Darwin’s theories of natural selection and sexual selection are significant scientific achievements, although his understanding of race and gender was defined and limited by his own life circumstances and the sociohistorical context within which he worked. This article considers the ways in which race, gender, and culture were represented and explained by Darwin and the ways in which his observations and opinions on gender and race were taken up by others and, more often than not, misapplied. Whereas the challenge of race (for Darwin) was to demonstrate the fundamental similarity and, hence, the common origin, of human races, the challenge of gender (for Darwin) was to identify a mechanism that could account for differences between women and men that, to him, were obvious, fundamental, and significant. The article concludes by considering the implications of Darwin’s views for contemporary psychological science.

Keywords: evolutionary theory, Darwinism, intersectionality, colonialism, evolutionary psychology

Charles Darwin’s theories provide a framework for understanding three important facets of human social organization. These are (a) the evolution of gender differences, (b) variations between cultures, and (c) the delineation of races. An analysis of Darwin’s body of scholarship allows us to demonstrate the forcefulness of his ideas for the present moment. The misapplication of Darwin’s ideas makes available to us some cautionary tales about how we both frame and approach the language of current debates on race, culture, and gender.

Darwin grappled with race, gender, and culture in the course of dealing with a core problem that each presented for the foundational tenet of his views on human evolution. His primary sources of evidence regarding race and gender were reports of anthropologists and other travelers and his own and others’ personal observations. Darwin’s conclusions from those data invariably supported what he already “knew” to be true about racial differences and the differences between women and men.

In this article we consider the ways in which race and gender were represented and explained by Darwin and the ways in which his observations and opinions on gender and race were taken up by others and, more often than not, misapplied. We begin by outlining the foundations for Darwin’s scientific views on race and gender as they are put forward in The Descent of Man, and Selection in Relation to Sex (Darwin, 1871), and we then consider race and gender in separate sections. For each, we outline a problem that requires reconciliation between Darwin’s view of natural selection and his perception of the facts of race and gender. We also briefly consider for each the (mis)application of Darwin’s views by his contemporaries.

Before going further, a note on terminology is in order. “Race” in the second half of the 19th century (the focus of this article) was a widely used construct but had no single meaning. When applied to humans, race was used to refer to broad geographic areas (e.g., the European race), to an individual nation (e.g., the English race), or to a group identified by distinctive physical features (Hawkins, 1997, p. 184). We use race as Darwin most often did, to refer to groups that share distinctive physical features. It is important to note that the physical differences that were used to differentiate races were presumed to carry distinctive psychological features. With respect to gender in that period, psychological and behavioral characteristics were presumed to be the direct manifestation of physical differences between the sexes. Thus, we use the present-day term gender when the emphasis is on the behavior, personality, or mental traits thought to be characteristic of a sex. Darwin did not separately examine culture, yet it is only possible to understand his views on race and gender within a cultural framework. We use culture to refer to the resources, language, communicative practices, artifacts, tools, institutions, myths, practices, customs, histories, everyday activities, and folklore that mediate the development of self and human mental functioning (Cole, 1996; Rogoff, 1990). Our meanings about self–other relation-

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ships are closely mediated, structured, and organized through our participation in everyday, sociocultural practices and the social relations that are embedded within these practices. Recent histories of evolutionary thinking regarding race and gender amply demonstrate that the two must be understood within the context of systems of power and privilege, especially as an aspect of colonialism abroad and class systems at home (e.g., G. Richards, 1997).

The Descent of Man (Darwin, 1871, 1874, 1882)¹

Darwin’s views on race and gender cannot be considered separately from his aims in The Descent of Man, and Selection in Relation to Sex (Darwin, 1871, 1874, 1882). When he published On the Origin of Species by Means of Natural Selection in 1859, Darwin knew that he would eventually have to outline how natural selection accounted for human evolution. The form that his argument took in The Descent of Man was, in part, a response to two intervening events that shaped the intellectual climate.

First was a shift in anthropology’s views on race in the period between the publication of On the Origin of Species and The Descent of Man. Up to the mid-19th century, anthropologists had been concerned with establishing the field’s scientific credibility by distancing it from biblical creationism and invoking a view of human evolution as stemming from a single common origin. In part spurred on by the rising influence of evolutionary theory, British anthropology had become focused on the question of racial origins, which paradoxically spurred a revival of debate about human origins, stimulating again the theory that prehuman species gave rise to the different races and a corresponding hierarchy of racial cognitive and cultural competence (Alter, 2007).

A second impetus was Darwin’s friend and professional rival Alfred Russel Wallace’s endorsement of the notion that human characteristics of consciousness, intellect, and will could not be accounted for by natural selection alone and that some divine intervention was required (Shanahan, 2004). Wallace had abandoned his earlier advocacy of a natural selection explanation for human evolution and had begun to invoke an extra-evolutionary power to account for human mental and moral capacity: “The brain of pre-historic and of savage man seems to me to prove the existence of some power, distinct from that which has guided the development of the lower animals through their ever-varying forms of being” (Wallace, 1869/1870, p. 343, quoted in Shanahan, 2004, p. 253).

Darwin proposed that sexual selection played a significant role in human evolution. As summarized by Dewsbury (2005), two processes typically contribute to sexual selection, male–male competition and female choice. Reasoning from reproduction in plants and other animals, particularly differences in the mobility of large ova and smaller, more mobile sperm, Darwin theorized that male–male competition for access to females promotes the occurrence of secondary sexual characteristics that are designed to attract female attention or vanquish male opponents and that it is the (stationary) female who chooses the more attractive mate. Darwin’s earliest formulations of evolutionary theory stressed the importance of variation as a mechanism in natural selection, and he particularly emphasized variation in his theory of sexual selection to explain development of secondary sex characteristics. Vivid and distinctive characteristics, he believed, originated in the males’ stronger passions, were strengthened by use, and then were more likely to be transmitted to male than to female offspring, who would then display those characteristics as adults. The tendency toward variation, he emphatically stated, did not itself cause these characteristics but made their occurrence more likely.

Even though Darwin countered the polygenetic proponents and advocates of special intervention in The Descent of Man, he endorsed the cultural values that fostered those points of view. He was politically liberal as a young man but became increasingly conservative over the years. Irrespective of political inclinations, however, he appears

¹ Darwin wrote The Descent of Man in two parts: the first part was “On the Descent of Man,” and the second, longer, part was titled “Sexual Selection.” The first edition (Darwin, 1871) was published in two volumes: Volume 1 contained “On the Descent of Man” and the first section of “Sexual Selection”; Volume 2 contained the remainder of “Sexual Selection.” A second edition was published in 1874 as one volume with three parts. In the preface to the second edition Darwin (1874) referred to the “fiery ordeal” through which the book passed in reaction to his ideas about sexual selection (p. v). Although the second edition was extensively revised from the first, Darwin’s narrative on race and gender remained substantially unchanged. Both editions, as well as Darwin’s other books and an extensive collection of personal papers, are available in full-text versions online at http://darwin-online.org.uk/. All quotations in this article from The Descent of Man, unless otherwise noted, are taken from the second edition in its 1882 issue (Darwin, 1882) available at that site, though nearly identical quotations appear in the first edition (also online at that site).
to have unquestioningly accepted gender and racial differences in cognitive and emotional capacities as normal, natural, and typical: This is the way the world is, now explain it. As one historian (E. Richards, 1997, p. 121) observed, Darwin’s “reconstruction of human evolution is pervaded by Victorian racial and sexual stereotypes and assumptions of the inevitability and rightness of the sexual division of labor.”

**Darwin on Race**

All the races agree in so many unimportant details of structure and in so many mental peculiarities, that these can be accounted for only by inheritance from a common progenitor; and a progenitor thus characterised would probably deserve to rank as man. (Darwin, 1882, p. 608)

A central question of *The Descent of Man* is how to account for differences across human groups, the “so-called races of men” (Darwin, 1882, p. 166). From the inception of his theory of evolution, Darwin espoused a view that all humans could trace their origin to a single common ancestral group in which physical and mental evolution distinguished them from a common ape-like ancestor. Darwin’s position was at odds with the then-prevailing notion of polygenetic origin, the belief that geographic dispersal of racial groups occurred prior to the complete evolution of the human mind. The polygenist view thus maintained the position that “earlier” and “later” forms of human evolution are contemporaneous and exist in distinct races, comprising a “many-stepped ladder of racial ascent” (Alter, 2007, p. 241). The polygenist approach fostered a science of defining distinctive racial groups. Indeed, research on race until the mid-20th century was dominated by this typological approach, that is, classification of human races according to distinctive standard forms. The extent to which an individual resembled that ideal type (itself a fairly arbitrary construction) was the determinant of her or his racial classification (Štrkalj, 2000).

**Explaining the Origins of Race Differences**

Darwin appeared to hold a deeply conflicted position on race. On the one hand, he argued the biological unity of all human groups, not only in *The Descent of Man* but in other notes and publications as well (e.g., Darwin, 1872). For example, he cited extensively anthropological reports that demonstrated the universality of bodily ornamentation and the importance of beauty (however defined) as evidence of a universal human character, indicating “the close similarity of the mind of man, to whatever race he may belong, just as do the almost universal habits of dancing, masquerading, and making rude pictures” (Darwin, 1882, p. 577). On the other hand, he unquestioningly assumed the superiority of Europeans. Indeed, Darwin predicted that intergroup competition would ultimately lead “civilized races of man” to “replace throughout the world the savage races” (Darwin, 1871, Vol. 1, p. 201).

Divergence in mental and social characteristics, Darwin proposed, was due to the environmental conditions in which groups lived, and advancement in civilization was a by-product of competition among groups. Further, the harsher the environment, the more inventiveness was required for survival. Harsh climate (read Northern Europe) was an environment that required “inventiveness for survival” and therefore fostered more intelligent and creative “races” (Alter, 2007, p. 241). Alter (2007) observed that, if one accepts the premise that European climate is more hostile to survival than other climates, this odd logic explains European superiority over African and antipodean indigenous peoples but ignores what would have been counter examples—native peoples of the Americas. The putative association between climate and racial development lingered well into the 20th century (see, e.g., Broom, 1933).

Both monogenists (like Darwin) and polygenists (like other significant proponents of evolutionary theory) presumed brain size and complexity to be the underpinnings of racial differences in mental capacity (Gould, 1981). Darwin considered the resulting dispositions, as he did the differences between females and males, to be “very distinct” and expressed chiefly “in their emotional, but partly in their intellectual, faculties” (Darwin, 1882, p. 167). In our view, more significant than Darwin’s own ambiguous position regarding evolution and race is the fact that his theory was stripped of nuance and appropriated to serve a scientific racism that aimed to prove comparative differences in mental abilities.

**The (Mis)Applications of Darwin’s Theory: Eugenics**

Opinions on the nature of racial differences were freely given and widespread. The two major figures who drove the formation of scientific racism were Herbert Spencer in
his formulation of “survival of the fittest” and Darwin’s cousin, Francis Galton, through his promotion of eugenics (see Fancher, 2009, this issue).

Darwin did not promote eugenics, but he did express concerns in _The Descent of Man_ that less fit groups in civilized societies might be protected from the operation of natural selection and that, through disproportionate reproduction, these less fit groups might bring about biological decline. Without severe struggle for existence, humans “would sink into indolence, and the more gifted men would not be more successful in the battle of life than the less gifted” (Darwin, 1882, p. 618). The assumptions underlying Darwin’s concerns “reappeared in, and indeed structured, subsequent discourses on eugenics and racial hygiene” (Hawkins, 1997, p. 217). Among those that Hawkins (1997) identified is Darwin’s assumption that social mechanisms necessarily interfere with the benign influences of natural selection by making it possible for “inferior” specimens to reproduce successfully. This, of course, requires an assumption that objective criteria exist “inferior” specimens to reproduce successfully. This, of course, requires an assumption that objective criteria exist to distinguish “superior” from “inferior” races (apparently, the indicators of superiority were characteristics of northern European cultures) as well as an assumption that heredity rather than social environment is the cause of difference between purported superior and inferior peoples.

However they got there, Darwin and proponents of rival theories all landed on the conclusion that there is a hierarchy of race based on mental and emotional competence. The difference lies in where the origin of those differences is believed to be—for Darwin it was environmental forces and clashes with other human groups that accounted for winners and losers; for others, it was in whether full humanity could be claimed at all.

**Darwin and Gender**

Woman seems to differ from man in mental disposition, chiefly in her greater tenderness and less selfishness; and this holds good even with savages. . . . Man is the rival of other men; he delights in competition, and this leads to ambition which passes too easily into selfishness . . . with woman the powers of intuition, of rapid perception and perhaps of imitation, are more strongly marked than man; but some, at least, of these faculties are characteristic of the lower races, and therefore of a past and lower state of civilization. (Darwin, 1882, pp. 563–564)

Whereas the challenge of race for Darwin was to demonstrate the fundamental similarity (and hence, the common origin) of human races, the challenge of gender was to identify the mechanism that could account for what to Darwin were the obvious and significant fundamental differences between women and men. Darwin espoused the general inferiority model of women’s capacities, considering some of those inferior traits fortuitous counterweights to masculine characteristics. Like Galton (1883), he believed that the intellectual, sensory, and physical capacities of females were inferior to those of males across the board: “The chief distinction in the intellectual powers of the two sexes is shewn by man’s attaining to a higher eminence, in whatever he takes up, than can woman—whether requiring deep thought, reason, or imagination, or merely the use of the senses and hands” (Darwin, 1882, p. 564).² Without the benefit of a genetic explanation for the transmission of sex-specific traits, Darwin faced the puzzle of how it could be that sex-related differences were maintained from one generation to the next: How do two sexes equally contribute to offspring yet appear to have sex-specific psychological and physical characteristics?

Darwin proposed three interrelated explanations for sex differences in mental and psychological traits: the developmental status of females, greater male variability, and sex-specific transmission of traits. Each of these is outlined below.

**Mechanisms of Sex-Specific Transmission of Traits**

**Developmental status.** Darwin (1882) has famously been quoted as asserting that man “has a more inventive genius” than woman (p. 557). Darwin considered this but one of many qualities of intellect and character that could be considered secondary sex characteristics that emerge fully only at maturity. In fact, it is because females mature earlier than males across species that Darwin considered age to be connected to sex-specific transmission of traits. “It is probably due to the rather late appearance in life of the successive variations whereby man has acquired his masculine characters, that they are transmitted to the male sex alone” (Darwin, 1882, p. 557).

Darwin (1882) pointed out that in childhood, girls and boys “resemble each other closely, like the young of so many other animals in which the adult sexes differ widely,” and suggested that in some physical respects the adult female could be considered “intermediate between the child and the man” (p. 557). This was a fairly common scientific view. For example, Spencer endorsed the idea that individual development recapitulated human evolution such that the female’s earlier maturity renders women incomplete: “The mental manifestations [of females] have somewhat less of general power or massiveness; and beyond this there is a perceptible falling-short in those two faculties, intellectual and emotional, which are the latest products of human evolution” (Spencer, 1902, p. 341; see also Shields, 2007).

**Characteristics acquired in adulthood.** Darwin asserted that male superiority was originally produced by both sexual selection and natural selection and was maintained, in general, by a tendency of some characteristics acquired in adulthood to be transmitted only to offspring of the same sex. Thus, the qualities that adult men acquire in their more rigorous “struggle for life” are more

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² Darwin was certainly aware of opposing opinions on the nature of female intellect. He even appropriated an argument from John Stuart Mill’s (1869) _The Subjection of Women_ for the legal and social equality of women for his own purpose. In a footnote, he quoted Mill to support his own view of the greater intellectual capacity of males. Citing Mill’s observation that “The things in which man most excels woman are those which require most plodding, and long hammering at single thoughts,” Darwin asked, “What is this but energy and perseverance?” (Darwin, 1882, p. 564).
likely to be passed on to their male than to their female offspring. He observed that it is fortunate for females that most inherited characteristics are transmitted equally to offspring of both sexes as “otherwise it is probable that man would have become as superior in mental endowment to woman, as the peacock is in ornamental plumage to the peahen” (Darwin, 1882, p. 565).

Darwin even offered a remedy for female inferiority that capitalized on the tendency for later-acquired traits to be transmitted to same-sex offspring:

In order that woman should reach the same standard as man, she ought, when nearly an adult, to be trained to energy and perseverance, and to have her reason and imagination trained to the highest point; and then she would probably transmit these qualities chiefly to her adult daughters. (Darwin, 1882, p. 565)

This example illustrates not only the role that Lamarckian thought played in Darwin’s evolutionary theory but also how impossible it was for him to grasp that social factors could also play a determinative role. A broad swath of social circumstances, from the pressures of social convention to educational opportunities, that could easily account for many gender differences in behavior went unseen.

**Variability.** Variation from the typical is a central construct in evolutionary theory. Darwin first suggested that males were more likely to express variation from the norm or central tendency in *The Variation of Animals and Plants Under Domestication* (Darwin, 1868). By the second edition of *The Descent of Man* he stated the difference as fact: “It is the male which has been chiefly modified, since the several races diverged from their common stock” (Darwin, 1882, p. 560), but in humans as in other animal species, “the cause of the greater general variability in the male sex, than in the female is unknown” (p. 224).

**The (Mis)Applications of Darwin’s Theory: The Variability Hypothesis**

Darwin’s recommendations for women’s education were about as far as he went in applying his own theory to social engineering. Others showed less restraint. In the 1890s, when psychology as a mental science began to expand dramatically, some made the jump from physical variation to mental variation. A set of beliefs, eventually known as the variability hypothesis, were popularized, according to which males were seen as more likely than females to vary from the norm in physical and mental traits. Some interpreted this as meaning that males were more likely than females to exhibit abnormal characteristics; others, that male characteristics/trait were spread out over a wider bell-shaped distribution, whereas females’ were more likely to cluster about the mean (Shields, 1982). For example, the developmentalist G. Stanley Hall, who assumed that psychological ontogeny recapitulates phylogeny, was a proponent of the variability hypothesis, claiming that among schoolchildren, “the easy and widely diffused concepts are commonest among girls, the harder and more special or exceptional ones are commonest among boys” (Hall, 1891, p. 143).

Havelock Ellis, the influential sexologist, saw the variability hypothesis as relevant to all aspects of gender. His first major publication on sex, *Man and Woman* (which went into eight editions, the last published in 1934) contained an entire chapter on “The Variational Tendency of Man.” Like Hall, Ellis concluded that variability was evident to an even more marked degree in mental traits than in physical traits. There were more males than females in homes for the mentally deficient, and “genius” was “in nearly every department . . . undeniably, of more frequent occurrence among men than among women” (Ellis, 1894, p. 366). Since both ends of the spectrum should be regarded as “an organic congenital abnormality,” both should be more common among men “by virtue of the same general [biological] tendency” (Ellis, 1894, p. 366). Thus, practically speaking, genius (defined as achievement of social or professional eminence) appeared to be a male trait.

The variability hypothesis enjoyed some degree of popularity until World War I and has periodically reappeared since then (Dewsbury, 2005). Especially in the early 20th century, discussion revolved around the practical social implications of greater male variation. For example, one debate concerned whether girls, because of the comparative rarity of female genius predicted by the variability hypothesis, should be encouraged to aspire to or be trained for intellectually demanding professions (Shields, 1975a, 1975b, 1982).

**Culture**

Do the races or species of men, whichever term may be applied, encroach on and replace one another, so that some finally become extinct? (Darwin, 1882, p. 6)

One of the critical questions in *The Descent of Man* revolves around the survival of racial cultural groups. In both the first and second editions of *Descent*, Darwin put forward the idea that races that were better equipped for besting others in direct competition had better prospects for survival. Although Darwin used the term *race*, it is clear from the context that it is not the group’s distinctive racial features per se that he felt were responsible for the success or failure of a race but its particular cultural formation that facilitated or impeded its success in competition with other groups: “Extinction follows chiefly from the competition of tribe with tribe, and race with race... When civilised nations come into contact with barbarians the struggle is short, except where a deadly climate gives its aid to the native race” (Darwin, 1882, p. 182). Darwin’s theory set in motion the “biologisation of human diversity,” both in the search for race-defining features and physical appearance and in using “temperament and culture” as a measure of evolutionary status (G. Richards, 1997, p. 13).

**The (Mis)Applications of Darwin’s Theory: The Primitive Mind and the Civilizing Mission**

Two interlinked developments characterize the appropriation of Darwinism to the 19th-century view of cultural imperialism. First is the belief in the characteristics of the “primitive mentality,” and second is the resulting belief in
the duty of more advanced cultures to harness and control the primitive.

**Culture and the development of primitive mentality.** Darwin’s ideas of evolution set the stage for establishing links between culture and mental progress and also provided a new psychological framework for reconfiguring the developmental capacities of the “primitives” (Bhatia, 2002). During the late-19th century, it was common for European intellectuals to compare non-Western “primitive” adults to European children on characteristics such as “inability to control the emotions, animistic thinking, inability to reason out cause or plan for future, conservatism, love of analogy, symbolism, and so on” (Cole, 1996, p. 16). The European colonization of Asia and Africa provided the impetus and justification to create a cultural “other” that not only exhibited primitive qualities of intelligence but was in need of civilizing and education (Said, 1979). One method of justification was through a theory that explained group differences in terms of the relationship between sociocultural development and mental development (Cole, 1996; Hallpike, 1979; Jahoda, 1993).

Darwin’s insights about the comparative development of cultures and races deeply influenced many key contemporary thinkers. For example, Spencer became one of the best known exponents of cultural evolutionism. His *The Comparative Psychology of Man*, which most explicitly accounts for psychological differences in terms of race, biology, and evolution, concluded with the observation that “the dominant races overrun the inferior races mainly in virtue of the greater quantity of energy in which this greater mental mass shows itself” (Spencer, 1876/1977, p. 8).

**The civilizing mission.** Darwin’s evolutionary theory provided the overarching framework for psychologists to investigate the psychological make-up of colonial subjects and primitives. Progress in other scientific fields provided the instruments by which the psychological make-up of the localized natives could be assessed and ranked. Ranking, in turn, provided, explicitly or implicitly, justification of continued British and other European imperialism.

Once evolutionary theory had established that the physicality and the psychology of the colonial subject was indeed primitive and savage-like, then the colonial powers could link racist thinking with educational policies for the natives. Such policies would leave an indelible mark on the consciousness of the colonized subjects. Adas (1989) pointed out that a “tautological relationship” developed between the concept of race, culture, and scientific achievements. On the one hand, scientific achievements were used as the most meaningful criterion of determining racial capacity, and on the other hand, “estimates of racial capacity” were used to formulate policies that would decide how much science, technical, and English-language education should be given to the various non-Western colonial subjects (Adas, 1989, p. 275).

The case of India is particularly telling. The ideology of science and technology was used by the colonial empire to fulfill its mission to “tame” and civilize Indian subjects. The British view emphasized that empirical science, with its claims to cultural neutrality and objectivity, had the power to infuse secularism into the superstitious, irrational, and mythical world of colonies (Prakash, 1999). The disciplines that were established simultaneously with the rise of modern imperialism, Prakash (1999) noted, did not develop because of “Europe’s prior self generated cultural and political resources; rather, their development in the course of trade, exploration, conquest, and domination instantiated Western modernity” (p. 13). As the colonizer began “staging India” and other colonies as objects of science, “it also created a place for what it sought to appropriate; indigenous artifacts and ‘tribes and races’ emerged in their native particularity as objects of scientific discourse” (Prakash, 1999, p. 26). Classification, order, and naming of native objects and artifacts through the museums and local exhibits played a key role in justifying the principles of evolutionary theory and bringing science to the level of the natives. One effect of these theories of comparative psychology of mental development was that colonized subjects came to internalize the racist images of colonial empires. For example, Indian psychologists had internalized British Orientalist images of the non-West, and with the process of “second colonization” in full swing in the postcolonial context, Western psychology was firmly transplanted onto Indian soil (Said, 1993).

The story of Indian psychology parallels the rise of British and North American psychology. The blind copying and imitation of Western psychology by Indian psychologists was, in Nandy’s (1974) view, a response to the “feeling of inferiority” that they had experienced during the colonial times (p. 7). The uncritical acceptance of Western psychology was also an expression of subservience to their colonial masters. Nandy (1974) noted that “all budding psychologists in India were expected to show due respect to the Anglo-Saxon stalwarts, and Western degrees and training were at a high premium” (p. 1). By the 1970s, Indian psychologists were primarily using European and American textbooks in their undergraduate and graduate curricula and were importing European and American standardized intelligence and personality tests to assess the various “abilities” of the Indian population. It is important to mention here that neither Nandy nor any other Indian psychologists mentioned above suggest that European/American psychology is irrelevant in the Indian context. Rather, they place at the forefront the point that the history of modern Indian psychology is closely intertwined with India’s larger colonial and postcolonial history. Such a history is disturbing because the native psychologists were, consciously or unconsciously, carrying forth the Orientalist ideals of the West. The Orientalist perception that the non-Western “Other” is incapable of defining his or her self and needs help from the West was clearly reflected in Indian psychology’s dependence on European/American psychology. Furthermore, the very mentality and psychology that the European and American intellectuals had created for the non-Westerners in order to control, colonize, and denigrate them was, in part, being held up as a mirror by the Indian psychologists to understand the development of their own sense of self.
It is important to recognize the fact that the birth of modern psychology occurred as evolutionary theory was broadening its scientific reach at the peak of colonialism. The development of Western scientific disciplines such as ethnology, political economy, botany, medicine, geology, and meteorology occurred simultaneously with the rise of modern imperialism (Prakash, 1999). Similarly, Said (1993) has demonstrated how with the rise of colonialism, the “structures of location and geographical references” (p. 52) within Western literature, history, and philosophy underwent remarkable changes. The British colonial government was aware that if it had to imagine itself as the master of all geography in the world, then science and technology had to be somehow transplanted into the alien worlds of the native colonies. The British thus envisioned their colonies as laboratories that could further science and their civilizing mission. Darwin’s evolutionary theory unwittingly provided comparative developmental psychology the scientific tool to show that the non-Western “Other” as a native subject was infantile, feminine, immoral, irrational, and uncivilized—in other words, not adult, not male, and not manly—and therefore in need of the governance of wise, powerful, civilized, responsible Western colonizers.

Integrating Themes in Gender, Race, Culture

Darwin’s ideas about gender, race, and culture can best be understood by considering them in relation to one another and to the prevailing ideologies of that era. An intersectionality analysis, which focuses on the mutually constitutive relations among social identities, gives us a nuanced and complex picture of Darwin’s interlocking ideas on race, gender, and culture. Darwin espoused and explained the inferiority of females via their lower developmental status, lesser variability, and sex-specific transmission of mental traits. In contrast, Darwin’s position on race was more ambiguous. He believed in the common biological origins of all races but also argued that the civilized European races ultimately would replace primitive races because of superior intellect and resulting success in intergroup competition. The role of power, privilege, and oppression, not surprisingly for the era, was the invisible thread woven through his views on race, gender, and culture that actually made a kind of logical coherence possible.

Darwin, like many others at the time, implied that greater gender differentiation came with a civilization’s advancement, stimulating clearer differences between the sexes in appearance and character. Although Darwin did not dwell on this, other evolutionary scientists pointed to the physical similarities of women and men in “lesser” cultures. Thus, greater gender differentiation was a privilege of evolutionary success overall and, in humans, the outcome of successful intergroup conflict. In “primitive cultures,” in contrast, the distinctiveness of each sex was described as instinctually driven: by maternal nurturance and male aggression. As a result, assertions of greater similarity between the sexes and less male variability in primitive cultures effectively rendered “primitive” women invisible and demasculinized “primitive” men while denying the humanity of neither. “Primitive” women were imagined solely in terms of their reproductive function, and “primitive” men, though credited as aggressive in the work of survival, were largely depicted as ineffective in harnessing that impulse to civilizing progress. The hypothesized increase in sexual dimorphism with cultural advance is a hypothesis that both reifies racial hierarchy and contains the women of so-called “advanced” cultures and races, making their capacity for challenging male dominance unthinkable.

In conclusion, we offer three observations drawn from this history that are relevant to contemporary psychology as it positions itself as a scientific discipline in a world that has become increasingly global yet is confronted with deeply divided ideologies and cultural truths.

1. We ignore the values that guide research at our peril. Looking at a timeframe removed from our own allows us to see more clearly the many ways in which cultural values are inadvertently inserted into the scientific process. Scientists then could not fathom that values affected their science, and it is no more obvious to us today, despite the large body of empirical work showing that values influence scientific practice (e.g., Harding, 1993).

Paternalism and exploitation are not innovations of the mid-19th century, but what some interpretations and applications of evolutionary theory added was a scientific basis for institutionalizing paternalistic behavior toward some groups and providing the rationale for their exploitation. Nineteenth-century applications of evolutionary theory to human behavior and group differences offer a stunning view of the appropriation of science for promotion of a social agenda. It is clear that Darwin himself did not lend his theory to these uses. It is also clear, however, that misappropriation of his thinking yielded a legacy of racism and justification of sexism. This example of scientific racism has a broad reach relating to how we view the practices of science. Many scientists understand scientific practice as “containing some transcendental core immune to the impact of ‘external’ factors such as funding and ideological interests” (G. Richards, 1997, p. 16). However, evolutionary theory serves as an example of how science can be infused with values to further particular cultural agendas and interests.

2. Popular notions circulate into social and behavioral science whether we see it at the time or not. For example, at the mid-19th century, psychology as a budding scientific practice was fed by popular discourse concerning fundamental psychological questions of human agency, mind, and relationships. Folk knowledge circulated to scientific psychology via periodicals and newspapers aimed at a general readership, and then the scientifically endorsed version of this knowledge circulated back again (G. Rich-
ards, 2002; White, 2002) The beginnings of the psychology were “shaped in a public arena, not through the specialization or differentiation of academic life” (Smith, 2004, p. 83; emphasis in original). The public and popular forum allowed popular cultural notions of race, cultural differences, women’s nature, and gender differences to permeate scientific discourse.

Lorimer’s (1997) analysis of scientific representations of race in Britain illustrates this idea. He observed that from the 1830s through the 1870s, racial discourse was not specialized, and the content and tone of scientific papers presented at learned societies did not differ from those of publications aimed at an educated public audience. By the end of the century, however, the application of “the ideology of scientific naturalism” (Lorimer, 1997, p. 228) to race and race relations had circulated widely. The end result of treating humans as natural objects was that it became impossible to consider the possibility of change in either race or race relations or to imagine a role for human will and agency in explaining either the oppression or the liberation of colonized peoples (Lorimer, 1997). Positive images of aboriginal and colonized peoples were therefore dismissed as the products of antiscientific sentimentality. We do not suggest that the impetus or values behind scientific representations of race, class, and gender were equivalent or that the social consequences of each played out in the same or even analogous ways. The point is that, in this period, public discourse and lay beliefs about group characteristics and differences fed into scientific understanding, and, in turn, scientific legitimization of these constructs further naturalized and reified them.

The circulation of popular imagery to science and back again is not simply a historical curiosity. Consider the contemporary global landscape of international psychology. One reason that European/American psychology has had such a huge presence on the world scene is that its power to represent the non-Western “Other” has been and continues to reside primarily with psychologists working in Europe and America (Moghaddam, 1987). For example, cross-cultural studies conducted by U.S. psychologists after the Second World War on perception, intelligence, and memory led to the conclusion that there was a “developmental lag” between modern European children and children in preindustrial cultures. Such research suggested that African children could not do problem-solving tasks, did not know how to classify, had perceptual incapacities, and were deficient in logical, mathematical, and formal reasoning. Cole (1996, p. 73), who was witness to such Orientalist representations during his work as a psychologist in Africa, “found these generalizations difficult to credit. It’s a long way from inability to do jigsaw puzzles to general perceptual incapacities.” Although European/American psychology has come a long way from describing the non-Western “Other” in 19th-century Orientalist terms, the core theoretical and conceptual frameworks that today are used to represent and study non-Western or globalized cultures are still products of European/American psychology.

3. There is no substitute for going back to the original to see what was really said and why. The point here with respect to Darwin is that viewing his ideas on race or gender only from the perspective of appropriators (gender) or opposing points of view (race) does him a disservice. Darwin needed to square his scientifically based theory with what he and others perceived as obvious and significant gender and racial differences. Seeing only the racism or sexism in his account conceals the more compelling part of the story: the logical turns and assumptions he had to make in order to square his science with what appeared to be social truth. More interesting and more telling, we think, is Darwin’s missed opportunity.

If Darwin had been able to conceive of gender or racial group differences as having a connection to broader social forces, he might have initiated a quite different conversation, one focusing on how natural selection and the impulses of sexual selection operate in concert with environmental factors such as socialization and sociocultural constraints. Everything in his personal experience and the culture in which he was immersed, however, suggested to him, indeed insisted, that social factors had negligible value as explanatory variables outside of an evolutionarily driven mechanism. This was Darwin’s road not taken—it was not until the next century that the existing social order was understood by scientific psychology as anything other than normal, typical, and natural.

REFERENCES


