

Racialized Architectural Space: A Critical Understanding of its Production, Perception and Evaluation

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Abstract

Academic inquiry into the concept of space as racialized can be traced back to at least as far as the turn of the twentieth century with sociologist W. E. B. Dubois' promulgation of the "color-line" theory. More recently, numerous postmodern scholars from a variety of fields have elucidated the various ways in which physical space (i.e., the built environment), as a social product, embodies racialized ideologies exhibited and reproduced by segregation, economics and other social practices. The dialogue on race and space has primarily been limited to the urban scales of city, neighborhood, community and street. Socio-spatial research that centers around race rarely addresses this phenomenon at the scale of architecture – the individual building or a particular development. Such a failure to critically examine the role of the architectural product in the creation and reproduction of socio-spatial and socio-racial inequality yields the field of architectural practice exempt and blameless in its tangible contribution to the psychosocial and geospatial

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marginalization of communities of color, as in, for example, the case of gentrification. This paper attempts to illustrate the fact that architecture, like all of the built physical environment, is not ahistorical, apolitical – and certainly not race neutral – but, as a social product, is also understood clearly within these contexts, and its psychological and social impacts and outcomes must be examined with a racially critical lens, particularly in heterogeneous urban communities.

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Introduction

If gentrification is class warfare, its architectural byproducts are forms of spatial terrorism. Critical scholars recognize that the process of gentrification almost always produces a contentious social environment in which long-time residents of poor urban communities are displaced by more affluent – and often, white – newcomers.^{1,2,3,4} The result of this demographic shift usually leads to the creation of spaces that are socially, culturally, economically, physically and racially polarized.^{5,6,7,8,9,10} Politicians, planners, developers, realtors, and landlords are the most common subjects of criticism in this process. However, when examining the socio-physical aspects of these transitioning communities, architects and the resulting architectural spaces they create are not given as much attention or critique – although much evidence indicates that socially, economically and/or racially polarized spaces contribute to social conflict.^{11,12,13} Further critical investigation reveals that racialized architectural space is ubiquitous,¹⁴ inevitably occurring – as it is the materialization of social ideologies – as an embodiment of power, class, gender and *race* relations (among other social constructs) in gentrified and non-gentrified environments alike.

The racial aspect of such architectural spaces* has been frequently overlooked in the prevailing academic discourse, although the foundations for such inquiries are apparent in the works of one of the first racially critical sociologist, W. E. B. DuBois. Nearly 120 years ago, in *The Philadelphia Negro*,¹⁵ DuBois's research documented the disparate social and housing conditions of American blacks. And 115 years ago, in *The Souls of Black Folks*,¹⁶ DuBois elucidated the concept of the “colorline” as a socio-physical construct that perpetuated environmental racism and segregation in many post-slavery American cities and towns.¹⁷ One can undoubtedly imagine a scathing rebuke

from DuBois in regard to academia's failure to link what we know from multiple disciplines into one thundering condemnation of environmental hypocrisy in the production of segregated and racialized architectural spaces. With an understanding of the interconnectedness of the built environment to socio-racial disparities, the necessity to scrutinize the role of architecture is therefore warranted. This paper attempts to address this topic primarily through an analysis of how the built environment – particularly at the scale of architecture – is both socially produced and psychologically perceived as racialized. Although there exists a small but important body of theoretical and speculative work devoted to exploring this concept, a major contribution of this paper is the incorporation of two empirical socio-psychological studies that quantitatively and – to a much lesser extent – qualitatively provide supporting evidence for the basis of a claim of racialized architecture. Additionally, specific examples of both theoretical and realized design projects are used to further illustrate and concretize an understanding of the role and function of architecture when used as a tool for racial (and class) distinctions. These examples are drawn globally from various projects that exemplify [architectural] environmental/spatial racism, although the condition of American gentrification remains a focal point. Subsequently, a foundation for how such architectural landscapes can be critically and empirically investigated and evaluated, primarily through psychosocial methodologies, is proposed.

The Social Production and Psychological Perception of Architecture as Racialized

University of Cambridge geographer Susan Smith¹⁸ defines racialized space as “the process by which residential location is taken as an index of the attitudes, values, behavioral inclinations and social norms of the kinds of people who are assumed to live [there].”¹⁹ Under this definition, two distinctions must be noted. The first point is that racialized space is not limited to the scale of cities or neighborhood blocks: virtually all built space (residential, commercial, office, recreational, conference, etc.) is racialized to some extent.^{20,21,22,23} Secondly, it must be understood that racialized space *is* socially produced space^{24,25,26} – that is to say, the racialization of space *does not precede* the social production of space or vice versa: they are one and the same – interwoven processes. Understanding the social production of [architectural] space, then, is akin to comprehending the racialized production of architecture.

A Marxian definition of “socially produced” means that it is a “product of the social relations of a particular economic organization” and focuses on the “political economy and specifically on urban spatial forms and/or urban consciousness as an outcome of the property relations of capitalism.”²⁷ Decentralizing considerations of capitalism and economics yields an even broader conceptualization of the topic that, in accordance with the original Lefebvrian theory, positions space as a product of a variety of social forces.²⁸ In addition to the economic, such social forces that shape our built

environment include politics, culture, technology,^{29,30,31} and of course the classical triad of race, class and gender.^{32,33,34} These factors are often collectively referred to as the [social] ideologies with which buildings are invested and which also produce – and are produced by – the “spaces within, around and between” buildings.³⁵ Furthermore, a Foucauldian approach positions built space as an apparatus of power, “fashioning ranks and roles of people in society.”³⁶ Therefore, architecture often materializes and represents configurations of power which echo, both directly and indirectly, the voice of the ruling class that attempts to dictate the production and perception of built form.³⁷ Lastly, Bourdieu situates the discussion of the built environment – including architectural space – in relation to its ability to both “serve and inform human consciousness, practice and society.”³⁸ He also posits that spatial form serves as an apparatus through which people establish identity and articulate social relations and that “the enduring capacity of buildings has the ability to sustain, protect and perpetuate those identities and social relations.”³⁹ The central theme among these theories is that built space is imbued with [social] ideologies, simultaneously being produced by, producing and reproducing social identities and relations. When race is considered as the primary unit of analysis for critiquing the production and perception of space, one must then critically consider how race is *made* in society as a foundation for the understanding of how racialized spaces are produced.

Making Race, Making Racialized Space

“There is no single force producing racial meaning.”⁴⁰ The making of race and, congruently, the making of racialized space is a formative process.^{41,42,43,44} Calmore⁴⁵ proposed that racialization is both a process and a project: “[r]acialization is a ‘dialectical process of signification’ that reaches to the societal processes in which people participate and to the structures and institutions that people produce.” Calmore specifically references Omi and Winant’s⁴⁶ theory of “racial formation” as a three-step process in the making of race. Their theory states that racialization, as a project, occurs first by the organization and representation of human bodies and social structures, then by the establishment of the hegemony of certain human bodies and social structures over others and finally by the politicizing and legitimizing of this hierarchical system via policies and practices of a “racialized state.” With regard to the built environment, including architectural space, the racialization process/project relies on an understanding of race that is shaped by political, economic, social and psychological concepts of race and space.^{47,48,49} Politically and economically racialized architectures, within larger spatial contexts, have been produced through a variety of discriminatory environmental practices: exclusionary lending practices, FHA loan-backing practices, predatory lending, exclusionary zoning, redlining, restrictive covenants, blockbusting, racial steering, economic disinvestment, and – of course – urban renewal/gentrification.^{50,51,52,53} These policies and practices, both historical and current, have served to materially reinforce the

socio-physical segregation of whites and racial “others,” producing differentiated spatial imaginaries along racial lines.

Whiteness has been historically and socially idealized in Western culture, leading to the construction of a white spatial imaginary as a “privileged moral geography of the properly-ordered, prosperous private dwelling . . . of exclusivity and augmented exchange value.”⁵⁴ Congruently, racial others have been deemed inferior,^{55,56,57} yielding an imaginary of non-white space as inferior, dangerous, crime-ridden, dirty, polluted, dilapidated, diseased, impoverished, uncivilized wasteland and having a diminished exchange value.^{58,59,60,61,62,63,64,65,66}

Urban geographer Jon Goss⁶⁷ elucidates the concept of value applied to buildings – and all built spaces, as material objects – by referencing Baudrillard’s four-component object value system (as cited in Marchand 1982): 1) *use value*, its practical function as shelter or living place; 2) *exchange value*, its value on the market as a commodity embodying labor and capital; 3) *sign value*, its function as a message of difference and status; and 4) *symbol value*, its role in prelogical thought. Goss further posits that the value of a building is determined by its *relative location* (accessibility), *site* (physical characteristics, amenity), *social setting* (neighborhood status), and *architecture* (size, fashionability, and facilities). The multi-faceted dimensions of the value of buildings illustrates that the value of architecture is produced and understood by social, economic, political and cultural forces, all of which are also embedded with racial implications. Both groups and individuals are frequently able to discern and decipher these embedded meanings and understandings of the buildings through their specific environmental schema (*habitus*) and architectural semiotics.^{68,69,70} Under these circumstances, racialized architecture carries with it specific perceived values, primarily dictated by the body politic’s determination of the value of specific environmental spaces.⁷¹

Race and Architectural Perception

However, as Lipsitz⁷² highlights, often communities of color, especially black communities, have developed a counter-spatial imaginary based on sociability and augmented use value: “unable to move away from other members of their group because of discrimination, ghetto and barrio residents turn segregation into congregation.” Goss expresses the view that “in the case of gentrification, the older run-down buildings which provide low-standard rental housing or business premises have meaning for present inhabitants very different from that for the incoming gentrifiers. These differences center around the realities of exchange value versus the interpretations of use value.”⁷³

The racialized social and cultural ideals embedded in architectural spaces, serving as signs and symbols, can also be seen, in some instances, in the physical design of the building itself, as architectural historian Charles Davis⁷⁴ elucidates in his analysis of the concept of architectural physiognomy. Davis understands architecture as an expression of both cultural nationalism and ethnographic character, realized and materialized through an architectural physiognomy. Davis’ examples posit that all artifacts of material culture,

including architecture, inherently reflect the [racialized] character of the creator of that architecture.

I would argue that there is a reciprocity in both the production and perception of architecture as racialized (among other social constructs), particularly in the context of gentrification. It appears that many of the racialized biases that we ascribe to many aspects of [material] culture (e.g., music, food, dance, clothing, cars, art, etc.) are also applied to architecture, so that these biases and stereotypes moderate our perceptions of what “kind” of people belong (or deserve to belong) in certain physical spaces.^{75,76,77,78} Bonam, Bergseiker and Eberhardt specifically refer to the concept as “space-focused [racial] stereotypes.”⁷⁹ Researching perceptions of black space – space occupied by or associated with black Americans –, they explicitly state that: “Just as generalized stereotypes about Black people can influence how people think about particular Black individuals, we propose generalized stereotypes about Black areas can influence how people think about particular locales occupied by Blacks.”⁸⁰ Such perceptions – and realities – of the blighted and inferior conditions of black [residential] spaces were officially documented by the United States government as early as 1932, when President Hoover commissioned a “Negro Housing” report.⁸¹ Bush, Moffat and Dunn⁸² effectively illustrate how the perception of a physical space as contaminated, polluted and/or undesirable for inhabitation results in environmental stigma attached, not only to that space, but to its occupants as well. Both space-focused racial stereotypes and environmental stigma can interact reciprocally to simultaneously produce negative perceptions of physical spaces – based on biases against those who occupy them^{83,84,85} – and [devalued] judgements of their inhabitants – as a result of the environments in which they live.^{86,87,88}

Raced Space Imaginary: Empirical Evidence

Thus far, substantial theoretical evidence has been presented on the production and perception of architectural space as racialized. Although arguably sound and compelling, such propositions may be understandably contested. Unfortunately, there exist very few empirical sociological or psychological studies that explore the perception of architecture or built spaces as projecting and embodying racialized meaning. To the best of my knowledge, only two psychosocial studies exist that seek to empirically evaluate perceptions and meanings of architectural space using racial associations. Interestingly, both projects were completed, independently, and without knowledge of each other, in 2016. One project was my own field research (accepted as partial fulfilment of the requirement for the Master of Arts degree) in the CUNY Graduate Center Environmental Psychology Doctoral Program which resulted in a paper I entitled “The Perception of Racialized Space as a Predictor for Architectural Meaning and Attributes: An East Harlem Study.” In this paper, I sought to explore the relationship between how architectural space is perceived as racialized (white or non-white) and how that perception correlates to its negative or positive evaluation.⁸⁹ The other project, entitled “*Polluting Black Space*” was conducted by Stanford University social psychologist Jennifer Eberhardt and

two of her colleagues, Courtney Bonam and Hilary Bergsieker. Their study demonstrated “that the physical spaces associated with Black Americans are also subject to negative racial stereotypes” and are thus devalued by whites.⁹⁰ The following details of these two research projects elucidate, empirically, how the built environment – such as physical spaces and specific architectures – embody racial ideologies and are perceived and evaluated through racial imaginaries.

East Harlem Architecture, Gentrification and Perceived Racial Attributes

My field research in East Harlem, New York, was conducted under two primary goals: 1) Firstly, to investigate whether different ethnic and social groups within a single neighborhood – in this case a gentrifying neighborhood in New York City – might perceive certain architectural spaces as racialized and how this contributes to their meaning-making processes regarding these spaces. 2) Secondly, to investigate how architectural space might embody socio-racial differentiation and potentially create different experiences of social desirability, particularly in socially contentious and racially polarized environments such as gentrified communities. More precisely, the primary intent of this project was to explore how the perception of an architectural space as racialized (white vs. non-white) correlated to how such spaces were evaluated (positively or negatively). The findings of the study ultimately revealed a raced space imaginary among participants, indicated by a clearly demonstrated association of particular architectures with specific ethnic groups. This project employed the use of six images of architectural details and spaces in the same residential area of East Harlem (Figure 1). Photos were taken to document architectural aesthetic conditions at three different scales: (1) a residential doorway, (2) a complete residential façade, and (3) a mixed-use streetscape. These images were then divided into two groups: (1) new construction (less than ten years old) and (2) vernacular neighborhood architecture (older than thirty years). These two conditions were assumed to be representative of pre- and post-gentrification architectural construction, respectively. Each of the architectural photographs were accompanied by a thirteen-item, five-point semantic differential scale containing bipolar descriptive adjectives to be used for participants’ perception and evaluation of the images. These thirteen word pairs connoted positive and negative meaning and/or attributes. Participants were first asked to evaluate the six architectural images using the semantic differential scale. They were shown the six images again and were asked to select what ethnic group(s) they perceived to live in and/or occupy the architectural spaces represented in the photographs. Lastly, they were asked to select what they perceived to be the *majority or primary* ethnic group(s) in these spaces. For each of the older, pre-gentrification images, a majority of both white and non-white participant groups perceived these to be “non-white” spaces (primarily or only occupied by non-whites). Conversely, for each of the newer, post-gentrification architectural photographs, a majority of both groups perceived them as “white” spaces



Figure 1: The six architectural photographs used in my East Harlem architecture survey-based research. The first column depicts (from top to bottom) a pre-gentrification streetscape, façade and doorway. The second column of images depicts (from top to bottom) a post-gentrification streetscape, façade and doorway. *Source:* Todd Brown, “The Perception of Racialized Space as a Predictor for Architectural Meaning and Evaluation: An East Harlem Study” (Master’s Thesis), The Graduate and University Center of the City University of New York (2016).

(primarily or only occupied by whites). All images depicting post-gentrification (newer) architectural spaces received positive evaluation scores, while the images of pre-gentrification architectures were scored negatively. The results of this study indicated that different types of architectural spaces do embody differentiated social and racial perceptions as well as varied meanings via the interpretation of their aesthetic features. While the study was not designed to indicate what specific elements in the architectural photographs participants

were responding to, the consistent pattern of perceiving older, pre-gentrification, architectural spaces as “non-white” milieus, evaluated as “negative”, and newer architectural spaces as “positive”, “white” milieus is strongly supported by the findings of this research.

Race-based “Space-Focused Stereotypes”

Bonam, Bergseiker and Eberhardt’s⁹¹ research offers several different approaches to investigating the topic of the raced space imaginary. As social psychologists whose primary research centers on racial biases, they sought to incorporate the built environment as a unit of analysis for illustrating what they termed as “space-focused stereotypes” rooted in racial bias. Their project consisted of a series of four short studies which collectively and effectively illustrate the role that race plays in individuals’ perceptions and imaginaries of the built environment, specifically black spaces. They demonstrated that the physical spaces – including specific architectures – associated with black Americans are also subject to negative racial stereotypes.

Their first study explored the concept of “Black space-focused stereotypes” by demonstrating the “existence of a tainted and pervasive image of generalized Black space” (p. 1,563). Here, they asked participants to list the characteristic qualities they imagined to be associated with black areas. Participants were asked to “describe the areas that most Americans would associate with Black people living in the United States” (p. 1,563). They were instructed to list characteristics of black areas as a whole (as opposed to specific locales) and then to rate the valence of the listed characteristic on a scale from very negative to very positive. Participants generated a variety of descriptors in their imaginary of black spaces, most of which were very negative: “poverty”, “poor”, “crime”, “dangerous”, “disrepair”, “dilapidated” “ghetto”, “slum”, “unappealing”, “barren”, “urban”, “dirty”, etc. were just a few of the responses (p. 1,564). These responses represented the imagined characteristics that participants believed “most Americans” would use to describe black areas (p. 1,565).

The second study sought to “test the space-focused stereotypes” generated in the first (p. 1,563) by examining whether this negative image of black space “ultimately shifts evaluations of a given space” (p. 1,567). In order to explore this hypothesis, the researchers showed participants a picture of a “phenotypically Black or White family” who were selling their suburban, middle-class home (Figure 2). Participants were randomly assigned to view an image (family picture) of either the black or white family ostensibly selling the home and were also showed several images of the interior and exterior of the home (Figure 2). The home used in both cases was the exact same property and the participants in both groups were provided with the exact same profile of the house (size, amenities, age, condition, etc.). They were then asked to evaluate the home in terms of desirability, imagining the quality of the neighborhood around the house, the quality of schools in the area, the perceived efficiency of municipal services in the neighborhood, levels of safety around the house and ease of access to other quality facilities such as banking and



Figure 2: Images of the black (a) and white (b) families and the house (c) used in Bonam, Bergseiker and Eberhardt's 2016 study. *Source:* Courtney M. Bonam, Hilary B. Bergseiker and Jennifer Eberhardt, "Polluting Black Space," *Journal of Experimental Psychology* 145, no. 11 (2016): Appendix.

shopping centers. The results here statistically confirmed that study participants showed "direct evidence of space-focused stereotype": "[Participants] imagined the neighborhood to have less positive characteristics when the home's sellers were Black, rather than White . . . felt less connection with the neighborhood when the family was Black as opposed to white . . . [and] provided a less positive house evaluation when the family was Black rather than White." (p. 1568)

The third study was conducted in a manner similar to the second; however, the visual association of blackness or whiteness – via a family portrait – to the house itself was removed and substituted with a descriptive table about the demographics and characteristics of the neighborhood containing the house. Thus, the two participant groups received a description of the neighborhood as being either a predominantly black or a majority white community. Again, both groups saw the same house image and the house profile also remained unchanged. Participants were asked to evaluate the house in a similar fashion as in the second study. The results again revealed direct evidence of space-focused stereotyping as neighborhood characteristics, neighborhood connectiveness, evaluation of the house itself and the economic value of the home were all consistently and statistically imagined to be much more negative when

the neighborhood demographics were described as predominantly black as opposed to white (p. 1,571).

The fourth and final study's aim was "to examine whether people still negatively stereotype, disconnect from, and devalue Black space even when they are not judging whether they wish to live in the target locale" (p. 1,572). In doing so, the researchers hoped also to examine how stereotypes around black space impacted sentiments and behaviors beyond "the effects of anti-Black attitudes and the perceived socio-economic status of an area" (p. 1,572). Here the participants were provided with an online survey presented as an investigation of "land-development decision making processes." They were told that they would be shown information about a neighborhood and then "provide opinions about how adjacent land should be developed." They were also asked to "create a vivid mental image of this neighborhood's physical space while doing so" (p. 1,573). The neighborhood information presented contained details about the neighborhood's environmental conditions (rainfall, snowfall, temperature, UV index, etc.), housing conditions (property values, vacancies, appreciation rates, average home age, etc) and neighborhood demographics (population, median age, size of area, etc) (p. 1,573). Participants in both groups were shown identical neighborhood information with the exception of the neighbourhood's race (largest ethnic group), which was manipulated to be either black or white, and the property values (half of all participants viewed a median home cost while half did not). After viewing this information, members of both participant groups were asked to read a proposal for building a chemical plant to be located adjacent to this neighborhood and to "take the perspective of a chemical production employee" that would be required to make a recommendation to their boss about the suitability of the location (p. 1,573). They were also asked to answer a series of evaluative questions about the community presented in the study. The results of this study revealed that both race and property-value manipulations "shifted perceptions in the expected direction" (p. 1,574). The race of the neighborhood influenced space-focused stereotyping, space connection and chemical plant opposition. When the neighborhood was described as predominantly black, participants imagined it as more industrial than when it was presented as primarily white. They were also less connected to the black neighborhood, and less opposed to building a chemical plant in a black neighborhood (p. 1,574). Finally, this last study was particularly important in that the researchers were able to – with statistical significance – demonstrate the persistence of race as a determining factor for spatial stereotyping, even when controlling for class perceptions. By manipulating the availability or absence of property values (including or not including a middle-class average home value) in the neighborhood information, the researchers were able to show that negative stereotyping, decreased levels of connectedness and decreased opposition to developing the chemical plant were more prevalent when the neighborhood was described as predominantly black (as opposed to white). This remained true whether the neighborhood was presented as middle class or when no class information was provided at all (pp. 1,574–75).

Lessons Learned

These two studies provide considerable empirical evidence that specific buildings, physical places and designed spaces are indeed perceived and/or imagined as having saliently racial qualities. They also clearly demonstrate that the built environment, at a variety of scales, when perceived as racialized, specifically as non-white space, is imbued with a devalued imaginary. Bonam's related dissertation research⁹² further provides foundational empirical evidence that specific *types* of spaces and buildings have the tendency to be associated with specific ethnic groups (p. 17). She refers to these as *racially modal spaces*⁹³ that appear to be prototypically associated with the population of a specific race. For example, the participant sample in her study most frequently associated malls, suburbs, golf courses, hiking trails, art galleries and business spaces with white people; while the ghetto, barbershops, basketball courts, stoops, dance clubs and street corners were most frequently imagined as black spaces. Additionally, accompanying valence – the intrinsic attractiveness/“good”-ness (positive valence) or averseness/“bad”-ness (negative valence) – of imagined black spaces was much more negative than that of perceived white spaces (p. 17–28).

These negative perceptions of racialized space can further polarize ethnic groups along both racial and class lines⁹⁴ as racialized physical environments materialize social distinctions and separations.⁹⁵ The racially polarized spaces and architectures created by the processes of gentrification in many ways represent the aesthetic sensibilities of the gentrifiers, driven by their racial, cultural and socio-economic preferences.^{96,97,98,99,100} In her critical essay, *Representing Whiteness in the Black Imagination*,¹⁰¹ social activist and race scholar bell hooks, although not specifically referencing geography or spatiality, poignantly illustrates the resulting psychological and social effects of the forced imposition of whiteness – white culture, ideals, bodies and spaces – into black (and other minority) communities:

Socialized to believe the fantasy, that whiteness represents goodness and all that is benign and nonthreatening, many white people assume that this is the way black people conceptualize whiteness. They do not imagine that the way whiteness makes its presence felt in black life, most often as a terrorizing imposition, a power that wounds, hurts, tortures, is a reality that disrupts the fantasy of whiteness as representing goodness. (p. 169)

It is with this understanding that I am also inclined to believe the ubiquity of white culture in American society assumes a neutrality of whiteness and neglects the importance of race in the various aspects of our everyday lives. This includes one of the most abundant artifacts of material culture that we encounter nearly every moment of our lives: *architectural space*. It is therefore crucially important that any socially critical evaluation of architecture *must* do so from a racially aware lens. One way to achieve this is to incorporate the framework of critical race theory with some of the most established evaluative methodologies for architecture and built space. A specific incorporation

of critical race theory in relation to an empirical evaluation of architectural space, in particular, remains in widely uncharted terrain. The underlying foundations of critical race theory have however permeated some of the more recent theoretical discourses on architecture and the built environment. The following section of this paper will highlight some examples of the critical analyses of racially polarized architectural spaces that have been either proposed or realized. The variety of such spaces throughout recent history and across varying geographies illustrates the pervasiveness of this phenomenon.

From Colonization to Gentrification: Learning from the Past and Present

Socio-spatial polarization along racial lines has been exemplified across space and throughout history via a variety of land use/appropriation processes that have served to disenfranchise particular groups' rights to the physical environment and even specific architectural spaces. The socio-political and economic forces of processes such as global colonialism (i.e., European imperialism), South African apartheid and American Jim Crow are all such examples. The mechanisms by which they were conceived and implemented demonstrate many parallels to the processes of gentrification currently affecting urban communities in the United States and around the globe. The common characteristics of all these conditions pivot on the deliberate creation of race-and class-based architectures and environments, whether implicit or explicit, that serve to physically embody distinctions between the economically disparate racial and/or ethnic groups that occupy them. The following historical examples of the racialized socio-spatial conditions created by discriminatory planning, design, policy and practices also elucidate the central role that architecture has always played in materializing social ideologies around racial distinctions.

European Imperialism

The Age of Imperialism, a time period beginning around 1760, saw European industrializing nations engaging in the process of colonizing, influencing, and annexing other parts of the world.¹⁰² This second expansion of Europe was a complex historical process in which “political, social and emotional forces in Europe and on the periphery” were highly influential in shaping [material] culture, society, politics, religion, and economics around the world.¹⁰³ These influences were undoubtedly evident in the production of architectures and physical spaces in the many colonized non-white countries under hegemonic European control. The architectural products of imperialism served as apparatuses of power to physically embody the might and dominance of the respective European countries responsible for their construction. Race inherently and inevitably assumed a distinct and tangible role in illustrating spatial distinctions between the white colonizers and the non-white indigenous

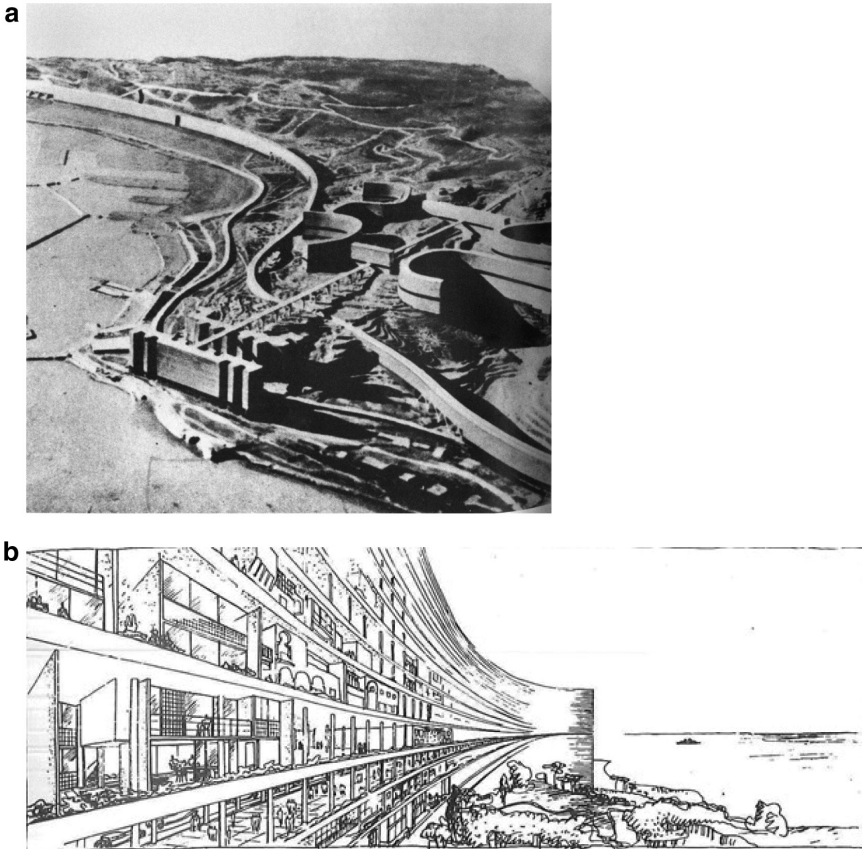


Figure 3: (a) Rendering of Le Corbusier's 1933 *Plan Obus* for Algiers. The disruptive nature of both the form and scale of this superstructure is both clearly deliberate and apparent. (b) Perspective rendering of one of the curved towers proposed in Le Corbusier's *Plan Obus*. Sources: (a) Ackley 2006 1; (b) Pinterest, <https://www.pinterest.com/pin/503629170819688420/?lp=true> (accessed January 4, 2019).

populations which they colonized. As various native peoples of color were socially constructed and psychologically perceived as inferior, the colonial architectures that emerged were deliberately designed to suggest the superiority of European culture (i.e., whiteness), particularly in relation to that of indigenous populations. One of the innumerable design projects that elucidates such intent is the unrealized 1933 proposal of the renowned Swiss-French architect, Le Corbusier, in Algiers (Figure 3). His *Plan Obus* was meant to be an iconic symbol of French imperialism in the heart of the Algerian Casbah (citadel).¹⁰⁴ In celebration of the centennial of French rule, Le Corbusier proposed a megastructure that would literally cut through and block the center

of this socially and culturally rich historic North African city (Figure 3). This massive project, positioned to make Algiers a world capital, consisted of three main components: “[1] a new business district on the Cape of Algiers . . . [2] a residential area in the heights accessible by a bridge spanning over the Casbah, and [3] . . . an elevated highway arcing between suburban cities and containing fourteen residential levels beneath it.”¹⁰⁵ This behemoth proposal would have ultimately – literally and spatially – positioned French nationals over the heads of Algerian locals (Figure 3), while simultaneously disregarding and disrupting Algerian social and religious traditions: segregating Algerian workers from the more affluent French colonizers through an “abrupt change in the spatial arrangement brought on by its brutal scale.”¹⁰⁶ Fortunately, Le Corbusier’s proposal was never constructed; however, if his plan had been realized, it would have served as a tangible spatial manifestation of the prevailing social ideology of Algerians as exoticized and inferior others. Unfortunately, this has indeed been the case where nearly all of the materialized colonial architectures served and/or continue to serve as overt representations of white dominance in non-white locales. One example where this is extremely apparent is in the planning of the Indian capital of New Delhi under British rule (Figure 4). Both the city itself as well as its particular architectures were created with the primary goal of symbolizing British power and supremacy.¹⁰⁷



Figure 4: Photo of the Secretariat Building (completed in 1927) in New Delhi, India, designed by English architect Herbert Baker as the seat of government for the British Indian Empire. *Source:* Jones, Laurie 2008 on Flickr, <https://www.flickr.com/photos/ljonesimages/3012901642/> (accessed December 28, 2018).

American Jim Crow

Leaving the African continent, similar spatial configurations can be seen in the design and production of architectural spaces in American society during the Jim Crow era of the 1870s through the 1960s. Arguably, the remnants of this period still persist in various forms even today. During this post-slavery period, the physical spaces of every city and town, particularly in the deep south, were explicitly delineated along racial lines, at almost every spatial scale: from entire neighborhoods, to specific buildings, to lunch counters, buses and even water fountains (Figure 5). Whites and blacks (in reality, virtually all non-whites) had distinct and separate spaces governed by a variety of laws and social practices.¹⁰⁸ The policies and practices that reinforced spatial segregation were augmented and materialized architecturally through what historian Robert Weyeneth has termed “spatial strategies of white supremacy” such as “isolation and partitioning” which were created by means of “adaptive use and new construction.”¹⁰⁹ Weyeneth further elaborates on isolation and partitioning as the two major ways in which racial segregation was established architecturally: “Architectural isolation represented the enterprise of constructing and maintaining places that kept whites and blacks apart, isolated from one another. Architectural partitioning represented the effort to segregate within facilities that were shared by the races” (p. 13). Exclusionary explicit signage that indicated which buildings and areas were for whites only and where blacks were permitted were applied to nearly every public space in the Jim Crow South.



Figure 5: Jim Crow era segregated water fountains. The spatial segregation of the races was overtly materialized at even the smallest of architectural scales. *Source:* Pinterest, <https://www.pinterest.com/pin/270919733813719329/?!p=true> (accessed January 15, 2019).

Although most of these signs were not integral parts of the architectural design, they served as unequivocal indicators of racialized boundaries that were fortified by both official laws and unofficial practices dedicated to the separation of the races. There were also many instances where signage was unnecessary because it was socially understood that particular types of architectures were reserved for whites only: libraries, major hotels, doctors' offices, most municipal parks, etc. These designed spaces were thus *de facto* white spaces. Such spatial segregations frequently necessitated the duplication of architectural spaces to accommodate both racial groups. In the instances where duplication was not economically viable, "only white space was provided."¹¹⁰ Temporal separation was also used as a mechanism for architectural isolation. In the event that facilities such as parks, theatres, zoos, army posts, and doctors' offices had to be used by both races, laws and practices were enforced that such usage and/or occupancy could not be simultaneous: "entrance and exit doors, stairways, windows, and pay stations" were temporarily segregated, often by statutes that dictated which race could use them during specific times of day, days of the week, or time of the year (pp. 18–19). When certain spaces had to be occupied and/or shared simultaneously by both blacks and whites, partitioning was employed as an architectural strategy to ensure racialized spatial segregation. The division of waiting rooms, movie theaters, railroad stations and even liquor stores, often used fixed or malleable barriers to clearly delineate the spaces for each racial group. Additionally, behavioral separation was a tool used to prohibit the mixing of races in shared spaces: "One learned the lay of the land through friendly advice, tense encounters with whites, and simply watching to see what other African Americans were doing."¹¹¹ The strategy of behavioral separation controlled how the races – more specifically, blacks – were to behave when a place was theoretically open to both races. This always meant deference to whites who had the most privileges, while black behavior was "significantly constrained" (p. 23). Customary practices coupled with visual and behavioral cues defined the racialized boundaries of such architectural spaces when no specific law governed spatial segregation. This form of *de facto* seclusion may be of particularly interest to contextualize modern forms of georacial polarization – such as gentrified spaces – that are not legally bolstered but nonetheless have similar disenfranchising outcomes.

South African Apartheid

As the continent of Africa has been arguably one most devastated by the processes of European domination – at least in regard to the sheer number of countries – a return is therefore warranted in the examination of the creation of race-based architectural space. However, this time, we travel from Algeria, the second northernmost country, to the southernmost government on the continent: South Africa. Having been first colonized by the Dutch in 1652, South Africa's history of *de jure* racial and spatial segregation begins in 1856 with the passage of Dutch discriminatory and segregationist laws¹¹²

and culminated in the 1948 enactment of apartheid under white Afrikaner rule. Interestingly, apartheid began in South Africa as the Jim Crow era in the United States was nearing its last decade of existence. Apartheid, which lasted for nearly half a century until 1994, operated along strikingly similar lines as Jim Crow. The recurring actuality is, as poignantly illustrated by environmental historian Sylvia Washington,¹¹³ that spatial injustices occur after the psychosocial construction of a particular group as inferior. This step is necessary to justify the segregating and discriminating spatial practices imposed upon such “othered” groups. During apartheid, only whites were allowed to live in the central areas of South African cities like Johannesburg and Cape Town. Individuals categorized as black or colored were spatially relegated to the fringes of urban life, forced to occupy suburban shanty towns and rural reservations^{114,115} (Figure 6). Rooted in the ideals of white supremacy and colonialism, South African architecture and planning practice and expression during the era of apartheid clearly echoed the racial hegemony embedded within its social, cultural and political context.¹¹⁶ As in the case of Jim Crow and gentrification, social relationships and transactions in these architectural spaces served to reinforce the racial



Figure 6: Photograph of the black South African Township of Nyanga. The makeshift housing is indicative of socio-economic and spatial disenfranchisement and isolation of apartheid. The polarized architectural condition of such townships, in contrast with the more affluent urban white spaces in Cape Town, served to further reinforce the association of specific residential forms with racial groups. *Source:* <https://www.sahistory.org.za/places/nyanga-township> (accessed January 19, 2019).

and spatial distinctions that permeated the physical environment itself. The racialization of architecture in apartheid South Africa was made explicitly apparent through the stark spatial dichotomies that were easily *read* by both whites and non-whites. This occurrence elucidated and continues to illustrate that architecture is a cultural system inextricable from its social context.¹¹⁷

Towards a Racially Critical Empirical Analysis of Architecture

Critical Race Spatial Analysis (CRSA) is a very new and still evolving “explanatory framework and methodological approach that accounts for the role of race . . . racism, and white supremacy in examining geographic and social spaces, and that works toward identifying and challenging racism and white supremacy within these spaces as part of a larger goal of identifying and challenging all forms of subordination.”¹¹⁸ Rooted in critical race theory (CRT), this conceptual approach has thus far been applied primarily to educational systems, institutions and spaces.^{119,120} However, as both a spatial analytical technique and a critical racial framework, CRSA has an undeniable potential to utilize mapmaking and other socio-physical techniques to highlight racial injustices and considerations at a variety of spatial scales in a process similar to what Peake and Kobayoshi¹²¹ refer to as “anti-racist landscape analysis”. *Ground-truthing* is one such technique implemented in CRSA research. Traditionally found in Geographic Information Systems (GIS) research, ground-truthing is “a process whereby GIS technicians are sent to gather data in the field that either complements or disputes airborne remote sensing data collected by aerial photography, satellite sidescan radar, or infrared images.”¹²² Solorzano and Velez further state that in CRSA, ground-truthing can be “reimagined as a process whereby community members, particularly those at the margins, gather or analyze “spatial” data, historical or contemporary, that either complements or disputes information portrayed in maps.”¹²³ I contend that, in relation to racially critical architectural evaluation, a technique such as ground-truthing can be a participatory process by which researchers and community members gather in-field socio-physical data on specific buildings, or groups of buildings, that either complements or disputes the social impact/social performance statements produced by architects, planners and/or developers.

As an offspring of both critical spatial analysis (which examines hegemonic human–environment relationships) and CRT – which rigorously examines the intersection of the law, power and race^{124,125} – CRSA has endless applications in critiquing the intersection of socio-racial and geo-spatial aspects of architectural landscapes. CRSA also seems extremely promising in its potential adaptability to existing empirical methodologies for architectural evaluation. Such methodologies include post-occupancy evaluation (POE) and building performance evaluation (BPE). Currently, both processes are almost exclusively technocratic exercises^{126,127,128,129} used to assess building performance in terms of physical measurements that include carbon dioxide (CO₂) emissions,

energy use, and on-site water management¹³⁰ – the metrics of which all are easily quantifiable and correspond to optimizing economic outcomes.¹³¹ However, there is much room for POE and BPE studies to lend themselves to the inclusion of racially – and thus, socially – critical approaches, through the incorporation of CRSA principles, particularly through an integration of such principles within their current occupant/user surveying techniques.¹³² Some innovative variations to traditional POE research – such as international architectural firm, HKS’, Functional Performance Evaluation (FPE) – has proved promising in its potential to critically address the psychological and social dimensions of human–environment relationships in designed spaces.¹³³

CRSA, in the combining of critical social theory, social science methodologies and spatial analysis techniques has much potential for reconceptualizing the mapping of architectural space, from the simple and broad exploration of large-scale external spaces to considering the complex psychosocial relationships of people to internal geographies.¹³⁴ The application of CRSA methodologies has the potential to highlight how the privileged may differ from oppressed communities in regard to socio-spatial perceptions of, and relationships to, specific architectural spaces, and what may be learned from both perspectives. CRSA readily lends itself to the incorporation of innovative techniques such as participatory mapping, and qualitative approaches, such as interviews, where occupants/users/experiencers are able to simultaneously identify, visualize and narrate their perceptions and experiences in particular spaces while being allowed to critically reflect on the socio-racial nuances that contribute to their perspectives. This dynamic form of documentation will serve to provide a comprehensive framework from which to understand the complexities of the social and spatial contexts that moderate one’s engagement with the built environment.

Any racially critical analysis of architectural landscapes *must* – as both CRT and CRSA principles dictate – challenge color-blind, “race” neutral, ahistorical and apolitical points of view on a variety of structures, politics, institutions, systems, epistemologies, practices, research methodologies, etc. while providing counter-narratives of marginalized voices in an activist agenda.^{135,136,137,138,139,140,141,142,143,144} In relation to the built environment and other socio-physical considerations, Bradley and Wolf¹⁴⁵ state that a critical approach to exploring “the conception and design of public places . . . must [also] be based on a definition of who constitutes the public which they serve” (p. 176). This definition imperatively recognizes the centrality of both diversity and intersectionality in order to properly situate individuals and groups of people in relation to the structures of power that moderate their relationships to environments. Unfortunately, prevailing architectural evaluation methodologies – by most often not specifying who the users, occupants and experiencers are – assumes an orientation towards white, adult, heterosexual, able-bodied, privileged males.¹⁴⁶

Lessons for the racially critical evaluation of architectural landscapes can also be learned from a variety of other interdisciplinary studies that critically evaluate psychosocial issues as they relate to human–environment

relationships. One such study was environmental psychologists, Valera and Guadia's¹⁴⁷ research of Barcelona's Olympic Village in which they conducted a study that assessed urban social identity and social sustainability issues of built space. Other research has demonstrated that levels of social prestige, inter-neighbor relationships, and sense of belonging are all concepts directly linked to dwelling in specific physical environments.^{148,149}

Centering race as a primary consideration in such studies may be key to calling attention to the accountability and role of architecture in materializing spatialized racial and social inequality and reflect a response to architectural historian Anthony Ward's¹⁵⁰ call to the inclusion of socially critical considerations throughout the entire design process. In *Housing As if People Mattered*, Cooper-Marcus and Sarskissian¹⁵¹ stress the need to critically consider the psychological and sociological aspects of architecture, planning and design – emphasizing the importance of the ethical dimensions of the impact of the built environment on specific individuals and groups. Understanding the racial and cultural diversity that exists among architectural occupants/users/experiencers is critical for the future of the discipline. Research has shown that the architect's concept of what constitutes “good” or “beautiful” design often does not coalesce with that of the general public.^{152,153,154,155} Much of this disparity is linked to the creation and reproduction of what Le Febvre, in critiquing the work of Le Corbusier, calls abstract and “repetitively patterned space [that] consumes and regulates the differences between places and people.”¹⁵⁶ Environmental ethicist Mick Smith further refers to such architectural spaces as “anti-social and instrumental . . . [encapsulating] a normalizing morality that seeks to reduce all differences to an economic order of the Same.”¹⁵⁷ This argument reinforces the ethical obligation for the responsibility in the design, creation and operation of buildings to produce social spaces that respect Otherness.

There is still much room for growth in empirical social research on architectural space to include some of the more critical social issues around race and place as central considerations in the evaluation of built spaces.¹⁵⁸ Such investigations can significantly advance the cause to hold those involved in the creation and control of architectural space directly accountable for the types of socio-physical spaces they produce and compel them to recognize the possibilities of their role in furthering – or remediating – discord along social, racial and spatial lines.

Notes

* It should be noted that throughout this paper, the terms “architecture”, “architectural space”, “space”, and “the built environment” are used interchangeably and all denote designed and constructed physical places that are occupied and tangibly experienced by people.

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