poem through its use of diction, rhyme, and dramatic subject matter, ultimately arguing that Pope achieves a complex balance of satirizing and sympathizing with the characters in his poem.

The third canto of Alexander Pope's The Rape of the Lock undoubtedly marks the climax of his mock-heroic masterpiece. Through a clever use of diction, subject matter, and heroic rhyme couplets, Pope achieves a bathetic contrast between the triviality of social conflicts and the significance which members of society place upon them. Many of the conflicts that Pope explores throughout the poem intertwine with one another in this canto, for they dwell on both imaginary and historical events. Particularly, they allude to the emasculation of Catholic men occurring at the time of Pope's writing, as well as his motivation for writing the poem in the first place: the tension between Arabella Fermor and Lord Robert Petre, two influential Catholic individuals in eighteenth century England. Through the formal structure of the poem, Pope manages these various tensions, reflects on the workings of fate, and instills multiple meanings into each line. Ultimately, Pope crafts a richly woven poem that both satirizes and sympathizes with the subjects it chooses to examine, culminating in the dramatic loss of Belinda's hair.

Throughout The Rape of the Lock, Pope presents a comical juxtaposition between majestic, politically important events and trivial, domestic ones. Such a contrast he achieves primarily through rhyming couplets, in which he groups an elevated event or idea with something less important (though nonetheless considered paramount by the subjects in the poem). For example, Queen Anne's residence at Hampton Court, where the dramatic ombre and hair cutting scenes occur, appears as a place for gathering and conversation, where statesmen "oft the fall foredoom / Of foreign tyrants, and of nymphs at home" (Pope 3.5). Since the fall of foreign tyrants indicates great military conquests, its being followed by "nymphs at home" feels particularly bathetic; the idea of something being foreign directly opposes something that not only exists in one's culture but also in their house. Similarly, the next stanza, which continues to describe the palace atmosphere, follows this pattern: "One speaks the glory of the British Queen, / And one describes a charming Indian screen" (3.13-14). While both speak of positive attributes, "glory" takes on a more powerful, significant role, suggesting renown and prestige that the queen has merited. "Charming," on the other hand, has a more superficial connotation and merely implies something pleasant to look at. One likely would not describe an important conquest or historical moment as charming, so the two contrast with each other comically. Lines such as these use their rhyme structure to emphasize the difference between their two components; by doing so, they bring underlying tensions to the surface in a humorous way.

Another significant way the poem maintains this comical contrast appears through its characters, especially the Sylphs. Described as "th' aerial guard," Ariel and the other Sylphs are tiny, airy creatures whose shared mission centers upon guarding and protecting Belinda's chastity (3.31). They serve as a contrast to the traditional gods and goddesses in classical mythology (often referenced in poetry of Pope's time); though Pope references

"the sacred nine" muses at the beginning of the card game, the Sylphs actively participate in the battle. Initially, the mention of the sacred nine muses seems out of place in a scene that primarily depicts a battlefield, but it serves a notable purpose. Mythological muses traditionally serve as goddesses of inspiration, encouraging a heightened striving for beauty, perfection, and goodness. In the card battle, however, the muses look over the players, who ignore their presence and focus instead on their own social hierarchies, acting "wondrous fond of place" (3.36). Thus, while the Sylphs guard Belinda, they comically immerse themselves in the same acts of pettiness that the humans do. By making these figures guard Belinda in the same way that a traditional god would, Pope belittles the classical epic form, both literally and figuratively. This becomes physically apparent when Ariel sits upon Belinda's matador card, providing the image that he precariously balances on the edge of a playing card much larger than himself (3.33). Comically, these creatures do not involve themselves in noble pursuits, but rather, household activities. For instance, they hover around Belinda as she takes her coffee, fanning the "fuming liquor" for her (3.114). Additionally, rather than being powerful god-like figures, the poem emphasizes them as delicate and "airy" throughout Canto Three; one of them even gets cut in two by the Baron's scissors (3.151). The prevalence of the Sylphs throughout adds humor to the climactic events of the card game and the hair cutting, comparing them to a mythological occurrence in a deflated, humorous way.

In addition to its bathetic contrast between noble and trivial events, Canto Three is rife with gender reversals and tensions. These tensions come to life at the commencement of the game of ombre, in which Belinda single-handedly takes on two men in a threefold battle: a tiny battlefield made of playing card characters, a battle between Belinda and her male opponents, and the battle between the Baron and Belinda over her heart (3.27). The third stanza of this canto describes how, at the start of the game, Belinda "Burns to encounter two adventurous knights / At ombre, singly to decide their doom" (3.26-27). By challenging the Baron and the unnamed knight to the round of cards and being the one to name the trumps, Belinda takes on the role of "ombre" and thus acts as the "man" of the game. The description of her male opponents as adventurous knights deliberately emphasizes Pope's satire, especially in comparison with the previous lines, which describe current events happening outside of Hampton Court, such as judges signing sentences (3.21). Whereas some men may be involved in important political activities, these two must stay inside, taking on the trivial challenge of defeating Belinda at cards. This acts, on Pope's part, as a reference to the current emasculation of Catholic men occurring at the time he wrote the poem; the word choice of "knights" touches upon the particularly sensitive point of men not being allowed to bear arms and thus, the only battle in which they can partake is a game of ombre, their only chance at victory a paltry card game.

The mock-heroic form, as discussed, lends itself to satirizing the poem's characters and belittling (or simply acknowledging the littleness of) their antics. On a deeper level, these notes of satire reflect upon the workings of fate and the way the figures in the poem deal with, or ignore, it. If the male figures are satirized as powerless or inconsequential, they are not the only objects of belittlement. The third canto subtly points out flaws with social hierarchies and ambitions, and even Belinda occasionally falls target to a portion of this satire. One of the main examples of this appears in the middle of the card game, when Pam, the knave of clubs, gets overthrown by Belinda's spade: "Ev'n mighty Pam, that kings and queens o'erthrew, / And moved down armies in the fights of Loo, / Sad chance of war! now, destitute of aid, / Falls undistinguished by the victor Spade!" (3.61-64). In other words, the knave (jack) of clubs may have won the victory in the game of Loo, but this power proves inconsequential in the game of ombre—and he does not achieve recognition from the past victories, instead falling undistinguished. Further, the poem does not seem to supply a strong reason for his weakness in this particular game, for it solely springs from a "sad chance of war" (3.63). Perhaps he could have demonstrated strength on a different occasion, but of course, this also negates the knave's true merits and makes him merely an object to whim or chance.

Belinda ends up victorious in the game of ombre, but this does not exempt her from the workings of fate. After her card game, the narrator notes that "Sudden these honours shall be snatched away, / And cursed forever this victorious day" (3.103-104). Just like Pam, she loses her claim to victory after it gets taken from her abruptly, rather than it gradually fading away. The previous lines, which mention that mortals are "thoughtless" and "blind to fate, / Too soon dejected, and too soon elate," suggest that the outcomes of their lives would appear happier if they rose above the littleness of earthly victories and trivialities, such as ombre, and considered a larger picture (3.101-102). Belinda, for example, places urgency and immediacy on her actions, such as when she challenges her opponents to the ombre game; the line reads, "Belinda now, whom thirst of fame invites" (3.25). Pope's choice of the word "now," as well as the use of "thirst," portrays her desire to play, and win, as something physical; like the instinctual desire for thirst to be quenched, her pursuit of victory does not act in accordance with a rational, deliberate calculation. She desires immediate gratification, and this hurry proves that fate too soon dejects or too soon elates her.

In the titular moment when the Baron severs Belinda's lock of hair, he deems himself the true victor of the afternoon's activities. In addition to declaring that he has won "the glorious prize," he declares, "So long my honour, name, and praise shall live!" (3.162; 3.170). Yet, despite these self-accolades, the Baron's speech does little to contradict the existing critique of social customs and dynamics. His time-bound statements, meant to

sound eternal, in fact refer to impermanent cultural patterns that can (and will, as modern readers can see) be broken. The reference to the British riding in a "coach and six," for instance, does not indicate an imperatively perdurable phenomenon; nor does reading Atlantis (3.164-165). The Baron wants to prove that this event will be acclaimed forever, but—and this illustrates another instance of Pope's use of bathos—the examples he uses to accentuate this point reveal themselves as rather minimal and insignificant. Additionally, he remarks that it is little wonder that her hair should experience "The conqu'ring force of unresisted steel," in a sense belittling his own achievement (3.178). If steel (a convenient play on the verb "steal") can destroy great monuments, it should not surprise or impress anyone that he can conquer an unsuspecting victim's lock of hair—and he alludes as much.

The third canto clearly minimizes the social antics on which its characters place much importance. Yet, there are subtle ways in which Pope portrays Belinda as a strong individual with agency, so even though he satirizes her in some ways, she does not fall as the primary subject of satire. Belinda exercises a God-like authority, such as when she declares, "Let spades be trumps!" (3.46). In a similar way, she operates more actively than nature, since the sun, near the beginning of the third canto, "obliquely shoots his burning ray" (3.20). Whereas this suggests a passive, indirect motion, Belinda herself "burns" (3.26). Thus, she acts in a more involved manner than nature, taking the initiative to actuate the game. With a mere spread of her hand, her Sylphs surround her with their support (3.31). Belinda's strength does not negate the fact that she does experience what could be considered weakness, such as a "livid paleness" or trembling (3.90). Rather, this sensitivity motivates her to persevere and win the game. Thus, even though she does fall prey to the Baron's conquest of her hair, she displays a fortitude of character that is powerful because of its vulnerability.

The formal structure of The Rape of the Lock's third canto contributes to Pope's bathetic intention, particularly through its consistent rhyming couplets. These couplets, along with the mock-heroic subject matter of Sylphs, create a humorous, deflationary style, making light of social hierarchies and customs. The poem also points out gender reversals and, by so doing, alludes to the emasculation of Catholic men—and more importantly, it gives precedence to Belinda and portrays her as a compelling, vivacious individual. Through crafting Belinda's personality in this way, the poem gives honor to Arabella Fermor, restores her lock as well as her dignity as an autonomous woman, and strikes a balance between humorously satirizing its subjects and representing them in a captivating, elevated manner.

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Evaluating Lunch Plan Data in the St. Charles School District (SCSD)

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Abstract

The SCSD is a public school district in St. Charles, with, on average, 4500 students a year. The SCSD is subdivided into an early childhood center, six elementary schools, two intermediate (5-6,7-8) schools, and two high schools. Vocational schools are also within this district but were not included in this report. The SCSD is concerned with the impact of the Covid-19 pandemic on their district's population and on the number of students that needed assistance with lunch. They have asked Lindenwood's 2024-25 PIC Math group to analyze their data from the years 2020-25 and identify any trends. Identifying these trends may help the client understand which areas in the school district are most likely to need financial aid, and which locations were most greatly impacted by the pandemic. So far, the group has analyzed the data to understand the retention rates and distribution of meal statuses and student populations across the 5-year period, as well as using ArcGIS and R programming software to generate various graphs and maps of the SCSD area. We focused our analysis and observations on these key areas employing statistical and data analysis skills to draw our conclusions.

1 Introduction

Preparation for Industrial Careers in Mathematical Sciences (PIC Math) is an applied course to prepare undergraduate students for careers in industry. Students work in teams on a project proposed by a local business, nonprofit, or government agency. This provides students with a professional setting to develop their mathematical and programming skills, interact with a client, manage deadlines, and produce a technical report. This document represents the final result for the spring 2025 cohort.

The SCSD tasked the class with identifying certain trends across 5 years of data. The district wanted to know more about the impact of the pandemic on student population and meal status; i.e., once parents were required to classify their income with the state, did they? (note that during "COVID" years students were all classified as "S", meaning their lunch was "subsidized"). Did the pandemic change their student population to become more reliant or less reliant on state aid? Did the district lose any specific percent of their population during or immediately after the pandemic?

The District also asked if there were any specific findings of the retention rate (of meal statuses and population) between K-4. Further, was this change reflected when transitioning to middle school? In particular, considering the total population and meal status retention during these transition school, were there certain elementary schools that were losing more of a population?

The remainder of this manuscript is as follows. In section 2, we examine the meal status by population within the district and offer some observations. In section 3, we review meal status from year to year since the outbreak of the pandemic. We also break these results down to grade level. In section 4, we investigate how attendance rates are related by meal status and student status. In section 5, we over a year-to-year visualization of meal status in the district using ArcGIS. In section 6, we offer our overall observations of the project and suggestions to our client to help improve their processes.

2 Meal Status by Population & Distribution

Meal status (Free, Reduced, Paid) reflects the socioeconomic makeup of a school district's student population. This section uses faceted charts to show the number of students in each meal status category for each year from 2020-2021 to 2024-2025. By comparing these counts across years, we can identify trends in enrollment, such as the 2024-2025 drop, and explore how economic factors influence student retention.

The distribution of students by meal status (Free, Reduced, Paid) across schools can reveal variations in socioeconomic need within a district and how these patterns shift over time. This section uses faceted line and bar charts to show the number of students in each meal status category for each school, sorted by total enrollment, across the years 20-21 to 24-25. Each chart highlights trends in meal plan distribution, such as the dominance of Paid students and the impact of the 24-25 enrollment drop, providing insights into how economic factors vary by school size and type.

2.1 Data

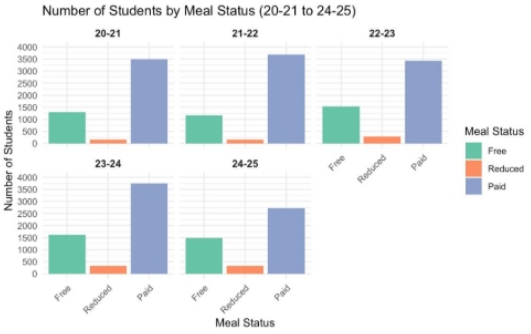

Figure 1: Meal Status vs. Number of Students by Year

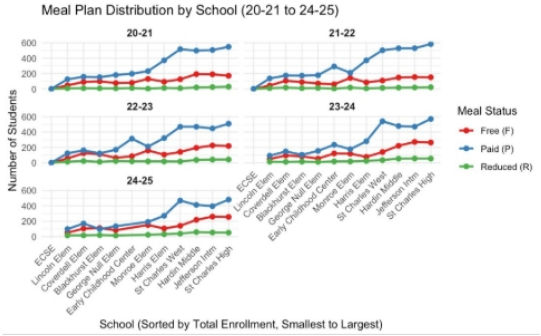

Figure 2: Meal Plan Distribution by Schools

2.2 Observations

2.2.1 Meal Status By Student

Paid Students in the Majority: In each year, the Paid bar is the tallest, reflecting that Paid students (S+P) make up the largest group (e.g., 3499 in 2020-21, 3744 in 2023-24). However, the Paid count drops significantly in 2024-25 to 2724, a decrease of 1020 students (27.24% drop), aligning with the overall 20.3% enrollment drop.

Free Students Increase in Count until 2023-24: The Free bar grows from 1301 in 2020-21 to 1620 in 2023-24, then slightly decreases to 1483 in 2024-25. Despite the count drop, Free students become a larger proportion of the total in 2024-25 (32.70%)

Reduced Students Grow Steadily: The Reduced bar, the shortest in each year, grows steadily from 149 in 2020-21 to 329 in 2023-24, then remains nearly stable at 328 in 2024-25, reflecting increased eligibility over time (from 3.01% to 7.23%).

2.2.2 Meal Status Distribution

Paid Students in the Majority: The Paid line is consistently the highest across all schools and years, reflecting that Paid students are the largest group (e.g., 548 in St Charles High in 2020-21, dropping to 481

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in 2024-25). The Paid line shows a significant drop in 2024-25, especially in larger schools (e.g., St Charles High: 570 in 2023-24 to 481 in 2024-25), aligning with the district-wide 20.3% enrollment drop.

Free Students Increase in Count: The Free line generally increases with school size (e.g., in 2020-21, from 0 in The Early Childhood Center to 193 in Hardin Middle) and shows growth over time in most schools (e.g., Blackhurst Elementary: 99 in 2020-21 to 111 in 2024-25), reflecting the district-wide increase in Free percentage (26.29% to 32.70%).

Reduced Students Grow Steadily: The Reduced line remains the lowest but shows a gradual increase over time (e.g., Hardin Middle: 21 in 2020-21 to 59 in 2024-25), consistent with the district-wide growth (3.01% to 7.23%).

2024-25 Enrollment Drop: The 2024-25 subplot shows a noticeable decrease in all bars, especially Paid, due to the 20.3% enrollment drop (from 5693 to 4535 students). Paid students were the most likely to leave (58.41% retention), while Free (65.19%) and Reduced (81.16%) students were more likely to stay. The 2024-25 Distribution subplot shows a dip in all lines, especially Paid, due to the 20.3% enrollment drop.

2.3 Conclusion

The faceted line charts reveal significant variations in socioeconomic composition across schools from 2020-21 to 2024-25, as well as reveals significant shifts in the district's student population across grade levels.. Paid students consistently dominate in all schools, particularly in larger ones like St Charles High and Jefferson Intm., but their numbers drop sharply in 2024-25 due to the district's 20.3% enrollment decline. Free and Reduced student counts grow over time, reflecting increasing economic need, with smaller schools like the Early Childhood Center showing higher proportions of Free students before program cuts in 2024-25. We also see that enrollment grew steadily from 4,949 students in 2020-21 to 5,693 in 2023-24, with relatively stable distributions across grades, though early childhood grades (e.g., PK) saw fluctuations due to program changes. The sharp 20.3% enrollment drop in 2024-25, from 5,693 to 4,535 students, is evident across all grades, with notable declines in early childhood grades and in Grade 12 (from 630 to 353 students), reflecting high school attrition. These trends underscore the impact of economic factors and district-wide changes, such as the discontinuation of early childhood programs, on student enrollment and meal plan participation.

3 Meal Status and Population Retention

To better understand the shift between schools and population fluctuations, we analyzed the retention rate of students at schools based on overall enrollment. This meant calculating retention rates by tracking students across years to determine how many remain enrolled in the same dataset (the same school system) from one year to the next, as well as retention over time. After tracking individual students (via Student ID), we could see how their lunch status changed year-to-year and whether they remained in the dataset (indicating retention) or dropped out (indicating attrition). Research indicates that students eligible for free or reduced-price meals often face higher risks of attrition due to socioeconomic challenges, but access to school meals can improve retention by supporting health and academic performance.

3.1 Data

3.1.1 Meal Status Retention

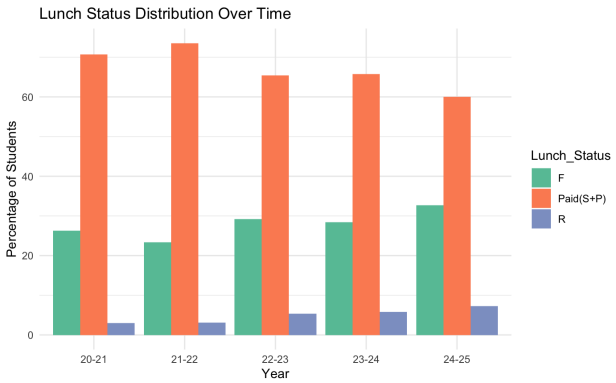

Figure 3: Meal Status Retention Rates by Year

3.1.2 Grade/Population Retention

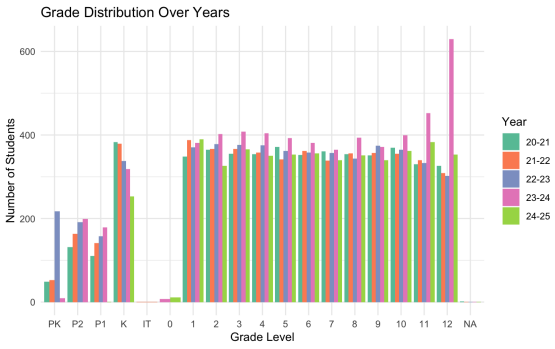

Figure 4: Grade Level Distribution by Year

Year	Total Students
20-21	4912
21-22	4978
22-23	5198
23-24	5693
24-25	4536

Figure 5: Total Population per Year

3.2 Observations

3.2.1 Meal Status Retention

Lunch Status Trends: Free lunch students decreased from 26.29% (1301) in 2020-21 to 23.30% (1169) in 2021-22, then increased to 32.70% (1483) by 2024-25, despite an 8.46% count drop in 24-25. Reduced lunch students grew from 3.01% (149) to 7.23% (328), a 120.13% increase in count, with high stability in 2024-25 (-0.30%). Paid lunch students decreased from 70.70% (3499) to 60.07% (2724), with a 27.24% drop in count in 2024-25, exceeding the overall enrollment drop (20.34%)

Socioeconomic Impact: The 2024-25 enrollment drop (20.34%) disproportionately affected Paid lunch students (58.41% retention), possibly indicating higher-income families leaving the district. Free (65.19%) and Reduced (81.16%) lunch students were more likely to stay, likely due to reliance on school meal programs, though the loss of early education programs (PK/P2) may have impacted younger Free lunch students. The increase in Free (32.70%) and Reduced (7.23%) percentages in 2024-25 suggests the remaining student population has a higher proportion of lower-income families.

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3.2.2 Grade Level Retention

Enrollment grew steadily from 4,912 to 5,693 (15.9% increase) over the first four years, peaking in 2023-24. The sharp 20.29% drop in 2024-25 (from 5,693 to 4,536) is significant and could indicate a major event (e.g., students leaving the district, school closures, or data collection issues).

Enrollment Dynamics: Total enrollment grew from 4,912 in 2020-21 to 5,693 in 2023-24 (15.9% increase) but dropped sharply to 4,536 in 2024-25 (20.3% decrease). This decline could reflect student outflows, policy changes, or data issues, requiring further investigation.

Early Education Challenges: Pre-K spiked to 217 in 2022-23 (4.175%), then collapsed to 0 by 2024-25, suggesting a discontinued program. P2 followed a similar pattern, disappearing in 2024-25. Kindergarten enrollment declined 33.94% (383 to 253), with its proportion falling from 7.797% to 5.578%, indicating fewer new entrants.

Elementary and Middle Stability: Grades 1-8 show consistent counts (326-408) and percentages (6.4%-8.6%). Grade 1 grew to 390 (8.598%) in 2024-25, becoming the largest grade. The Kindergarten cohort (2020-21) lost 8.62% by Grade 4, suggesting moderate attrition.

High School Volatility: Grade 12 surged to 630 (11.066%) in 2023-24, likely a data error, before dropping to 353 (7.782%) in 2024-25. Grade 11 peaked at 452 in 2023-24 (7.940%), then fell to 383 (8.444%). High school grades grew until 2023-24, then adjusted downward in 2024-25.

3.3 Conclusion

The analysis of grade distribution and meal status retention from 2020-21 to 2024-25 reveals significant shifts in the district's student population across grade levels. Enrollment grew steadily from 4,949 students in 2020-21 to 5,693 in 2023-24, with relatively stable distributions across grades, though early childhood grades (e.g., PK) saw fluctuations due to program changes. The sharp 20.3% enrollment drop in 2024-25, from 5,693 to 4,535 students, is evident across all grades, with notable declines in early childhood grades and in Grade 12 (from 630 to 353 students), reflecting high school attrition. It is clear that while it is common for students to retain the same lunch status, the amount of Free and Reduced students is slowly growing throughout the SCSD, indicating a higher population reliance on State Aid and financial resources.

4 Attendance Rates by Student, School, & Meal Status

Student attendance is a critical factor in academic success, influencing both individual student outcomes and overall school performance. This analysis examines attendance patterns across multiple schools in the St. Charles School District over the academic years 2020-21, 2021-22, 2022-23, and 2024-25, excluding 2023-24 due to incomplete data.

The schools analyzed include all schools along with some unidentified schools labeled "GNULL" and "SUCC." The data reveals variations in attendance by school and grade level, highlighting trends such as the impact of program changes at Early Childhood Center, differences between elementary and high schools, and the presence of students with zero attendance, particularly in 2024-25.

By exploring these patterns, this study aims to identify areas of concern and opportunities for improving student engagement and attendance across the district. The St. Charles School District has been analyzing attendance patterns across its schools from 2020-21 to 2024-25 to identify trends and areas for improvement. Previous analyses revealed that elementary schools generally maintain high attendance rates (above 93%), while middle and high schools show steady improvements (reaching 90-92% in 2024-25), and certain programs like the Early Childhood Center and Juvenile Justice Center face significant challenges (e.g., 80.94%

and 54.15% attendance in 2024-25, respectively).

Using this analysis, the district wants to understand whether socioeconomic factors, as indicated by stu-dents' meal status, can influence attendance rates. Meal status often reflects a student's family income level, which can impact access to resources like transportation, health care, and stable home environments —all of which may affect school attendance. In this analysis, we categorize students into three meal status groups: "Free" (F, indicating eligibility for free meals), "R" (a specific category in the data), and "Paid" (combining S for Subsidized and P for Paid, representing students not on free meals). Additionally, the dataset in-cludes a group of students with an unspecified meal status (Empty), which we will investigate. This analysis aims to explore the correlation between these meal status groups and attendance across the district, using student-level data from 2020-21 to 2024-25.

By examining this relationship, the district can identify whether students from lower-income backgrounds (e.g., those on free meals) face greater attendance challenges and develop targeted interventions to support these students, ultimately enhancing overall academic success.

4.1 Data

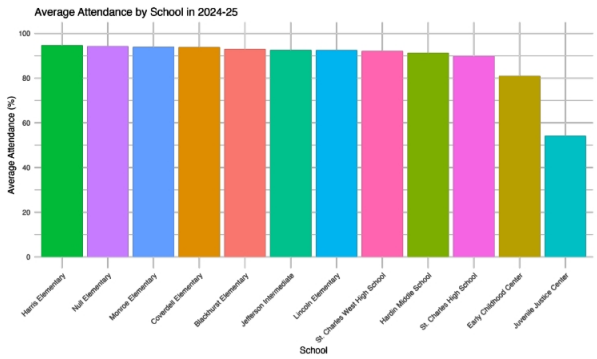

Figure 6: Average Attendance by School

4.2 Observations

4.2.1 Analysis of Average Attendance

Averages Across the District: The analysis of attendance in the St. Charles School District from 2020-21 to 2024-25 shows strengths and challenges. Elementary schools like Harris, Blackhurst, and Coverdell maintain high attendance above 93%, reflecting strong engagement. Middle and high schools, including Hardin Middle, Jefferson Intermediate, St. Charles High, and St. Charles West High, improve over time, reaching 90-92% in 2024-25, but lag behind elementary schools. The Early Childhood Center struggles, dropping to 80.94% in 2024-25 due to 38 zero-attendance students, likely from program changes. The Juvenile Justice Center also faces issues, with 54.15% attendance in 2024-25, needing targeted interventions.

4.2.2 Comparing Attendance Rates to Meal Status

Empty: The 977 students with an unspecified meal status have the lowest average attendance at 81.82%, with a high standard deviation (SD) of 23.22, indicating significant variability. This group likely includes students who were not assigned a meal status due to data entry issues, transfers, or other administrative reasons. Their low attendance suggests they may face unique challenges, possibly related to incomplete enrollment or socioeconomic factors not captured by meal status.

Free: Students with "Free" meal status (likely from lower-income families) have an average attendance of 89.64%, with an SD of 11.02. This is higher than the unnamed category but lower than "Paid" and

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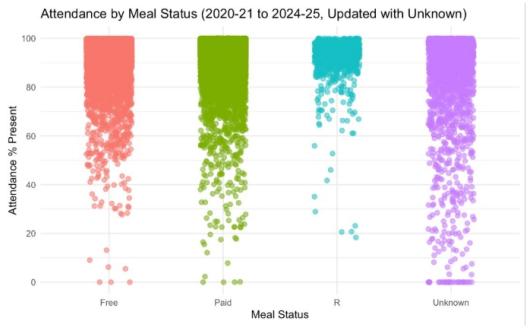

Figure 7: Average Attendance vs. Meal Status by Year

Meal Status	Avg. Attendance	SD Attendance	Total Students
Empty	81.824831115660 2	23.223806662532 8	977
Free	89.644789191261	11.016671646760 4	5218
Paid	92.742006244496	8.8266057068685 5	12491
Reduced	92.099807474518 7	8.9627136335586 2	883

Figure 8: Average Attendance vs. Meal Status by Year TABLE

"Reduced," suggesting that socioeconomic barriers may impact their attendance.

Paid: The "Paid" group (combining S and P) has the highest average attendance at 92.74%, with an SD of 8.83, indicating more consistent attendance. This group, representing students not on free meals, likely benefits from greater access to resources.

Reduced: The "Reduced" category has an average attendance of 92.10%, very close to "Paid", with an SD of 8.96. This group is smaller (883 students) and may represent a specific subset of students (e.g., a special program or data entry variation).

4.3 Conclusion

The analysis of student attendance in the St. Charles School District from 2020-21 to 2024-25, with meal statuses grouped into "Free," "Reduced," and "Paid" (combining S and P), highlights a clear correlation between socioeconomic factors and attendance rates.

The "Paid" group, representing students not on free meals, achieves the highest attendance, averaging 92.74% with an SD of 8.83, and improves from 91.57% in 2020-21 to 94.41% in 2024-25. The "R" category follows closely with an average of 92.10% (SD 8.96), rising from 90.22% to 93.30% over the same period. Students with "Free" meal status, likely from lower-income families, have a lower average attendance of 89.64% (SD 11.02), improving from 88.61% to 90.77%. The "Unknown" meal status group (2044 students) has the lowest average attendance at 81.9% (SD 22.94), increasing from 74.13% in 2020-21 to 82.87% in 2024-25, but remaining significantly below the other groups. The differences across all meal status groups are statistically significant (ANOVA F-value 544.5, p-value ¡ 0.001), confirming that meal status impacts attendance.

The "Unknown" group's low attendance and high variability suggest data quality issues or unique challenges (e.g., transfers, special programs like the Juvenile Justice Center, which had 54.15% attendance in 2024-25), warranting further investigation. For the "Free" group, socioeconomic barriers such as transportation difficulties or family responsibilities may contribute to their lower attendance, with a consistent gap of about 3-4 percentage points compared to "Paid" students.

The district should prioritize targeted interventions, such as enhanced transportation support, family outreach, and breakfast programs, to support "Free" students. Additionally, resolving the "Unknown" meal status data through improved record-keeping or separate analysis can ensure a more accurate understanding of attendance patterns, ultimately helping the district close the attendance gap and promote equitable academic success for all students

5 Exploring Meal Status Distribution with ArcGIS

The SCSD also tasked the group with determining if location within the district had any correlation to meal status. Using ArcGIS, the group was able to geocode the provided addresses of every student in the district from the years 2020-25.

By observing heat maps of every student within the district, the group was able to determine if there was a correlation between location in the district & meal status, i.e., do students that live in one part of the school district require free lunch more often than students than live in other parts of the district?

By determining this correlation, it allows for the SCSD to determine if certain areas need more financial assistance and how they can stage interventions to encourage these kids from these certain areas to attend school more often, as described in the previous section, but it also allows for them to see which areas were more greatly impacted by the COVID-19 pandemic.

5.1 Data

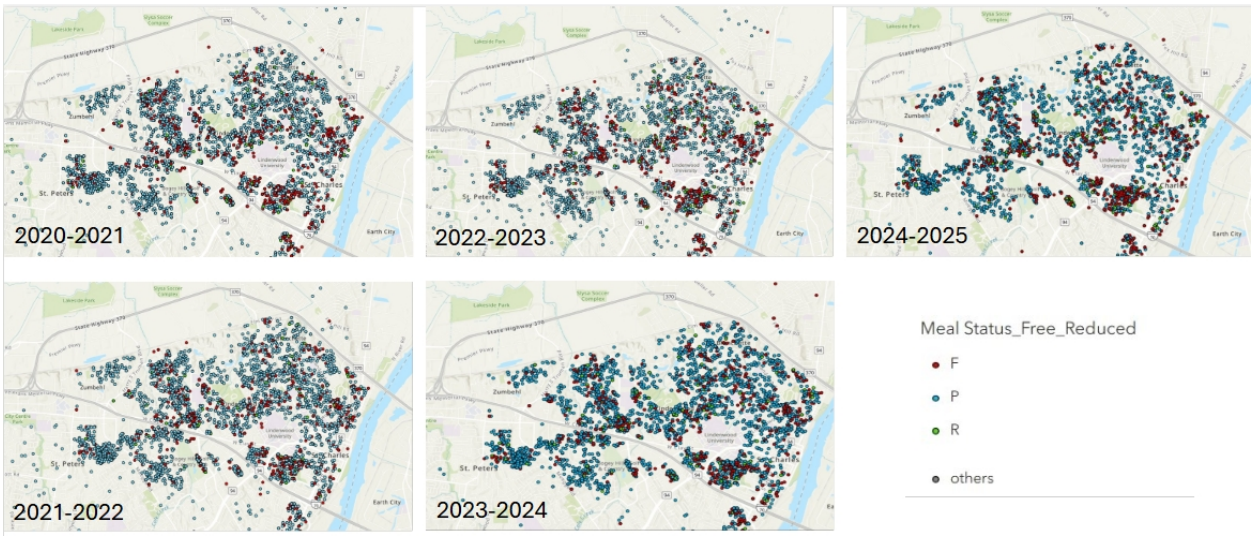

Figure 9: Mapping using ArcGIS

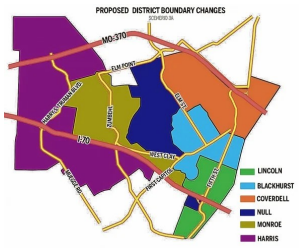

Figure 10: SCSD District Lines

5.2 Observations

In 2021-22, large clusters of Free meal recipients appeared in the central and southern parts of St. Charles, mainly within the lines of Blackhurst Elementary, Lincoln Elementary, and Monroe Elementary, indicating

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these may be lower-income neighborhoods. These areas showed signs of economic strain following the Pandemic. By 2023-2025, there is a noticeable increase in Paid (P/S) meal statuses, indicating partial economic recovery. However, many red clusters remain, especially in the same high-need zones, revealing persistent inequality. Throughout all the years, the regions with the highest concentrations of free and reduced meals remained largely consistent, suggesting structural issues in food access and income disparities. The use of graduated symbol sizes in each map effectively shows where the highest densities of affected students are located, helping stakeholders target interventions.

5.3 Conclusion

The analysis of the ArcGIS maps reveals significant challenge areas in the district. Across all 5 years, Blackhurst Elementary, Lincoln Elementary, and Monroe Elementary all had the largest clusters of free and reduced lunch status students. By understanding where these high-need areas are, the SCSD can focus on staging certain interventions within these elementary schools in order to ensure that these children receive the same quality education and are encouraged to attend school. The SCSD can also focus on these high-need areas in an effort to understand where these income disparities are stemming from, and maybe even provide financial aid to certain struggling areas.

6 Conclusion

6.1 What Can the SCSD do?

After the analysis of the provided data, our team recommends that the SCSD:

- Investigates the 24-25 enrollment drop and the 23-24 Grade 12 spike for data accuracy.
- Monitor Kindergarten declines to address potential long-term enrollment challenges.
- Validate cohort data to confirm retention rates and identify transfer patterns.
- Investigate the 24-25 enrollment drop, focusing on why Paid lunch students left at a higher rate (e.g., economic migration, dissatisfaction with school changes).
- Enhance meal program support to retain Free and Reduced lunch students, especially in early grades, to encourage continued enrollment in the district.
- Monitor the socioeconomic shift toward a higher proportion of Free and Reduced lunch students, ensuring resources are allocated to support lower-income families.

By considering these recommendations, the SCSD may be able to understand on an even deeper level the retention rates of their students, and also understand who, where, and why certain areas of their district are leaning more towards Free and Reduced meal plans.

6.2 Data Entry Problems

Our team was tasked with cleaning and analyzing 10,000+ lines of data. In doing so, we discovered multiple discrepancies. The SCSD, between 2023 and 2024, changed their student records-keeping systems. With this change, some data was lost in translation or completely changed. This led to some issues in our analysis as certain grade levels needed to be changed, some students' information was lost, and some programs (vocational) were completely ignored. We also ran into a few communications issues with the district, which led to some of our questions going unanswered, and therefore we decided to alter our methods as best as possible in order to provide proper analysis for the SCSD.

6.3 Conclusion

The analysis of student attendance in the St. Charles School District highlights a clear correlation between socioeconomic factors, attendance rates, and population retention. We recommend the district should consider providing resources such as meal-support for "Free" students, targeted programs for low-attendance schools, and focus on utilizing better data systems to ensure equity and accuracy post-COVID-19

After speaking with Mr. Jeremy Shields, our client from the SCSD, we also discovered that IT employees in the SCSD have also been investigating the discrepancies in enrollment numbers after 2023. The shift from the "Tyler SIS" system to "Power Schools" has created a substantial challenge for the SCSD- the Power Schools program is new to the Midwest Region of the United States, so while the State is learning how to use this new system, so are all of the schools. This has led to a loss in certain data sets (i.e., race, age) in the collection of student data, but has also led to multiple miscommunications among the data. Mr. Shields informed us that after the switch, there is the possibility many students were counted multiple times throughout the data sets under different program names, which ultimately contributed to the large enrollment "drop" observed in 2024-25. Mr. Shields informed our group that the SCSD did not see a 20% enrollment drop in their students, so he intends on working with his team over at the SCSD to investigate the data discrepancies we found while working on this report.

Mr. Shields also was interested to hear that a lot of their student population is now beginning to rely on financial aid, i.e., students with free and reduced lunch. Although pre-COVID, a majority of their retained populations were "Paid" students, post-COVID, a majority of their population were "Free" students, indicating a substantial shift in the makeup of their student population.

Acknowledgments

Special thanks to Dr. Ana Londoño for her mentoring and assistance in creating the GIS plots found in this document. The group also thanks the SCSD for their data set and insights used in this project. In addition, we would like to personally thank the referees for their contributions in improving the quality of this manuscript.

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A Comparative Analysis of Eyewitness Testimony Accuracy: Victims Versus Bystanders

Allyson Phillips

Abstract

Eyewitness testimony is a vital yet fallible component of the criminal justice system. This study investigates differences in eyewitness testimony accuracy between two witness types: victims and bystanders, adding to the scarce literature regarding the subject. Participants were assigned to either the Victim or Bystander Group and participated in a memory test. During the memory test, a staged intruder entered the room and stole either a gift card belonging to the participant (Victim Group) or me (Bystander Group). Following the theft, participants were given an eyewitness testimony survey and photo lineup to assess their memory of the theft and intruder. Results indicated that there is no difference in eyewitness testimony accuracy, $t(22) = -0.05$, $p = 0.48$, $d = 0.02$, or intruder identification accuracy, $(n = 24) = 0.51$, $p = 0.11$, between victims and bystanders. Limitations, such as the Victim Group participants' weak emotional attachment to the gift card, may have influenced the results. However, secondary analyses revealed a significant difference in memory of the intruder's utterance between witness types, indicating the Bystander Group's memory of the auditory stimuli were more accurate than the Victim Group's memory, χ^2 $(n = 24) = 6.769$, $p = .009$. These findings contribute to the broader understanding of eyewitness memory accuracy to help inform the criminal justice system.

The present study investigates potential differences in eyewitness testimony accuracy between victims and bystanders. Throughout decades within the American criminal justice system, eyewitness testimony has been a widely controversial topic and a crucial turning point in many cases. Research has been conducted to identify individual characteristics related to eyewitness testimony accuracy. A study administered by Rich and Goodfriend (2016) found that memory accuracy and age have a negative correlation; as age increases, memory accuracy tends to decrease. Additionally, the study concluded a positive correlation between consciousness and memory accuracy. These personal characteristics should be considered by criminal justice officials when assessing the accuracy of an eyewitness.

Although convictions based on inaccurate testimony can have detrimental effects, jurors are often influenced by eyewitnesses. Garrett et al. (2020) examined the influential factors of eyewitness testimony on jurors. They found that an eyewitness has more influence over the jury when the witness has high confidence during the initial identification procedure and in the courtroom. However, confidence does not equate to accuracy, and many researchers suggest that eyewitness memory is not consistently accurate (Wells & Turtle, 1987). Another factor that can alter eyewitness testimony accuracy is the misinformation effect. As discussed by Loftus (2019), the misinformation effect is when an individual's original perception of a detail is later altered. One reason an individual's original perception can be changed is the result of not fully encoding the event or object into their memory system. Additionally, perception of a detail can be altered if the witness has weakened the memory of the original detail by contemplating its authenticity. Research has conclusively found that eyewitness testimony is unreliable (Loftus, 2019).

Eyewitnesses may also identify a suspect in a lineup because the individual appears familiar to them, even if the suspect is innocent. Carlson et al. (2023) elaborated on this phenomenon by proposing a possible explanation: theories of unconscious transference. One theory of unconscious transference explained by Carlson et al. (2023) is when individuals mistake a bystander of a crime for the offender due to poor source retrieval. In the study by Carlson et al. (2023), subjects had an increased likelihood of misidentifying the bystander as the offender when the bystander was included in the lineup. The eyewitnesses' testimonies of the crime were inaccurate and demonstrated confusion between the bystander and offender. This highlights how individuals can mistakenly associate a familiar face with the wrong person, significantly impacting the reliability and accuracy of eyewitness testimony.

Facial recognition abilities hold strong precedence in eyewitness testimony accuracy and confidence. Individuals with greater abilities in facial recognition tend to show a strong positive correlation between their accuracy in identification and confidence (Berkowitz et al., 2020). However, for individuals with average to poor facial recognition abilities, the relationship is less consistent. As indicated by Berkowitz et al. (2020), individuals with poor facial recognition abilities who reported 100% confidence in their identifications are only approximately 60% accurate. While unconscious transference can facilitate the misidentification of familiar faces due to poor source retrieval, the inconsistency in individuals' facial recognition abilities adds to the complicated nature of eyewitness testimony accuracy.

In the United States, technology is rapidly growing, and its benefits can be reflected in the courtroom. Eyewitness testimony is often compared to video evidence, given the perceived notion that video evidence is reliable (Chew, 2018). Although the benefits of technology in the criminal justice system are obvious, there may be a threat to establishing validity of an eyewitness given the possibility of digital tampering of evidence. According to Maras and Alexandrou (2019), artificial intelligence and machine-learning applications can create fake videos and audio recordings by modifying and integrating multimedia elements. Anyone with access to the Internet has the ability to create fake digital media. Digital media forensic experts may not have enough resources or experience to identify the authenticity of fake media (Maras & Alexandrou, 2019). This poses a large challenge to the criminal justice system by diminishing the trust in digital evidence. Just as digital evidence is being used to validate eyewitness testimony, malicious use of technology may in turn require eyewitnesses to validate the digital evidence.

Eyewitness testimony is often utilized in the criminal justice system to establish facts and secure convictions. However, the deterioration of trust in digital evidence and the established lack of accuracy in human memory encourage a reevaluation of eyewitness testimony. Given that digital media may no longer be solely reliable to authenticate or augment eyewitness testimony, more studies examining the in-depth factors affecting eyewitness testimony are vital. Understanding more factors is essential to enhancing the accuracy and reliability of eyewitness testimony.

In a rare study, Kassin (1984) conducted an experiment investigating the accuracy of eyewitness testimony between victims and bystanders. Kassin (1984) grouped participants into pairs (victims and bystanders) and staged a crime. The participants were asked to individually complete a survey about the offender's physical description and rate their confidence in their responses and viewing of the crime. The participants were then given a photo lineup to select the offender. Kassin (1984) revealed that bystanders were slightly more accurate in describing

the offender when compared to victims; however, the results did not reach statistical significance. There was also no correlation between participants' identification accuracy in the photo lineup and their confidence in identifying the offender.

The present study was also designed to examine whether victims or bystanders are better able to provide accurate eyewitness testimony. While there is a large presence of research on witness characteristics correlated to eyewitness testimony accuracy, research regarding accuracy between victims and bystanders is relatively scarce. If the criminal justice system must continue to rely on eyewitnesses, it would be beneficial to know who is better able to provide an accurate account. Given the results by Kassin (1984) were inconclusive, this study was designed to reassess the research question: Is there a difference in eyewitness testimony accuracy between victims and bystanders?

I hypothesized that victims would have more accurate eyewitness testimony responses and intruder identification compared to bystanders. Additionally, I hypothesized a relationship between identification accuracy and confidence levels. To test these hypotheses, I used a staged theft followed by an eyewitness testimony survey and photo lineup. Participants were also asked to rate their level of confidence in their identification of the intruder from a photo lineup.

Method

Participants

A total of 37 undergraduate students (31 women, 5 men, and 1 gender-fluid individual) took part in this study. The ages of the participants ranged from 18 to 38, with a median of 20 years old. Individuals identified as White (27), Black (6), Hispanic/Latino (1), Asian (1), and mixed races/ethnicities (2). The top two majors indicated by participants were psychology (48.6%) and criminology/criminal justice (16.2%).

Data from a total of 7 participants were discarded because they indicated they had vision and/or memory impairments and/or because they did not identify with their witness category. Data from an additional 6 participants who knew the intruder were excluded from the primary analyses. A total of 24 participants' data (11 in the Victim Group and 13 in the Bystander Group) were kept for primary analyses. Data from the 6 participants who knew the intruder were added to the 24 participants, resulting in a total of 30 participants (15 in the Victim Group and 15 in the Bystander Group) for secondary analyses.

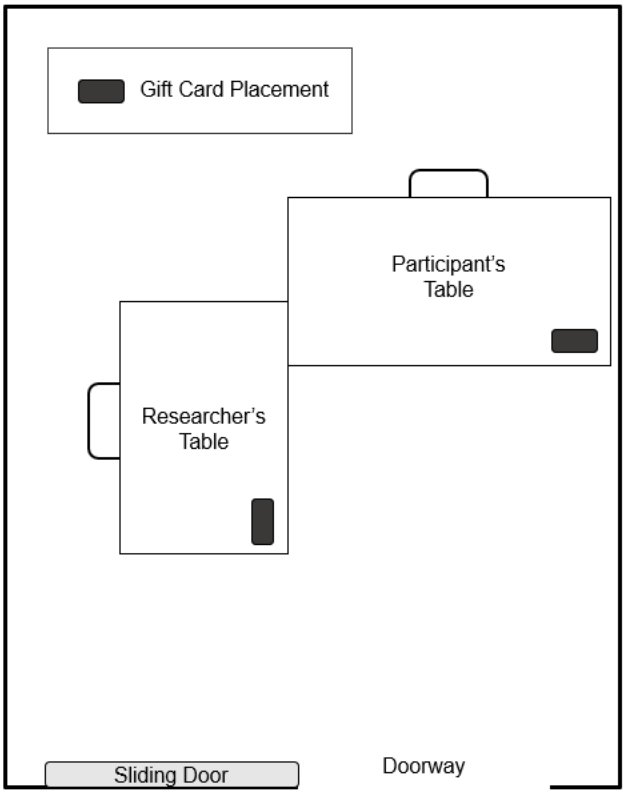
Participants were recruited through flyers posted around Lindenwood University, advertised through Fizz, Lindenwood Snapchat stories, and classroom presentations. Interested individuals were asked to scan the QR code on the flyer and select a date and time-slot to participate in the study. They were compensated with a $20 Amazon gift card for their time and effort.

Materials

Two research rooms from the Lindenwood Psychology Research Labs were utilized in this study. The room for testing the participant had two tables and two chairs. The testing room was arranged for one desk and one chair to face the entrance door, where the participant sat. The other desk and chair were set up perpendicular to the participant's table, forming a reversed L-shape.

Figure 1

Room Layout



Note. This figure represents the testing room layout used in the study. Room dimensions are approximate.

To create a scenario for the staged theft, two $20 Amazon gift cards were used. One gift card was placed on each table. The gift card on the participant's table was placed in the far corner on their left-hand side. The gift card on the researcher's table was placed on my far right-hand side (see Figure 1). Precautionary steps were taken to reduce the possibility of an altercation occurring between the intruder and participant. The arrangement of the furniture

ensured a safe distance between the intruder and participant, creating a barrier between them. A protocol was created in case the participant tried to stop the staged theft. However, no altercations between the participant and intruder occurred. The staged intruder is a 20-year-old Asian woman. She weighs 110 lb and is 5 ft 1 in. She has black hair and dark brown eyes. She wore a black hoodie with the hood pulled over her head, blue jeans, glasses, and white tennis shoes in all trials to maintain consistency in her appearance across all participants.

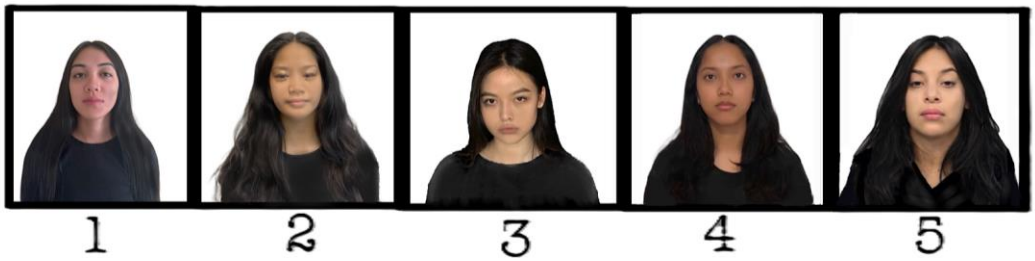
The second research room was used by the staged intruder. She stayed in this second room before and after the staged theft. The two research rooms were on opposite ends of the research lab to ensure that the participant did not see the intruder. The staged intruder and I followed scripts to maintain consistency in the staged theft scenario throughout all trials.

Participants were given an initial consent form and a demographic survey on an iPad. The consent form stated that the present study was testing memory accuracy in college students, specifically their ability to memorize a wordlist. There were two copies of the initial consent form: a printed version for the participant to keep and a digital version for me. The demographic survey asked the participants' gender, age, race/ethnicity, their major(s), and asked them to rate how good they thought their memory was compared to their peers' memory on a scale from 1 (*poor*) to 5 (*excellent*). After the participants completed the demographic survey, they were given instructions on the timed memory test, which involved memorizing a printed wordlist of 12 unrelated, common English nouns. A timer app on a cell phone was used to keep track of time.

A second consent form was administered to the participants on Qualtrics after the staged theft had occurred, revealing that the true nature of the present study was eyewitness testimony accuracy. Once the participant consented to continue with the study, an eyewitness testimony survey inquiring about the intruder's demographics, clothing, and belongings, as well as other aspects of the incident, was administered. To verify that the witness-type manipulation was effective, participants were asked whose belongings had been taken by the intruder. The survey also inquired if the participant had any vision impairments, memory impairments, and/or knowledge of who the intruder was (see Appendix A).

A photo lineup of potential intruders created using five physically similar individuals was given at the end of the survey (see Figure 2). To achieve similarity between the staged intruder and four foil photos, I used pictures of individuals that had the same skin tone, gender, approximate age, and physical traits, such as hair color and eye color, as the staged intruder. The participant was able to identify one person from the lineup or mark that the intruder was not depicted. The participant was also asked to rate how confident they were in their choice on a scale of 1 (*not confident*) to 10 (*very confident*).

Figure 2
Photo Lineup



Note. The staged intruder is depicted in Photo 2 above.

A printed debriefing statement was given to the participant once the survey was completed. The debriefing statement provided explanations about the deceptions used in the study. Additionally, facts were provided on the debriefing statement to educate the participant about eyewitness testimony. After the debriefing process, the participant was given their $20 gift card.

Procedure

Prior to beginning the study, the research assistant, disguised as the intruder, hid in a second research room before the participant entered the research lab. Using a between-subjects design, each participant was tested individually and discreetly assigned to either the Victim or Bystander Group in alternating order. When the participant arrived, they were seated at a table facing the door of the room. I sat perpendicular to the participant, as the tables were arranged in a reversed L-shape. Once the participant consented to the study, they completed some demographic questions on the iPad provided. While the participant was completing the demographic survey, the staged intruder exited the second research room she was hiding in and stood outside the testing room so she could hear what was going on but still remained out of the participant's sight.

After the participant completed the demographic questions, they were told they had 30 seconds to study a list of 12 words. They were informed that after the study period, they would be asked to verbally recall as many words as they could remember. After giving these instructions, I placed the wordlist face down in front of the participant. I then deliberately placed two $20 Amazon gift cards on the tables: one on the participant's table and one on my table. I inquired what the participant will buy with their gift card to reinforce that the gift card on the participant's table was theirs. Once the gift cards were placed, the participant was prompted to flip over the wordlist and review it for 30 s. After the time was up,

the wordlist was taken away from the participant, and they began to verbally recall as many words as they could from the list.

The participant's recalling of the first word served as a cue for the staged intruder to enter the room and commit the staged theft. The recall task was used as a foil to disguise the true nature of the study, which was to assess the accuracy of eyewitness testimony. When the intruder entered the testing room, she scanned the room, looked at the desired $20 gift card, and then briefly made eye contact with the participant and me. Then the intruder stated, "Give me that," grabbed the $20 gift card from the participant's table (Victim Group) or my table (Bystander Group) and ran back to the nearby research room she had hidden in beforehand. As the staged intruder ran out of the testing room, I shouted at the intruder that she had stolen the participant's gift card (Victim Group) or my gift card (Bystander Group) to reiterate whose belonging had been taken. The owner of the gift card was the independent variable in this study.

Immediately after the intruder exited the room, I verbally informed the participant of the true nature of my study, which was to examine the accuracy of eyewitness testimony. The participant was given the opportunity to ask questions and was provided with a second informed consent statement, which reiterated the true nature of the study. If the participant consented to continuing the study, they were given as much time as they needed to complete the eyewitness testimony survey. The amount of time between the intrusion and administration of the eyewitness testimony survey was roughly 1 to 2 min.

The survey consisted of questions inquiring about the characteristics of the intruder and the theft. A photo lineup was presented at the end of the survey on the iPad along with a confidence rating scale to investigate a potential relationship between the participant's identification accuracy and their confidence in their choice. The responses given by the participant in this survey were the dependent variables.

The participant was thoroughly debriefed after they finished the eyewitness testimony survey. The participant also met the staged intruder, who introduced herself as a student research assistant. The participant was debriefed on the deceptive techniques used in the study and received their $20 Amazon gift card as compensation. Any questions the participant had were answered at this time. The participant received the debriefing statement on paper to take with them and were requested not to discuss the true nature of the study with other individuals.

Eyewitness testimony accuracy was measured by comparing each participant's survey responses to an established answer key. Participants received one point for each correct response. No points were deducted for incorrect or omitted responses. The maximum possible accuracy score was 25 points.

Results

The results reported here exclude data from participants who were acquainted with the intruder. However, the second analysis under Intruder's Clothing was conducted including data from participants who were acquainted with the intruder.

Primary Analyses

Accuracy of Eyewitness Testimony

To assess whether victims or bystanders provide more accurate eyewitness testimonies, an independent *t*-test was conducted comparing the accuracy scores from the eyewitness testimony survey between the Victim and Bystander Groups. The results revealed no difference in eyewitness testimony accuracy between The Victim (n = 11, $\bar{x}$ = 9.55, s = 4.23) and Bystander Groups (n = 13, $\bar{x}$ = 9.62, s = 3.23), $t(22) = -0.05$, $p = 0.48$, $d = 0.02$.

Intruder Identification Accuracy and Confidence Level

The results of the chi-square analysis comparing identification accuracy of the Victim and Bystander Groups revealed no statistically significant differences between the two groups, X_1^2 (n = 24) = 0.51, $p = 0.11$. To test the relationship between confidence level and identification accuracy, a point-biserial correlation was used. The results indicated a weak positive correlation, $r_{pb} = 0.25$, $p = 0.25$.

Secondary Analyses

Memory for Intruder's Utterance

During the staged theft, the intruder stated, "Give me that," while grabbing for the gift card. The eyewitness testimony survey inquired whether the participant heard the intruder say anything during the intrusion. Only 6 out of 24 participants correctly indicated that they heard the intruder speak — all of whom were bystanders. A 2 × 2 chi-square test of independence revealed a statistically significant association between Group and memory for intruder's utterance, X_1^2 (n = 24) = 6.769, p = .009.

Intruder's Clothing

Participants were asked to describe the intruder's clothing and were allocated one point for each accurate descriptor with a maximum score of 10 points. These points were summed to generate a total accuracy score for each participant. Inaccuracy was measured similarly, with one point assigned per inaccurate descriptor of the intruder's clothing. An independent *t*-test comparing the clothing accuracy scores of the Victim (n = 11, $\bar{x}$ = 4, s = 1.73) and Bystander Groups (n = 13, $\bar{x}$ = 4.38, s = 1.76) indicated no statistically significant difference between groups, $t(22) = -0.54$, $p = 0.3$, $d = -0.22$. Similarly, no statistically significant difference was found in another independent *t*-test comparing clothing inaccuracy scores between the Victim (n = 11, $\bar{x}$ = 1.18, s = 1.17) and Bystander Groups (n = 13, $\bar{x}$ = 0.69, s = 0.75), $t(22) = 1.24$, $p = 0.11$, $d = 0.51$.

To examine potential differences given a larger sample, data from participants who knew the intruder were included in the following analyses.

Although these additional participants were aware of the intruder's demographics, they were unaware of her clothing, ensuring the integrity of the clothing identification results. An independent *t*-test comparing the accuracy scores between the Victim ($n = 15$, $\bar{x} = 4.40$, $s = 1.72$) and Bystander Groups ($n = 15$, $\bar{x} = 4.67$, $s = 1.88$) showed no statistically significant difference, $t(28) = -0.41$, $p = 0.34$, $d = -0.15$. Likewise, inaccuracy scores did not differ statistically between the Victim ($n = 15$, $\bar{x} = 1.07$, $s = 1.01$) and Bystander Groups ($n = 15$, $\bar{x} = 0.60$, $s = 0.74$), $t(28) = 1.37$, $p = 0.09$, $d = 0.50$. Despite including data from participants who knew the intruder, there were no differences in accurate or inaccurate clothing responses between the Victim and Bystander Groups.

Discussion

The purpose of the present study was to gain a better understanding of eyewitness testimony accuracy between two witness types: victims and bystanders. I hypothesized that the Victim Group would provide more accurate eyewitness testimonies compared to the Bystander Group. The results showed there was no difference in eyewitness testimony accuracy between the Victim and Bystander Groups, indicating that my hypothesis was not supported by the data. However, my results are consistent with the study conducted by Kassin (1984), similarly concluding no difference between the two groups.

Additionally, I hypothesized that the Victim Group would be more accurate than the Bystander Group at identifying the staged intruder in the photo lineup. My results did not support my hypothesis and indicated that there was no difference in identification accuracy between the Victim and Bystander Groups. Furthermore, the correlation between identification accuracy and confidence showed a weak positive relationship, meaning that as confidence increased, identification accuracy tended to increase slightly, but the connection was not strong.

The findings suggest that neither witness type gave more accurate than the other. Results may have differed if the Victim Group had felt a stronger emotional attachment toward the gift card, mirroring a more realistic scenario. Participants may not have felt a strong connection to the gift card due to the limited duration they possessed it. Six participants in the Victim Group did not perceive the stolen gift card as their belonging. These participants reported the stolen gift card as the "researcher's gift card" or "my soon-to-be gift card," indicating they did not feel personally attached to the stolen gift card.

An association between witness group and memory for the intruder's verbal statement was examined during secondary analyses. Findings revealed that most participants did not remember the intruder speaking during the staged theft, except for 6 bystanders who correctly remembered the intruder speaking. This may suggest a potential difference in memory between the Victim and Bystander Groups when recalling auditory stimuli.

Clothing identification was also measured in the secondary analyses. The results indicated that the Victim and Bystander Groups did not differ in their accuracy or inaccuracy when describing the intruder's clothing. Including data from participants that knew the intruder did not change these findings. This indicates that familiarity of the intruder does not help individuals remember the appearance of the intruder, specifically the intruder's clothing.

The present study faced various limitations that should be addressed in future research. One significant limitation was the level of emotional attachment that participants from the Victim Group felt toward their gift card. In reality, individuals feel victimized when personally valued items are stolen. Their emotional attachment to the stolen item may heighten victims' reactions and increase the accuracy of their testimonies.

To increase participants' sense of ownership of the stolen gift card, future research could implement modifications such as requiring participants to write their name on the gift card or spend some time having participants place items in a shopping cart in an online shop that they plan to buy with the gift card. These changes may increase participants' sense of ownership and attachment to the gift cards. Instead of stealing the participant's compensatory gift card, a personal item belonging to the participant (e.g., pencil case or keys) may reflect a more realistic sense of ownership during a staged theft.

Another limitation in this study was that some participants were acquainted with the intruder, which compromised the integrity of their eyewitness testimony. Since prior familiarity with an offender can influence identification accuracy and testimony, data from these participants were excluded from the primary analyses, reducing my sample size. Moreover, my sample lacked diverse demographics in terms of race, age, and gender, limiting the generalizability of the findings. Ensuring a larger and more diverse sample would improve the validity of the study.

A notable finding in this study was that only 6 out of 24 participants reported hearing the intruder speak during the staged theft, and all 6 were bystanders. This suggests that bystanders may be more receptive to auditory stimuli than victims, possibly due to differences in emotional arousal or attention. Interestingly, none of the six bystanders accurately indicated the intruder's exact words. Although the intruder's utterance was "Give me that," none of the participants reported it verbatim. Examples of responses from participants included "That's my gift card," "I need that," and "Give me the gift card". This finding aligns with the phenomenon in which individuals fill in gaps in their memory with contextually rational but false details (Loftus, 2005).

Future researchers could further explore the relationship between this phenomenon and schema theory by altering the dialogue of the intruder. Schema theory explains how individuals organize and interpret stimuli based on past

experiences, suggesting that our knowledge is built into mental frameworks or "schemas" (McVee et al., 2005). Schemas allow more efficient interpretation of new information. For example, if the intruder were to say something out of context rather than using demanding language, would participants report the unexpected utterance, or would they fabricate a demand that fits the context of the situation and their past experiences? This exploration could provide insight into schema theory in the context of stressful crime scenarios, particularly how individuals interpret and recall unexpected auditory stimuli under pressure. Additionally, such studies could provide knowledge of how eyewitnesses report auditory stimuli rather than visual stimuli in stressful situations.

My results represent a direct demonstration of eyewitness testimony accuracy between witness types through a between-groups design. The present study indicated there is no difference in eyewitness testimony accuracy between victims and bystanders; however, the topic should be further explored. By modifying the methodology to increase the Victim Group's attachment to the stolen item, ensuring the unfamiliarity of the intruder, and diversifying the sample tested. Future researchers can build on this study to enhance the validity and applicability of eyewitness testimony research.

This study contributes to the ongoing research regarding eyewitness testimony accuracy. It provides insight into the effects of witness types on eyewitness testimony and opens the door to new possibilities in understanding factors that influence accuracy. While no significant differences were found between victims and bystanders in terms of eyewitness testimony accuracy, the indication of memory for auditory stimuli suggests that further research needs to be conducted on auditory recollection between witness types. Given the importance that eyewitness testimony holds in the American criminal justice system, investigating and identifying factors that influence eyewitnesses remains a vital goal. By deepening our understanding of eyewitness testimony, researchers and practitioners can implement evidence-based practices to pursue justice in legal proceedings.

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Appendix A
Eyewitness Testimony Survey

Intruder's Description:
Answer these questions about the intruder's description to the best of your knowledge. If you are unsure, you can leave the answer box blank.

1. What gender did the intruder appear to be?
2. What is the approximate age of the intruder? (in years)
3. What race/ethnicity did the intruder appear to be?
4. What was the approximate height of the intruder? Please clearly indicate the unit of measurement. (format: "x" feet "x" inches OR "x" centimeters)
5. What was the approximate weight of the intruder? Please clearly indicate the unit of measurement. (format: "x" pounds OR "x" kilograms)

Intruder Characteristics:
Answer these questions to the best of your knowledge. If you are unsure, you can leave the answer box blank or mark "I don't know" on the multiple-choice questions.

6. What color was the intruder's hair?
7. What color were the intruder's eyes?
8. Did the intruder have any specific identifiers such as tattoos, facial markings, piercings, scars, etc.?
   - ☐ Yes
   - ☐ No
   - ☐ I do not know
9. List and describe the specific identifier(s):
10. In as much detail as possible, describe the intruder's clothing.
11. Did the intruder have any belongings with/on them when they entered the room?
    - ☐ Yes
    - ☐ No
    - ☐ I don't know
12. Describe everything you can remember the intruder having/holding when they entered the room.
13. Did the intruder say anything when the crime was occurring?
    - ☐ Yes
    - ☐ No
    - ☐ I don't know
14. What did the intruder say?

15. Did the intruder take anything?

- ☐ Yes
- ☐ No
- ☐ I don't know

16. What did the intruder take?

17. Whose belonging(s) was/were taken?