Introduction

White like No Other

It has come to be recognized [that] light in itself is one of the greatest of advertising forces in modern business.
—“A Plan for a White Way,” 1915

“New York’s main artery is the greatest city artery in the United States,” Scotsman Stephen Chalmers declared of Times Square in a 1904 issue of the New York Times. Alongside numerous national and international newspapers, trade journals, and magazines, Chalmers sang the praises of the Square as the newly minted home of the New York Times and pinnacle of mankind’s “perfection.”1 The Square was the “supreme being” and “triumph” of civilization at the center of the country’s commercial capital—the capital of capitals—a truly exceptional entity all unto itself. From the 1900s to the present, Times Square has “shimmer[ed] like a pyrotechnic Rome . . . spangled with a thousand flecks of light and color.”2 Rome indeed: another capital of capitals whose fall at the end of the Roman Empire now presages the demise of American exceptionalism (both real and imagined) at the dawn of the twenty-first century, but I am getting ahead of myself.

Capital of the Twentieth Century

A century and a half ago, New York City was still climbing to the top of the food chain as if nothing was manifest destiny but the attainment of national and international omnipotence.3 And, certainly, for most of the past century, New York City and Times Square functioned as the biggest, brightest, and most supreme urban center in the world. Much of the city’s “greatness” originated from its 1811 zoning grid, which
permitted buildings to rise no more than one and a half times the width of the street, while narrow widths allowed as many buildings as possible to populate the area. New York City’s “Euclidean clearness,” Le Corbusier wrote in 1964, gave it “immense and beneficent freedom for the mind.”\(^4\) Exactly one century later, in 1911, the greatness of the city and Square were further catapulted into bright-light supremacy with the advent of electric signs and street lighting, followed by incandescent illuminants in the homes and workplaces of the wealthy. Also in this year, E. Leavenworth Elliott declared that New York City’s “miles of brilliancy and beauty of illumination” was testament to its true “excellence.”\(^5\) Unstated was the fact that, to be “the best lit city,” New York also needed to be the wealthiest city, which, in the American context, was also to say the whitest city.\(^6\) The power to light costs money.

Before New York City’s and Times Square’s claims to fame as the world’s brightest and lightest, Paris and Berlin played a brief role as international “cities of light,”\(^7\) until European metropolises were hindered by legal restrictions limiting the quantity and intensity of illuminated advertising. Only in America could a truly supreme white-light imaginary take shape.

America would be the greatest, but not the first. Public lighting was introduced to Parisians first, albeit for reasons of control, not grandeur. In 1667, King Louis XIV ordered Parisian police to install tallow-lit lanterns illuminated on city streets and required residents to keep candles and oil lamps in their windows to prevent criminals’ free reign in a darkened, unsurveilled city. This use of light to sanitize and restrict bodies and spaces remains intact in France and, now, throughout most of the developed world. In America, however, the development of supreme white light in urban and suburban centers over the past century sprang forth first for reasons of capital, and only secondarily for purposes of surveillance and control. American novelist Edith Wharton (1862–1937) touched on this distinction when she condemned Paris’s failed attempts to imitate America’s electric excesses, with its thousands of gas and electrical lights along the Champs-Elysées. In 1928, another like-minded critic penned, “Paris is proud to be known as the City of Light, but she wants it to be intellectual rather than electric.”\(^8\) That is to say, reserved and “tasteful” (i.e., white, in the old-world sense of the term) for the benefit of aristocratic traditions and moral (Christian) factions of society that benefit from them. In short, the Parisian City of Light was supreme only because it was void of the crass, popular
colors that, by contrast, made the cities born of American capital so exceptional.9

In America, such taste-based confines were not only relaxed; they were completely abandoned in the unfettered pursuit of entrepreneurial greatness. Street and commercial lighting districts known as “white ways” were developed in cities across the country to boast new businesses and innovations, followed by the democratization of domestic lighting for interiors. Granted, zoning issues ensued to ensure electric signs would be banned from affluent residential neighborhoods like Fifth Avenue; in more commercially zoned districts like Times Square, electric signs were readily embraced and, by the end of the twentieth century, required to be bigger, brighter, and lit during all hours of the day.

In sum, over the course of the past century, a white imaginary developed in America, fueled by entrepreneurial success, technological and scientific innovation, and an emergent polychromatic landscape of light and color previously unimaginable. Electrographic Architecture: New York Color, Las Vegas Light, and America’s White Imaginary charts this history by focusing on the technical and aesthetic development of large-scale illuminated signage in New York City’s Times Square and Las Vegas’s Freemont Street, with special attention to the understudied role whiteness has played in these transformations.10

While polychromatic, electrographic architecture may seem an unlikely candidate to allegorize America’s white imaginary, it is precisely for this reason—and for the claims to diverse and democratic color in places like Times Square (in the most ethnically diverse metropolis on the eastern seaboard)—that it is a prime candidate. Drawing on technological histories of illuminated light, architecture, and aesthetics, the book interrogates one of the most untapped questions of our times: How do the visual diversity, unpredictability, and heterogeneity of American urban centers like New York City also perpetuate historically entrenched legacies of Western chromophobia running alongside the proliferation of urban capital?

To be clear, Electrographic Architecture is not a book about racial politics. It does not analyze socioeconomic histories of race, or explore the demographic ramifications of white power in the history and culture of the United States. Nor does the book study how the unequal distribution of light across urban space perpetuates race and class inequity,11 though it does recognize strong correlations with all of the above. Rather, the book questions how white mythologies run through the
material history of illuminated architecture in two major American metropolises, New York City and Las Vegas, in ways that resonate with broader histories of power and light.

This introduction contextualizes technology studies alongside critical and traditional approaches to color studies in the creative arts. Chapter 1 and 2 then analyze historical constructions of whiteness from the origins of Western architecture through Le Corbusier’s white militancy, followed by an examination of the ways American whiteness intersects with the country’s unfettered pursuit of bright white light and power. When entrepreneurs like Thomas Edison, J.P. Morgan, John Jacob Astor, and Cornelius Vanderbilt financed public lighting systems in American cities, they fashioned a nationwide conflation of the capacity to generate synthetic light with entrepreneurial capital. Chicago’s “White City” (1893) and Broadway’s “Great White Way” (1892–1945) are analyzed in chapter 3 as reinforcing this surprisingly still-unconscious link between material and symbolic forms of white power.

In chapter 4, I chart advertising executive Douglas Leigh’s innovative Times Square signage from the 1930s through the 1950s, analyzing how a new genre of polychromatic “spectaculars” catalyzed an American ethos of consumerism, with Times Square lauded as its biggest and brightest emblem. Electrographic Architecture next takes temporary leave of the Square, in chapter 5, to consider how the Young Electric Sign Company’s (YESCO’s) development of Las Vegas spectaculars in the 1930s through the 1960s steered the transformation of the neon palette from a signifier of prosperity and optimism in the early part of the century to a symbol of social and economic decline by the early 1970s, determining the backdrop for the book’s return to Times Square during a sad state of fiscal degeneration, the subject of chapter 6.

The book’s penultimate chapter (6) analyzes selections of electronic art from American artist Jenny Holzer to recount how the economically undesirable colors of crime, drugs, and prostitution put a temporary hold on America’s former mecca of commercial greatness, until New York City mayor Rudy Giuliani commenced its mass gentrification in the late 1990s and early 2000s, resulting in the urban Disneyland that Times Square is today. The book concludes with an examination of the Square’s newly sanitized digital colors, primed for the informatic control spaces of the twenty-first century where a white imaginary persists, not only through the polychromatic spectacles of diversity ostensibly
offered to “everyone” but also, through so-called smart tech, which, under the auspices of participatory play and sharing, surveil, discipline, and whitewash anew all who come in proximity to it.

By bridging the histories of technology and aesthetics, *Electrographic Architecture* weaves a critical narrative about the key role that illuminated light and color have played in the formation of America’s white imaginary over the past century. To restate: this is not a book about race theory but instead a history of Times Square’s electrographic urban light, viewed through the combined lenses of color studies, media history, architecture, and aesthetics. The book offers new insight into one of the central questions that media scholars, architects, and historians of technology repeatedly turn: How can we use and speak about light and color in the world today in ways that are productive and commemorative while remaining critical of the systems of power undergirding them?

By drawing on archival research, interviews, and visual analysis, *Electrographic Architecture* illustrates how Times Square’s polychromatic landscape of light serves as a complex symbol of America’s deep-seated dreams of utopic transcendence and material escape, coupled with fears of loss, ephemerality, and obsolescence in the face of newer and more powerful entities. In America’s twentieth-century imaginary, whiteness aimed to become everything but itself: colored, lit, and vital. This seemed to be the only covert way for whiteness to persist, undetected in the turbulent times that characterize the previous century and much of the first quarter of this one. The remainder of this introduction contextualizes *Electrographic Architecture*’s theoretical positions within and against color studies and histories of electric light. It concludes with a discussion of my analytic methods and a more detailed overview of the book’s chapters.

**COLOR: A CRITICAL OVERVIEW**

The ancient question “What is color?” has yet to be adequately answered. A preliminary set of problems arise from the fact that everyone sees color differently. Twenty people may be exposed to the same object, yet each will see it in a unique way. Moreover, when one attempts to recall the color of the object in one’s mind, one usually remembers it in a hue darker than it actually was. This is because a person’s physiology, history, culture, and memory uniquely structure their visual perception. As Bauhaus colorist Josef Albers puts it, if one says the word
“red” and 50 people are listening, it should be “expected that there will be 50 reds in their minds. And . . . all these reds will be very different.”

Color is the ephemeral and elusive medium through which people relate to one another, both in the present and in the (mediated) past.

Responses to color further diversify across gender, linguistic, and ethnic divides. While only 0.5 percent of Caucasian women are red-green colorblind, up to 8 percent of Caucasian men are, including Mark Zuckerberg (potentially explaining Facebook’s primarily blue tonality). This percentage shifts across racial and ethnic groups, so that only 1 percent of Indigenous males, 2.9 percent of Saudi Arabian men, and 3.7 percent of men from India are deemed colorblind. Language and nomenclature further exacerbate color problems. Philosopher Ludwig Wittgenstein argues that the English phrase red-green denotes a fundamentally insecure relationship between color and language by invoking an impossible color reality. Color is an elusive “language game,” he writes, whereby one assumes a color like “grey-green” denotes a consistent hue but is in fact “indeterminate and relative to specific contexts and situations.” For Wittgenstein, Albers, and numerous others before and after them, indeterminacy and flux lie at the heart of color and its infinite manifestations as a relational media. Color is, in a sense, our always already, ever-changing surround; a media ecology that is in many ways perceptible but is in many more ways covert and unconscious.

Humans are in theory capable of seeing innumerable colors even though an English-speaking culture can recognize and name an average of only thirty different colors. Designers, color physicists, and artists can train themselves to see and name more colors than the layperson, but these specialists are far from the majority. Seeing color is a matter of cultural, aesthetic, historical, and political training. Countless artists and scientists have devoted their life’s work to classifying, harnessing, and controlling color-ordering systems, but these attempts all inevitably fail, because, as I have argued elsewhere, color—like subjectivity—is always on the move, shifting, transforming, and escaping the rules and protocols that attempt to contain it. We must therefore begin with, and consistently return to, color’s double bind: any effort to classify or control it as a stable object of inquiry inevitably contributes to its use in epistemic and ontological violence, and yet naming, understanding, and classifying color is one of the few means available to use color in any practical or standardized way. In short, color’s intrinsic transience, compounded by its material diversity, ensures it is a rich subject of
investigation in multiple fields, across manifold times and places. In this study, however, I focus on only one, singular aspect of white and colored light.

The following section addresses the field of color studies conventionally construed, then looks at more recent interventions in the field as it intersects with film, new media, and architecture, before concluding with a brief overview of critical whiteness studies (CWS).18

**EARLY MODERN COLOR**

The study of color in the global Northwest tends toward one of two general approaches: the objective and the subjective. Following Empedocles’s emission theory of vision, Plato (429–347 BC), by way of Socrates, approached color through the lens of subjective perception to propose that the “pores of the eyes” consist of “fire and water” through which humans perceive white and black.19 In the *Timaeus*, Socrates argues that “the pure fire which is within us . . . flows through the eyes in a stream smooth and dense” and later that “the light that falls from within [travels to] meet an external object.”20 A subject’s capacity for visual discernment is, in these views, mediated through the body and brain but, given Plato’s well-known metaphysical prioritization of abstract mathematical Forms over sense perception, it should come as no surprise that such mediated visions were ultimately regarded as deceptive and unreliable. Sophists, rhetoricians, and painters were “creator[s] of phantoms,” he argued, “technicians of ornament and makeup,” but by far the most poisonous of simulacra was color: a cosmetic and false appearance Plato likened to a “multicolor drug”21 that, like the Sophists’ “gaudy speeches” and “glistening words,” seduced the listener with its “ambiguity and deceiving sparkle.”22 Unlike words, however, color does not have the benefit of a signifying capacity beyond itself. In short, color holds to nothing and to no one, and herein lies its main source of perceived fear and danger in the inherited legacies of the global Northwest.

For Plato, the most sensible way to deal with the “color problem” was to relegate it to the realm of artifice and deception. Similarly, for modern philosopher Immanuel Kant (discussed in chapter 1), a preliminary solution was to codify colors as “merely charming,” dismissing a priori their seriousness relative to true aesthetic Beauty and Form.23 As a marginalized and secondary phenomenon, color was associated with nothing beyond decorative charm or mimetic supplement.24 It was