UC Santa Cruz UC Santa Cruz Electronic Theses and Dissertations

Title

Optics of American Empire: James Ricalton and Stereoscopic Ethnography in Early Twentieth Century India, 1888-1907

Permalink https://escholarship.org/uc/item/5mv5s9zt

Author Winter, Mitchell Arthur

Publication Date 2018

Copyright Information

This work is made available under the terms of a Creative Commons Attribution License, available at https://creativecommons.org/licenses/by/4.0/

Peer reviewed|Thesis/dissertation

UNIVERSITY OF CALIFORNIA

SANTA CRUZ

OPTICS OF AMERICAN EMPIRE: JAMES RICALTON AND

STEREOSCOPIC ETHNOGRAPHY IN EARLY TWENTIETH CENTURY

INDIA, 1888-1907

A thesis submitted in partial satisfaction of the requirements for the degree of

MASTER OF ARTS

in

HISTORY OF ART AND VISUAL CULTURE

by

Mitchell A. Winter

March 2018

The Thesis of Mitchell A. Winter is approved:

Professor Stacy Kamehiro, Co-Chair

Professor Maria Evangelatou, Co-Chair

Professor Albert Narath

Tyrus Miller Vice Provost and Dean of Graduate Studies Copyright © by

Mitchell A. Winter

2018

Table of Contents

Abstractvii
Acknowledgementsviii
Chapter One: A "New" Sensorial Rendering of the World: Observing Photographic
Science, Technology, and the Politics of Representation in early Twentieth
Century British India 1
Chapter Two: Dual Vision: Ethnographic Surveillance and the Visual Culture of
Stereoscopy in America, 1870-190713
Chapter Three: Visual Analysis of Stereographs: James Ricalton in India, 1888-
1889
Conclusions: Optics of American Empire: India as Imagined Site/Sight54
Appendix One: Figures
Notes
Bibliography72

For the lost



"James Ricalton in Old Rhodesia, Africa," 1909, unknown photographer

All photographs and/or images used are over one hundred years old and are protected under public domain. Additionally, all photographs are protected under fair use per the U.S. Copyright office's definition of copyrighted material for non-profit educational purposes, research, and/or critique in Section 107 of the U.S. Copyright Act (1978).

ABSTRACT

OPTICS OF AMERICAN EMPIRE: JAMES RICALTON AND STEREOSCOPIC ETHNOGRAPHY IN EARLY TWENTIETH CENTURY INDIA, 1888-1907

During the mid-nineteenth century, stereoscopy became a monumentally popular and heavily studied component of British and American optical science. James Ricalton (b. 1844-1929), an American photographer and traveler, utilized stereoscopy and stereography for the production of travel cards that displayed 'non-Western' locations and peoples. This thesis examines Ricalton's deployment of stereography and shows that Ricalton's brand of stereographic practice participates in contemporaneous ideological formations concerning social Darwinism, civilizationism, and American exceptionalism. I visually analyze fifteen of Ricalton's original 100 stereographic prints from India Through the Stereoscope: A Journey through Hindustan" (1900) to show that Ricalton's orientation towards the people and places he photographs is a complex negotiation of his own masculinity, narratives of American nationhood, and dominant ideologies of nineteenth century colonial apologism. I argue that Ricalton's usage of stereoscopy and stereography forms a 'hybridized' archive that does not fit into standard photographic typologies of the nineteenth or twentieth centuries.

vii

Acknowledgements

To begin, I would like to thank the University of California at Santa Cruz' History of Art and Visual Culture Department for their generous support of my thesis project. The initial research included in this thesis was conducted during spring 2015 courtesy of a University of California, Santa Cruz Regents Fellowship and a graduate student fellowship awarded to me by the History of Art and Visual Culture Department. In spring of that year I participated in Professor Albert Narath's firstyear seminar on the history and visual culture of remote sensing technologies. Narath's seminar allowed me to explore the possibility of viewing remote sensing apparatuses as more than mere technological instruments; indeed, via the legacies of European colonialism, forms of remote sensing technology also incorporated a wide array of ideological apparatuses that assisted and justified the domination of societies in the Global South. I thank Professor Narath for allowing me to explore this avenue of the course material and to the students in that seminar who read and edited early drafts of the paper. I decided to revamp the paper into a thesis in the summer of 2017 and, since then, have been editing my previous work and adding supplemental material. Additionally, I would like to offer much thanks to Stacy Kamehiro and Maria Evangelatou, my advisors, for reading through drafts of the thesis and guiding me to alternate source material. I'd also like to thank Alexandra Macheski for her ardent and passionate support of my thesis project and our many (many) conversations about the historical implications of colonial power structures, the place of art in the contemporary world, memory, sadness, love, anger, fear, Freud; thank

you, child. As always my partner Kenny is instrumental in maintaining the stability (and sometimes instability!) of my mental health so I thank him for his eternal companionship and help with navigating this thorny world. Lastly, I want to thank you, the reader, for picking up this slim, unassuming tome. Hopefully you will find something that you are looking for.

> M.A.W. March 2018 Santa Cruz, California

Chapter One: A "New" Sensorial Rendering of the World: Observing Photographic Science, Technology, and the Politics of Representation in early Twentieth Century British India

Beginnings: Aporias of the Modern Sensorium

During the nineteenth century, attempts to augment the nature of "subjective" experience took on a variety of technologically motivated forms, all of which challenged, in some way, contemporaneous understandings concerning human sense perception. The assumption that the human sensory apparatus preserves "objective" data as infallible ciphers of the "natural" world was one that persisted throughout this period.¹ Stereoscopy, the technical study of stereography, or three-dimensional binocular vision, was an advancement in optical science that demonstrated the possibility of altering human sense perception. Proponents of stereoscopy had differing views on the effectiveness of stereoscopy as a scientific imaging instrument, but in the public imagination stereoscopy was generally accepted as both fantastical and educational.² The imaginative possibilities of stereoscopy as a visual culture encompassed the activities of daily European and American life as well as dramatized depictions of "far off places," often set in the mystical "Orient" or "the East." Following Robert DeLeskie, whose work on the Underwood Stereograph system has steadily been an invaluable resource, my theoretical positioning resounds with his claim that "the study of stereoscopy could add much to our understanding of how North American and European perceptions and expectations of the non-Western

world were constructed and maintained by stereographs through the later part of the 'Age of Imperialism.'"³

This thesis examines the ideological bases of stereoscopy in the early twentieth century by focusing on its deployment by James Ricalton (b. 1844-1929), a figure in the history of photographic and stereographic art practice whose presence in the academic literature has not been fully explained in terms of its cultural and political consequences. I contextualize stereoscopy as a scientific and aesthetic practice that conformed to a modern, racialized schema of sight augmentation as a necessity for effective colonial rule by examining Ricalton's published stereographic works and show that the extant discussion and popular perception of Ricalton as a neutral documentarian needs to be revised to reflect his ideological commitments to producing an ethnographic archive in imperial British India.

Chapter 1 discusses the main arguments in the academic literature on photographic/stereographic practices in imperial India that I draw upon for the purposes of this thesis and foregrounds Ricalton's involvement in the emerging culture of American stereographic image practices. I also provide a brief overview of the historical period of British imperial rule (c. 1757-1947) that contributed to shaping the culture of American stereoscopy into a "reliable" representational form. I discuss the possibility of reading Ricalton's intervention in stereography as a moment in the "Sensory Revolution" of the nineteenth century and connected its consequences to optical science and stereoscopy in twentieth century India. Ricalton uses his stereographic representations to index particular ways of seeing the subjects he

2

imaged as either "civilized" or "uncivilized." Through his images' composition and cultural familiarity or distance to an assumed (Western) observer, we can imagine stereography and photography as technologies of rule that converged with regimes of power and Ricalton's personal politics that desired to have some things visualized (e.g. poverty in India) and others not visualized (e.g. poverty in America or Britain).

Chapter 2 discusses the emergence of popular photography and stereography in Britain and the United States and focuses on three pioneering scientists who contributed to stereoscopic science: Charles Wheatstone, David Brewster, and Oliver Wendell Holmes, Sr. I also discuss stereoscopy's relationship to forms of ethnographic representation in anthropological studies of India and assert that stereoscopy can be seen as a form of surveilling currently and formerly colonized social spaces.

Chapter 3 discusses and visually analyzes fifteen of the 100 stereographs featured in Ricalton's travelogue *India Through the Stereoscope* and provides detailed annotations of Ricalton's accompanying text in his monograph. I turn next to Ricalton's life and work in India during the first years of the twentieth century, and end with a discussion of the implications that arise from a contemporary critical reading of Ricalton's work. My discussion of the potential political implications that arise by situating Ricalton's portfolio of stereographic images, photographs, and writings in the context of imperial British India is at odds with a contemporary critical visual studies reading and discursive analytic framework that unilaterally privileges his position as an author of original art works. Indeed, in addition to decentering Ricalton's position as an author, my aim is to show that Ricalton's stereographic tours of India were a form of ethnographic representation⁴ that participated in the colonial projects of both imperial Britain and the United States, at both the conceptual/cultural and social/material levels. For individuals like Ricalton, the presentist term "American empire" did not exist, but "America" as a hybridized nationalistic depiction of the United States of America was an image that congealed preconceived notions concerning the nature of sense perception, particularly vision or sight, as well as Euro-American cultural norms about the "correct" way to progress to a democratic civilization.⁵

Ricalton participated in multiple photographic tours in Asia and Africa for Underwood and Underwood which yielded vast amounts of visual material. I focus on Ricalton's one published monograph that was the result of his tours of India in the late 1800s. I reference the only monograph written on the topic of Ricalton's India tours, Christopher Lucas' *James Ricalton's Photographic Travelogue of Imperial India* (1990) for clarification on some historical contextualization of the images, but it should be noted that Lucas does not engage in any form of visual analysis in his work. Lucas includes singular photographs and repeats the descriptions that Ricalton gives in from *India Through the Stereoscope*, but does not provide the stereograph images or any critical examination of their visual contents. *India Through the Stereoscope* provides 100 stereograph cards of Ricalton's travels in India to the reader of his travelogue. My visual analysis focuses on fifteen of the original 100 stereograph images from Ricalton's travelogue, supplemented by Ricalton's own description of

the images presented. The particular fifteen stereograph cards I have chosen reveal some of Ricalton's intentions as an American photographer in British India while simultaneously mystifying his own subjectivity as the observer and documenter of the spectacles he encounters. I use "mystification," in this instance, to denote Ricalton's mythologically constructed self-narrative of his travels and his time in India because, at times, the equivalencies he relates often elevate him above the story he is telling. In addition, Ricalton's descriptions of the stereographs cards I have chosen provide the discursive evidence for his specific brand of social Darwinism, democratic civilizationism, and American nationalism by fixating on the perceived "negative" conditions of territories colonized by British and American political actors. Rather than list or elaborate on Ricalton's India tour in chronological order (which seems to have no governing logic of its own) I have chosen seven stereographs showcasing the people, five stereographs showcasing the places, and three stereographs showcasing the social practices Ricalton choose to depict in his work. The categorical rationale behind these distinctions follows Ricalton's own descriptions and the images he provides but troubles the narrative of "European" moral superiority Ricalton attempts to craft in *India Through the Stereoscope*. There are overlaps in this polemical move since there are "people" present in the "places" section and vice versa, but I choose to segment these images into three sections to provide some comparison between Ricalton's descriptions and the visual content of his stereograph cards. In some instances, Ricalton omits referencing the people he photographs and comments on the surrounding landscape while in others he describes the people but not their

surrounding environment. Ricalton isolates visual elements he finds appealing, troubling, or potentially lucrative and then elaborates on them by way of discussing the benefits of Western European society. My aim is to add to this archive of knowledge about Ricalton's stereograph images by providing a critical visual culture studies analysis of his stereograph cards. This thesis follows a similar line of thinking as Dipesh Chakrabarty in its view of Ricalton's career: it is an attempt to "write into the history of modernity the ambivalences, contradictions…and the tragedies and ironies that attend it."⁶

Background: Sensing the World

Britain's acculturation to non-Western socio-cultural practices and the primitive accumulation⁷ of capital stored in niche markets around the globe that expanded rapidly during the late eighteenth century and throughout the nineteenth century provided the underlying basis and justification for creating novel forms of sensory stimulation. As with any expanding world power, Britain's technological advancements and the accumulation of capital fanned and fueled the desire to reimagine the world as an object to be consumed. From the beginning of the seventeenth century, the British and Dutch East India company's organization of trade monopolies and plantations in south and southeast Asia, manufactured for the extraction of "sensuous" spices, sugars, and cloths, aligned with a rising demand in Europe for "Oriental" paraphernalia: textiles, jewelry, and art. The British monopoly of the Indian market from 1600-1757 and the governmental control of the subcontinent from 1757-1947 coincides with well-known revolutions: the Glorious Revolution in England (1688-89), the French Revolution in France (1789-1799), and the Scientific and Industrial Revolutions in Europe and America (c. 1750-1870). Historical moments of economic domination disrupt traditional historiographic representations of revolution, owing to their indebtedness to forms of capital developed in the laboratory of colonized spaces—sites of violence where innovating technological and scientific methods of production came at the expense of indigenous forms of money circulation, kinship guilds, and forms of cultural production.⁸ India became an experimental site for the exercise of colonial power wherein communities with control over the financial sector were targeted and systematically dispossessed of their wealth.⁹

What has been omitted in standard histories of Europe ("world history") but has been explored in recent scholarship is the impact that confrontations with colonial life and those living under Western European empires had on the European sensorium, what we could peripherally call a "Sensory Revolution."¹⁰ With the understanding that the senses provide the interpretive tools with which humans organize raw data of the external world around us, European philosophers such as René Descartes (b. 1596-1650) demarcated the forms of existence (material objects that provide sensory data) from an immaterial organizing principle (theology's God; mind). Any extensions or prostheses of the human body, in Cartesian terms, would add to the ability to control one's environment and affect the physical world. Stereoscopy as a technological discourse troubles the boundary between reliable scientific instrumentation and the fantastical human sensorium by creating an image that is simultaneously present and absent. As objects to be consumed, stereoscopes and stereographs appealed to the visual sense, but unlike other counter-Enlightenment contraptions, the stereoscope appealed to other senses as well, like touch. Indeed, in travelogues like Ricalton's that provided detailed descriptions, an observer would perhaps be able to smell and hear aspects of the image. The haziness of this type of visual production accounts for part of the stereoscope's appeal to the public as a fascinator, but also questions the "realism" of what is apprehended by the viewer of the stereographic image. Jonathan Crary notes that the observer of "realism," whether in the realm of art or science, became an object of investigation and a locus of knowledge beginning in the first few decades of the 1800s: a shift from the geometrical optics of the seventeenth and eighteenth centuries to physiological optics, which dominated both scientific and philosophical discussions of vision in the nineteenth century.¹¹ In essence, when Euclidean optics failed to provide universal solutions to the problems of individual subjectivity, a vigorous critique of the human body as a naturalized physiological space expanded the purview of experiences that could potentially act upon the body. The development in technology, such as the stereoscope, that imitated or augmented the functions of the human eye were lauded as major scientific achievements. Crary warns against conflating the rise of photographic imagery with that of stereoscopic imagery, even though they were, to some extent, linked from the start. Stereoscopic images were made through a doubling of a photographic image and an erasure of selected contours of one picture,

but they were mostly produced with a binocular stereoscopic camera as opposed to the monocular photographic camera.

Popularizing Vision as Space (to be conquered)

The appeal of stereoscopic imaging derived from its projection of a threedimensional object or scene into the visual field of the observer and is thus "also inseparable from early nineteenth-century debates about the perception of space."¹² In the nineteenth century and early twentieth centuries, this observational state of stereoscopic viewing is more than a projection of an image in space, but constitutes what Henri Lefebvre describes as "social space."

Social space is a function of the Real that 'incorporates' social actions, the actions of the subjects both individual and collective who are born and who die, who suffer and who act. From the point of view of these subjects, the behavior of their space is at once vital and mortal: within it they develop, give expression to themselves, and encounter prohibitions; then they perish, and that same space contains their graves¹³

Social space is not mental in the unconscious psychological sense, but symbolic in that it is an interactive matrix of knowledge that normalizes the "representations of space which are tied to the relations of production and to the order which those relations impose."¹⁴ The underlying "order" Lefebvre identifies is aligned with a Marxist critique of capital, wherein surplus and its generation dictates the direction of social action. British financiers and envoys of the *Raj* harnessed the power of capital to instrumentalize nature with the effect of hierarchizing its incipient forms; space became non-mythical, flat, planar, and unadorned. The figurality evoked through pictures from devices such as stereoscopes was more than a Victorian scientific

pursuit¹⁵: it was also an imaginative attempt to re-enchant the Euro-American sensorium—a social space fraught with intensities, emotions, senses, feelings, thoughts, words, and memories. This thesis gives precedence to the social space of the sensorium by focusing on the constructed nature of stereoscopic vision and the position that James Ricalton occupied as an engaged observer.

There is an acute academic sensitivity to the complex sociocultural milieu of late eighteenth to early twentieth century colonial India.¹⁶ While historical records pertaining to legal matters and trade transactions exist and are used to study the material, economic interactions between Britain and India, the available visual archive of photographs taken by both British and Indian subjects provides a unique perspective on the social conditions and cultural exchanges present during this period. While some scholars of colonial South Asian visual culture focus on the works of Indian and Bengali civil servants, featuring both highly-trained and amateur photographers,¹⁷ others choose to examine the British photographers and *Raj* officials whose works constitute a considerable archive of visual material.¹⁸ Still others engage with both the indigenous Indian or Hindustani photographic repertoire and the colonial photographic archive.¹⁹ I want to emphasize that the photographic medium prospered as the prime instrument of anthropological ethnography because a colonial apparatus of knowledge including a hierarchical ordering of "Otherness" was endemic to and necessary for its ideological execution. To the British photographer's eye, the social space of life in Hindustan differed to such a degree that its continual surveillance was necessary for the preservation of Anglo-Saxon purity; deviance from accepted forms of "Otherness" or stereotypes would be imaged in such a way as to emphasize "deviant" qualities ranging from dress and adornment to normalized social rituals.²⁰

Although James Ricalton engaged in a form of photographic/stereographic practice that emphasized the "Otherness" of the Indian populace, he was also entangled in a system of American corporate photography that enshrined "Otherness" as a selling point in the production of stereographic prints. I would also like to suggest that Ricalton's position and authoritative voice moved between observational/scientific and sentimental/emotional registers in his descriptions of the stereograph cards in *India Through the Stereoscope*. His writings and presentation of the stereographic material lie somewhere between the industrious, ever-searching observational 'traveling' eye of British botanists researching new varieties of plants in late eighteenth and early nineteenth century India that David Arnold describes²¹ and the passive, processual eye that Jennifer Barker observes from descriptions by viewers of early cinema.²² By examining the social construction of vision in colonized spaces and "modernized" social spaces like the colony or the twentiethcentury movie house, Arnold and Barker participate in an academic practice of enunciating particular historical instances of visual modes shifting, changing, or being changed by altered perceptions or environments. Arnold's "traveling eye" refers to the spatialized visual imaginary of British botanists in nineteenth century India who were trained to perceive slight differences in plants they encountered, while Barker's "tactile eye" refers to the eye of the cinematic observer who absorbs and gestates the

11

moving visual image as a cohesive narrative.²³ In both Arnold and Barker's visual schema, the eye detects aberrations or errors in the visual image and attempts to "correct" what is perceived as either objectively false (in Arnold's "traveling eye") or socially unacceptable (in Barker's "tactile eye") through recourse to fantasy. Like the production of accurate botanical manuals or enjoyable cinema, Ricalton was paid for his work and expected to photograph scenes that appealed to as many people as possible. Thus, Ricalton's stereographic representations and descriptions do not conform to any standard typology of colonial imaging practices, despite being present in the histories of colonial photography in Japan, China, India, Samoa, and the Philippines.²⁴ However, Ricalton's fluctuation between multiple modes of vision is not an anomaly, but a result of the social conditions of a person with multiple allegiances and conceptions of belonging.

Chapter Two: Dual Vision: Ethnographic Surveillance and the Visual Culture of Stereoscopy in America, 1870-1910

Beginnings: Popular Photography and Stereoscopy in Britain, c. 1840

Stereoscopy and stereography were first scientific instruments and techniques that simulated binocular depth perception for academic study, becoming a popular form of viewing entertainment in the 1870s.²⁵ The popularity of the stereoscope during the nineteenth century is undeniable. In 1838, Sir Charles Wheatstone (b. 1802-1875), an English polymath who studied binocular optics, created the first stereoscope. In the same year, Wheatstone published his "Contributions to the Physiology of Vision,"²⁶ which described "the role of interocular discrepancy for binocular space perception"²⁷ and devised a rudimentary version of the refracting stereoscope. In this way, the stereoscope was first a scientific instrument that simulated binocular depth perception for academic study, only later becoming a popular viewing device. Wheatstone's main contribution to ocular science was the concept that depth perception was generated from the production of two simultaneous monocular images; in short, dual monocularism produces binocularism on a planar surface.²⁸ Additionally, Wheatstone realized that the indeterminate relationship between the two eyes produces a three-dimensional image that "fills in" the spaces that intersect such that "rays of light from two slightly dissimilar pictures were made to enter the eyes, as if coming from a single object into which they are combined in front, and on each point of which the visual lines could be made to meet."²⁹ This

discovery laid the way for his development of simple stereoscope cards that displayed almost identical images that filled in the contours of the other which, through the stereoscope, produced a three-dimensional image. The stereographic image produces depth based on the imperfections in the photographic image. For people like David Brewster (b. 1781-1868) who believed in the primacy of the eye and its power to penetrate through the image this posed a problem. If the stereoscope was a tool used to imitate the capacities of the eye and it used distorted images to produce a "real" depiction of an object, did our eyes derive reality from two variously distorted images as well?

After the vetting of photography as a verifiable source of visual information in the 1860s, amateur scientists like Walter LeConte Stevens (b. 1847-1927) equated the stereoscope to its illustrious cousin, the camera: "The effect is much the same as if the eyes, with normal convergence of visual lines, had been substituted for the cameras."³⁰ Steven's language begs the question: what is the "normal" convergence of visual lines? Is the realism of a stereographic image translated as "true" only if the lines converge? Does an after image or ghostly outline appear if the stereographs are aligned incorrectly? And if so, is this considered abnormal because it fails to attend to the realistic bounds that object's presence in the world? These types of questions circulated in the parlors of amateur and professional scientists and early photographic practitioners in the latter half of the nineteenth century,³¹ but at the beginning of the 1870s stereographs depicting the activities of daily life began to generate a monumental impact on public consciousness concerning the photographic image.

Aspirational or informative rather than instructional, Robert Silverman notes that "despite its crucial role in the laboratory, the stereoscope is most immediately recognized as the consummate Victorian amusement."³² The stereoscope was seen as a technological advancement that fostered a social space of collective leisure in Victorian England and then later in the United States. Thus, while Wheatstone's initial research remained the more empirical, objective account of the stereoscope, "Brewster's ceaseless work for the periodical press meant popular explanations of the stereoscope more often than not reflected his position"³³; that is, that the eye was a God-given instrument that produced a truthful representation of reality.

In 1861, over two decades after Charles Wheatstone débuted his refracting stereoscope and a decade after David Brewster modified Wheatstone's version with his lenticular stereoscope, Oliver Wendell Holmes, Sr. (b. 1809-1894), an American physician from Massachusetts, developed his own version of the stereoscope, dubbed the "American stereoscope." Holmes' stereoscope was more compact than the Wheatstone stereoscope but not as compact as Brewster's model: the distance between the stereographs and the eyes was lengthened and a small peg was added on the stereoscope shaft to effectively grip the apparatus. Holmes, in effect, made a hand-held version of the lenticular stereoscope, the portability of which made it the most popular version of the stereoscope sold in America.³⁴ Unlike Brewster, Holmes was interested in the tactile projection that the stereoscope offered to its viewers, saying "we clasp an object with our eyes, as with our arms, or with our hand, or with thumb and forefinger, and then we know it to be something more than a surface."³⁵

Holmes, a practicing physician, was familiar with the necessity of the haptic sense in navigating the organs of the body to assess for disease or aberration. He often related the views of the stereoscope to "palpation," a common heuristic tactic used in medicine to perceive problem areas through touch and feeling.³⁶

The similarity of the Holmes stereoscope to a prosthetic organ is more striking due to the elongated shaft of the stereograph viewer, longer than original models made by Wheatstone or Brewster. Outside of his scientific pursuits, Holmes actively championed stereography as both a technology of leisure and education.³⁷ In comparison to Brewster, scholars of stereoscopic history who claim that he promulgated utilitarian seeing laud Holme's non-theological view of the primacy of vision as a prime tenet of his philosophy. Commenting on Holmes' 1859 article in *The Atlantic*, John Plunkett observes that

[t]he appeal of the instrument could be regarded as stemming from a deepseated western desire to erode the gap between the viewing subject and nonlocal object, particularly as the device gained success during a period marked by globalization and colonialism.³⁸

Holmes' essay describes the production of stereographs of "every conceivable object of Nature and Art" as akin to that of a game hunt. In his description, photographers acquire ideal forms and representations as if they were skins: "Men will hunt all curious, beautiful, grand objects, as they would hunt cattle in South America, for their skins, and leave the carcasses as of little worth.' The form/skin would be ripped from the body: the matter did not matter."³⁹ With the hope of offering stereographs as proverbial peace offerings to all the world's peoples, Holmes imagined stereoscopy as a universal language of image-forms that could be replaced if particular stereographs were too culturally obscure or if a viewer did not understand the cultural context they saw before them. Holmes and Brewster both agreed that the sculptural quality of stereographs was of remarkable value for teaching, but they each had a different interpretation of how stereograph images were translated by the eye. Holmes glorified the stereoscope for representing "things unseen" by the eye; in his physician's mind, the stereoscope made "palpable" (a medical metaphor) the image in a way that photography did not. For Brewster, the stereoscope allowed a glimpse at the functioning of the eye itself, and thus idealized the eye as a monocular instrument from which the binocular could be reconstructed; his view gave primacy to the eye as superb organ.

During the late 1860s and the early 1870s, mechanical modifications and advancements to the photographic (and thus stereographic) process allowed prints or stereographs cards to be produced cheaply and quickly, although this did not mean that more Americans necessarily consumed stereograph images. Shirley Wajda describes stereography in nineteenth century America as "a popular symbol of the Victorian dedication to self-improvement through didactic pursuits."⁴⁰ Many homes owned and, indeed, displayed a stereoscope prominently in communal spaces such as the parlor or living room. Wajda notes, however, that "few Americans could afford the \$1,160 price tag of Southworth and Hawes's piano sized 'Grand Parlor Stereoscope,''' so most middle-class homes that could afford leisure items bought Brewster's modified lenticular stereoscope.⁴¹ Wajda also affirms the claim that the American consumer public was using stereoscopes and stereographs for educational

purposes, but provides visual evidence of antagonists in comic strips chastising stereograph users from becoming lazy and looking through the stereoscope all day. At this point, Wajda suggests that American stereograph companies were aware of the moral objection of over-using the stereoscope but understood its value for education and thus "acknowledged this demand [for stereographs] by supplying appropriate subject matter."42 In this way, companies like the Keystone View Company and Underwood and Underwood stimulated a demand for images that could be seen in different circumstances as "enjoyable" and thus leisurely, or "educational" and thus scientific. Wajda provides a helpful overview of the history of stereograph companies in the period immediately after the American Civil War (1861-1865) and claims that in this period twelve local and isolated stereograph companies were bought by larger corporations which merged, leaving the Keystone View Company and Underwood and Underwood as the main producers and distributors of stereoviews from the 1880s to the mid-1910s.⁴³ While the main debates concerning the nature of stereoscopic perception put forward by Wheatstone, Brewster, and Holmes may not have circulated widely, admiration for stereograph cards and stereoscopy as an indicator of an aspirational middle-to-upper-middle class lifestyle was most certainly a fixture of American public and domestic life in the period immediately preceding Ricalton's India tours.

Marketing Masculinity: James Ricalton, Underwood and Underwood, and American Expansionism

Brothers Elmer Underwood (b. 1859-1947) and Albert Underwood (b. 1862-1943), founders of the Underwood and Underwood Photograph Company, were also proponents of the sculptural model and insisted on "promoting the tactility stereographs as an improvement upon the flatness and abstraction of photographs."44 The "keenness" that Victorian stereograph viewers acquired by being incorporated into the visual regime of stereoscopy was of the same kind that Ricalton acquired growing up in 1850-1870s New York City.⁴⁵ The popularization of the stereoscope and its "views" thus fits into a classificatory scheme of similar technologies (like the kaleidoscope) produced in the nineteenth century that altered vision for the aesthetic delight of the observer, which often was re-translated through an Enlightenment optic as an educational exercise. Anne Laura Stoler's research on "intimacies of empire"⁴⁶ and education as a node in the colonial project that helps maintain and shape children into responsible citizens of the dominant empire, states that "anxieties over European [colonizer/settler] identity were amplified in anxieties about the young."⁴⁷ "European identity," as a signifier of the material conditions of "European" modernity, is an essentialist trope when referring to the subjectivities of those living in and under imperialized social spaces. But in Ricalton's particular historical instance, recognizing that a considerable amount of cultural exchange occurred between America and Britain and its colonies during the last three decades of the nineteenth century can help illuminate the complexities of his own subject position. Furthermore, future research on the conditions of working class British and American citizens living in imperial spaces and their relationship to stereoscopy as a consumptive form

of leisure or education as depicted in stereograph cards can also be considered a tangent of this line of argument.⁴⁸

Susan Kempler has studied Ricalton's stereographic prints in the context of Underwood and Underwood industry practices and provides a helpful grounding to Lucas' work on Ricalton. Kempler claims that while Underwood and Underwood published Ricalton's India Through the Stereoscope: A Journey Through Hindustan in 1907 Ricalton's Indian tours were completed during the years 1888-1889.⁴⁹ Lucas and DeLeskie both note Underwood and Underwood's publication of India Through the Stereoscope in 1907, but do not provide consistent dates for Ricalton's India tour. Lucas' dating methods are the most dubious as are his written accounts of Ricalton's life, which verge on mythological and lay claim to personal details that are not cited nor found in any archive of Ricalton's work or biography. DeLeskie provides more accurate dates for Ricalton's India tour and Kempler's work confirms DeLeskie's dates. Ricalton himself also does not date his journal passages and stereograph images and we do not know the exact date when Underwood and Underwood contracted Ricalton as a photographer. The copy of India Through the Stereoscope that I used for the research of this thesis states that it was published in 1900, seven years before the canonical dating of the monograph. The lack of consistent dating and the earlier 1900 edition of India Through the Stereoscope suggests that Underwood and Underwood hired Ricalton in the late 1890s after he went to India as an amateur explorer in the late 18880s, gaining the rights to the stereograph images around 1900. This also means that Underwood and Underwood had a general knowledge of

amateur and professional photographers in America and sought them out for their adventurous personalities or their collections of stereographic or photographic images.

James Ricalton grew up in a time when stereoscopy was experiencing its commercial heyday. From the mechanical peep show to mutoscope machines that showed comic strips in motion to the nickelodeon, viewing mechanized images for pleasure was a salient cultural phenomenon. Ricalton was born in 1844, a few years after Wheatstone and Brewster's improvements to the stereoscope and immediately during the public debate between Holmes and Brewster on the eye's role in stereoscopic viewing. Ricalton worked first as a school-teacher for twenty years during which time he became an amateur naturalist collecting and displaying in his classrooms "plant specimens, rocks, and unusual crystals, not to mention the hundreds of native artifacts and curios brought home from his many trips abroad during summer vacations."⁵⁰ In the summer of 1884 Ricalton went on a hunting expedition in South America after which "he and his entourage returned home to New Jersey in triumph, bearing game heads as trophies."⁵¹ We can begin to see the connections between Ricalton's overt usage of foreign "skins" and Holmes' metaphor of the stereoscope. His attitude and actions sound like the U.S. President Theodore Roosevelt's (in)famous game trips to far-flung places. Indeed, Ricalton's 1904 stereoscopic tour of Japan during the Russo-Japanese War (officially ended by Roosevelt via the Treaty of Portsmouth) affirms his penchant for masculine endeavors. Despite being sixty years old by the time these stereographs were made, Ricalton exhibited extreme zeal to the point where

[o]n one occasion Ricalton braved a lethal fusillade to get into position, only to witness the literal decapitation of the Japanese gunner at his side. Others in the vicinity were carried off laced with shrapnel. Ricalton miraculously returned without a scratch⁵²

As is common with war journalists and photographers, the desire to capture the picture of the action often supersedes a critical engagement with the realities of war. Even Christopher Lucas' valorization of Ricalton's efforts continues this sort of voyeurism, where the narration of dramatized violence appears as an aesthetic object in its own right, unhinged from its connection to any understanding of real suffering—the aestheticization of the "real" becomes an artistic category. Ricalton's desire as a photographer was alienated from any idea that his actions could be symbolically injurious and politically problematic.

Lucas comments on Ricalton's popularity and the riches he amassed from his partnerships with large-scale photographic firms like the Keystone View Company and popular illustrated periodicals like *Outing: an Illustrated Monthly Magazine of Recreation*⁵³ and describes his travels in a mythological register:

Indeed, Ricalton was a keen observer, with an appreciative eye for the scenic beauty of a landscape. But it was the human drama that interested him most; and he rarely missed an opportunity to photograph people in their natural settings: Japanese geishas reposing in a tea garden, Sengalese [sic] nobility taking their leisure, African devil dancers performing frenzied tribal rites. Whatever the culture or geographical locale, the former teacher's aim was to blend in with his camera as much as possible while still trying to capture the essential texture and feeling of the view before him⁵⁴

Throughout the course of his career Ricalton produced thousands of individual stereoscope cards for Underwood and Underwood. It should be noted that Underwood and Underwood was incorporated as a company in 1890, a strategic timing that

coincided with the revival of stereoscopy after a lull that had taken hold during the 1870's-1880s.⁵⁵ With the advent of faster photographic procedures and less expensive cameras, a cadre of amateur photographers sprouted up in the United States and England, temporarily hampering the stereoscope market. Plunkett contends, "[t]he success of Underwood...was not due to any fundamental change in the nature of the stereoscope. Rather, it was the innovative means they used to update the marketing, packaging and distribution of stereographs."⁵⁶ Such innovations included marketing "foreign" lands that one could step into (or back) in time to see something "exotic," "mysterious," etc. One author notes the organization of labor Underwood and Underwood implemented for their advertisement campaigns in the 1880s: "Each [of the Underwood brothers] had a force of canvassers, which they supplied with a large stock of 'scopes and views carried with them."⁵⁷ Thus, it was under the new logic of Underwood and Underwood's advertising scheme that their separate stereograph series of the "Orient" were initiated. Ricalton, being an employee of the dominant stereograph company in the world at the time, is not ideologically exempt from his actions as a photographer, but acts historically as an imperial ethnographer of sorts. As stated, Underwood and Underwood contracted Ricalton after his Indian tour of 1888-1889, implying that the stereograph company sought out individuals with substantial, ready-to-print portfolios. Around this period, the Spanish-American War (1898) stimulated American public interest about Asia and America's role as a colonial power in Asia and the Pacific Ocean. America's claim to land in the Philippines resulted in the Philippine-American War (1899-1902) that consolidated

American power in Southeast Asia and the western Pacific. In my work, despite my deep commitment to understanding India on its "own" terms, Ricalton becomes an authoritative narrator of early twentieth century Indian public life through his brand of stereoscopic ethnography—a signifier of a Euro-American imperial cartography of desire, amusement, and capital. Thus, it is possible that Underwood and Underwood collected and published Ricalton's stereographic images of India in 1900 immediately after the Spanish-American War in order to reaffirm America's need to settle "new" colonies while on a path to global political supremacy.

Chapter Three: James Ricalton in India, 1888-1889

"Seeing" India: Visual Analysis of Ricalton's Stereograph Card images

The stereoscope brought a whole variety of objects into the public eye that could be contemplated under the rubric of scientific education: natural history specimens, episodes from recent history, battles, landscapes, and people. Distant places could be consolidated into a neat set of cards with the expectation that through viewing one would acquaint themselves with "other" cultures. The decontextualization of stereographs becomes compounded when we consider the original abstraction at the level of the photographic image. Formal issues such as lighting, contrast, the position of the shot, and the overall composition of the stereograph are not givens; they had to be attuned to the specifications of the person operating the camera. The discussion of the image-producing power of the stereoscope aside, we must consider the effects that stereographers aimed for in an image and how they chose to represent that image. In this way, realism is prefigured by the photographer, the original observer of a stereographic scene. The mediation between the image and its taker constitutes a movement in social space, where the operational machinery (the camera) is used in service of a particular ideology (the desire of the photographer to represent the image). The desire to capture plants and animals, cars and buildings, landscapes and "pure" nature and "foreign" lands stemmed from a "desire to know" spurred by the colonial encounter. British superiority, despite its contested and constructed nature, had already proven to be the

catchphrase of the era, especially after 1857 when Bengal, Britain's largest colony, was officially brought under the governmentality of the Crown. But I think, much like Partha Chatterjee, that such claims to exceptionalism from this period confirm Edward Said's "utterly simple structure of the moral justification of nineteenth century imperial power" by conceding to the historical "fact" of British exceptionalism and superiority. Following this, stereographic depictions of India, or any colonized space for that matter, cannot be seen as an isolated collection of images in part because Said's Orientalism (1978) made the crucial and powerful step of moving from the figure of the "image" to the object of discourse, which is seen to construct a world, geographic domain, or ethnic grouping in a comprehensive way, rather than merely express a particular perception of something that already existed.⁵⁸ Images themselves always already express an ideological viewpoint through their representation of an event; images constitute their own discourse through the grouping of their component parts. I take up a similar line of thought when considering James Ricalton, whose stereographic works can be considered ethnographic documents that aided in constructing a palatable representation of colonial India for consumers of stereoscopes and stereograph cards.

In 1900, Underwood and Underwood published *India through the Stereoscope: A Journey through Hindustan* with Ricalton as the "conductor" of the text. The book also names him as the "Author of 'China through the Stereoscope," which alludes to the Underwood publication of his monograph and stereograph cards of the Chinese Boxer Rebellion earlier in 1900.⁵⁹ In the opening salvo of *India* *through the Stereoscope* titled "Seeing India," Ricalton sets up the ideological base of his text:

We shall be constantly in the midst of and passing through a new and strange flora and fauna, and different aspects of agriculture. In the midst of so much that is strange and unseen and unknown, you are likely to become a persistent catechist, and a persistent and intelligent catechism is the high road to knowledge⁶⁰

In the old argument of Holmes and Brewster, the stereoscope is, in this manifestation, a tool for the furthering of natural knowledge of the Indian subcontinent that can lead to intellectual refinement; indeed, perhaps this refinement comes from acquainting the mind with figures that are unfamiliar. Education through pictures, through spectacle, also leads one to a "high" intellectual understanding of culture, even if the subjects of the images display "low," uncivilized people. Contemporary critiques of Ricalton would also comment on his ability, by virtue of his corporate sponsorship and American citizenship, to render certain things seen and other unseen during his travels in India.⁶¹ Ricalton's ability to make certain things visible or invisible in an image was a feature of his position as an explorer-stereographer.

"India Through the Stereoscope" Stereograph Cards: People

For example, in card Position 36 Ricalton's description of a group of girls depicted as living near the Sutlej River in Himachal Pradesh provides insight into his multivalent articulations of masculinity and nationality (fig. 1):

we may refer to them as hill-women...Very seldom, if ever before, have they seen a European; they are shy and suspicious...They come near being beautiful; their hands and facial lines are beautifully modeled; their eyes are houri black. With fair complexions, and rosy cheeks, I am sure they would

form a tolerable quartette of Nereids...They fall in love I suppose, but have no courtship; they marry after fashion; they have children; they die and get buried in a wooden box away back in the mountains...and that's all, poor things!⁶²

The image depicts four girls ranging in age from pre-teen to late adolescence. Ricalton has positioned himself over the girls at an angle, as was common to do for stereographic prints, and depicts the four girls seated in front of him. Three girls sit in a closed posture with their faces turned towards Ricalton while one has her hands open in a slightly different pose; her gaze does not directly meet the camera. Ricalton describes the "modeled" faces of the girls, presumably suited for the sculptural rendering via stereoscope. He makes the assumption that because the girls are beautiful that they deserve to be photographed and added to his collection of images from India. He quickly returns to patronizing them after detailing their beauty and realizing that he cannot have sexual access to them based on the hereditary and local caste restrictions on marriage. This was not an uncommon rhetorical tactic in Ricalton's writings. Ricalton also refers to the girls as houris, virginal maidens said to accompany devout Muslim men in the afterlife. The usage and visual registers of the houri figure evoke sentiments of passivity as well as irrationality and violence, owing to constrictions on femininity during the colonial period that resulted in stereotypes concerning the bifurcated personalities of Muslim women.⁶³ In the same description, Ricalton refers to the girls as *nereids*, temperamental water maidens that populate the narrative tradition of classical Greek mythology. Switching between fantastic mythological creatures that share resemblance to these girls, Ricalton discursively confirms that he is binaristically referring to the Sutlej girls as "dangerous" and

unknown but also as friendly, beautiful, and sexually available. The extensive description of these girls paired with Ricalton's identification as a European indicates his assumption of a narrative voice instead of a reporting one. Additionally, based on Ricalton's comments in *India Through the Stereoscope*, Sharma contends "Ricalton was a believer in the superiority of the ruling 'white' race, and the good work that the English were doing in India...In addition, the reader finds many digressions from purely photographic matters."⁶⁴ I have already discussed the problematic nature of the term "European" as an essentialist category in the context of Ann Stoler's work; however, because Ricalton self-identifies as European (we are aware he is American) in the description for card position 36 (fig.1), we can treat his identity formation as an aspirational endeavor to relate "Europeanness" with whiteness and thus, Americanness. We can already begin to see this pattern from the examples given. His attitude, from Amazonian hunter to entranced tourist asking for photos of people for a small tip, resounds with the American attitude towards non-Western spaces as open for discovery, access, and adventure.⁶⁵

Indeed, Ricalton's engagement with and equation of the landscape of north India to local Indian women expresses a particular epistemological connection between the land and gendered Indian subjects.⁶⁶ By linking these two spheres, Ricalton participates in what Joel Snyder calls "territorial photography," an aspect of colonial imaging that reduces humans dominated by imperial tactics of land governance to the geographic territory itself.⁶⁷ Ricalton is aware of the presence of the British empire (and encourages its continuation) and ponders the changes it has on the physical landscape of the Indian subcontinent:

Throughout the vast empire pastoral scenes are novel and strange. Instead of fields of western cereal grains, the traveler sees poppy and paddy fields, and fields of indigo and jute. Palm, tea, and cocoa plantations are new features in the landscape...Few are able, personally, to visit that teeming world-empire...the stereographic itinerary affords a most realistic, permanent, and pleasurable alternative⁶⁸

Instead of examining this sight critically as a concatenation of colonial law enforcement and the modern plantation economy, Ricalton passes over it, favoring instead to designate the farming of "...tea, and cocoa" as new features of the landscape in 1900. These "new" crops, in Ricalton's view, are successful because they are ensconced in the "vast empire" of the *Raj*, the progress and wealth of which can be tracked in the form of his travelogue. This observation comes from the introduction to India through the Stereoscope, but Ricalton becomes more passionate when describing each individual stereograph. In card Position 9, the description Ricalton provides adopts a eugenicist tone (fig. 2): "When we look at these dirty, miserable people, poorly clad, half-fed, and not housed comfortably as our cattle, I want to remind you that there are probably more than one hundred millions conditioned like these in this great and populous country."⁶⁹ The image depicts several adult women at mills grinding grain while a pair of children sit on the farright side. A tree juts out from the right side of the image and a house from the left side. The figure in the foreground appears to be actively grinding grain while the others have paused to address Ricalton with their gaze. Instead of talking about what is actually depicted in this image, Ricalton uses this moment in the text to talk about

general wages in England and France in comparison to India and the poor quality of the mills depicted in the photograph. He never considers that the millet was one of the only food sources inexpensive enough to buy after the price of land rose due to the enforced strategy of British direct rule, which consolidated both common lands and the traditional *zamindari* households that had provided small loans to farmers and redistributed grain and rice after harvesting. Nor does he have knowledge of the dissolution of *Marwari* households in the late nineteenth century that provided capital to small farmers.⁷⁰ Moreover, he links the manual functioning of the stone mills with "primitiveness,"⁷¹ going to far as to imply that Indians should invest in modern mill technology. Ricalton goes on to say:

"You wonder how people live? Well, living is not so difficult as many people think. Along with a millet scone, these people will have a bowl of rice. This food, *in sufficient quantity*, would be considered as possessing ample nutriment for a horse, then why not for a man?"⁷²

Here, Ricalton poses the general question of "how [do] people live [in this place]?" and provides an answer that equates the diets of Indians living near Ahmedabad to those of a horse, making the distinction between the people depicted and an animal unclear. Ricalton is attempting to understand how anyone could subsist on a sparse amount of food and even compares a millet cake or *putu ragi* to a food item of British origin: a scone. Mary Louis Pratt's work on colonial travel writing and cultural translation helps to anchor this description by Ricalton:

The verbal painter must render momentously significant from what is, from a narrative point of view, practically a non-event...discovery in this context consisted of a gesture of converting local knowledges (discourses) into European national and continental knowledges associated with European forms and relations of power⁷³

Ethnographic forms of documentation "underwrites" any narrative it could construct about a particular culture due to the genre of ethnography within the discipline of anthropology itself which, from its beginnings, had a vested interest in an "objective" rendering of cultural practices. The space of ethnography is the space of non-event, as Pratt describes, because culture "isn't happening." An experiment is happening. One party is interested in the subjective experiences of the other without regarding its own subjectivity. Here, "national" and "continental" knowledges can refer to technologies such as stereography with local understandings of space in the Indian subcontinent being used as the silent backdrop of stereoscopic canvases. By depicting those under colonial occupation, ethnographic practices such as photography and stereoscopy provide a method of translating "culture" back into itself with the aid of grammars, dictionaries, and standards of normative behavior. But ethnographic forms of cultural translation tend to discount, as Ricalton has in fig.2, existing practices pertaining to the production of food, labor, and the maintenance of social relations.

Next, in card Position 90 (fig.3), Ricalton offers a historical description of the valley of Amer in present-day Rajasthan and gives precedence to the panoramic views shot with his stereographic camera:

Amber [sic] here was the ancient capital of Rajputana. Jeypore has been the capital for one hundred and seventy-eight years, but before Jeypore became the capital, Amber [sic] was the capital for nearly seven-hundred years...The picturesque surroundings of Amber [sic] are wonderful. It is a natural fortress as well as a rarely beautiful situation for a series of palace-buildings...There is a native grandeur in every direction—a grandeur which was defensive in time of war.⁷⁴

The foreground shows a man clad in a white *dhoti* sitting with his back to an ornamental railing. Behind him is an expansive landscape with a large hill dominating the left side of the image. Towns, roads, and natural features of the landscape are shown in the background of the image, which is decisively broken by the angled horizontal lines of the railing. The man in the foreground sits alone with on hand open on his left knee and the other clasped into a fist on his right knee. In this image, it is unclear if the man depicted is meeting Ricalton's gaze (he appears to be looking past Ricalton) but, once again, Ricalton assumes a slightly higher and angled position when capturing the scene. Nowhere in the description of card Position 90 does Ricalton mention the man sitting in the foreground of the image. Instead Ricalton chooses to recount and romanticize the warfare conducted between the different tribal emissaries of feudal⁷⁵ Rajaputana and comment on how the landscape of the Amer valley provides natural defensive and offensive advantages for a military. In this instance, Ricalton is conflating his perception of Rajputs as militaristic people with the surrounding environment that lends itself to be used for the purposes of armed combat. Ricalton is recalling the history of the Rajputana Agency, which, in 1817, became a strategic land holding and residency of the British empire after a confederation of Rajput princes, consented to act as its governors. In a sense, Ricalton is using this opportunity to emasculate the rulers of the princely states of Rajputana who surrendered vast amounts of wealth and power to British authorities at the time of the Agency's establishment. Not only did Rajputs contend with the stereotype of their people being warmongers due to the prestige given to militaristic social

organizations in Rajputana, but this stereotype was forcefully reintroduced by people like Ricalton who also mapped that stereotype onto conflicts that occurred between Indian rebels and the British during events such as the Siege of Cawnpore (1857) in which British women and children were captured and held hostage by the forces of Maratha statesmen Nana Sahib (b. 1824-1859). Ricalton's disregard for the man in card Position 90, a man not connected to Ricalton's troupe and a probable inhabitant of the Amer valley, highlights his endeavor to solely depict visual information that could benefit the continuity of the British Empire.

In Ricalton's view and in the view given to the observer of the stereograph, this geological formation indexes a victory for the British empire and a moment when a destructive element in the history of the ordered space of empire was eradicated. In short, this particular image is a memorialization of conquest and a reminder to viewers that "India is for the British (and perhaps Americans)" and not for the people represented as living in the landscape. Fig. 4 is a stereograph produced by Underwood and Underwood in 1903 and was, in all likelihood, taken by James Ricalton during his India tours. There is a similar layout of a structure in the background surrounded by hills, trees, and other natural features and a person in the foreground looking toward the observer. A man clad in white *pyjamas* (loose-fitting cotton pants) sits in the foreground with his side facing Ricalton. The man is, as in the previous example, on the right side of the foreground, backed by an ornamental railing, with an expanse of landscape behind him in the background. But in this image, the man does not face Ricalton frontally since he is presenting his side: his gaze meets Ricalton directly, but is shown as peering from behind his shoulder. Trees, the city of Udaipur, and mountains constitute the background of the image. In the description of this stereograph, an author, presumably Ricalton, states the following: "Looking from Oudi Tower (E.) over Oudeypore, with palace, town, lake and mountains all in sight" (fig. 4). Again, Ricalton does not recognize the person in the foreground of the image and draws the viewer's attention to the landscape, erasing himself in the process. These two stereograph images demonstrate Ricalton's tendency to "Other" Indian subjects living under imperial British rule to the point where the subjects themselves become invisible aspects of the image. Furthermore, it demonstrates Ricalton's understanding of stereoscopic science, since the figures in each image assume the same positions in order to make the transfer from film to stereograph easier and more precise.

In card Position 60 (fig. 5) Ricalton again references the Siege of Cawnpore, this time focusing on the geophysical location of the massacre of three hundred British subjects by the Nana Sahib's forces. Ricalton's caption for card Position 60 reads: "Peaceful now, but stained with horrible memories—north at the Massacre Ghat on the Ganges, Cawnpore."⁷⁶ The image of an unsuspecting man with cattle near the banks of the Ganges is a visually jarring counterpoint to the description Ricalton provides, due in part to the gentle demeanor of the animals and the lack of any other observable figures besides the *ghat* jutting out from the top left corner of the stereograph. The river Ganges occupies the right and median registers of the image with the cows and man occupying the foreground. Again, the visual focus is

not present in the image itself, but in the memorialization of the British lives lost at the *ghats*. Evidence of my earlier claim that Ricalton intended to emasculate the efforts of Rajputs with his description of the valley of Amer can be found in this stereograph description that reads:

We are standing on the bank of the Ganges at a spot rendered sacred by one of the cruelest and most pathetic events in the annals of India. Let us recall somewhat of the story of the Mutiny. There was a line of native kings who long ruled India called the Mahrattas. England had many wars with these rulers...The memories of this spot will remain forever. Most natives probably would gladly forget the bloody and treacherous record of Cawnpore; and it should not be forgotten that some native troops did remain faithful to the English.⁷⁷

In contrast to the Rajputs, the Maratha had a well-defined system of central governance that made them important allies in the establishment of the formal *Raj* in the years following the Rebellion of 1857. The networks of patronage and power that the Marathas controlled then became *de facto* assets of the British Crown following their retaliation against Nana Sahib and the anti-imperial retinue at Cawnpore. Ricalton's comment about the British feuds with the Marathas also neglects to mention that English-armed Maratha forces also fought against anti-imperial forces during the Siege of Cawnpore, hence his next comment concerning the steadfastness of "some native troops." Ricalton also assumes that people from Cawnpore would rather forget the uprising due to the fact that Indian forces murdered helpless bystanders, but does not ruminate on the effects that the systematization of the British colonies had on the lives of Indian civilians.

In card Position 75 (fig. 6) the image depicts six men seated in a circle outside of the Jama Masjid (1656), an important pilgrimage site for Indian Muslims. The masjid figures prominently in the background and a camel carriage occupies the left and median registers of the image. The six men are clothed in white clothes and caps that highlights them against the dark brown lawn that is the ground of the image. Ricalton focuses on the multiple "two-story camel wagon[s]"⁷⁸ shown in the background of the image. He states:

"These heavy wagons as you will readily see are clumsy and primitive. Male passengers occupy the lower story; women, children and poultry occupy the second...Fossil remains of the camel have been found and this tends to confirm the belief that it belongs to a prehistoric mammalian. It truly looks sufficiently antiquated to be prehistoric!"⁷⁹

Ricalton, in a manner befitting his previous descriptions, does not direct his attention to the Jama Masjid but to the forms of material culture, like the camel wagon, present in his view. His description in card Position 75 differs from descriptions of other Islamic architectural monuments in north India such as the Taj Mahal in that he does not believe structures like the Jama Masjid to be of aesthetic importance. Rather, Ricalton comments on the construction of the camel-wagons and ascribes the physiology of the camel to an earlier age. Once again, Ricalton's social evolutionist stance becomes apparent when he claims that the visual form of the camel—its oddly shaped humps, long legs, and lithe body—provides evidence for its inclusion in an earlier historical epoch. The camel as a mode of transport has a long social history in south Asia and particularly in northern India where caravans from Saudi Arabia transported goods, people, and customs since well before the formation of Islam beginning in the 7th and 8th centuries CE. Ricalton's co-location of the "prehistoric" camel with Indian men, women, and children suggests that he believed Indians to be in a similar classificatory schema as the camel, which would place them in a prehistoric era. This Darwinian stereotype is strengthened when we consider that he also locates food animals, such as the poultry, in the same rung of the wagon as the women and children. Further, in the last paragraph of his description on card Position 75, Ricalton states:

"The life in the foreground shows you a peculiarity of the oriental man throughout the entire eastern world; he has no knowledge of chairs, nor use for them...They squat as you see here; they sit by the hour in this fashion, smoking and chatting. There isn't much manly dignity in this couching posture, but to them it is restful and not undignified."⁸⁰

Here, the men in the stereograph image are reduced to the singular stereotype of the "oriental man" which, lacking any qualification, applies to the entirety of the "eastern world." Ricalton then claims the "oriental man" is not accustomed to using chairs, comments on how this is an undignified social practice, and ends by back-pedaling and asserting that to the men in the image sitting on the ground is not something out of the ordinary. Again, Ricalton compares his own masculine endeavors (of sitting?) against the social practices of Indian Muslims.

Compare card Position 75 to card Position 28 (fig. 7), which shows a passenger in a wagon similar to the ones shown in card position 75. Ricalton does not explain who the passenger is but, after reading his description, it is clear that he is the passenger and one of the subjects of the stereograph card. Angled at the center of the image is the *ekka* carriage with Ricalton and his guide seated closely next to one another. In the foreground, the tethered black horse features prominently while in the background dark trees open up to reveal a patch of sky. A small group taking the

same path as Ricalton occupies the left side of the image while on the right a tree shoots up vertically near the jaw of the horse. He writes: "My choice of an *ekka* rather than a tonga was the result of necessity, as I planned to stop at points en route in order to secure stereographs of desirable places.³¹ He then proceeds to give an extensive description of the construction of the wagon, far more extensive than his previous observation of the camel-wagon in card Position 75. After describing in detail the axle placement, baggage compartments, and wheels of the wagon Ricalton equates the *ekka* or carriage driver to his carriage itself: "the general aspect of a wellstocked traveling *ekka* is a snarl or conglomeration of horse, humanity, rags, and ropes."⁸² Ricalton's metaphors of objectification seem to always draw a direct parallel between the Indian people he encounters and their respective occupations or the animals used in their occupations. In some instances, like the previous example, the animal life that Ricalton compares Indian Muslims to need not even be associated with the occupations of the subjects depicted, but just in their vicinity or within the frame of the stereoscope. Card Position 28 is the only stereograph in India Through the Stereoscope that depicts Ricalton and depicts him in a way that is the inverse of the men he describes in card Position 75: off the ground, seated, and in control of the carriage. We can see that Ricalton, even though he has hired an ekka as a guide, is the one holding the reigns in this stereograph. Here, he assumes the position of full author of the image and controller of his destiny, even though he is in a place he has never been. Ricalton also chooses a more culturally salient mount than the "prehistoric" camel: his ekka drives a horse carriage.

Card Position 16 (fig. 8) depicts "Rival pot-sellers in the chatty-market, Lahore."⁸³ Ricalton's description of card Position 16 continues to document the material culture of Indian society, including the chatty, or clay pot. Three men look directly into Ricalton's camera as they sit in the foreground of the image. Clay pots with smooth, circular openings feature in the foreground of the image on the right side while more stacked pots appear on the left side middle-ground. In the background, a group of five men huddle near one another with their gazes directed at Ricalton. Ricalton's stereograph description begins by universalizing the chatty as a "vessel common to the entire Oriental world."⁸⁴ He then extols the benefits of the chatty and its versatility, stating:

[s]uch vessels are sometimes even used as boats...They are sometimes used for head-covers when the heat of the sun is intolerable...Water is boiled, rice is cooked, bread is baked, and milk is churned in chatties...Mussulmen must have their chatties at hand for ablutions five times a day before prayers, and they cannot drink water from vessels used by a 'Christian dog'...I think that group under the shelter of thatch are preparing a meal in chatties; for a moment their attention has been distracted by the photographer.⁸⁵

In this moment, Ricalton recognizes the particular usage of chatties in daily Muslim prayer rituals, which constitute an important part of *salāh* (prayer), the second doctrine of the Five Pillars of Islam. The frontality of the three figures in the foreground of the stereograph present the viewer with a more palatable image of mutual visual exchange, but Ricalton only mentions these figures as "rival pot-sellers," directing his attention more carefully to the group of men in the background who are presumably cooking using chatties. Ricalton notes that the group in the background recognizes his presence before going back to their cooking. While card Position 28 (fig. 7) depicts Ricalton visually without explicitly saying that he is the passenger, card Position 16 references Ricalton in the text of his travelogue, but does not image him. In certain points of his travel narrative, his own subjectivity and the apparent ethnographic objectivity of the stereoscopic image are made known and available to the reader and observer of his text. Still, in card Position 16, the focus on the clay vessel as a multivalent object used across Asia presents a succinct summation of Ricalton's views towards Indian material culture that correlates the primacy of clay with all of Indian civilization and, indeed, all of "Asian civilization." All activities related to the home can be conducted in chatties, so there is "great demand for these useful articles,"⁸⁶ which constitutes the economic justification for their continued production. Ricalton's orientation to the people depicted in his stereographs fluctuates between engaged observer to social commentator and this trend continues in the next set of stereograph cards which depict specific sites Ricalton visited in the course of his India tour.

"India Through the Stereoscope" Stereograph Cards: Places

Card Position 97 (fig. 9) shows "Northeast to gate towers of Hindu Temple, at Seringham [sic], near Trichinopoly, where idols' jewels are worth millions."⁸⁷ The foreground of the image shows the wooden platform Ricalton stands on as he takes the shot while just before the middle-ground the image opens up to show three *gopuram* (towers) of Srirangam as well as the central temple. Palm trees obscure the *gopuram* on the left side of the image near the foreground and haze or fog obscures

the main temple tower in the far right background. The palm trees, a generic botanical stereotype denoting paradise, leisure, and relaxation crowd the middle ground of the image while the temples in the back remain elusive and shrouded in haze. Here, the narrative of exploration is written directly into the image via Ricalton's stereographic skill: a journey through the trees lead you to riches galore. Additionally, when card Position 97 is compared to card Position 96 (fig. 10) depicting Lord Clive's estate there is a noticeable erasure of prominent features of the landscape and an intentional concealment of the temple towers. Lord Clive's estate in card Position 96, by comparison, depicts a clear street, busy with people, cut on the left by the gate of the estate and vaulted with a hill and Clive's commanding fortress. Here, the "Indian" spaces Ricalton chooses to show are obscured or made to be "mysterious" in some way while "European" (British military) spaces are shown to be highly ordered, clean, and politically important. Ricalton depicts the Vaishnava Hindu temple complex at Srirangam (c. 7th century CE) in the south Indian state of Tamil Nadu. Ricalton does not include any description of the religious life of Hindus at Srirangam, opting instead to detail the contents of the temple's treasury, which would be used to adorn and dress icons for temple festivals or processions. His description follows:

Among the jewels are two ornaments of diamonds and emeralds, and one of diamonds and rubies. One of these is valued at thirty-five thousand rupees. There are idols of gold studded with jewels. Among the many costly ornaments there is a gold bowl worth over eleven thousand rupees. There are countless other idolatrous extravagancies within those courts, and almost universal poverty under those stucco roofs extending in every direction.⁸⁸

Ricalton takes care to mention the monetary value of Srirangam Temple's treasury but he does not mention how he arrived at those particular values. Once

again, Ricalton is acting as a reporter and adopts an observational rather than narrative or imaginative tone. He also notes that "[a]t this distance we cannot study the wonderful sculpture in detail...The stones in some of those gateway arches are enormous monoliths—one is twenty-nine feet, seven inches long; four feet, five inches broad, and about eight feet thick."89 It is unclear if Ricalton ever entered the Srirangam temple complex, but it is possible he captured a stereograph at this distance because he was not allowed to bring his equipment into the sanctuary. Still, we have no evidence that he entered the complex or if he captured this image from a distance. If he did take card Position 97 from a distance and never entered the complex, we should not rely on his reporting of the dimensions of the columns or the value of the treasury's contents. As an alternative, we can see Ricalton's description in this stereograph image as a corollary against Indian poverty at the hands of the upper-caste Brahmin priests and patrons of Srirangam who, Ricalton implies, are hoarding a vast amount of wealth. In reality, temple communities and their patrons sponsor a variety of social works programs, local kitchens and shelters, schools, and public festivals. Prior to British imperial control of India, Hindu temple communities also had control over systems of land grant ownership that could be deferred to singular individuals or parts of the community. So while Ricalton's interest in the monetary value of Srirangam's jewels and the size of its columns is, on the surface, an educational moment for the viewer, there is an inherent polemical shift in the description that reorients the viewer to the superior moral and ethical codes of the

43

average American or "European," which finds poverty an unnecessary ill in society caused by those with exorbitant wealth.

Card Position 96 (fig. 10) shows "Trichinopoly, India, where Lord Clive once lived, northeast across the town to the old Citadel and famous Rock."⁹⁰ The foreground depicts a line of people and carts near the gate surrounding Clive's estate. In the background, a large mound-like hill rises above the horizon and is flanked by a plateau (described by Ricalton as fort) on the left and the sloping side of the hill on the right. In this stereograph, Ricalton references the residence of Robert Clive (b. 1725-1774), a corporate agent and manager of the British East Company, in Trichinopoly and notes Clive's participation in the Second Carnatic War (c. 1748-1763) under Stringer Lawrence (b. 1697-1775), first Commander-in-Chief of the British Raj. Clive would go on to become Commander-in-Chief of the Raj in 1756, becoming infamous for his involvement in the Black Hole of Calcutta: an event occurring at Fort William prison involving the capture and imprisonment of an inconclusive amount of British soldiers by the forces of the Nawab of Bengal, Siraj Ud Daulah (b. 1733-1757).⁹¹ In this image, Ricalton is connecting himself and his viewers to the imperial lineage of Robert Clive and other Commanders-in-chief of India in an attempt to inject the imperial history of Britain into his travelogue. For this example, Ricalton does not ruminate much on the history of Clive's residence but instead glorifies the Commander-in-Chief's success in the Carnatic Wars and his handling of the Black Hole incidence which, in part, accounted for the excessive

bloodshed caused by Clive's troops at the Battle of Plassey in 1757 and the long retribution against Indian subjects a century later during the Rebellion of 1857.

Card Position 89 (fig. 11) shows "A fascinating glimpse of Hyderabad, famous for embroideries, enamels, and lacquers."92 Perhaps one of Ricalton's bestknown stereograph cards from *India Through the Stereoscope*, card Position 89 depicts two elephant mounts with riders in the foreground with the iconic Charminar Mosque (1591) in the background. Ricalton's description starts by orienting the reader to the perspective of the image: "We are now in Hyderabad looking north, everything in sight is absolutely Oriental; this is 'Pure East.' In the shops, in the equipages and among these people we see nothing European."93 Ricalton delights in finding "nothing European" in the streets of Hyderabad and draws attention to the architectural feat of the Charminar Mosque as a feature of the urban landscape that he lauds while also commenting that it is a "scandal point or the loafer's rendezvous."94 Charminar and the surrounding square is a multivalent space that offers people the opportunity to use it in its capacity as a mosque for religious rituals or as a commercial center with spaces set aside for leisure. Ricalton does, however, comment on the religious life of Muslims connected to an architectural monument in the next example.

Card Position 76 (fig. 12), like card Position 75 (fig. 6) shows the Jama Masjid from a different vantage point and features a large group of Muslims performing *salāh* during a call to prayer in the foreground. This stereograph image depicts the Jama Masjid from an angle that highlights the marble and sandstone facades of the inner courtyard in the background. The black and white garments of the people in the image produces a visually stimulating pattern in the foreground while the background is anchored by the solid image of the Jama Masjid. Ricalton's description of this stereograph revolves around the gestures and comportments of the Muslim devotees shown in the image:

Mussulmen at prayer go through a series of postures and genuflections...here on this day all pray in mechanical rhythm in obedience to a signal from a priest within the mosque beyond the court. (Can you see the priest in his pulpit beneath the central arch?)⁹⁵

Ricalton equates the Muslim *imam* to a Christian priest, even though these two clerical professionals have drastically different ideological stances and functions within their respective religious communities. Ricalton's inclusion of the question "Can you see the priest...?" as a parenthetical remark displays his willingness to translate stereographic material that depicts "unfamiliar" Indian customs into a palatable visual analogue that resonates with the American and British consumer public. Indeed, even Ricalton's substitution of the term "pulpit" for the architecturally correct term "minbar" (which Ricalton actually describes in detail in the stereograph card Position 89 of Charminar, using "pulpit" again) demonstrates his aptitude for rendering non-Western material culture knowable for a white audience. He notes the "mechanical rhythm" of the Muslim devotees in their cycle of prayers and thus reduces the specific ritual comportments of Islam as physical aberrations. To this point Ricalton states: "Mohammed was an epileptic. It is often difficult to distinguish between a morbid intellect and one endowed with superior gifts."⁹⁶ Here, Ricalton also reduces the spiritual leader of Islam to the status of an epileptic,

drawing a direct parallel between nineteenth century anthropological definitions of tribal religion originating with visions or trances of mentally unstable personas whose charisma and deceptive story-telling allow them to amass a following of gullible people.⁹⁷ At once, Ricalton implies that while Muhammad (c. 571-632 CE) may not be a reliable doctrinal leader of Islam, Christ and the Christian way provide a necessary alternative. Ricalton does not explicitly state this in card Position 76, but in a penultimate index of "Religions of India" in the section "Christians" of *India Through the Stereoscope* he does say:

Outside of teaching a new and better religion, the charity and altruism of the Christian missionary are wide in scope, and nobler and more beneficient [sic] in influence than the ostentatious benevolence of millionaires...The suffering of the heathens is mostly owing to the darkness of ignorance, while crime and want in our own land are often in spite of the intelligence and illumination of civilization. In time of great need as in a catastrophe, should one first hasten to assist the helpful or the helpless?⁹⁸

Ricalton, a former schoolteacher, is obsessed with sharing his "discoveries" with others in an "educational" environment. The section on "Religions of India" is the last piece of formal text in *India Through the Stereoscope* before the index and in it Ricalton attempts to emphasize to the reader the benefits of Christian missionary work, particularly in India. Ricalton couches his terminology in the typical registers of Christian missionary discourse by referencing "heathens" who need to be saved from their (self-imposed) suffering through "charity." Card Position 76, then, acts as a stereotyped depiction of the kinds of "heathens" (in this case, Muslims) that could convert to Christianity. Card Position 30 (fig. 13) depicts Christ Church (1857) in Shimla, Himachal Pradesh. Ricalton details the architects and reigning *Raj* officers that erected Christ Church in the early 1850s before turning to the mountainscape of the Shimla countryside:

We can discover the contour of the mountains beyond the foothills to the monarch ranges lying far north; the ranges such as you see here constitute the world of mountains to which I have already referred, not in regular chains as those appear to be, but an incomprehensible world-chaos of ranges, peaks, spurs, valleys, ravines, and gorges, bounded on the far south by hazy plains and on the distant north by snow peaks piercing the sky.⁹⁹

In the above description, Ricalton spends virtually no energy explaining Christ Church nor does he aggrandize the efforts of the Church or Christian missionaries. Ricalton's description becomes an ecological vision that grips the reader and reveals his alignment with a form of "planetary consciousness," a name given by Mary Louis Pratt to the categorical imperative and form of scientific classification developed by Western European Enlightenment and Counter-Enlightenment thinkers during the seventeenth, eighteenth, and nineteenth centuries.¹⁰⁰ Card Position 30 contains the busiest foreground of any stereograph card we have seen thus far from Ricalton's collection with at least thirty people populating one of the entrances to Christ Church. In the background, mountains are shown covered in mist and snow covers the ground and buildings in the foreground. In this moment, Ricalton's ethnographic acumen shifts to the eye of a surveyor, analyzing the landscape for ordered patterns amidst entropic earth.¹⁰¹ Ricalton often comments on the features of the landscape he is viewing, but the description in card Position 30 is perhaps his most emotional and imprecise out of his entire travelogue. Ricalton frequently provides dimensions or

estimates of the size, length, or distance of the monuments and natural landscapes that he images in *India Through the Stereoscope*, so his authorial choice to describe Shimla's landscape in the above terms signals a shift into the realm of the sensorial.

"India Through the Stereoscope" Stereograph Cards: Practices

Card Position 10 (fig. 14) depicts a Jain ascetic performing penance among four sacrificial fires, his back turned to the observer and his head covered. Ashen slopes in the background create a dark backdrop for the ascetic in the middle ground of the image. Smoke billows around the body of the ascetic and his back is turned, facing away from Ricalton's gaze. Ricalton's description of this stereograph begins by commenting on the ascetic:

How strange are the eccentricities of the human mind! This man is seated under a tropical, meridian sun; that is not enough. He is, as you see, surrounded by fires of dried cow-dung which make a strong heat with little smoke—he has placed a cloth over his mouth and nose to guard against the smoke.He is doing penance. What must his sins have been to require this atonement! What a price to pay for a purified heart!...For thirty years he has lived in this cave and for ten years he has not for a day failed in his selfimposed purgatorial penance.¹⁰²

Extreme ascetic practices across sectarian religious groups such as Jains, Buddhists, Hindus, and Sikhs in India are often related to the purification of various bodies physical, mental, astral, metaphysical—and is an expression of a pan-Indian ritual comportment to sacrifice as a non-doctrinal form of meaning-making. In Jainism, *tapas* (inner-fire; penance) take the form of violence against the physical body of the penitent and constitute an important factor in Indian renunciate discourses. Ricalton glosses over the specificities of the ascetic traditions of Mt. Abu in Gujarat and

associates the burning of the ascetic by intense heat to be a form of purgatory. Here Ricalton conflates the current physical state of the ascetic with a Christian theological metaphor for the transmigration of the "soul" to a more enlightened plane: the opposite goal of Indian ascetic traditions that aim to exit the cycle of soul transmigration entirely. Ricalton questions what "sins" the ascetic incurred to need this type of spiritual purification, but the conceptual framework of "sin" is absent in Indian ascetic traditions. A more closely aligned concept would surely correlate to *dharma*, or "divine responsibility," which appears in both orthodox and heterodox sects of Hinduism, Buddhism, and Jainism. Moreover, the strange nature of the ascetic's penance yields potential economic benefits in Ricalton's description: "One traveler claims he saw a fakir in India who never ate at all, that he carried a black stone which he sucked instead of taking food, and that he was rolling in obesity at forty years of age. Those black stones would sell in New York!"¹⁰³ Ricalton's narrative compulsion to monetize an object with allegedly "mystical" powers of energy generation exposes the system of capitalist branding and advertising that he was accustomed to in the United States and further illustrates his commitment to surveilling Indian social practices for potential monetary gain.

Card Position 44 (fig. 15) depicts two men handling a variety of snakes in the foreground with several men dressed in white in the background. The implements of snake-handling lay on a cloth in front of the two seated "charmers." Ricalton's narrative treatment of Card Position 44 draws on an Orientalized history of "snake charmers" in India being associated with the dark arts, crime, and other "anti-modern"

cultural practices.¹⁰⁴ Ricalton discounts the trade of snake hypnosis for entertainment and the procurement of antivenins and states that

[t]here is probably nothing in India which more clearly shows the benighted ignorance of the masses than their folk-lore and their superstitions concerning snakes...The absurdity of what pretends to be snake-charming should be obvious to any observer.¹⁰⁵

Ricalton proceeds to spend three pages of text criticizing the practice of snakecharming as a pointless and lazy endeavor. Towards the end of his anti-snake charmer rant, Ricalton makes another theological claim: "In India many more women than men are bitten by snakes—here is the eternal and inevitable law of retribution eternity is still between the serpent and the woman."¹⁰⁶ Ricalton's serious conflation of Eve's Fall into Sin with the fact that Indian women are more susceptible to snake bites is outlandish at best and racist and sexist at worst, favoring to place the bane of Western civilization (the Fall from God's grace) on the bodies of Indian women. Again we see Ricalton's brand of stereoscopic ethnography that works to conceal his own presence in the process of photographic critique while designating others as intellectually or morally inferior.

Card Position 48 (fig. 16) depicts the killing of a several goats at the Kalighat temple (1809) in Calcutta, West Bengal. There is a bound goat in the immediate foreground of the image that is surrounded by a small group to the left and two on the right. A priest holds the goat while another raises a sacrificial knife above his head. A luminescent trail of liquid (presumably blood from other sacrifices) weaves its way from the foreground to the background of the image and a temple façade can be seen in the background. Ricalton correctly identifies the slaying of the goats with the local Durga Puja festival, during which hundreds, if not thousands, of live animal sacrifices take place throughout the city. A common topic of disdain for British and American travelers to India, descriptions of sacrifice of live animal offerings often take on a morbid tone and instill negative emotions in readers. Ricalton questions the effectiveness of the sacrifices at Kalighat by saying: "How far these sacrifices are to gratify the blood-hunger of Kali, and how far to put pice¹⁰⁷ in the temple coffers and advance the price of meat, we are all free to imagine."¹⁰⁸ Again, Ricalton admonishes Hindu temple authorities for "wasting" goods on the production of sacrifices and raising the price of meat all for the superstitious "blood-hunger" of the Hindu goddess, Kali. Ricalton further advances the idea that Brahmin priests and temple authorities are members of an underground crime ring and links them to a stereotyped depiction of *thuggees* or thugs¹⁰⁹:

You have read of Thuggism which refers to a class of professional robbers and murderers in India—a kind of secret religious fraternity, murdering stealthily by strangling, by breaking the backs of their victims, or by poisoning with datura...It is admitted that Thuggism had its origin in Kaliworship.¹¹⁰

In fact, "thuggism" is a constructed colonial category that refers to a wide array of criminal practices performed by Indians against British officers and their families living in India during the imperial period.¹¹¹ The *thuggees* Ricalton describes also did not hold allegiances to any one particular religious group, but were a diverse subsection of the Indian population that dealt in organized and petty crime. In this example, Ricalton attempts to instrumentalize a popular cultural stereotype about Indians to demonize Hindu ritual practices. The ideological goal of this type of

cultural stereotyping would be, again, to showcase the negative aspects of Hinduism and reinforce the moral superiority of Christianity. Conclusions: Optics of American Empire: India as Imagined Site/Sight

James Ricalton's view of imperial India was a multivalent stereotyped landscape. To him, India was a dirty, undemocratic wasteland that did not bear the proper signs of civilized society. However, in this "mystic wonderland" beautiful nymph-like women roamed the mountainsides and rational British men tested themselves against the "uncivilized" forces of militaristic tribes in battle. The stereoscope provided Ricalton with views of India that were "close up at a distance"¹¹² to borrow Laura Kurgan's words. The resulting stereoscope cards appealed to consumers in the Western world because of their exotic otherness and their novel three-dimensional sculptural form. Ricalton's stereographs brought India into tens of thousands of British and Americans homes, many of whom were seeing the people, places, and practices of the Indian subcontinent for the first time. In many ways, revivalist twentieth century stereography championed by Underwood and Underwood was used as a tool to educate viewers about the British empire and acted as a form of remote sensation that vastly extended the human sensory organs into a variety of locations. The popular dissemination of stereoscopes and stereographic ethnography in many places in Asia, Africa, South America and Oceania was an extension of the colonial project of societal control that aimed at familiarizing the Euro-American public with colonized spaces, people and their material cultures. Like skins kept and preserved, stereographic ethnography provided a tactile sensation of ownership and control over unknown and confusing visual material. Stereoscopic ethnography as an intersection of ethnographic photographic practice and

standardized American corporate photography deployed by figures such as Ricalton acted as an instrument of social documentation that embedded the ideologies of social Darwinism and spatial control into its design.

Ricalton's nebulous orientation to stereoscopy in India elicits more potential research questions, but it is important to discuss how his ideological project converged with those of both 1) the nascent American empire and 2) the declining British empire. Borrowing Mary Louis Pratt's terminology again, Ricalton's stereoscopic tours functioned within the operational logic of "neocolonial modernity."¹¹³ Different from colonial modernity, which focuses on the mercantilist occupation and regulation of a territory, in "neocolonial modernity" "travel is the code that expresses the neocolonial relationship."¹¹⁴ Attuned with his "imperial eyes" that desired a specific object, the unattainable object of a universally accessible India, Ricalton imagined something that was hyper-real and at the same time a fiction. His imaginative narratives and stereographic travelogue represent what the stereoscope produces in general; a sculptural object that invites touch, sensation, grasping, understanding and penetration, but which ultimately remains imprisoned in mere figurality, the ghost and child of the doubled photographic image. Ricalton's representations of British imperial India, then, fortify the ideology of American imperialism and exceptionalism, which relegates all other social spaces to the pictorial— available to the world to see and consume as objects. Could we perhaps see the entirety of the world as America's global frontier in the early twentieth century? With the refinement of ships that used coal, oil, and steam, the laboratory of

the railway, and early aerospace innovations, the imagined border separating America from the "rest of the world" began to recede.¹¹⁵ The American public's perceived intellectual and moral ascendency paired with Roosevelt's policy of "big stick" imperialism and William McKinley's (b. 1843-1901) involvement in the Spanish-American War (1898) that essentially stalemated countries into giving the U.S. land holdings in Asia and the Pacific after 1898, opened endless possibilities for constructing "nature" in ways that appealed to Americans. More than wanting to know about India, the goal was always to dominate a space, visually, by controlling the contents of the stereographic image. Subsumed under this category of movement, control over the visual contents of the image results in a particular structure of feeling that underwrites the space in question and provides a certain mastery of its experiential dimensions. Ricalton's response to poverty was the common Western liberal response: it must be stopped because it is preventable; resources exist to end poverty. But the discernible forms of poverty or disease were readable to Ricalton because Western society categorizes problems based on negative differentiation; i.e. Europe and America have eradicated disease and poverty (through empire) and thus have the tools to combat it. Whether or not this type of negative differentiation was factually true is irrelevant because the exercise of depicting the stereotypes of "Others" took on a narrative valence, through stereographs, that exaggerated the "negative" aspects or conditions of Indian public life and used these images to embolden borders between racialized communities and ethnic groups in the United States.

56

I have shown some of the political implications of viewing James Ricalton's stereographic work in India as naturalized art objects or items of consumer pleasure. Ricalton's placement as an engaged, though problematic, American observer of Indian public life at the turn of the twentieth century presents challenging future research questions. A full visual analysis of his collection of stereographs on India requires much more work and historical contextualization. Ricalton's stereograph cards and commentary comprise a small archive in themselves and demonstrate that he was dedicated to his craft in a way that belied a critical interpretation of his own work. Ricalton's tours served to reinforce the surveillance and consumption of India as a site/sight of the "real" as well as conceptually degrade its "sights" to the level of photographic exploitation and stereoscopic ethnography. Underwood and Underwood, as the largest stereoscope manufacturer in the world at the time, cannot be seen as a neutral force that merely provided entertainment to the American and British consumer public. In this instance, American business, industry, the photographic enterprise as well as British ocular science must be implicated in the imperial project if there is to be a meaningful debate about how our forms of seeing and interpreting the "natural" world changed radically over the course of the last century.

Appendix 1: Figures from James Ricalton's *India Through the Stereoscope: A Journey Through Hindustan*, New York: Underwood and Underwood Publishing,
1900. All figures are from this source and the accompanying text is Ricalton's
description unless noted otherwise. The figure number is followed by a description.

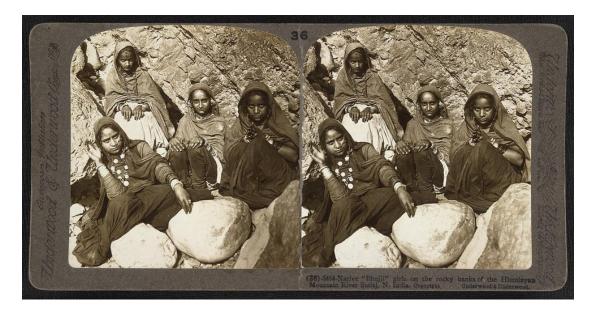


Fig. 1 "Position 36. Native Bhuji girls on the rocky banks of the Himalyan mountain river Sutlej, N. India." Ricalton, 1900.

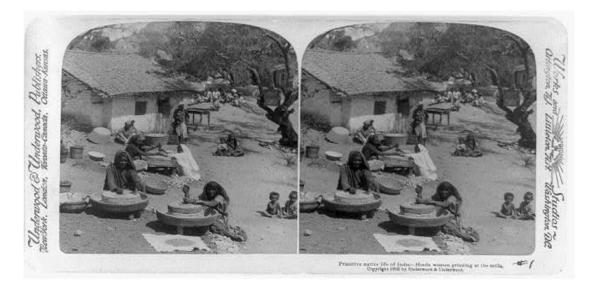


Fig. 2 "Position 9. Primitive native life in India-Hindu women grinding at the mills."

Ricalton, 1900.



Fig. 3 "Position 90. The scene of dead splendors—looking across the ancient city of Amber to mountain fortress—India." Ricalton, 1900.

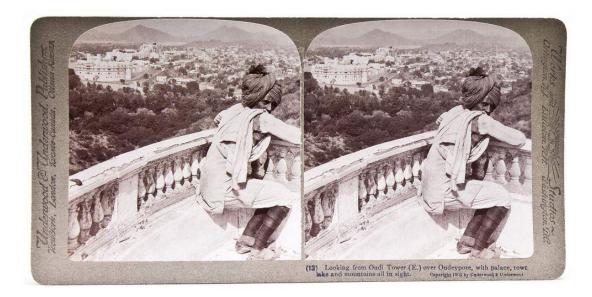


Fig. 4 "Looking from Oudi Tower (E.) over Oudeypore, with palace, town, lake, and mountains all in sight." Ricalton, 1903.

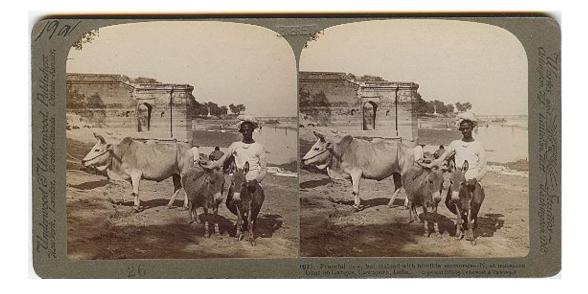


Fig. 5 "Position 60. Peaceful now, but stained with horrible memories—north at the Massacre Ghat on the Ganges, Cawnpore." Ricalton, 1900.

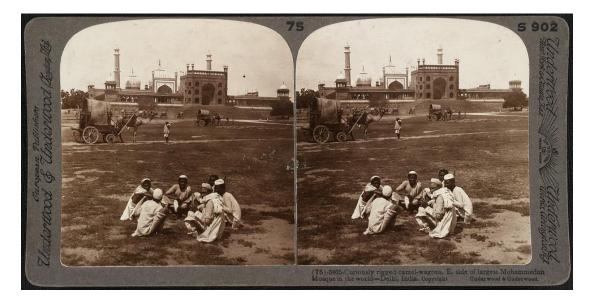


Fig. 6 "Position 75. Curiously rigged camel-wagons, E. side of largest Mohammedan [Muslim] Mosque in the world—Delhi, India." Ricalton, 1900.



Fig. 7 "Position 28. A hill-country ekka with passenger and baggage coming from Cashmere to Murree." Ricalton, 1900.

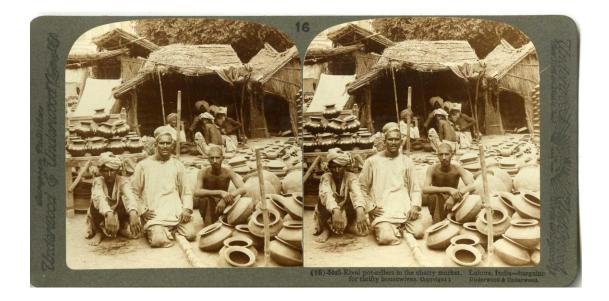


Fig. 8 "Position 16. Rival pot-sellers in the chatty market. For thrifty housewives."

Ricalton, 1900.



Fig. 9 "Position 97. N.E. to gate towers of Seringham temple, Tricinopoly, India,

where idols' jewels are worth millions." Ricalton, 1900.

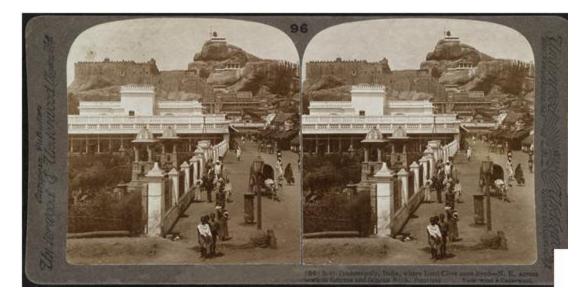


Fig. 10 "Position 96. Trichinopoly, India, where Lord Clive once lived—N.E. across town to fortress and famous Rock." Ricalton, 1900.

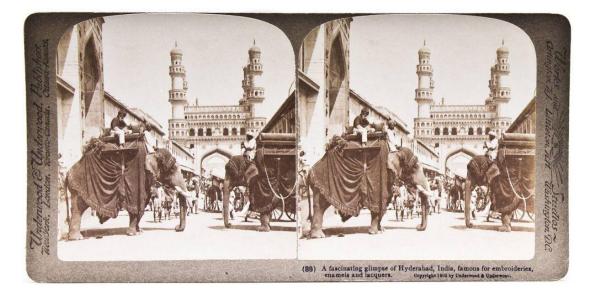


Fig. 11 "Position 89. A fascinating glimpse of Hyderabad, India, famous for embroideries, enamels and lacquers." Ricalton, 1900.



Fig. 12 "Position 76. Devout Mohammedens prostrate at prayer time—Jumma Musjid, India's greatest mosque, Delhi." Ricalton, 1900.



Fig. 13 "Position 30. Before Christ Church, at Simla. India's charming 'Summer Capital' in the Himalayan Mountains." Ricalton, 1900.



Fig. 14 "Position 10. Hermit at Gem Lake, doing penance—exposed to mid-day sun and intense fires—Mt. Abu, India." Ricalton, 1900.

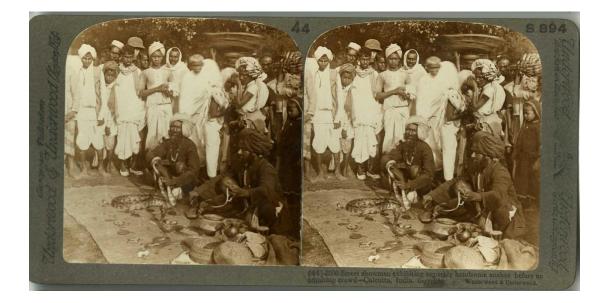


Fig. 15 "Position 44. Street showman exhibiting superbly handsome snakes before an admiring crowd—Calcutta, India." Ricalton, 1900.



Fig. 16 "Position 48. Seven goats slain but Kali wants more—horrid sacrifice to the Hindu Goddess—Calcutta, India." Ricalton, 1900.

Notes

³ DeLeskie 2000: 138.

⁴ The speculative bounds of what constitutes "ethnography" in the contemporary academic climate are vast and much work has been done on attempting to re-envision previously unaccounted-for modes of colonial knowledge production as forms of ethnography. Rather than assuming that ethnography is a neutral or impartial mode of knowledge production implemented by academics in disciplines across academia such as anthropology, religious studies, linguistics, oral literature, and folkloristics, I am participating in a speculative research practice that understands the racial, colorist, gender, class, and economic profiling of colonized subjects to be a form of ethnography of the self), which shifted the disciplinary boundaries of ethnography and questioned the assumed, inherent objectivity of ethnographic research, see Crapanzano 1980; Clifford and Marcus 1986; Weber 1985; Clifford 1983; Marcus and Fischer 1986; Burke 1990; Scherer 1992.

⁵ Hevia 2014.

⁶ Chakrabarty 1992: 21.

⁷ Primitive accumulation refers to the gradual siphoning of resources from a colonized or otherwise dominated community to be used as the initial capital for the formation of a new market or sub-section of the market. Used by Karl Marx (b.1818-1883) in his *Grundrisse* (1939), the term "primitive" has no connection or reference to colonized or 'Othered' peoples, but is used to denote that the capital used is "newly" derived from novel resources or markets. See David Harvey (2003) *A New Imperialism*, chapter 4"Accumulation by Dispossession" for more details. ⁸ El Shakri 2007.

⁹ Birla 2009: 67-103. Birla describes the situation of *Marwari* merchants in late nineteenth and early twentieth century Rajasthan in northern India being stripped of their hereditary and professional assets through British *Raj* regulations and taxation as one instance of the systematic dispossession of Indian subjects. As emerging capitalists, the *Marwari* posed a threat to the prevailing system of British finance and the capitalist bureaucracy. For an example of this phenomenon that affected women and the performing arts see Soneji 2012 and Srinivasan 1988.

¹⁰ See David Howes 2003 and his more recent work at the Centre for Sensory Studies at Concordia University. Additionally, Hamann 2010 has examined the sensory extensions of the material culture of luxury items such as mirrors depicted in classical works of Western art and linked their production to an emerging Western European capitalist world system.

¹¹ Crary 1990: 16.

¹² *Ibid.*, 18.

¹ See Daston and Galison 2007: 9.

² Bak 2012: 148.

¹⁵ Silverman 1993; Malin 2007; Edwards 2008.

¹⁶ For instance, Bayly 1983; Bayly 1996; Chatterjee 1998; Cohn 1996; Dirks 2001; Inden 1990; Mitter 1977; Nandy 1983; Nandy 2007.

¹⁷ Dewan and Hutton 2013; Karlekar 2005.

¹⁸ Allana and Depelchin 2014; Chaudhary 2012; Dehejia and Allen 2000; Falconer 2001; Worswick and Embree 1976.

- ¹⁹ Pinney 1997; Pinney 2008.
- ²⁰ Bhabha 1994: 66.
- ²¹ Arnold 2014: 54-55.
- ²² Barker 2000.
- ²³ Arnold 2014: 29; Barker 2000: 123.
- ²⁴ Nordström 1991.
- ²⁵ Earle 1979; Merrin 2005.
- ²⁶ Wheatstone 1838.
- ²⁷ Silverman 1993: 729.

²⁸ Wheatstone's observations relied on the infallibility of the eye as a lens and simply applied the concepts of physical optics onto the perceptive function of the eye. It is now know that depth-perception is caused by a number of neurological and optical factors and not by the mere lens-like qualities of the eye alone. See Ono and Wade 1985 and 2012 and Wade 1987 for a discussion of Wheatstone's cognitive approach to optical science.

- ²⁹ Stevens 1881: 546.
- ³⁰ *Ibid.*, 548.

³¹ Edwards 2008; Trotter 2004; Wedel 2015.

- ³²Silverman 1993: 730.
- ³³ Plunkett 2013: 393.
- ³⁴ Silverman 1993: 736.
- ³⁵ Plunkett: 2013: 394.
- ³⁶ Ellenbogen 2010: 16.

³⁷ Shloss 1981; West 1996.

¹³ Lefebvre 1990: 34. Lefebvre's use of the term "the Real" resonates with similar descriptions provided by art critic Hal Foster in his *The Return of the Real: The Avant-Garde at the End of the Century* 1996 in which he claims that institutional gallery art from the 1980's to the 1990's began referencing 'real' that is *historical* events and placing them in conversation with the social histories of art. In this sense, "the Real" is a heuristic modifier used to denote the implementation of a historical sensitivity and acuity to the performance of art and its self-reflection as well as engaging with an archive that aligned with similar themes or events that artist was intending to portray. "The Real" often focused on moments of historical trauma enacted upon black or brown communities or the contemporary conditions of people from marginalized groups, such as homeless queer youth.

¹⁴ *Ibid.*, 33.

³⁸ Plunkett 2013: 396.

³⁹ *Ibid.*, 396.

⁴⁰ Wajda 1992: 113.

⁴¹ *Ibid.*, 115.

⁴² *Ibid.*, 116.

⁴³ *Ibid.*, 118.

⁴⁴ Plunkett 2013: 389.

⁴⁵ Taft 1964 [1938].

⁴⁶ Stoler often focuses on bureaucratic or educational archival material that highlights the micro-transactions of empire and favors a critical race and feminist studies methodological framework to view the constructed nature of the nuclear family as a symbol of the effectiveness of the social formation of empires. Stoler's own engagement with histories of Dutch colonization and imperialism in Indonesia and other parts of southeast Asia lends itself to studying the early imperial political formation of the United States in the nineteenth century by focusing on the gendered and racialized spaces of nurseries and early Native American boarding schools. See Stoler 2006.

⁴⁷ *Ibid.*, 43.

⁴⁸ I discuss the possibility of reading Ricalton's stereographs as linked to America's nascent political formation as an empire on pages 31-32 and on pages 62-63 in "Conclusions."

- ⁴⁹ Kempler 1991.
- ⁵⁰ Lucas 1990: 30.
- ⁵¹ *Ibid.*, 31.
- ⁵² *Ibid.*, 34.
- ⁵³ Ricalton 1887.
- ⁵⁴ *Ibid.*, 34.
- ⁵⁵ Dominici 2015; Edwards 2008.
- ⁵⁶ Plunkett 2008: 240.
- ⁵⁷ Wilson 1894: 68.
- ⁵⁸ Thomas 1994: 37.
- ⁵⁹ Ricalton 1901.
- ⁶⁰ 1900: 15; my emphasis.
- ⁶¹ Arnold 2014; Malin 2007; Natale 2012; Singh 1996.
- ⁶² Ricalton 1900: 126.
- ⁶³ Nerina 2007: 84.
- ⁶⁴ Sharma 1987: 54.

⁶⁵ The connection between touristic travel practices and stereoscopy in relation to U.S. expansionism has been examined in detail in DeLeskie 2000: 103-112 and Dominici 2015.

⁶⁶ For an extensive discussion of this phenomenon in colonial and modern India, see Ramaswamy 2009.

⁶⁷Synder 2002 [1994].

⁷⁰ Birla 2009: 13-18.

⁷¹ This is a moment when the term "primitiveness" or "primitive" refers exclusively to a racist and racialized temporal conscription of "non-Western" (or perhaps "non-American" would work better in this instance) people's contemporary development to a prehistoric period, where current social formations, rituals, and forms of meaning-making are seen as "survivals" of earlier periods of historical time. Such terminology is the ideological legacy of British anthropologists such as E.B. Tylor (b. 1832-1917) and Herbert Spencer (b. 1820-1903) whose brand of social evolutionism borrowed its classificatory schemas from Darwinian theories of natural selection. The social evolutionist stance of "primitivism" went on to influence social anthropologists like the American scholar Lewis Henry Morgan (b. 1818-1881) and James Frazer (b. 1854-1941), whose cross-cultural study of "primitive" mythology and religious practices, *The Golden Bough* (1890), remained a staple text in studies of the anthropology of religion. Historians of religion such as Joseph Campbell (b. 1904-1987) and Huston Smith (b. 1919-2016) are other examples of primitivist reformists. ⁷² Ricalton 1900: 47; emphasis original.

⁷³ Pratt 2008 [1992]: 198.

⁷⁴ Ricalton 1900: 292-293.

⁷⁵ Indian feudalism has a contested historiographic genealogy and is a particularly problematic temporal classification of what has been periodized as "medieval" Indian society ranging from 200 BCE-1600 CE or the establishment of the Dutch and British East India Companies and the incipient colonial period. Ram Sharan Sharma upholds this paradigm in his early studies of Indian feudalism in the ancient period and in his more recent work, *Early Medieval Indian Society: A Study in Feudalisation* 2003 [2001], which relies primarily on Marxist critiques of capital and wealth accumulation to explain "feudal" India. The placement of Marxist economic teleologies that have been applied to European feudal societies alongside Indian social organizations that resemble feudalism is often critiqued for its Eurocentric bias against indigenous non-Marxist forms of economic or historical thought. For a detailed discussion see Harbans Mukhia's edited volume *The Feudalism Debate* 1999, especially "Was There Feudalism in Indian History" (34-82) and "How Feudal Was Indian Feudalism?" (82-112).

- ⁷⁶ Ricalton 1900: 204.
- ⁷⁷ *Ibid.*, 206-207.
- ⁷⁸ *Ibid.*, 245.
- ⁷⁹ *Ibid.*, 246.
- ⁸⁰*Ibid.* 248.
- ⁸¹ *Ibid.*, 100.
- ⁸² *Ibid.*, 101.

⁶⁸ Ricalton 1900: 10-11.

⁶⁹ *Ibid.*, 46.

- ⁸³ *Ibid.*, 68.
- ⁸⁴ *Ibid.*, 68.
- ⁸⁵ *Ibid.*,68-69.
- ⁸⁶ *Ibid.*, 69.
- ⁸⁷ *Ibid.*, 314.
- ⁸⁸ *Ibid.*, 316.
- ⁸⁹ *Ibid.*, 315.
- ⁹⁰ *Ibid.*, 310.

⁹¹ For more on this incident and its nebulous historiographic representation, see Chatterjee 2012.

⁹² Ricalton 1900: 298.

- ⁹³ *Ibid.*, 298.
- ⁹⁴ *Ibid.*, 299.
- ⁹⁵ *Ibid.*, 249-250.
- ⁹⁶ *Ibid.*, 250.
- ⁹⁷ See endnote 63.
- ⁹⁸ Ricalton 1900: 379.
- ⁹⁹ *Ibid.*, 110.
- ¹⁰⁰ Pratt 2008 [1992]: 15.
- ¹⁰¹ Arnold 2014; Bantjes 2015; Barker 2000.
- ¹⁰² Ricalton 1900: 50.
- ¹⁰³ *Ibid.*, 50.

¹⁰⁴ For a contemporary debate on the legacies of civilizationalism and the British Broadcasting Company's recent statements against snake charmers in India see <u>https://www.thequint.com/news/india/bbc-snake-charmers-modernity-twitter</u>.

¹⁰⁵ Ricalton 1900: 152.

¹⁰⁶ *Ibid.*, 148.

¹⁰⁷ "Pice" refers to a small unit of money in areas of current day India and Pakistan formerly occupied by the British *Raj*.

¹⁰⁸ *Ibid.*, 162.

¹⁰⁹ Chatterjee notes that the *thuggee* was one of the prevailing stereotypes of Indian subjects of the British empire that circulated heavily outside of India in the eighteenth and nineteenth centuries. For a detailed historical overview of the term and its ideological bases, see Chatterjee 1998:125-141.

- ¹¹⁰ Ricalton 1900: 163.
- ¹¹¹ Chatterjee 1998: 3-27.
- ¹¹² Kurgan 2013.
- ¹¹³ Pratt 2008: 227.
- ¹¹⁴ *Ibid.*, 227.

¹¹⁵ Hall 1996.

Bibliography

- Allana, Rahaab and Davy Depelchin. 2014. Unveiling India: The Early Lensmen, 1850-1910. Ahmedabad: Mapin Publishing.
- Arnold, David. 2014 [2006]. The Tropics and the Traveling Gaze: India, Landscape, and Science, 1800-1856. Seattle: University of Washington Press.
- Bak, Meredith K. 2012. "Democracy and Discipline: Object lessons and the stereoscope in American education, 1870-1920." *Early Popular Visual Culture*. Vol. 10 (2): 147-167.
- Bantjes, Rod. 2015. "Reading Stereoviews: The Aesthetics of Monstrous Space." *History of Photography*. Vol. 39(1): 33-55.
- Barker, Jennifer. 2000. *The Tactile Eye: Touch and the Cinematic Experience*. Berkeley: University of California Press.
- Bayly, C.A. 1983. Rulers, Townsmen, and Bazaars: North Indian Society in the Age of British Expansion, 1780-1870. Cambridge: Cambridge University Press.
- -----. 1996. Empire and Information: Intelligence-gathering and Social Communication in India, 1780-1870. Cambridge: Cambridge University Press.
- Bhabha, Homi K. 1994. "The Other Question: Stereotype, Discrimination, and the Discourse of Colonialism." *The Location of Culture*. London: Routledge. 66-85.

Birla, Ritu. 2009. *Stages of Capital: Law, Culture, and Market Governance in Late Colonial India*. Durham: Duke University Press.

- Burke, Peter. 1990. "Historians, Anthropologists, and Symbols." In *Culture Through Time: Anthropological Approaches*. Emiko Ohnuki-Tierney, ed. Stanford: Stanford University Press. 268-283.
- Chakrabarty, Dipesh. 1992. "Postcoloniality and the Artifice of History: Who Speaks for 'Indian' Pasts?" *Representations*. No. 37 (Imperial Fantasies and Postcolonial Histories): 1-26.
- Chatterjee, Amal. 1998. Representations of India, 1740-1840: The Creation of India in the Colonial Imagination. London: Macmillan Press.
- Chatterjee, Partha. 2012. *Black Hole of Empire: History of a Global Practice of Power*. Princeton: Princeton UP.
- Chaudhary, Zahid R. 2012. *Afterimage of Empire: Photography in Nineteenth Century India*. Minneapolis: University of Minnesota Press.
- Clifford, James. 1983. "On Ethnographic Authority." *Representations*. No. 2: 118-146.
- Clifford, James and George Marcus. 1986. Writing Culture: The Poetics and Politics of Ethnography. James Clifford and George Marcus, eds. Berkeley: University of California Press.
- Cohn, Bernard. 1996. Colonialism and its Forms of Knowledge: The British in India. Princeton: Princeton University Press.

- Crapanzano, Vincent. 1980. *Tuhami: Portrait of a Moroccan*. Chicago: University of Chicago Press.
- Crary, Jonathan. 1990. Techniques of the Observer: On Vision and Modernity in the Nineteenth Century. Cambridge: MIT Press.

Daston, Lorraine J. and Peter Galison. 2007. Objectivity. New York: Zone Books.

- Dehejia, Vidya and Charles Allen. 2000. India through the Lens: Photography, 1840-
 - 1911. Washington D.C.: Freer and Sackler Gallery of Art, Smithsonian Press.
- DeLeskie, Robert. 2000. *The Underwood Stereograph: A Historical and Cultural Analysis*. Master's Thesis. Montreal: Concordia University.
- Dewan, Deepali and Deborah Hutton. 2013. *Raja Deen Dayal: Artist-Photographer* in 19th-Century India. Ahmedabad: Mapin Publishing.
- Dirks, Nicholas. 2001. *Castes of Mind: Colonialism and the Making of Modern India*. Princeton: Princeton University Press.
- Dominici, Sara. 2015. "Tourist Photographers and the Promotion of Travel: the Polytechnic Touring Association, 1888-1939." *Photography and Culture*. Vol. 8 (3): 297-323.
- Earle, Edward W. 1979. *The Stereograph in America: A Cultural History*. New York: The Visual Studies Workshop Press.

Edwards, Elizabeth. 2008. "Straightforward and Ordered: Amateur Photographic Surveys and Scientific Aspiration, 1885-1914." *Photography and Culture*. Vol. 1 (2): 185-210.

- Ellenbogen, Josh. 2010. "The Eye of the Sun and the Eye of God." *Visual Resources: An International Journal of Documentation*. Vol. 26 (2): 113-130.
- El Shakri, Omnia. 2007. *The Great Social Laboratory: Subjects of Knowledge in Colonial and Postcolonial Egypt.* Stanford: Stanford University Press.
- Falconer, John. 2001. India: Pioneering Photographers, 1850-1900. London: The British Library.
- Hall, Stuart. 1996. "The West and the Rest: Discourse and Power." In *Modernity: An Introduction to Modern Societies*. Stuart Hall, David Held, Don Hubert, and Kenneth Thomason, eds. Oxford: Wiley-Blackwell Publishing. 184-227.
- Hamann, Bryan Ellsworth. 2010. "The Mirrors of *Las Meninas*: Cochineal, Silver, and Clay." *Art* Bulletin. Vol. 92 (1/2): 6-35.

Harvey, David. 2003. The New Imperialism. Oxford: Oxford University Press.

- Hevia, James. 2014. "The Photography Complex: Exposing Boxer-Era China (1900-1901), Making Civilization." In *Empires of Vision: A Reader*. Martin Jay and Sumathi Ramaswamy, eds. Durham: Duke University Press. 283-315.
- Howes, David. 2003. Sensual Relations: Engaging the Senses in Culture and Social Theory. Ann Arbor: University of Michigan Press.

Inden, Ronald. 1990. Imagining India. Bloomington: Indiana University Press.

Karlekar, Malavika. 2005. Re-Visioning the Past: Early Photography in Bengal,

1875-1915. New York: Oxford University Press.

- Kempler, Susan. 1991. America Discovers the World: James Ricalton's Travels on Next to Nothing, 1844-1929. Ph.D Dissertation. New Brunswick, NJ:
 Rutgers University press.
- Kurgan, Laura. 2013. Close Up at a Distance: Mapping, Technology, and Politics.Cambridge: MIT Press.
- Lefebvre, Henri. 1990 [1984, 1974]. The Production of Space. Blackwell: Oxford.
- Lucas, Christopher J. 1990. James Ricalton's Photographic Travelogue of Imperial India. Ed. Edwin Mellen Press: Ontario.
- Malin, Brenton J. 2007. "Looking White and Middle Class: Stereoscopic Imagery and Technology in the Early Twentieth-Century United States." *Quarterly Journal* of Speech. Vol. 93 (4): 403-424.
- Marcus, George E. and Michael M.J. Fischer. 1986. Anthropology as Cultural Critique: An Experimental Moment in the Human Sciences. Chicago: University of Chicago Press.
- Merrin, William. 2005. "Skylights onto Infinity: The World in a Stereoscope." In Visual Delights Two: Exhibition and Reception. Vanessa Toulmin and Simon Popple, eds. Bloomington: Indiana University Press. 161-174.

Mitter, Partha. 1977. Much Maligned Monsters: A History of European Reactions to Indian Art. New Delhi: Oxford University Press.

Mukhia, Harbans. 1999. The Feudalism Debate. New Delhi: Manohar.

Nandy, Ashis. 1983. The Intimate Enemy: Loss and Recovery of Self Under Colonialism. Oxford: Oxford University Press.

-----.2007. An Ambiguous Journey to the City: The Village and Other Odd Ruins of the Self in the Indian Imagination. Oxford: Oxford University Press.

- Natale, Simone. 2012. "Photography and Communication Media in the Nineteenth Century." *History of Photography*. Vol. 36 (4): 451-456.
- Nerina, Rustomji. 2007. "American Visions of the *Houri.*" *The Muslim World*. Vol. 87 (1): 79-92.
- Nordström, Alison Devine. 1991. "Early Photography in Samoa: Marketing Stereotypes of Paradise." *History of Photography*. Vol. 15 (4): 272-286.
- Ono, H. and N.J. Wade. 1985. "The Stereoscopic Views of Wheatstone and Brewster." *Psychological Research.* Vol. 47 (3): 125-133.

-----. 2012. "Early studies of binocular and stereoscopic vision."

Japanese Psychological Research. Vol. 54 (1): 54-70.

Pinney, Christopher. 1997. Camera Indica: The Social Life of Indian Photographs. Chicago: Chicago University Press. -----. 2008. *The Coming of Photography in India*. London: British Library Press.

- Plunkett, John. 2008. "Selling stereoscopy, 1890-1915: Penny arcades, automatic machines and American salesmen." *Early Popular Visual Culture*. Vol. 6(3): 239-255.
- -----. 2013. "'Feeling Seeing': Touch, Vision and the Stereoscope." *History of Photography.* Vol. 37 (4): 389-396.
- Pratt, Mary Louis. 2008 [1992]. *Imperial Eyes: Travel Writing and Transculturation*. Routledge: New York.
- Ramaswamy, Sumathi. 2009. *The Goddess and the Nation: Mapping Mother India*. Durham: Duke University Press.
- Ricalton, James. 1887. "Travels on Next to Nothing." *Outing, an Illustrated Monthly Magazine of Recreation (1885-1906): American Periodicals*. Vol. 10 (1): 49-51.
- -----. 1900. India through the Stereoscope: A Journey through Hindustan. New York: Underwood and Underwood Publishing.
- -----. 1901. China through the Stereoscope: A Journey through the Dragon Empire at the Time of the Boxer Uprising. "New York: Underwood and Underwood Publishing.

Said, Edward. 1978. [2003]. Orientalism. London: Penguin.

- Scherer, Joanna C. 1992. "The Photographic Document: Photographs as Primary Data in Anthropological Inquiry." In *Anthropology and Photography*, *1860-1920*.
 Elizabeth Edwards, ed. New Haven: Yale University Press. 32-42.
- Sharma, Brij Bhushan. 1987. "James Ricalton—An American Photographer in India." *History of Photography*. Vol. 111 (1): 53-61.
- Shloss, Carol. 1981. "Oliver Wendell Holmes as an Amateur Photographer." *History of Photography*. Vol. 5 (2): 119-123.
- Silverman, Robert J. 1993. "The Stereoscope and Photographic Depiction in the 19th Century." *Technology and Culture*, Vol. 34 (4): 729-756.
- Singh, Jyotsna G. 1996. Colonial Narratives/Cultural Dialogues: "Discoveries" of India in the language of colonialism. London: Routledge.
- Snyder, Joel. 2002 [1994]. "Territorial Photography." In *Landscape and Power*.Mitchell, W.J.T.,ed. Chicago: University of Chicago Press.
- Soneji, Davesh. 2012. Unfinished Gestures: Devadasis, Memory and Modernity in South India. Chicago: Chicago University Press.
- Srinivasan, Amrit. 1988. "Reform or Conformity? Temple 'Prostitution' and the Community in the Madras Presidency." In Structures of Patriarchy: The State, the Community and the Household. Bina Agarwal, ed. 175-198.
- Stevens, Walter LeConte. 1881. "Wheatstone and Brewster's Theory of Binocular Perspective." *Science*. Vol. 2 (73): 546-548.

Stoler, Anne Laura. 2006. "Tense and Tender Ties: The Politics of Comparison in North American History and (Post) Colonial Studies." In *Haunted by Empire: Geographies of Intimacy in North American History*. Durham: Duke UP. 23-70.

- Taft, Robert. 1964 [1938]. *Photography and the American Scene: A Social History, 1839-1889.* New York: Dover Publications.
- Thomas, Nicholas. 1994. *Colonialism's Culture: Anthropology, Travel and Government*. Princeton: Princeton University Press.
- Trotter, David. 2004. "Stereoscopy: Modernism and the 'Haptic.'" *Critical Quarterly*. Vol. 46 (4): 38–58
- Wade, Nicholas J. 1987. "On the Late Invention of the Stereoscope." *Perception*. Vol. 16: 785-818.
- Wajda, Shirley. 1992. "A Room with a Viewer: The Parlor Stereoscope, Comic Stereographs, and the Psychic Role of Play in Victorian America." In *Hard at Play: Leisure in America, 1840-1940.* Kathryn Grover, ed. Amherst: University of Massachusetts Press. 112-138.
- Weber, Ronald. 1985. "Photographs as Ethnographic Documents." Arctic Anthropology. Vol. 22 (1): 67-78.
- Wedel, Michael. 2015. "Sculpting With Light: Early Film Style, Stereoscopic Vision and the Idea of a 'Plastic Art in Motion."" In *Film 1900: Technology*,

Perception, Culture. Annemone Ligensa and Klaus Kreimeier, eds.

Bloomington: Indiana University Press. 201-223.

- West, Nancy. 1996. "Fantasy, Photography, and the Marketplace: Oliver Wendell Holmes and the Stereoscope." *Nineteenth Century Contexts*. Vol. 19(3): 231-258.
- Wheatstone, Charles. 1838. "Contributions to the Physiology of Vision."
 Philosophical Transactions. Vol. 128. London: The Royal Society Papers:
 Bakerian Lecture of 1838. 371-394.
- Wilson, Edward, ed. 1894. "Industrial Photography." Wilson's Photographic Magazine. In The Photographic Journal of America, Vol. 31. 66-69.
- Worswick, Clark and Ainslie Embree. 1976. *The Last Empire: Photography in British India, 1855-1911.* New York: Aperture Publishing.