Spring 1-1-2018

Giovanni Morelli: Comparative Anatomy, the "Science" of Attribution, and Racialism

Sara Sisun
University of Colorado at Boulder, sara.sisun@gmail.com

Follow this and additional works at: https://scholar.colorado.edu/arth_gradetds
Part of the Anatomy Commons, and the Classical Archaeology and Art History Commons

Recommended Citation
https://scholar.colorado.edu/arth_gradetds/42

This Thesis is brought to you for free and open access by Art and Art History at CU Scholar. It has been accepted for inclusion in Art History Theses & Dissertations by an authorized administrator of CU Scholar. For more information, please contact cuscholaradmin@colorado.edu.
GIOVANNI MORELLI: COMPARATIVE ANATOMY, THE “SCIENCE” OF
ATTRIBUTION, AND RACIALISM

by

SARA SISUN

B.A., Stanford University, 2009
M.F.A., San Francisco Art Institute, 2011

A thesis submitted to the
Faculty of the Graduate School of the
University of Colorado in partial fulfillment
of the requirement for the degree of
Masters of Arts
Department of Art and Art History
2017
This thesis entitled:
GIOVANNI MORELLI: COMPARATIVE ANATOMY, THE “SCIENCE” OF ATTRIBUTION, AND RACIALISM
written by Sara Sisun
has been approved for the Department of Art and Art History

____________________________________
Professor Claire Farago

____________________________________
Professor Kirk Ambrose

____________________________________
Professor Kira van Lil

Date __________________________

The final copy of this thesis has been examined by the signatories, and we Find that both the content and the form meet acceptable presentation standards of scholarly work in the above mentioned discipline.
Sisun, Sara (M.A., Art History)
Giovanni Morelli: comparative anatomy, the “science” of attribution, and racialism
Thesis directed by Professor Claire Farago

ABSTRACT

This thesis will explore the connection between the practice of comparative anatomy as developed by George Cuvier in the decades before the professionalization of art history and the attribution method of Giovanni Morelli. In 1815, Cuvier published his, “theory of the correlation of the parts.” Assumptions about the correlation of body parts to tendencies of the mind at the root of the practice of comparative anatomy (“form following function”), laid the bedrock for Morelli’s education. Morelli’s legacy as a medically trained, contentious, and influential attribution expert has inspired creative speculation as well as oversimplification and misunderstanding. His self-proclaimed “experimental method,” proved foundational to the professionalization and development of art history as a rigorous discipline, one in sync with natural science rather than “bookish” musing. Morelli’s scientific tendencies—his desire to observe works in person, to categorize them into charts, to map an “organic genealogy” of regional schools—have been well documented. This influential methodology is steeped in a social history of ideas, an ideology that deserves a critical historiography because of its implications for disentangling the roots of a discipline with racial thinking. In this paper, I offer speculations on how late nineteenth and early twentieth century examinations of race and methodologies of attribution might not merely be compared, but contextually interwoven in ways that elucidate both. My emphasis lies in understanding the relationship between the medical/scientific discourse of comparative anatomy implicit in Morelli’s art history and the dominant scientific discourse around race during this period.
ACKNOWLEDGEMENTS

It is most important that I first thank my advisor, Dr. Claire Farago. I am grateful for her continued support, her incredible knowledge, and her perpetual enthusiasm. I would like to thank the other members of my committee, Dr. Kirk Ambrose and Dr. Kira van Lil, for their knowledge and exemplar in the field of Art History. Thank you for shaping me with your knowledge. I am beyond grateful to have worked with such reputable scholars and for the attention and time they have given me.

I would also like to thank my family and friends. First, I would like to thank my mom and my dad for being endlessly supportive of my interest in the arts. Thank you to my sister and my brother for fearlessly pursuing creative paths. I would like to thank my close friend, Dr. Sonia Buckley, for talking to me about ways of knowing, science, and rocks. I would like to thank this wonderful place for providing an inspiring location to live and pursue my master’s program and thesis.
FIGURES

Figure

1. “Portrait of Giovanni Morelli” 1886 ..........................................................57
2. The “Mask to Protect the Christian Air,” Morelli,
   1839 ........................................................................................................58
3. Lewis Phetic Haslett’s “Inhaler or Lung Protector,” 1849. .....................59
4. Louis Agassiz and radiate morphology .....................................................59
5. “Jem, Gullah, belonging to F.N. Green,” J.T. Zealy, S.C.,
   1850 ........................................................................................................60
6. Cuvier, illustration of the Mongolian race and Mongolian skull.
   1890 ........................................................................................................61
7. Cuvier, illustration of Saartji Baartman ....................................................62
8. “the Habits of Most Countries in the World,” 1747 ............................63
9. Giovanni Morelli, Illustration of Botticelli’s way of seeing..................64
10. “Raphael’s Ears” Visualization by Dietrich Seybold, 1995 ...............64
“The connection between race and art would form an interesting subject for study and investigation.”
Austen Henry Layard, 1886, Introduction to the Present Edition of the Handbook of Kugler

INTRODUCTION

This thesis examines the implications of contextualizing the methodology of art historian Giovanni Morelli (1816-1891) with racial science. I argue that Morelli’s approach and legacy is saturated with nineteenth-century ideology—particularly as it relates to comparative anatomy, a topic unacknowledged until now. By treating Morelli, a founding father of art history, as a document of cultural history rather than an inherited methodology, we see that he worked in a paradigm of emerging objectivity alongside the rise of centralized, unified, bureaucratic states with nationalistic agendas.¹ By offering a social history of ideas, this thesis advocates the necessity of moving beyond embedded categories of classification that privilege a certain way of looking. There is an urgent need to reexamine the history of the discipline in order to address the question of how to practice global or world art history, something the current model has proven unable to accomplish. Looking to the past allows for an observation of what it means to privilege the elite, the formal, or the scientific—and what potentialities exist beyond this framework. At stake is an addiction to the dangerous practice of identifying artworks with ethnic identities and reading external form as unquestionably revealing of

internality. These viewpoints emphasize human difference and enable a willful ignorance of an individual or a group deemed “less than” an objective authority.

Jaynie Anderson calls Giovanni Morelli “an incredibly complex person: an ironic cosmopolitan and a connoisseur of great ability. He utilized the conventions of the natural sciences to identify and describe examples of attribution in works of art.”

His self-proclaimed “experimental method,” proved foundational to the professionalization and development of art history as a rigorous discipline, one concurrent with natural science rather than “bookish” musing. Morelli’s scientific tendencies—his desire to observe works in person, to categorize them into charts, to map an “organic genealogy” of regional schools—have been well documented. Part one of this thesis will provide an overview of the existing literature on Morelli. I will highlight what has been neglected and what has been aggrandized by previous scholarship. Part two will briefly locate Morelli’s education in the complex context of his day, a time of tremendous social, scientific, and political change. His education alongside polygenist Louis Agassiz under the notoriously racial scientist, George Cuvier, provided the blueprint for his method of attribution. In part three, I will show that Morelli’s methodology overlaps with Cuvier’s in three

---

problematic aspects: by categorizing essentially distinct groups in terms of race, by ranking these groups according to a preconceived hierarchy, and, most importantly, by assuming that outer physical characteristics are somehow the manifestation of deeper, inner realities. Morelli’s worldview was partially inherited and partially invented, synthesizing ideas into the bedrock of art history. I will conclude with the implications of his racialized methodology for the field of art history today.
HISTORIOGRAPHY

In 1874, 1875 and 1876, at age 60, Morelli published under the pseudonym Ivan Lermolieff essays on the works of the Roman Galleria Borghese in the periodical *Zeitschrift für Bildende Kunst*. His bold re-attributions and polarizing language attracted immediate attention. In 1880, still writing in German and under the name of Lermolieff, he published a book reconsidering the attributions of fifteenth-century paintings in Munich, Dresden, and Berlin. In his published method, Morelli insisted on authentication primarily using the “fundamental forms” of a certain artist. Comparison between forms would undoubtedly reveal authorship. He drew diagrams depicting details, primarily of eyes, ears, and hands, which acted as an objective device to enable comparison and attribution. In 1891 Wilhelm Bode wrote an article criticizing Morelli for relying totally on these schedules. Morelli himself insisted that a comparison of details alone was not enough for his method to work, but must be combined with a knowledge and training in the field of connoisseurship. Nevertheless, he embraced the attention and support that came as many museums compiled their catalogues using interpretations of his published “method.”

Although his writing was highly influential and his astonishing talent for attribution became notorious, Morelli largely disappeared from art historical memory until a famous reference by Freud appeared in an essay titled *The Moses of Michelangelo*, translated into English in 1883 by Louise Richter. The attributions in the Borghese and Doria-Pamfili were translated by Constance Ffoulkes in 1892 and reprinted in 1900.}

5 Morelli’s attributions in German galleries were translated into English in 1883 by Louise Richter. The attributions in the Borghese and Doria-Pamfili were translated by Constance Ffoulkes in 1892 and reprinted in 1900.

published in 1914. Freud claims to have found Lermolieff’s writings in a Milan bookshop before he developed his method of psychoanalysis. Freud partially attributes his observation of inconspicuous details as symptomatic of psychology to his unexpected discovery of Morelli’s writing. Much of Morellian commentary has been inspired and limited by this connection to Freud. In my opinion, this scholarship misunderstands a basic tenet of what Johanna Vakkari calls morellian art theory, mistaking Morelli’s analysis of detail for an investigation of personality when in fact it was an investigation of race. When Morelli’s method is given importance only in relationship to Freud, a Freudian understanding of psychoanalysis masks the racial and biological underpinnings of his texts. None of Freud’s twentieth-century constructions of the mind would have been articulate in Morelli’s thought. Morelli has been misrepresented by an emphasis on Freudian ideas.

An example of this misinterpretation is Jack J. Spector’s argument that Freud’s purpose in studying “apparently trivial and accidental errors and slips” is “not merely to describe and recategorify the phenomena, but to conceive them as brought about by the play of forces in the mind, as expressions of tendencies striving toward a goal… a dynamic conception of mental phenomena.” Spector claims Freud’s undertaking was directly appropriated from Giovanni Morelli’s method. Here Spector misunderstands that Morellian attribution was based entirely on physical appearance and not on human

---

7 Sigmund Freud’s essay “The Moses of Michelangelo was originally published anonymously in Imago, III, 1914, 15-36.
8 Vakkari makes the point that few scholars have acknowledged the importance of Morelli’s total theory of art, beyond his use of diagrams and details. See Johanna Vakkari, “Giovanni Morelli’s ‘Scientific’ Method of Attribution and Its Reinterpretations from the 1960’s until the 1990’s,” Konsthistorisk Tidskrift 70, nos. 1–2 (2001): 46–54.
desire or motivation. A visual image, after all, cannot be said to have the same capacity for agency or consciousness as a patient seeking psychoanalysis. Spector’s analysis also emphasizes the decipherability and underlying cohesion of every gesture. Artworks do not necessarily represent a coherent image of the mind—artists often work ad hoc, in workshops, and in environments that lend themselves more to chance than Freudian scholarship allows. The passage of time is not obvious on the surface of an artwork as it is in a psychological narrative. While Freud examined patients for neurosis, I will show Morelli examined paintings for race. Rather than twentieth-century concepts of the mind, Morelli likely had in mind the practices of working artists, his familiarity with great works of art, and his recent education in comparative anatomy under the legacy of George Cuvier. For this reason I allocate the first section of this thesis to Morelli’s scientific education and his earliest publications.

Arguably the first to instill Morelli’s Freudian legacy was the radio program and article ‘Critique of Connoisseurship’ by Edgar Wind in 1960.10 Wind emphasizes Morelli’s “romantic proclivities” particularly as he valued fragments and the “least significant parts of the work.” Wind claims Morelli’s method emphasizes “freshness,” and finds identity in the unique “flourishes” of a particular master.11 In the 1970s and 1980s, Jack J. Spector,12 Hubert Damisch,13 and Carlo Ginzburg14 renewed Wind’s connection of Morelli to modern psychoanalysis. Ginzburg additionally emphasized the relevance of Arthur Conan Doyle’s

---

11 Wind, Art and Anarchy, 40-51.
stories of Sherlock Holmes in his use of indexical traces or clues, contextualizing Morelli with a larger epistemological shift toward objectivity. The association between Morelli and criminal anthropology was a connection first made in relation to Alphonse Bertillon and reiterated in the “clue and trace” analysis by Enrico Castelnuovo.  

Nevertheless, Ginzburg’s article is remarkable for its originality and broad conception of Morelli within a larger framework of scientific paradigms.

Richard Wollheim extended Morelli’s legacy as a “scientific” art historian, his 1973 article analyzed Morellian method primarily for logic and value, and is the first to emphasize the inconsistency between Morelli’s remarkable talent for attribution and the coherence of his published approach. Wollheim acknowledges that Morelli ignores context, both in the details he isolates within a composition and in the experience of the perception of a viewer. Wollheim signals Morelli’s influence in the formation of formal analysis such as Wolfflin’s and Reigl’s. Henri Zerner’s 1978 article “Giovanni Morelli et la science de l’art” focused on Morelli’s biography and the history of the discipline. In this article, he connects Morelli to Kunstwissenschaft, where attribution functions as a fundamental practice in the “science of art.” Carol Gibson-Wood’s doctoral dissertation of 1988 frames Morelli in the context of a history of connoisseurship—extending

---


between Vasari and Berenson.\(^{19}\) She was the first to credit Morelli with the view that the “schools” of Italian art are part of a larger, objective scheme that can be understood accurately through scientific classification.

Gibson-Wood is the first to mention the racial underpinning of Morelli’s thought, particularly in his previously unpublished personal letters to Layard. She does not, however, see these views as foundational to Morelli’s method. Most recently, Jaynie Anderson explains the biographical connection between George Cuvier, Louis Agassiz and Morelli as well as describes his earliest publication, *Miasma Diabolicum*, which I use as evidence of Morelli’s early interests in the first section of this thesis.\(^{20}\) Anderson highlights the influence of Goethe and *Naturalphilosophie* as a possible origin of Morelli’s understanding of “morphology.” Valentina Locatelli expands on this connection in her doctoral dissertation entirely on the connection of Morelli to *Naturalphilosophie*.\(^{21}\) I have chosen to focus on the importance of comparative anatomy to Morelli rather than his connection to Schelling, German idealism or romantic philosophy.

My contribution to the existing literature on Morelli is to connect his biography and methodology presented by Anderson and Gibson-Wood within the larger frame of racial science, a crucial historical context that has previously been unacknowledged. Anderson defines Morelli’s method in terms of three categories: the pose, movement, expression, color drapery and “general impression”; the anatomical details; and finally

---


the habitual idiosyncrasies, habits of expression, or involuntary qualities of an artist. The last category was the most emphasized by the Freudian wave of scholarship following the 1960s. I agree with Anderson’s perceived categories, however I would subordinate the first and last to a primarily anatomical model, one that is distinctly based on race. In this thesis I will argue that an anatomical-racial model positioned in a new paradigm of objectivity is Morelli’s primary organizing scheme and underlying method in his published writings.
CHAPTER ONE: EDUCATION AND EARLY INTERESTS

Born in 1816 to a Protestant family, Morelli was raised in Bergamo. Because Protestants were forbidden to attend Italian Universities, he was educated in Munich. There he received a medical degree under Ignatius Dollinger, student of leading paleontologist and zoologist George Cuvier. In his undergraduate dissertation, Morelli describes Cuvier as, “a jewel of our times.” Cuvier’s science was racially constructed and religiously motivated, founded on the belief that he scientifically understood the lineage of the Earth from the biblical moment of creation to the present. Cuvier’s powerful contribution to the field of comparative anatomy was his principle of the correlation of the parts. In any organism, he observed, each body part was deeply interdependent and must fit perfectly with the others or the organism could not exist. This principle ensured that species, or “types,” remained separated, and also that extinct species could be reconstructed from bone fragments. Cuvier considered his methodology a rational, calculated way to reconstruct extinct creatures and make predictions that did not negate, but rather necessitated, a divine creator. He emphasized the predictive power of his principle, writing, “Today comparative anatomy has reached such a point of perfection that, after inspecting a single bone, one can often determine the class, and even the genus of the animal... in such a way that—up to a point—one can infer the whole form from any

---

22 Quoted from Morelli’s doctoral dissertation, “gioiello della nostra epoca... che ci ha stupito con un tipo di anatomia comparata di cui avevamo solo un’idea molto vaga” in Anderson, “Dietro lo Pseudonimo,” 500.
23 George Cuvier, Essay on the Theory of the Earth (Edinburgh, London: W. Blackwood; J. Murray, 1815)
one and vice versa.”  

This revolutionary theory allowed Cuvier to correctly predict the skeleton of the extinct mastodon before its fossilized body was discovered on the outskirts of Paris.  

The implications of this predictive approach, one that emphasized the necessity of functional integration over comparative form, became influential in Morelli’s application of scientific methodology to connoisseurship. In the preface to *Italian masters in the German galleries*, Morelli suggested his new method enabled, “the right understanding of the outward form of a work of art... this outward form is by no means accidental, as many contend, but is determined by inward conditions.” The outward form is not simply “habit” or “accident,” but “typical and fundamental... revealing the deeper qualities of the mind.”

Morelli did not publish his methodology until after age sixty, instead pursuing careers in science, translation and politics. It was, however, during his intellectually formative youth that he first ventured into allegory. At age 20 and 23, while studying anatomy in Erlangen, he published two mock iconographical studies under the pseudonym of Nicholas Schäffer. Supposedly co-authored by several physicians, *Miasma Diabolicum* is a religious and medical pamphlet explaining how to prevent the pollution of the air by sinners. These non-believers are recognizable by the angle of their foreheads and their terrible smell. A fictional narrator compares the trachea of two men and

---

determines that the anatomical structure of the trachea is directly correlated with piety. The throats of non-Christians contain microscopic glands that expel a smelly gas harmful to the virtuous. The doctor insists that the biologically corrupted must wear masks. He offers one designed for adults and a special one for children, so as to keep the air as pure as it was in Eden (fig 1.2). Morelli would not print anything so creative again until he undertook the publication of his already notoriously accurate “metodo sperimentale” in 1876. The themes of Morelli’s earliest writing, however, are indicative of the beliefs he had inherited through his medical education: that form is indicative of function, as the foreheads and smell of the sinners signals their guilt. Therefore, externality reveals internality. It is unclear what Morelli intended his satire to do. This early writing belies his awareness, doubled with the unrestrained exaggeration of a privileged and ambitious youth—of the power of scientific language in crafting convincing argument.

The narrative also belies a significant impact Cuvier made on Morelli— the pertinence of racial assumption. Cuvier maintained Blumenbach’s definition of “race” to refer to the visible hereditary differences between groups of people. This is the definition Cuvier wrote into his lectures on comparative anatomy in Paris and his published classifications of the animal kingdom. Central to both Blumenbach and Cuvier was the

31 Blumenbach originally published his idea of the “five races of mankind” as his MD thesis in 1755. Linnaeus had previously founded his classification system upon skin color, Blumenbach added that a combination of color, hair and cranial structure be used for classifying man. See Haller, Outcasts from Evolution 6-9. Blumenbach developed his theory from George-Louis Leclerc, the Comte de Buffon, often credited for introducing the term “race” and a theory of origins 100 years before Darwin. He theorized people with darker skin tones were degenerate Caucasians adapted to tropical climates. See Abby L. Ferber White Man Falling: Race, Gender, and White Supremacy (Lanham: Md: Rowman & Littlefield, 1998).
superiority of the Caucasian type; a name inherited from Mount Caucasus. This paradise had been occupied by the most beautiful original race, the Gregorian, and was supposedly the location of the biblical ark. Although capable of “propagation” Cuvier observed “eminently distinct” racial difference between “the Caucasians, or white, the Mongolian, or yellow, and the Ethiopian, or negro.” Facial angle, as in the foreheads of Morelli’s “sinners,” was for Cuvier directly correlated with “barbarism and insufficient nourishment.” The eerie resemblance of Morelli’s masks to the modern gas mask is not entirely coincidence—the modern gas mask was patented in the same decade, anticipating and enabling chemical violence in the coming world wars (fig 1.3.).

Still thinking he might become a scientist like Cuvier, Morelli graduated from the University of Munich in 1837. He undertook a wissenschaftliche Reise at the neighboring university in Erlangen, where he enrolled in a postgraduate course in comparative anatomy. Among his professors was Rudolph Wagner (1805-1864), another enthusiast of Cuvier’s theory of correlation and the comparative method. Morelli also shared with Wagner a passion for Schelling’s emerging theory of Naturphilosophie. In 1838, Morelli accompanied another scientific protégé of Cuvier and Dollinger, Louis Agassiz, on his first expedition to examine the morphology of arctic glaciers. Both had learned under Dollinger the importance of “observation and comparison.” As Agassiz told his students,

---

32 Cuvier, The animal kingdom, 37.
33 Cuvier, The animal kingdom, 37.
34 The form of the gas mask that most resembles Morelli’s was invented by Lewis P. Haslett in 1847. See Scott Christianson, Fatal Airs: The Deadly History and Apocalyptic Future of Lethal Gases That Threaten Our World (Santa Barbara, Calif: Praeger, 2010).
35 For the more on Romantische Naturphilosophie and Morelli see Locatelli, “Le Opere dei Maestri Italiani.”
this was the fundamental quality of the naturalist—to see well, and to see clearly. Agassiz did not train his students in a particular procedure; rather he taught an epistemology modeled on cognition through sight, one that was as mechanical and detached as possible. In this model, perception was internalized through intentional observation and catalogued in the brain in order to develop pattern recognition and thereby accumulate knowledge.37

Morelli joined Agassiz on a groundbreaking objective: applying Cuvier’s principle of comparative anatomy to another field of study, geology. Through purely the “observe and compare” method and the law of the “correlation of the parts,” Agassiz was able to determine the original extent of a glacier by observing grooves, pits, and surfaces transported and transformed by water. Together, Morelli and Agassiz re-envisioned the rocks into linear diagrams, much as Agassiz had already done in species of fossilized fish, these images were ordered into a series that shed light on the formation patterns of the Earth’s surface. (fig. 1.4)38 By working with Agassiz, Morelli was given the opportunity to apply the comparative method to a field beyond anatomy—geology. Morelli was here exposed to the potential for implementing the comparative method to diverse types of specimens. Grouping samples, be they rocks, fish, paintings or people, into like types

37 Nineteenth-century science reinvigorated the much older art of encyclopedic categorization by privileging the objective and the empirical. In Objectivity, Peter Galison and Lorraine Daston chart the development of this conceptual paradigm in contrast to previous models of truth-to-nature and trained judgment. I agree with their argument that embedded in the scientific image are ethical and epistemological choices about what constitutes knowledge to a particular scientific community. See Lorraine Daston and Peter Galison, Objectivity (New York; Cambridge, Mass; Zone Books, 2007).

38 An idea that resonates with Kubler’s Shape of Time by proposing new networks of historical sequencing, “purpose has no place in biology, but history no meaning without it.” See George Kubler, The Shape of Time: Remarks on the History of Things (New Haven: Yale University Press, 1962).
allowed for new ways of understanding the world. Such systems gave coherence and
meaning to seemingly random components.39

Agassiz’s so-called slave daguerreotypes at Harvard’s Peabody Museum
discovered in 1978 provide visual evidence his impact on the construction of “race,”
“science” and “the museum” in the decades immediately after his expedition with Morelli.
Taken after Agassiz immigrated to America for the position of professor of zoology and
geology at Harvard, these fifteen daguerreotypes depict African and African American
slaves. Two images were taken of each individual, the first recording body shape,
proportion and posture, and the other emphasizing phrenological character and head
shape (fig 1.5). Agassiz hoped to prove through objective analysis of form that the races
of mankind were separate species, one existing in the Americas for a different amount of
time than Caucasians and not created by the same god, proving a theory of separate
creation. The potential for an organized catalogue comparing structures was understood
in consideration of Cuvier’s theory of correlation because, as Agassiz said, “the material
form is the cover of the spirit.” He considered appearances fundamental and self-evident
of internal reality.40

Before I argue that the Morellian attribution method is distinctly racial, it is
necessary to understand the meaning of “race” in the 1830s, 1840s and 1850s. Although
used interchangeably with “type” and “species” race had a distinct meaning that was
understood through prevailing scientific logic, associated with the physical manifestation

39 Galison and Daston, Objectivity, 55-113.
40 For excellent discussion see Brain Wallis, “Black Bodies, White Science: Louis Agassiz’s Slave
traits through heredity.\textsuperscript{41} Prejudice and discrimination existed prior to 1800, but not in terms based on race. An explicit philosophical and scientific view of human difference is a construct of the modern period. Enslavement, conquest, conflict and exploitation have occurred between and among groups in human history long before the development of race as a system of classification, and it was foremost a term in animal breeding.\textsuperscript{42} There is evidence for the earliest usage of the word around 1300, when race referred to a rush of water, a passage of time, or a voyage.\textsuperscript{43} The early modern period in Europe saw revolutions in anatomy enabling innovations in animal breeding.\textsuperscript{44} Race later became used to describe origin, descent, or tribe, usually with a modifying distinction, such as British race or Roman race, contemporary of Linneus, George-Louis Leclerc, the Comte de Buffon (1707-1788), was a French naturalist and aristocrat who attempted to produce a rational treatment of the whole of natural history. Unlike Linneaus, Leclerc questioned the validity of the named categories adopted from the logica materialis of medieval theology. Leclerc considered himself a scientist and Linneaus a “nomenclateur.”\textsuperscript{45} Buffon reasoned that climate was “the chief cause of the different colours of men” and that foods, soil, air and the earth’s topography have an influence on the form of the human body. He considered appearance also to be caused by culture, habits, customs, beliefs, and practices. Between 1770 and 1780 Johann Blumenbach proposed the division of

\textsuperscript{43} "race, n.1". OED Online. March 2017. Oxford University Press.
\textsuperscript{44} For example, Carlo Ruini, \textit{Anatomia del cavallo} (Bologna, 1598). See Monique Kornell. “Artists and the Study of Anatomy in Sixteenth-Century Italy,” PhD diss, (University of London: Warburg Institute, 1992).
humankind into four, and later five, “races” associated with different regions of the world.\textsuperscript{46} It was widely believed that the habits, customs and cultural practices of each type could be classified according to geography (fig 1.5). Until the twentieth century, there was not conceptual clarity on the disanalogy between race and species. Until the 1950s, race was still understood to exist biologically.\textsuperscript{47} In Morelli’s time, reproduction between different species, “miscegenation” was often condemned but not impossible. Hybridity was understood to be possible, although explicitly unnatural, between a wide variety of species.\textsuperscript{48} As it was understood, the principle difference was of form and function: “species” was focused on the physical traits of creatures, while “race” implied lineage and heredity.

With the growth of the fields of comparative anatomy and morphology in the late eighteenth and nineteenth century, variation found within human types could be compared in great detail with the variation found in animal species. As with Cuvier, a scheme of culturally embedded ideas directed the “discovery” of the “laws of variation” that separated various groups. The eighteenth and nineteenth century saw a move from an emphasis on the fundamental physical and moral sameness of humankind to an emphasis on the essential difference of mankind observable in subtle or obvious physical characteristics.\textsuperscript{49} Comparative anatomy, however, long predates the paradigm of

\begin{itemize}
\item \textsuperscript{47} Joseph L. Graves, \textit{The Emperor's New Clothes: Biological Theories of Race at the Millennium} (New Brunswick, N.J: Rutgers University Press, 2001), 155.
\item \textsuperscript{49} See Thomas Laqueur, \textit{Making Sex}. (Cambridge, MA: Harvard University Press, 1990). For post-Enlightenment science and the rhetoric of gender. For the origin of race as a concept, see Joseph L.
\end{itemize}
objectivity. Historian Arthur Lovejoy has shown that the idea of a “great chain of being,” goes back to Aristotle’s ‘scala naturae,’ in which it was imagined that nature produced all things in a great ladder, each separated by minute differences, observable by comparison, ascending in complexity and guided by divinity. Aristotle’s explanation of observable homologies among creatures was understood as a sense of community in a divinely inspired scheme of creation. The concepts of continuity and gradation were understood in a larger scheme of naturalism. Likewise, Christian theology, according to Augustine, suggested that no matter where a man had come from, he was a rational, mortal animal descended from Adam. The inherited structure of a great chain of being complicated the confusion felt by European travelers toward others they “discovered.” Methods of anthropometry were invented to confirm the inferior status of the different. In the 1770s, Peter Camper introduced the facial angle to indicate the supposed gradation in skull shape that sloped from the white dome of the Caucasian to the Negro and eventually the chimpanzee. Camper’s purportedly scientific observational “discoveries” correlated stupidity with the appearance of an elongated snout, supposedly explaining the owl’s Grecian association with wisdom. Such methods became standard of nineteenth century anthropology, and were used to scientifically schematize the universe with the implicit logic and “naturalness” of the great chain of being, even as the reality of such a chain was questioned. Technologies were invented to confirm the beliefs of those passing judgment.

Intending to reveal something of the inward nature of a specimen, these measurements included in their invention the evaluation they were designed to make.52

These ideas easily lent themselves to popular conceptions of the “naturalness” of a hierarchy of man. Theories of race formation and “type”—as arrested states of development, as inherited levels of talent or weakness, as an inherent essence or way of being, continued to gain even greater popularity after Darwin introduced his theory of evolution in 1859. The nineteenth-century anthropologist would not understand why it is impossible to speculate about the elements of different cultures scientifically— at the time it was natural to view cultural artifacts as scientific evidence.53 Today we understand that race has no pure, reducible type and cannot be directly linked to cultural objects. To clarify, in evolutionary biologist Ernst ’s 1959 definition, “Race is based on the simple fact that no two individuals are the same in sexually reproducing organisms and that consequently no two aggregates of individuals can be the same. If the average difference between two groups of individuals is sufficiently great to be recognizable on sight, we refer to such groups of individuals as different race.”54 Race, then, is never an individual, a randomly selected sample, or an archetypal blueprint. Race has no “pure” or “objective” quality as implied by the nineteenth-century preoccupation with “type.” In 1998, Science magazine’s genome issue devoted a section to the rift between genetic reality and the racial categories used by the Office of Management and Budget (OMB) for

53 See Galison and Daston, Objectivity; and Martin Kemp, Seen/unseen: Art, Science, and Intuition from Leonardo to the Hubble Telescope (Oxford; New York; Oxford University Press, 2006).
the 2000 census. Yale geneticist Kenneth Kidd stated: “One of the benefits that’s going to come from such studies is an even greater understanding of how similar we all are in our marvelous variation.” In genomic science, race today is understood to exist as a social reality but certainly not a genomic one.

In his extraordinary article on Morelli, Carlo Ginzburg suggests that Galileo launched the sciences on a path away from anthropocentrism and anthropomorphism, instead concerned above all else with the need for qualitative measurement and proof through repetition. Galilean science could say nothing about the individual, which could only be observed through “symptoms” or characteristics, an idea familiar from Hippocratic texts and medical practices. Two options became increasingly obvious: to reduce the individual to measurable and quantifiable abstractions in order to develop a standard that could be used in mathematical inference, or to assess the individual in ways that were unconfirmed (because they could not be repeated), unequivocal, and unempirical. Because the first method allowed for verification and certainty, many pursuits, including the arts, began to explore ways to reduce objects into data and extrapolate concrete facts. Cultural objects were investigated with the aim not of exploring or illuminating inconsistencies and peculiarities, but rather to establish solid reports. It was on this stage that art history sought to make itself a scholarly discipline, one as objective as the natural sciences.

55 Graves, The Emperors New Clothes: biological theories of race at the millennium, 156.
56 Ginzburg, “Morelli, Freud, Sherlock Holmes Clues and Scientific Method,” 15-17. Giulio Mancini (1559-1630), also a connoisseur, may have anticipated Morelli with a method influenced by his work as a doctor and astronomer; See Gibson-Wood, Studies in the Theory of Connoisseurship from Vasari to Morelli, 33-40.
The promise of certainty provided by analytic observation, without emotional effusion, was appealing to Morelli, as it was to many scientists of his day. In becoming a connoisseur, he was determined to bring art history closer to natural science. He kept the goals of the nineteenth-century typologist: to assign paintings to particular artists, to categorize artists into schools, and to chart the development and embranchments of various schools. Morelli’s project of classification is also why he declared it impossible to discover an attribution for any work associated with the movement he called “Mannerist.” His argument was that when artists no longer aspired to depict the world mimetically, it was impossible to see the “type” inherent in each artist’s eye. Mannerist paintings had been “overwhelmed by that general flood of eclecticism which permeated Italy from the closing years of the sixteenth century.” Instead of competing to depict reality, artists borrowed distortions and ideas from one another. It was no longer possible to see the “pure type” of the artist in the depiction of form. In such a worldview, every individual belonged to an undying essence and bore in some way the characteristic features of that essence. The task of the nineteenth century scientist was to explore the stable essence somehow present in each type, detectable by its outward appearance. I believe Morelli gave himself the task of finding the pure essence intrinsic to each artist by looking at an artwork they had created. Each artist saw differently because of the region of Italy (or beyond) that he was from, the air, soil and customs had grown him differently. His specific way of viewing was visible in the way he painted.

57 “authorship was not an end in itself, but rather the starting point for a complete and systematic history of painting in Italy” Gibson-Wood, Studies in the Theory of Connoisseurship from Vasari to Morelli, 207-209
By 1840 Morelli had officially embraced a new career, dedicating himself to "a real Science of Art."\(^{59}\) After moving to Paris he met the art dealer Otto Mündler, who introduced him to connoisseurship. Mündler worked for the National Gallery in London, and in the 1850s introduced Morelli to his circle, including Sir Charles, Sir James Hudson, and the amateur archaeologist and politician Sir Austen Henry Layard.\(^{60}\) The year Darwin published the *Origin of Species*, Morelli wrote to his friend Layard, his first pupil in his method of attribution, about his study of the regional schools of style in Italy and his enthusiasm for new followers of this “organic” method.\(^{61}\) This is why attribution was foundational to Morelli, not as a discernment of quality, but because it provided the first step towards a “history” of art that developed according to the objective rules of biology, guided by climate, geography, and secular, empirical truth. Morelli assumed that art, like Cuvier’s animal kingdom, could be mapped into discrete classifications based on racial type. The belief that different rates of development occurred between different peoples was likely derived from J.G. Herder (1794-1791) who also believed appearance was the manifestation of “nature” and/or “internal conditions.”\(^{62}\) Artifacts and biological specimens also had a long interwoven history. The proliferation of collectors’ “cabinets,” sixteenth-century European proto-museums—were entire rooms that encouraged displaying and pondering the abundant and various objects found on Earth. These

---

\(^{59}\) Morelli, *Italian masters in German galleries*, vii.

\(^{60}\) Eastlake was the first director of the National Gallery. Layard advised acquisitions to the National Gallery when Eastlake died in 1865. Hudson was businessman and strong supporter of Italian unification. For more on Morelli’s circle at this time see Gibson-Wood, "*Studies in the Theory of Connoisseurship from Vasari to Morelli.*"


assortments included mirabilia (marvels of nature), exotica (things from unfamiliar places), naturalia (objects of nature), artificialia (the man-made), and scientifica (instruments used for measurement and technology).  

The context of scientific paradigm fundamentally affected Morelli’s method. The year he was born, 1816, a German dictionary first defined objektiv as a “relation to an external object” and subjective as “a personal, inner, inhering in us, in opposition to objective;” as late as 1863 a French dictionary still called this the “new sense” (as opposed to the scholastic sense) of the word subject and credited “the philosophy of Kant.”  

Eighteenth-century experimentations with silver nitrate had recently married with the classic trick of the camera obscura to create the first designated “photograph.” The photograph provided a new tool to collective empirical projects of anatomy, flora, fauna, geography and astronomy—all seeking to create a systemic compilation of the natural world. Such atlases had long pre-existed the nineteenth century, but became mechanized in the eighteenth century in a way that made obvious the limitations of the artist’s hand. Between 1830 and 1930, roughly 2000 distinct (nongeographical) atlas titles were published, their numbers mushrooming during Morelli’s lifetime, as mechanical imaging became convenient and affordable.  

A generation before Morelli, Cuvier was still contracting drawings for his additions to the Paris Muséum d’Histoire Naturelle. Gradually, mechanical objectivity defined itself in contradistinction to “truth-

---

64 Daston and Galison, Objectivity, 31.
65 Daston and Galison, Objectivity, 122.
to-nature.” Technological advancements and scientific prerogatives inspired Morelli’s attributions and defined his beliefs.

Morelli’s method was developed in the transitional interval between these modes of representation: on one side, the skilled and knowledgeable intention of the artist-author, and on the other, the procedural-detached use of image technology. Over his lifetime, Morelli saw the invention of the photograph. Only a few engravings accompanied his first articles. His widely read publications, however, referenced the Braun Photographic Company, based in Alsace. In the 1850s the Company create a visual guide to the major European museums and private collections, and was widely used by historians and tourists. Morelli maintained that photographs were never as helpful to attribution as seeing the work in person, but nevertheless utilized them to demonstrate his observations and classifications. It is worth noting that in the convention of “policing” artist-illustrators for “truth” in the compilation of atlases, there existed the convention of looking at the artistic object through a scientific, “truth seeking” lens. Morelli’s, formulations of attribution could be applied to works of art with objective accuracy. The mechanized eye required discipline and vigilance, particularly when observing the work of art—a paragon of human skill and virtue.

The connoisseur, like the photographer, uses a technology, or a scientific method, to frame the object of the gaze. Morelli’s attribution charts potentially enabled any museumgoer to correctly identify the work of certain masters by providing a simplified example of the forms indicative of their type. These charts provided an abstraction (a

---

67 Daston and Galison, Objectivity.
simple line drawing) that indicated the work of a particular “genius” individual (1.7).
Because of his excellence, the work of this artist provided the best example of his type.
What was “type” to Morelli? My argument is that it was not a fluid, personal, or subjective
manifestation of artistic intention and accident. Type was reducible to form, the product
of geography and heredity. Attribution was only important to Morelli in that it enabled
the charting of regional “schools” of art, a model that assumed the cultural production of
a group of people was somehow a manifestation of their bloodline and geography. *Blut
und Boden*, an ideology that focused on ethnic descent through blood and territory,
manifested by 1895 in the study and practice of eugenics and eventually in the Nazi
ideology of the twentieth century.69

The future direction of “blood and soil” thinking is foreshadowed in the language
of Morelli’s personal correspondences from the early 1880s. Morelli’s publisher,
Seemann, suggested he work on a new edition of his book about the German galleries. At
the same time, Layard pressed him to write a new description of his method of
attribution for the introduction. Morelli wrote to Layard in response, “Aesthetics and
what today is called the ‘history of culture’ has nothing to do with the science of art.
Young people, above all in Germany, will now be able to follow the method of Lermolielff
and begin to study the schools of painting and sculpture, to understand them in relation
to the air, the climate, and the earth where they were born. Looking at them as living

69 See “Rassenhygiene” described by Alfred Ploetz (1860-1940), *Die Tüchtigkeit Unser Rasse und
Der Schutz Der Schwachen: Bein Versuch über Rassenhygiene und Ihr Verhältniss Zu Den Humen
Idealen, Besonders Zum Socialismus* (1895). Ironically, Ploetz initially argued the Jews were
Aryans and antisemitism would naturally die over time. He changed his mind after becoming a
supporter of the Nazi party, in Paul Weindling, *Health, Race and German Politics between National
Unification and Nazism, 1870 – 1945*, Cambridge History of Medicine (Cambridge: Cambridge
University Press, 2002.)
beings, with distinct features and types.” In the “Morellian Method” individuality was subordinated to typology and used to infer identity. Such a framework implied permanent, inarguable differences between groups based on biology and geography—observable through careful, trained visual scrutiny. The implications of this legacy will be further examined in my conclusion. For the purpose of framing my argument, consider that in this scientific gaze, assumptions about identity based on cultural artifact were not considered essentializing—rather, this was the only way to reveal truth.

---

CHAPTER TWO: MORELLI, CUvier, RACE

"Indeed, one school can learn and appropriate from another, but conception and feeling, as something alive and wholly intrinsic, must, like speech, bear the stamp of the individual, and therefore of the nationality, the race."71


In this chapter I will argue that race was the fundamental organizing factor in Morelli’s published attributions in the German galleries. My evidence will be presented as parallels between Morelli’s text and Cuvier’s The Animal Kingdom Arranged after its Organization. Included will be examples from Morelli’s personal letters to Layard, quotations from publications and the context and relevance of racial science as it developed at this time.72 First I will explain how Cuvier’s law of the correlation of the parts was entangled with dangerous and consequential beliefs about race, then I will explain how Morelli used these ideas as an architecture to verbalize his method in his published works, I will conclude with examples from Morelli’s text and personal correspondences that are distinctly racial. For the purposes of this thesis, my point of entry into the racial ideology of the nineteenth century is Cuvier’s proportion theory. I choose this historical location because, as described in the previous chapter, it was this epistemology that most impacted Morelli’s education and his alleged working method.

Before I make this argument, I would like to acknowledge that Morelli was an individual implicated in a way of thinking much larger than he realized. His “experimental method” wasn’t published until he was over sixty years old, and what he describes is

---

71 Morelli and Richter, The Italian Masters in German Galleries. p. 104. Emphasis Morelli’s.
72 Cuvier’s first scientific paper was published in 1792. His Survey of the Animal Kingdom was published in 1797. His “correlation of the parts” was first published in 1800-1805. See Coleman, “Georges Cuvier, zoologist: a study in the history of evolution theory.”
much more intricate and personal than the term “method” typically allows. Over the span of his career rapid changes occurred in prevailing theological and scientific thought. His writing reflects these changes: the word “race” appears six times in his 1883 publication and nine times in his 1893 and 1900 publications. The publications from the 1880s contain the word “science” seven times, in the publications from the 1890s the word appears fourteen times. What Morelli actually did and what he claims to have done after the fact are very different things. Like many of us, he was not always a systematic thinker, drawn to disparate areas of study but with a talent for attribution, he was foremost a savvy businessman interested in science, politics, and collecting art. He only published a “method” when pressured to do so, with the intention of attracting followers and galling his adversaries. Morelli intended to be polarizing and incite polemic. His early writing in *Miasma Diabolicum*, as well as his use of a pseudonym (a Russian sounding anagram of his name) hint at his facetious and eccentric personality. He was shaped by the ideas of his time, and cannot be held personally responsible for racism and anti-Semitism any more than other figures of his generation. What can be gained from an investigation of his method, however, is an understanding of how foundational racial thinking has been to western art history. The implications of this legacy will be revisited in my final chapter. Keeping the complexity of Morelli’s character and wit in mind, this

---


74 For Morelli’s personality, see Gibson-Wood, *Studies in the Theory of Connoisseurship from Vasari to Morelli*. [See citation]
chapter will investigate the correspondences between Cuvier’s biology and Morelli’s connoisseurship and the primacy of race in his attributions.

First I will explain how Cuvier’s “theory of the correlation of the parts” is a distinctly racial understanding of a “part to whole” relationship. As described in the previous section, Cuvier’s great contribution to comparative anatomy was to observe each part of an organism as dependent on and predictive of the other parts. It is important that Cuvier, a religious conservative, strongly believed that no characteristic would be unnecessary in the plan of God’s creation.75 Each observable element must be an indication of a corresponding function and therefore a condition of existence. Through close observation of the parts, a specimen would reveal its function, which was predetermined and conditioned by the surrounding environment. Cuvier describes his scientific procedure as a reversed dictionary, “in which we proceed from the properties of things to discover their names; being the reverse of ordinary dictionaries, in which we proceed from the names to obtain a knowledge of the properties.”76 The advantage of this method is that it does more than “teach us names.” If observable subdivisions are based on “true fundamental relations,” in other words, a correct observation of function, then it follows that “the method is the surest means of reducing the properties of these beings to general rules, of expressing them in the fewest words, and of stamping them on the

75 “The Spirit of God beats in every pulse of Nature and forms the mysterious basis on which the student must rest after his deepest researches” Cuvier, The Animal Kingdom. 2; and Cuvier, Essay on the Theory of the Earth.
memory.” This results in the “exact and complete expression of all nature. Each thing is determined by its resemblance to others, and its differences from them; all these relations would be fully given by the arrangement which we have indicated, advancing science to perfection.” Careful observation led to perfect classification.

What is racial about the theory of the correlation of the parts? As described in my first chapter, Cuvier’s “races of mankind” was a theory inherited, among others, from George-Louis Leclerc and his follower, Johann Friedrich Blumenbach. Both believed that favorable climate conditions would breed healthy humans, and that modes of poor living, over time, could degenerate humans from the original Caucasian race. Both believed that within a human lifetime, living with proper environmental control would allow an individual to revert closer to the civilized and beautiful white race. Likewise, dwelling for too long in an unsuitable climate would lead to “degeneration.” Cuvier’s religious belief predisposed him to strongly object to theories of evolution. He interpreted his findings in paleontology to support his religiosity. These discoveries led him to believe that species remained consistent through thousands of years, rather than undergoing changes of physical traits. As described in the Essay on the Theory of the Earth, he attributed abrupt appearances in the fossil record between long periods of stasis to geological catastrophes, the most recent of which had been found in Genesis. Species developed in accordance with current environment, which was at times catastrophically altered, as by a flood, leading to mass extinction. A generation before Cuvier, Leclerc had introduced his theory of the “unity of type”—which saw a community of descent from a

---

77 Or as linear diagrams, in the method as it was practiced by both Morelli and Agassiz.
78 Cuvier, The Animal Kingdom.
single type, initiated by environmental circumstances. Types progressed towards the ideal morphology for their present environment. Cuvier eliminated the evolutionary thinking from Leclerc, but kept the correlation of organism to environment. Therefore, in Cuvier’s thinking, the “types of mankind” were never able to completely pass into one another. Each had developed after different catastrophic events, and, consistent with Leclerc’s ideas, presented a certain morphology, structure, or appearance that was in accord with environment. Human morphology could then be studied to reveal environment, and was indicative of ability, beauty and worth.

Cuvier’s scientific method aspired to nineteenth-century conceptions of objectivity, which took seriously the reality of a Christian creator. Scientific objectivity valued highly trained discipline, the ability to suppress the personality, and the desire to allow the facts to “reveal themselves” through mechanized procedure. Cuvier understood these facts to be god-given, eternally standing, and preordained, alterable only by catastrophic events like the biblical flood. It was inconceivable that his identity as an educated and affluent French Baron would do anything but positively effect his observations and descriptions. Lorraine Daston and Peter Galison explain that possessing subjectivity was a different matter from being endowed with a rational soul or with coordinating mental faculties (as in older models of the self). Subjectivity was something that could be repressed and quelled by mechanical observation. Cuvier

---

80 Buffon and his followers believed beauty played a major role in establishing a hierarchy among the races, with the pinnacle being statues from Greek antiquity. See Ferber, *White Man Falling: Race, Gender, and White Supremacy* (Lanham, Md: Rowman & Littlefield, 1998), 29
82 Cuvier’s education at the Karlsschule Stuttgart was predominately Christian but included classical study in ancient language, science and philosophy, with an emphasis on morality. See Coleman, *George Cuvier, zoologist: a study in the history of evolution theory*, 5 – 25.
83 Daston and Galison, *Objectivity*, 199.
developed his embranchments through charting and linking like types of creature based on this understanding, for example as the existence or nonexistence of a backbone, lungs or liver. By the theory of the correlation of the parts, difference in characteristics between “types” were necessitated by different environments and appeared as visible characteristics. Those traits that “dominated” a particular specimen were perceived to be likely of greater importance, as they served a greater necessary action in the surrounding environment. It followed that observed biological races would differ in ways relevant to character or intelligence.

In Cuvier’s writing, as in Morelli’s attributions, “race,” “species,” “type,” and “kind” are used interchangeably. Cuvier’s conclusion that all men are of one species was based on similarities of morphology and existed among the ancient Greeks, but was an idea nineteenth-century racial scientists contested in favor of alternative views of the origin of the various “races” of mankind. Many polygenists and monogenists found it unimaginable that the Caucasian could share an ancestor with the negro. Cuvier professed monogenism only because of his conservative religion. Fundamentally his racial studies held the main features of polygenism: a belief in the fixity of species, the limitations of environmental influence, an unchanging underlying type, variations in anatomy based on race, and mental and physical differences between racial ability or worth. Cuvier, writing before Darwin and dismissing Leclerc, assumed that the races were fixed and did not change over time. Additionally, “one of the races has never been known to pass into

another.”\textsuperscript{86} Intermixing was sometimes possible, resulting in intermediate varieties regarded as degradations of the original form.\textsuperscript{87} In Egypt, for example, mixed Italian and Negro race had produced “women wandering about with children... just like apes... on their backs... in the torrid zone a propensity to theft, prodigious appetite, cunning, sensuality and revengefulness.”\textsuperscript{88} Harsh conditions and difficult climate would result in lower intelligence and uncivil behavior, indicating the species that had developed to fit these conditions would have such qualities ingrained in an archetypal race (Fig. 6).

What is essential to Cuvier’s correlation of the parts for our understanding of a racial paradigm is that the whole is causally correlated with environment—that individuals cannot escape a racial “fate,” and that this fate is determined by geography, climate, and heredity. Cuvier saw the Caucasian race as having “enduring dominion” because of “mental superiority.”\textsuperscript{89} The negro race, on the other hand, native to Western Africa, is capable only of handicraft, not fine art. Their climate had lead them to become “careless and lazy,” “passionate and cruel” and “without science.”\textsuperscript{90} The mostly meat diet of the South American race is assumed to be the cause of “feeble development, either physical or mental.”\textsuperscript{91} In this paradigm, there is no scientific observation of form that is not somehow indicative of internal character—character developed in relationship to quality of the parts and nature of environment.

\textsuperscript{86} Cuvier, \textit{The Animal Kingdom}, 28.
\textsuperscript{87} See Claire Farago and James Córdova in \textit{At the Crossroads: The Arts of Spanish America & Early Global Trade, 1492-1850: Papers from the 2010 Mayer Center Symposium at the Denver Art Museum}, (Denver: Denver Art Museum, 2012.)
\textsuperscript{88} Cuvier, \textit{The Animal Kingdom}, 28.
\textsuperscript{89} Cuvier, \textit{The Animal Kingdom}, 26.
\textsuperscript{90} Cuvier, \textit{The Animal Kingdom}, 27.
\textsuperscript{91} Cuvier, \textit{The Animal Kingdom}, 27.
In the nineteenth century, the answer to the puzzling question of what caused cultural difference was certainly “race.” Morelli used the same racially framed theory as a blueprint for his method of evaluating and attributing works of art. In the preface to the 1883 edition of his “critical study” of the Italian painters, Morelli describes his “experimental method” as the ability to, “discern in the features, in the form and movement of the hand, in the pose of the figure—in short, in the whole outward frame—the deeper qualities of mind... This outward form... the typical, or the fundamental form (Grundform) of hand and ear is characteristic in all works of independent masters, and affords valuable evidence for identifying them.” He refers to this as “art morphology” and presents it in contrast to “traditional” art history, which would focus on, “the culture of the people under whose influence and auspices these works originated.” Morelli is “as the botanist lives among his fresh or dried plants, the mineralogist among his stones, the geologist among his fossils...” Works of art are surrounded by a “fungus growth” of “pointless and even childish fabrications” that must be cleared away for the true classification of artworks to be visible. This radical re-visioning of art history would dismiss romantic effusions in favor of true and quantifiable arguments of quality based on form. From the letters Morelli wrote in 1879, Carol Gibson-Wood has summarized Morelli’s concept of art history as it stood and why he felt a new type of study was necessary: aesthetic discourses were personal and impractical. Inventories of names were also not useful because they didn’t advance the science of art in any way. Cultural

---

92 According to the OED, the term “critical study” was predominately and specifically used at this time in relation to natural science. See OED 1856-1884.
history, as exemplified by Jakob Burkhardt, was the most worthless of all, because it looked beyond the work of art itself.

Morelli believed anatomy, the literal shape of the eyeball, dictated how the artist saw. This concept would have emerged naturally from his education in Cuvier’s proportion theory, because function alters form. Cuvier described sight as a “sieve” “which shall allow nothing to pass through to the nerve except the species of the agent which should affect it in that particular place.” Sight is therefore conditioned by species. Differences in the anatomy of different artists, predetermined by racial type, exerted an effect on how they saw and therefore how they painted, especially when they endeavored to paint mimetically. Morelli was an Italian nationalist, and his writing about art was politically compelled, “Each nation has its own way of looking at everything, and consequently at works of art; an Italian eye may see things in an Italian painting or drawing that did not strike a French or a German eye.” Mimetic art revealed the true nature of the artist, not because it depicted a romanticized vision unique to that creator, but because it revealed which area of Italy he was from, his regional Italian race.

The forms depicted by each master artist are such because each artist literally sees differently, as “every human eye sees differently.” This is also why Morelli insists his method is only applicable to the Renaissance, when art undertook most literally to depict

---

vision. Only when the artist is painting what his eye sees can it be read in his painting, his “type” of vision, and therefore his “type” of art. The hands, ears, and eyes drawn by the masters are not the result of accident, “but of internal conditions.” Morelli himself asserts that these features were primarily chosen not because they revealed an artist’s particular habit or training, but because they are less likely to be marred by restorers, who tended not to repaint these parts of a composition. Morelli’s understanding that sight is specific to structure accords with similar scientific rationale of the correlation between head shape and intelligence, or facial angle and reasoning power. It was like thinking that allowed Camper’s facial angle to be a simple and outward sign of the graded series of the complexity of mental ability or of animality in man. Character was fixed by structure, which was determined by heredity, which was predetermined by environment.

Cuvier and Morelli inherited a long existing understanding that proportion was a matter of the expression of essences, essences concentrated in and magnifying the individual. The innatist and deterministic essence of this thinking motivated Morelli’s obsession with travel. For proper attribution to be possible, artworks must be observed in the “native setting.” This is not due to the necessity of close observation, but instead

---

99 “every great artist sees and represents these forms in his own distinctive manner; hence, for him they become characteristic. For they are by no means the result of accident or caprice, but of internal conditions. You had better say... that most persons, and pre-eminently art-historians, and “art philosophers” as you call them, do not see these various forms at all. It is no easy matter, I admit, to see form correctly—I might almost say to feel it aright; this is partly due to the physical conformation of the eye,” Morelli and Ffoulkes, 23.

100 “in later times this picture had been painted over by an unskillful restorer, so that in its present condition the original outlines are hardly to be recognized. But this will not materially interfere with our studies of form, first of all you look at the hand and ear...” Morelli and Ffoulkes, 50.

101 For more on physiology and/as phrenology see Stepan, 20-23 and Brace, “Race” is a four-letter word. (New York: Oxford University Press, 2005) 30-36.

because, “we must be in harmony with the intellectual atmosphere, as well as with the outward conditions of the land we are in, if we are ever to feel at one with its people and its products.” Furthermore, “each nation has its distinctive conception of science, art, and religion” and must be fundamentally understood in these frameworks. As David Summers has argued, qualitative proportion had long been associated with anatomy, and also entangled with decorum, for example that the quality of a person was demonstrated by the quality of his appearance.\textsuperscript{103} Proportion implies a connection between things that is relationally bound. The idea that the skeleton was the basis for the order and proportion of the human body had existed since antiquity; Galen wrote that bones were to living creatures as poles to tents. Traditional notions of proportion between internal and external predated modern biology and the division of the arts and sciences, making such assumptions seem natural in the nineteenth century.\textsuperscript{104} The science of physiognomy, assuming a proportionate relationship between essence and appearance, appeared in the fifteenth and sixteenth centuries and was based on writings attributed to Aristotle in a short treatise called \textit{Physiognomia}.\textsuperscript{105}

The idea that the appearance of an animal expressed the inner nature of the animal had a long history, but the development of comparative anatomy as an objective science distinctly enabled a racial model. “Establishing indicative relations between superficial, and therefore visible elements, and others that are concealed in the depths of the body,” in the words of Foucault, additionally fed assumptions about cultural

\textsuperscript{103} Summers, \textit{Michelangelo and the Language of Art}, 337.
\textsuperscript{105}Summers, \textit{Michelangelo and the Language of Art}, 340.
superiority. Arguably the first modern anatomist, Vesalius (1514-1564), made the argument that “In certain nations there is something peculiar in the shape of the head...particularly of the Greeks and the Turks... which not a few of them think elegant and consider to be well adapted to the turbans which they wear in various ways... The Germans, indeed, have a very flattened occiput and broad head, because the boys always lie on their backs in their cradles.” Vesalius here combined different customs with the anatomy of different nations, and even suggests a judgment based on appearance. In the mid-seventeenth century, esteemed economist Sir William Petty insisted that the races of mankind were not distinguished only by physical traits, but by psychology and worth. He wrote in 1677, “Europeans do not onely differ from the aforementioned Africans in Collour, which is as much as white differes from black, but also in their Haire which differs as much as a straight line differs from a circle; but they also differ in the shape of their Noses, Lipps, and cheek bones, also in their skulls. They differ in their Naturall Manners, & in the internall Qualities of their Minds.” George-Louis Leclerc, when invited to write for the Académie Française in 1753 contributed a “Discourse on Style” in which he stated that writing was the expression of thinking, feeling, and “soul.” Therefore, “the style is the man himself.” Leclerc’s education as a naturalist and his biological theory of the “unity of type” was no doubt in his mind when he argued his thoughts on “style.”

To return to the beginning of my argument that a fundamental racial parallel exists between Morelli and Cuvier, we can recall the image of Cuvier’s reversed dictionary. Morelli’s methodology is Cuvier’s reversed dictionary—the name of the artist is given to a specific set of forms, unique to a way of seeing, correlated to the conditions of a particular place. This is why, although he traveled extensively, when Dürer paints, “The German peeps out in every stroke.”110 The boundaries Morelli imposes onto art, science, and religion are nineteenth-century divisions based on a re-understanding of pre-existing ideas about proportion, decorum, and creation combined with Christian underpinning and a new privileging of objectivity. The locations with which he affiliates Giorgione, Titian, and Raphael are nineteenth-century nation states. Since racial ‘types’ were already assumed to exist, as was a single patriarchy of master artists, aggrandized and enumerated since Vasari.111 A close study of form as rendered by each canonical artist could be assumed to lead to an average that represented the category—his signature, his style and his type. Morelli’s charts depicting the eyes, ears, or hands of a particular artist present such an average. Morelli’s art history began and ended with the art connoisseur—in the authorship of the artwork itself was everything, everything there was to know was contained within his “type.” Biology and national culture were linked directly to race, and so an understanding of artist “type” had practical relevance for collecting artworks for the display of national identity. Just as miscegenation had implications for racial purity, the finest example of a Raphael or a Titian exemplified the pinnacle of a standard for comparison. Morelli observed that geographic schools were

110 Morelli, Giovanni, and Luise Richter, *Italian Masters in German Galleries*, 104.
able to “appropriate from another” but, “conception and feeling, as something alive and wholly intrinsic, must bear the stamp of the nationality... of the race.”

Populations were not seen as complex mixtures composed of individuals, but as somehow containing a fixed essence. This explains the organization of Morelli’s 1880 critical study on the Italian painters of Munich, Dresden and Berlin. Each gallery is given a chapter, and each chapter is divided into “schools”: The Venetian, the Ferrarese and Bolognese, the Lombards, the Tuscans, and the Umbrians. These classifications of “schools” are still used today. The Venetian school is described as having, “a peculiar physiognomy... of difference of race” that must be understood “on the very soil whence it grew, and with which it stands in the closest organic connection.” Paintings by Italian masters can be treated as scientific specimens because art “meets no obstruction, it is the genuine outcome of the people. It sprang up from the soil, a living growth, speaking everywhere the native language, the local dialect.” Similar to Cuvier’s biological “organs,” “the history of any school of art can only be understood by regarding it as a living organism, which from its germ and its death has it regular development; it rises step by step, then step by step declines.” Such expression proceeds from no external factors (education, trade, travel, accident) but instead from what Morelli terms “causative Nature.” These schools are composed of artists who represent the essential and authentic type, emblematic of the geography (“sturdy” and “energetic” in the case of mountainous Bergamo). In the “schools of the less gifted races” the ability to depict

perfected linear perspective, anatomy, and grace is noticeable. The Florentine school is “the most perfectly developed.”

The following parallels between Cuvier and Morelli have been established: both inherited the belief in preexisting environmentally determined types, “races” of mankind. These types could contaminate one another, polluting a “pure” prototype. The effect of influence, training or travel was minimal when compared to the foundational and inherited race. Original race could be determined through a careful observation of form. Form was presumed indicative and causative of habit, custom, identity and value. Morelli took it upon himself to discover the correct attribution of works in the galleries of Munich, Dresden and Berlin largely because of what he regarded to be the inability of the Germanic race to correctly attribute art. He felt it his duty to travel to the galleries of Germany and correctly attribute each work he saw according to fifteenth century Italian “school,” a term that directly signaled race.

EXAMPLES

Having laid the groundwork of the coexistent beliefs between Morelli and Cuvier, I would like to give several examples in Morelli’s attributions that show that his method was primarily racial. The word “race” appears nine times in Morelli’s attributions in the German galleries of Munich, Dresden and Berlin. Morelli, unlike Cuvier, does not frequently explicitly expound on the superiority or physical qualities of one particular

---

116 Valentina Locatelli has created a chart of Morelli’s attributions in the Gemäldegalerie Alte Meister, available here: https://arthistoriography.files.wordpress.com/2015/11/locatelli-chart.pdf
race over another, he rarely strays from discussing the paintings directly. This is not, however, to say that his text is not racial, and that his descriptions are not racialized. One of Morelli’s great goals was to direct art history to the object itself. Everything he needed to know was assumed to be present in the appearance of the work, and one of the primary attributes he looked for was proof of the race of the artist. This is evidenced most clearly in the structure of the text itself, which is divided by perceived racial divisions (geographic “schools”) in nineteenth-century Italy: The Venetian, the Ferrarese and Bolognese, the Lombards, the Tuscans, and the Umbrians.117 These schools are still used in reference today.

I would like to individually point to a few examples of attributions that also bear Morelli’s racial construction. The first example I will use of this methodology at work in his publication on the German galleries is his attribution of the works by Jacopo de’Barbari in the Dresden gallery. Previously disputed in its attribution to a “Frenchman, Dutchman or Nürnburger” Morelli agrees with Moritz Thausing, a founder of the Vienna School of Art History, that he is “expressly Venetian.”118 Morelli cites the three existing attributions to Jacopo de’Barbari in the 1876 catalogue of the Dresden Gemäldegalerie, two of saints and one of “Christ Blessing” as correct. Previously, in the catalogue of 1867, the Christ was attributed to Lucas van Leyden, primarily an engraver from Leiden, but also a prolific painter. Morelli describes the painting as slightly confused because it has a “mixed Venetian-German character.” Among the three works by Jacopo de’Barbari, he associates “heads with the mouth half open,” “a prominent upper eyelid springing from a

deep pucker” and “a round, clubby skull.” These are the “strong influences that Northern Art exercised on the Venetian.” Here is an example of how Morelli often ignored characteristics of the works of art such as chiaroscuro or paint handling used to depict anatomical features, and instead focused on the features themselves, as though the choice of models, not artistic interpretation, differentiated the artists. Jacopo de’Barbari, although he traveled to Germany, remains primarily a Venetian artist, because his visual habits are of the Venetian race. Morelli again takes anatomical features as an opportunity to dispute a fourth picture in the same gallery, previously attributed to Botticelli, the “Galatea standing on a Dolphin” because it gives him the distinct impression of a “Flemish-Italian work” not the Florentine, Botticelli, known for his “fiery, dramatic spirit.”

Morelli always refers to the birthplace of an artist as the ultimate determining factor in his racial type. He blames previous historians for misunderstanding Italian geography and therefore misunderstanding race. He blames Julius Hübner, author of the previous catalogue of the Dresden gallery, for misattributing an Andrea del Sarto because he did not understand that the artist was from Gualfonda, close enough to Florence to be considered of the Florentine race. Another example of the fundamental relevance of

121 “Dürer was a longtime in Venice, but still the German artist peeps out in every stroke” in Giovanni Morelli and Louise Richter, Italian Masters in German Galleries: A Critical Essay on the Italian Pictures in the Galleries of Munich, Dresden, Berlin, 104.
123 Giovanni Morelli and Louise Richter, Italian Masters in German Galleries: A Critical Essay on the Italian Pictures in the Galleries of Munich, Dresden, Berlin, 203; Julius Hübner’s catalogue to the Dresden gallery was published in several revised editions, Morelli primarily used the 1867 and 1876 editions.
birthplace is in Morelli’s attribution of Jacopo Palma, “Palma, as a painter, a Venetian, but as an artist, a Bergamese turned Venetian, for, notwithstanding having studied his art at Venice, he could never entirely lay aside his mountain-nature.”¹²⁴ This mountain-nature is “coarser” “more severe” and “energetic.” Similarly, the Friulian race, native to modern day Trieste and the Slovenian border, are “energetic, shrew, and intelligent little people... but of a rough and home-spun nature.”¹²⁵ At the idea that one school could teach or influence another Morelli responds, “conception and feeling, as something alive and wholly intrinsic, must bear the stamp of the individual and the nationality, the race.”

The Roman school is an interesting case, because Morelli says, “they are without any local character whatever.”¹²⁶ Instead, “those who happened to build or chisel or paint at Rome were not sons of the soil, but in most cases, from the neighboring countries, from Umbria, Tuscany, or Bologna or Venice.” The few artists born within the “walls of Rome” “have surely no right to be considered representatives of a school of art” because “A genuine Latian school of painting, originating within the walls of Rome, out of the Roman population, and reflecting the national character never existed.”¹²⁷ Morelli emphasizes that the main artists associated with the Roman school are not Roman at all. Everyone in Rome is a traveler, no one contains the pure blood of a Roman any longer. So there is no Roman school, only painters of other races who worked in Rome. In explaining how some areas of Italy are more artistically capable than others he says, “As birds may be divided

into song-bird and birds of prey, so in the great family of man we find some nations gifted with a sense for Art, and others whom Nature has denied it. Among the populations of old Italy that were most richly endowed with the sense of Art, we count the Etruscans; among those devoid of this feeling are the Latins. Hence, the latter have produced great citizens, great legislators, statesmen, lawyers and warriors, but not a single national School of Art. To me a sure sign that the Adriatic coast from the Rubicon southward is peopled by Latins and not by Umbrians, is the total absence of art along that coast... On the left bank of the Po, up to the Adda, the Etruscan blood seems altogether to have taken far deeper root than on the right bank.”

Morelli’s scientific declarations, although borrowing the language of anatomy or biology, are often muddy. The process of vision here is racial, biological, and predetermined by geography, dictating how races perceive and depict the world. Seeing as a way of knowing is only a way of knowing race. One of Morelli’s best-known attributions is of the Sleeping Venus by Giorgione, previously listed as a copy by Sassoferato after a lost work by Titian. Morelli calls this Venus, “the prototype of that kind of love-picture to the Venetian school.” The key words in this attribution are prototype and Venetian. In the Giorgione lies a mysterious archetype of the Venetian spirit, emblematic of the beauty and vision of that particular racial school of Italy. Numerous other examples of racial framing can be found in Morelli’s publications.

As I have indicated previously, what Morelli said and what he actually did were likely different things. His attributions were enabled by a long education and many first-hand experiences with works by artists of all kinds. His language, however, voiced in the

---

parlance of his day and influenced by his education in comparative anatomy is distinctly racial. The method he encouraged his followers to use is distinctly racial. It was this method that was taken to offer the foundational blueprint for a “science of art.”

PROBLEMS AND IMPLICATIONS

Although Cuvier and Morelli might have not wanted to hear it, the 1950 UNESCO statement on race made clear that our species does not have biological races: “Homo sapiens is made up of a number of populations, each one of which differs from the others in the frequency of one or more genes. Such genes are always few when compared to the whole genetic constitution of man and to the vast number of genes common to all human beings... the likenesses among men are far greater than the differences.”¹²⁹ According to biologist Ernst Mayr, this declaration reflected the shift in understanding of populations accumulating genetic variation through long-term adaptation to environment. Population definitions of race within any species revolve around how much genetic variation exists within and between supposed racial groups. As late as 1974 a study in the Journal of Human Genetics maintained that the five purported geographical races/subspecies, originally defined as deviations from the Caucasian by Linneaus, were measured for genetic variation using protein electrophoresis, and concluded that it was not appropriate to consider Caucasians, Negroids, Mongoloids, Capoids, and Australoids as subspecies. Modern population genetic analysis suggests that anatomically modern humans do not display biological races.

By today’s standards, geographically associated variation has been consistently misinterpreted as evidence of the existence of biological race. A national University of Michigan study found that after 70 years of evolutionary biology, the majority of Americans still believe races exist within the human species. The same study found that half of all European Americans still believe that racial differences drive the ability to succeed in math, the tendency to act violently, and general intelligence. Race is a curated selection of traits judged to be socially relevant. Racial identification became a tool of ideologies of conquest and hierarchy, as a justification of slavery, as a method of declaring superiority, and as a way to determine quality, in the case of Morelli and connoisseurship practices.

130 See Graves, *The Emperor’s New Clothes: Biological Theories of Race at the Millennium.*
CONCLUSION

What was Morelli’s method exactly? Often considered, in my opinion problematically, in congruence with modern psychoanalytic theory, the “Morellian Method” consists essentially of observing the forms given by Italian renaissance masters to details such as ears and eyes, bearing discernments on the correspondence of forms with authorship. It is important that Morelli did not consistently use this method, nor did he describe it this way. Connoisseurship and artistic practice have more in common than may at first be obvious, both requiring an education and knowledge base gathered through experience, mysteriously termed “an eye,” that is accumulated gradually over time. Neither is easily reduced into a procedural method or coherent theory, although it would be convenient if they could be. Some populations—often outside of an elite club, are dismissed when their “eye” does meet the approval of a select audience. Morelli did not finish his project—but he might have found eventually that mapping an “organic” history of art is more complicated than locating an index for tracking connections between groups. As Carol Gibson Wood has shown, Morelli’s letters to his student and protégé Federico Frizzoni do reveal that at an early date he believed he could detect “the physiognomy,” of an artist in his artwork. An understanding of Morelli’s context reveals that what he searched for in works of art, at least according to his written method, was a geographically based racial type—something we now understand to be an erroneous and consequential conceit.

The Morellian Method became popular with a group of art historians directly following his generation. Moriz Thausinger, second chair of the Vienna School of Art

---

History, was a close friend of Morelli. The Vienna School played a central role in the formation of the “scientific” (*wissenschaftlich*) study of art. Rudolf von Eitelberger, the first chair of the school, stressed the importance of immediate and direct contact with art works. The Vienna School served as a prototype for art history as an established discipline, and the first PhDs in art history were awarded there in the 1860s, marking the first generation of trained art historians. Thausing’s inaugural lecture as first chair to the Vienna School was held in 1873 and published in May of 1883 in *Österreichische Rundschau*. It was titled, “The Place of Art History As a Science.” In this lecture Thausing contemplates the limits of the history of art in relation to other disciplines, as well as the border between art history and art practice. He describes a misplaced overlap between aesthetics and art, saying that, “the history of art has nothing in common with aesthetics, or no more than political history or moral philosophy—no more than physiology goes with psychology or natural science with metaphysics,” a comment reminiscent of Morelli’s insistence on an art history without “bookish musing.” Thausing

---

133 In the early nineteenth-century the term referred to a philosophical study of art, predominated referring to the aesthetics and beauty. In the later nineteenth century, the term changed meaning in relationship to a revolution in mechanization and the influence of positivism. See Matthew Rampley, “The Idea of a Scientific Discipline: Rudolf von Eitelberger and the Emergence of Art History in Vienna, 1847–1873.” *Art History* 34, no. 1 (2011), 54–79.


135 Matthew Rampley, “Art History and the Politics of Empire: Rethinking the Vienna School,” 54-79.

expounds on the value of the publication of historical facts, ideally to serve as the subject for inductive research (‘inductive Forschung’). This was to be the chief aim of the discipline. Thausing believed works of art “reveal to us a reliable source of how earlier periods thought and felt, and of their entire intellectual powers.” As a method, Thausing is particularly encouraging of comparative analysis, “similar to that of the natural sciences.” He goes on to say, “Primitive people and children register very incomplete visual impressions... In ancient Japan, India or Ireland, the artists who imperfectly invoked the human figure and its movement were not lacking manual dexterity—many of their finest and most intricate works prove this... They did not have the same visual experience.” Thausing clearly had the same concept of racial types as Morelli, and also believed that vision varied depending on race, in accordance with anatomy and advancement or degeneration. Those with adequate mental capacity to decipher works of art also required training, “the formal language of art must of course first be learned in the same manner as all other language.” He closed his lecture with a quote from his “dear friend,” Ivan Lermolieff: “‘A work of art will always give you an answer if you are able to pose the question correctly. If an answer is not forthcoming, then you have either not completely discovered the question, or it might not possess a language in which to speak, that is to say, it might not be a true work of art.” With these

words, Thausing bestowed two privileges on the first official academy of art history: the right to determine what should and should not be viewed as art, and the right to objectively determine what this art denoted about—not for—various peoples of the world.

Thausing had set the course for what would become a program in the discipline offered by Julius Schlosser. Thausing’s students, Alois Riegl and Franz Wickhoff, both became professors at the school and furthered Thausing’s approach. Through methods of comparative analysis, they sought to avoid all aesthetic judgment. Alois Reigl (1858-1905) in particular focused on the purely formal qualities of the work of art and read cultural details as symptoms of a larger whole—recalling the sociological positivism of Hippolyte Taine (1828-1893): “Just as in the animal, the instincts, teeth, limbs bones and muscular apparatus are bound together in such a way that a variation in the others, and out of which a skillful natural, with a few bits, imagines and reconstructs an almost complete body, so, in a civilization, do religion, philosophy, the family scheme, literature and the arts form a system in which each local change involves a general change, so that an experienced historian, who studies one portion apart form the others, sees beforehand and partially predicts the characteristics of the rest.”140 Morellian method, through comparative analysis, lent itself to the assumption that artworks are direct cultural products of a “type” of humanity, and that social groups and artworks form coherent wholes that can be productively analyzed for underlying truths. Morelli’s method also had great influence on the development of art history in the United States. Bernard Berenson

described his encounter with Morelli’s writings in 1888 as “life changing” and dedicated his “entire activity” to connoisseurship.141 Berenson became a purchaser for Isabella Steward Gardner and banker Theodore M. Davis. He also published and taught widely, particularly on the Italian Renaissance. Berenson’s books, categorizing artists into schools, were additionally divided into “decorators” or “illustrators.” Like Morelli, Berenson focused on attribution rather than constructed histories. He held the radical stance that selfhood and morphology are one, and that artworks stand as evidence of biography.142 His legacy extended scientific connoisseurship into the American canon.

In recent years, particularly beginning in the 1990s with President George W. Bush’s declaration of the “Decade of the Brain,” there has been a revitalized effort to bring scientific methods and concepts to bear on the understanding of the humanities, and visual art in particular.143 These efforts come alongside the attempt to question the assumed division between the arts and sciences, and to quell anxiety about the relevance of art history as a discipline—an anxiety that was equally felt by Thausing at the founding of his school. Interdisciplinary is appealing to academics and artists for various reasons—unfortunately some of the advocates of a “scientific” approach to art history repeat the mistakes already existing at the core of the discipline. MRI scans, even when thinly interpreted, offer the type of scientific data and parlance rarely available in art history.

142 Franco Russoli, Bernard Berenson, Nicky Mariano, Villa I Tatti (Florence. The Berenson Collection. (Milano: Arti grafiche Ricordi, 1964)
This embrace of “science” comes in various forms. Edward O. Wilson, for example, calls for “consilience,” a systemic and coherent approach to the production of knowledge. Re-embracing an Enlightenment tradition of rationalism, Wilson claims that many of the disastrous issues confronting the modern world would be solvable by integrating all fields of knowledge. His argument for a “sociobiology” seeks to ground human social behavior in biological traits. As Matthew Rampley points out, the problem with this argument is that it assumed the world to be a single, solvable object of knowledge.\(^\text{144}\) This dialogue raises issues of intellectual imperialism, in which natural science, simply for being “science,” holds a special explanatory power. In the recent collection of essays, *Creating Consilience*, suggests the possible power of a “science of culture.”\(^\text{145}\)

Neuroarthistory has emerged as one of the more controversial and polarizing ways biological thought has been applied to the discipline of art history. Criticized for presenting a superficial view of neurological process, the field nevertheless attracts followers and attention. Such studies raise questions about the use of subordinating the study of the arts, or any discipline of the humanities, to the scientific gaze. Such insistence is also political, a guise for the claim that cultural production is linked to biological process. The desire to map the intrinsic quality of “artwork” (itself a contested term) across the “world” is often not conducive to the exciting negotiations of cultural diversity that occur. The science of world art is often motivated by an unease with global culture, limed by assumption, speculation, and generalized inherited cognitions, like the science of race, through preconceived frameworks of knowledge.


\(^{145}\) Rampley, *The Seductions of Darwin: Art, Evolution, Neuroscience*, 5
Neuroarthistory is the undeclared legacy of the paradigm of objectivity, and so recalls modernist formalism. John Onians in particular has emerged as a scholar interested in linking formal structure to neural patterns specific to Greeks and their temples. Despite his use of scientific terminology, Onians is here reliant on the tradition of German *Kunstgeographie* that had emphasized the role of environment on art history. Onians observations of effect of environment on artwork are almost comically simplistic—Roman buildings of domes reference Italian volcanoes, Greeks prefer a rounded shape because of their rocky landscape, the intricacy of a Canaletto was particularly popular among English tourists because of an English environment of ‘clarity, linearity, and angularity.’ “Neural pathways” are used as a scientific catch all to position empty generalities. What do we gain by linking artworks, artists, and geographies besides inculcating Eurocentric beliefs about beauty, genius and hierarchy? Perhaps the scientific roots of art history have troubled and foretold its scientific future.

To conclude, the idea that the form of a work of art is a communication of the deep-seated identity or essence of an artist is unfortunately not obsolete. Such thinking takes as fact the modern Western ideas that art is primarily an expression, representation, embodiment or sign of its original producer. In many traditions, objects are considered sentient beings. Artworks can also be seen as necessary parts of a complex network of relationships, accidents, and interactions. Every artwork, after all, requires on some level both an artist and a viewer. The duality of form and content is also distinctly a Western belief, imposing artifice and allowing nothing to be studied unless ontologically

---

“worthy.” To imply that the Western framework, under the veil of “science” should be universalized is to deny art history a future beyond an Enlightenment exercise in categorizing and classifying.

In undergraduate physics courses at my alma mater, there is an understood necessity of teaching Newtonian math before newer concepts of relativity can be introduced. Later developments, such as relativity, necessarily debunk the previously understood mathematical “facts.” False preliminary lessons understood first are facetiously referred to by teaching assistants and professors as “lies for children.” In the case of upper level mathematics, learning the lie makes it easier to understand the way the rules operate on certain stages. As much as art history would like to envision itself as a science, “lies for children,” in the form of a canon of “great” images in a freshman survey may not be a good way to introduce our discipline. Doing so instills the problematic belief that there is a “true” way to read the art—and that our task as historians is to discover the ultimate methodology. Students will always be introduced to some kind of canon—whatever they see will become their canon. Nevertheless, art history is not a game with rules the same way math or physics is, and there is no reason that critical thinking should be discouraged at the introduction of the discipline.

Artworks, as they travel through time, do not get to dictate the story told about them. Rather, the lens we view them through tells us more about ourselves than about the biological underpinnings of the culture that created them. What does our continued privileging of the scientific do for our discipline? What would an art history without science look like? All this is to say, there may be more to learn about Morelli’s method, and its various interpretations, than first meets the eye. After conducting this research
and writing, I have come to the understanding that what may be necessary is removing
the one-way mirror that exists between the art historian and the object of study. By
clearing the objective disguise of the historian as all knowing and teleological, we are
forced to select our framing more consciously.

It was the unquestioning reduction of individual to type that allowed entire races
to be deemed inferior or “degenerate.” By looking at the racial language and beliefs of this
forefather of art history we can learn several lessons—first, there is no universal art
historical method. Second, linking identity to geography is tempting because of historical
precognitions, but often arbitrary and likely unproductive, assigning static meanings and
locations to objects, people and ideas that need be given flux. Otherwise, objects that
complicate the “facts” are ineffectively represented or omitted entirely. Hopefully my
study has shown that borrowing scientific language does not necessarily make something
true or real. Subordinating the humanities to the sciences is counterproductive, as each
serves different needs in our exploration of knowledge and epistemological systems, and
both have proven to be fruitful and continuing human pursuits. Morellian method and its
racial legacy is a framework that does not take into account transnational encounters,
cross-cultural exchange, networks of contact, or complicated objects—but pretends that
none are necessary if ideal, rigorous art history is practiced correctly. To define art
history racially is a disturbing legacy for an ambitious discipline.
Fig 1.1 "Portrait of Giovanni Morelli" 1886. By Franz von Lenbach, oil on canvas, collection of the Academia Carrara.
Fig 1.2 The “Mask to Protect the Christian Air” version for an adult (left) and a child (right), Giovanni Morelli’s illustrations for Das Miasma diabolicum, 1839. Source: “Dietro lo Pseudonimo” p. 519.
Fig. 1.3 Lewis Phetic Haslett’s “Inhalar or Lung Protector,” patented 1849. Source: Chemical History Foundation, Philadelphia, Pennsylvania.

Fig. 1.4 Louis Agassiz and radiate morphology. Source: Margaret Olin in German Art History and Scientific Thought: Beyond Formalism Farnham, (Surrey: Ashgate): 2012.

Fig. 1.9 “Raphael’s Ears” Visualization by Dietrich Seybold, 1995
Bibliography


Frank, Mitchell Benjamin, and Sterling and Francine Clark Art Institute, eds. German Art History and Scientific Thought: Beyond Formalism: [most of the Papers in This Volume Were Presented Either at the “Art History and the German Philosophical Tradition” Colloquium at the Sterling and Francine Clark Art Institute in Summer, 2001, or at the “German Art History and Philosophy: A Systematic Legacy” Conference at the University of Glasgow in Autumn, 2008]. Farnham, Surrey: Ashgate, 2012.


Johns, Karl. “Moriz Thausing and the Road towards Objectivity in the History of Art (1883), with a Provisional List of His Publications and Translation of His Inaugural


Kornell, Monique Nicole “Artists and the Study of Anatomy in Sixteenth-Century Italy” (doctoral dissertation, University of London: Warburg Institute, 1992.)


