

Darwin communicates with the Christian world: his transatlantic strategy

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Abstract: Born into a Christian world without an audience for naturalistic theories of evolution and human origins, Charles Darwin came of age sharing many of his world's beliefs about nature, God and history. After the *Beagle* voyage he faced the challenge of gaining an audience for his private theorizing about life's evolution from "one common ancestor". From the start of his evolution-research he aimed to promote "my theory", not necessarily as the negation of religious doctrines, but as a religious-scientific advance. One such doctrine, to which he adhered deeply, was a belief in the common-ancestry or brotherhood of the human races as the moral basis for abolishing black chattel slavery. With abolition complete in the British Empire in 1838, all eyes turned to the United States, where slavery flourished alongside a new slavery-sanctioning, race-pluralist creationism. Darwin's transatlantic strategy from the 1850s was to cultivate elite anti-slavery Yankee naturalists whose sponsorship of his common-descent theory would serve to undermine this pluralist creationism more effectively than discredited scriptural arguments for human racial unity. His theory could thus appeal as a moral-scientific advance to abolitionist Christian America. But the strategy never realized its potential, leaving new forms of creationism to spring up in the twentieth century.

Key-words: Darwin, Charles; Darwinism; evolution; creationism; common descent; slavery abolitionism; U.S. Civil War; Agassiz, Louis; Dana, James Dwight; Gray, Asa; Garrison, William Lloyd

Darwin comunica-se com o mundo cristão: sua estratégia transatlântica

Resumo: Nascido em um mundo cristão, sem audiência para teorias naturalistas de evolução e sobre as origens do homem, Charles Darwin cresceu compartilhando muitas de suas crenças sobre natureza, Deus e história. Após a viagem no *Beagle* ele se deparou com o desafio de obter uma audiência para sua própria teoria sobre a evolução da vida a partir de "um ancestral comum". Desde o início de sua pesquisa sobre evolução ele teve por objetivo promover "minha teoria", não necessariamente como uma negação das doutrinas religiosas, mas como um avanço científico-religioso. Tal

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doutrina, à qual ele aderiu profundamente, consistia na crença da ancestralidade comum ou parentesco das raças humanas como a base moral para a abolição da escravidão dos negros. Com a abolição da escravatura no Império Britânico em 1838, todos os olhos voltaram-se aos Estados Unidos, onde a escravidão florescia junto a um novo criacionismo, que a sancionava e era racista-pluralista. A estratégia transatlântica de Darwin, a partir dos anos 1850, foi a de cultivar os naturalistas da elite *Yankee* anti-escravagista cujo patrocínio à sua teoria da ancestralidade comum serviria mais efetivamente para minar o criacionismo pluralista do que os desacreditados argumentos bíblicos em prol da unidade racial humana. Sua teoria poderia então parecer como um avanço científico-moral para a América Cristã abolicionista. Mas sua estratégia não atingiu todo seu potencial, deixando novas formas de criacionismo surgirem no século XX.

Palavras-chave: Darwin, Charles; Darwinism; evolution; creationism; common descent; slavery abolitionism; U.S. Civil War; Agassiz, Louis; Dana, James Dwight; Gray, Asa; Garrison, William Lloyd

1 INTRODUCTION

Communication transforms local knowledge into universal knowledge by the reciprocal sending and receiving of messages. Knowledge-communication is a multi-pathway process – not broadcasting, but dialogue. The dialogue goes on both distantly, between senders and recipients, and locally among senders and among recipients as they seek to fix the knowledge-content of messages. At the same time, the knowledge-content is shaped by the medium through which the messages are sent. Every medium imposes its own constraints on the form and content of messages, paper being the obvious example. As a medium of knowledge-communication, paper ordinarily requires senders to be able to write and recipients to be able to read. Fixing the knowledge-content of messages is thus privileged to those with the access, means and skills to create and interpret inscriptions (Moore, 1989).

Paper was Charles Darwin's usual medium of knowledge-communication. The history of the communication of Darwin's theories is therefore primarily the history of the writing, illustrating, printing, advertising, distributing, selling, reading, reviewing, translating and redacting of Darwin's private research through the medium of letters, tracts, books, journals, magazines and newspapers. (No Edison foil-cylinder recording of Darwin's voice has been found.) Once we understand the political economy and sociology of the print-medium in Darwin's day – from the price of paper and the structure

of press ownership to the rise of mass literacy – we will understand the material and historical preconditions for the dissemination of a universal knowledge that has come to be known as “Darwinism” (Moore, 1986, 1991, 2001).

But no universal agreement has ever existed on what Darwinism *is*. Indeed, senders and recipients of messages about the knowledge-content Darwin’s texts are notoriously unable to agree on what those texts mean (or even sometimes on what their own messages mean). This discord originated with Darwin himself: he backtracked, hedged, glossed, and temporized in numerous passages, notably in the five revised editions of the *Origin of Species*. During his lifetime, critics exploited the changes and inconsistencies (some still do), much to Darwin’s chagrin. Privately, he would admit to “wriggling” or “truckling” to get his message across (e.g. *CCD*, vol. 9, p. 331; vol. 14, p. 60), but in print he always sought to appear as he believed himself to be: cautious, honest, open, sincere and above all faithful to “the facts”. In the introductory pages of the *Origin of Species*, for instance, Darwin presents himself as the model of an upright English man of science, and with characteristic modesty he hopes that he “may be excused” for doing so. In these six pages, on the brink of revealing to the world the lonely burden he has borne for twenty years, Darwin is at his most disarming: he appeals directly to his readers in the first-person, using “I”, “me” and “my” 63 times (Darwin, 1859, pp. 1-6). Darwin knew that his theories would be transformative if communicated strategically to a hostile world.

2 THE MORAL SUPERIORITY OF “MY THEORY”

No man of science was ever more conscious of his audience. Or, in Darwin’s case, it was as much the *absence* of an audience that he was aware of. Evolutionary biology as known today was non-existent in the 1830s; there was no field of evolutionary anthropology, no natural science of human origins. In Britain, only reckless or “bad” persons – atheists, revolutionaries, republicans, fools – endorsed the notion of species “transmutation”, with its corollary that humans were nothing but advanced apes. The gentlemen whom Darwin most respected, the Christian naturalists and natural philosophers on whose patronage his fledgling career depended, anathematized all

such speculation (Desmond, 1989, pp. 398-414). Thus even as the ambitious young Darwin “let conjecture run wild” in his private transmutation notebooks (*Notebooks*, B 232), hell-bent on solving what his mentors politely termed “the mystery of mysteries” (Darwin, 1859, p. 1), how living species originate, he was devising self-protective and promotional strategies against the day his theorizing would appear in print.

“Mention persecution of early Astronomers”, he reminded himself, bold believers such as Galileo whose theories the Church had come to embrace; play up the “opposition of divines to progress of knowledge”, he jotted again (*Notebooks*, C 123, N 19e). Explain how “my theory” is “very distinct” (*Ibid.*, B 214) from the French naturalist Lamarck’s *transformisme*, and “avoid stating how far, I believe, in Materialism” (*Ibid.*, M 57), as the revolutionary French do. Don’t disparage the Bible – that would show “bad taste” (*Ibid.*, D 37) and detract from the virtues of “my theory”, which to Darwin were very real. For “what a magnificent view one can take of the world” if evolution be true, a “far grander” view than that of a tinkering God creating by miraculous interference, a view of the earth “peopled with myriads of distinct forms” in accordance with Divinely appointed laws (*Ibid.*, D 36-37). “My theory would give zest” to all sorts of subjects, from fossils to “metaphysics”, he crowed; it would promote the study of “causes of change in order to know what we have come from & to what we tend” (*Ibid.*, B 228); it would even make our so-called “innate knowledge of [the] creator [...] a necessary integrant part of his most magnificent laws [...] which we profane in thinking not capable to produce every effect, of every kind which surrounds us” (*Ibid.*, M 136).

In short, young Darwin saw “my theory” as a scientific-religious advance, and he aimed to communicate it as such. This was not just a ploy to win a hearing for “my theory”, for he *believed* in what he was doing, believed in the moral magnificence of his covert notebook project. “Man in his arrogance thinks himself a great work, worthy the interposition of a deity”, Darwin scrawled solemnly in spring 1838; “more humble & I believe true to consider him created from animals” (*Notebooks*, C 196-97). From the start, ethics, epistemology and theology were as one in Darwin’s theorizing.

But this was no innovation. The “unity of truth” was foundational to the scientific consciousness of young Darwin’s generation. Christian naturalists believed that God did not contradict Himself, God did not lie. The universe was a lawful cosmos, ruled by a beneficent Creator. Nature, history, human nature and human destiny together made up a preceptive moral order by Divine arrangement. Any defects or flaws in the system would eventually be put right, and all would turn out to be for the best in this world and in the next. Knowing the truth about God’s created order – *scientific* as well as religious truth – would set humanity free (Cannon, 1978, pp. 1-23).

Darwin had been brought up as a “rational Dissenter” – a Unitarian Christian outside the established state Church of England. But having been baptized into the Church as an infant, he was entitled – after failing at medicine – to train for the Anglican priesthood at Cambridge University. In this ancient seminary, unity-of-truth was in the air young Darwin breathed, and he absorbed its assumptions effortlessly, unconsciously. After the *Beagle* voyage, while filling his transmutation notebooks, he continued to adhere to these assumptions, more or less. He believed in a Creator-God. He believed in the reality and universality of natural laws. He believed in real history – time’s linear directionality – and in the reality of historical progress towards a better world according to laws ordained by God. Humanity seemed to be advancing rapidly on many fronts, with Britain and her Empire in the lead, but the most striking evidence of qualitative advance in young Darwin’s age was a singular moral triumph, the culmination of a half-century of struggle: the final abolition of black chattel slavery in the British Empire on 1 August 1838 (Davis, 1980; Moore, 2010). That summer, as Darwin’s notes plunged ever deeper into what he termed “metaphysics on morals” (*Notebooks*, M cover), as he edged towards a formulation of what he would eventually call “natural selection”, he and the rest of bourgeois England were riding the crest of moral tsunami. All expected it to sweep westward and annihilate the slavery still flourishing in England’s former colonies, the United States of America.

Anti-slavery, too, had been in the air Darwin breathed at Cambridge – in fact, it had been instilled in him since childhood. His commitment to the brotherhood of the races, the unity of the human species and the “sin” of holding persons as property was a further set

of assumptions he had brought to his theorizing (Desmond and Moore, 2009, pp. 1-110). But as he jotted down strategies for communicating “my theory”, Darwin was plagued by memories of the *reality* he had learnt to detest. On the east coast of South America, he had witnessed slavery in the flesh – raw horse-whipped flesh. He remembered too well the “heart-sickening atrocities” committed against black Africans and Christian men making light of or even condoning these atrocities, men who, Darwin raged:

Profess to love their neighbours as themselves, who believe in God, and pray that his Will be done earth! It makes one’s blood boil, yet heart tremble, to think that we Englishmen and our American descendants, with their boastful cry of liberty, have been and are so guilty. (Darwin, 1845, pp. 499-500)

His righteous wrath had first ignited on the *Beagle*, where his chief intellectual reference-points were the captain, Robert FitzRoy, and the English geologist Charles Lyell, whose *Principles of Geology* Darwin studied during the voyage. Neither Lyell nor FitzRoy was a fervent opponent of slavery, but as Christian gentlemen they did share and reinforce at least one of Darwin’s inherited assumptions: that the human races had diversified within a single species during their descent from a single ancestral source. That this source was the biblical Adam and Eve could be fairly disputed. FitzRoy thought so, Lyell didn’t; and at this stage Darwin may have sided with Lyell (Desmond and Moore, 2009, pp. 87-97). The point however was a moral one: the world of racial diversity that Darwin discovered during the voyage was manifest within one human family, one species. All the races he encountered were brothers and sisters; their differences had not been specially created by God, with some races destined for slavery. The different races, the *varieties*, of humankind had appeared *naturally* over time, perhaps a very long time.

As the voyage ended, Darwin was wondering about the parentage of other species and whether their varieties too had come into existence naturally. He was becoming preoccupied with the origin and nature of *all* racial differences and the practicalities of tackling this problem. And his thoughts were turning to transmutation as the solution. The immensity, indeed the enormity of that shift in his thinking is calibrated by the life-changing decision that Darwin made while still

in South American waters and three years before his mythical finches eureka-moment in the Galapagos archipelago. After months of witnessing slavery in the raw, he underwent the most disturbing encounter of the voyage – indeed, of his entire life. Days before Christmas 1832, at Good Success Bay on the easternmost coast of Tierra del Fuego in southern Patagonia, Darwin first set eyes on “wild” men, “savages” he called them, an “untamed” race of fellow-humans (Keynes, 1988, pp. 122-25, 444; *CCD*, vol. 1, p. 302). “The reflection at once rushed into my mind – such were our ancestors”, he remembered, whereupon immediately, on the spot, the 23 year-old tyro became a new man, a convert with a mission, his life’s work stretching out before him. Face to painted face with this proof of human plasticity and racial variability, Darwin vowed for the first time (as he later wrote) that “I could not employ my life better than in adding a little to natural science” (Darwin, 1871, vol. 2, p. 404; Barlow, 1958, p. 126)¹.

¹ Thirty years later, Darwin admitted that man’s animal ancestry was less “awful & difficult” for him to contemplate “partly from familiarity & partly, I think, from having seen a good many Barbarians. I declare the thought, when I first saw in T. del Fuego a naked painted, shivering hideous savage, that my ancestors must have been somewhat similar beings, was at that time as revolting to me, nay more revolting than my present belief that an incomparably more remote ancestor was a hairy beast” (*CCD*, vol. 10, p. 71). He had been shaken to the core, yet afterwards his first letters home emphasized the “extreme interest [...] created by the first sight of savages” (*Ibid.*, vol. 1, p. 303), “an interest, which cannot well be imagined, until [sic] it is experienced” (*Ibid.*, vol. 1, p. 306), “an interest which almost repays one for a cruise in these latitudes; & this I assure you is saying a good deal”. In little over a year, the voyage had given him a “zeal [...] for every branch of Natural History” (*Ibid.*, vol. 1, p. 305), and “this my favourite pursuit [...] will remain so for the rest of my life”. Thus in the immediate aftermath of his first encounter with ‘wild men’ (*Notebooks*, B 33), Darwin signalled a new sense of vocation and a new commitment to his family, who had doubted whether he would ever lead a “steady life” (*CCD*, vol. 1, p. 133) after the voyage: “I trust and believe that the time spent in this voyage, if thrown away for all other respects, will produce its full worth in Nat: History: And it appears to me, the doing what little one can to encrease [sic] the general stock of knowledge is as respectable an object of life, as one can in any likelihood pursue” (*Ibid.*, vol. 1, p. 312). Seeing “the world before us”, Darwin went on to exclaim, “How may magnificent & characteristic views, how many & curious tribes of men we shall see – what fine opportunities for geology & for studying the infinite host of living beings”. Among those beings, now as never before, was “man”. On the tribes Darwin met in Tierra del Fuego, Chapman, 2006, is authoritative.

3 THE ANTI-AGASSIZ *ANNUS MIRABILIS*

The United States of America was anything but united in the 1840s as Darwin wrote the early drafts of “my theory”, which he now called, very privately, “natural selection”. From his Yankee correspondents and *The Times* newspaper he kept abreast of the gathering North-South crisis and the dire predictions that slavery would tear the new nation apart. In fact, Christian abolitionists were demanding as much, and quietly Darwin sided with the most radical of them, the evangelical preacher and pacifist William Lloyd Garrison, notorious as “the Liberator”, who at a public rally in 1854 burned the U.S. Constitution for its tolerance of slavery. Not that Darwin’s moral compass deflected from pursuing “the truth” as he saw it. If, for instance, the evidence was reliable and different species of lice did live on different races of humans, he would have to face the possibility that the host races themselves were unrelated species, for as he admonished one earnest correspondent, “I myself do not think our supposed knowledge of having come from one stock ought to enter into any scientific reasoning” (*CCD*, vol. 3, p. 38). It was an open question in science whether the human races had originated separately by divine creation or by some undiscovered natural process. Darwin knew that. But he had already made up his mind.

The “supposed knowledge of having come from one stock” had entered into his reasoning, if not from childhood or fully at Cambridge, then certainly from the time his faith in the consanguinity of the human races became a burning conviction in South America. But it was no longer the discredited, “supposed knowledge” of Adam and Eve that he now embraced. Christian abolitionists took their stand on the Bible and the literal truth of the story of Adam and Eve as the first parents of all the races, but this sacred ground was crumbling. Geology, ethnology and historical criticism were discrediting the Bible, undermining abolitionist proofs of the “brotherhood of man”. Darwin knew that. He knew that a different and better foundation was needed, a more secure, scientific knowledge of human nature to replace the “supposed” biblical one in which God made “man” by miracles. As he had jotted in an early notebook, it was “more humble & I believe true to consider him” – “man” in all his races – “created from animals”. The ethical, epistemological and theological superior-

ity of “my theory” would thus be to the fore as Darwin moved at first slowly, then decisively towards publication. Belief in his theory’s transformative power would underwrite his strategy to win a hearing in a Christian world outraged by the enslavement of black Africans.

From about 1850, Darwin began devouring the latest literature on human racial origins. The central question in English-speaking ethnology at mid-century was not whether humans had evolved from animals but whether the human races had diverged from one common stock. Traditional Christians, including abolitionists, answered Yes; a rising band of free-thinking “anthropologists” declared emphatically No – the races had descended from as many separate stocks.

The unity-versus-plurality debate escalated during the 1850s as divisive laws, terrorist attacks and racial atrocities pushed the United States towards civil war. From the outset, the argument turned on domesticated animals (Desmond and Moore, 2009, pp. 199-227). Had specialized races of dogs or pigs been selectively bred from a common stock, as the traditional unitarists held? Or were the fancy and farmyard races so many separate *species*, as distinct now as at their creation? So the pluralists insisted, citing evidence from ancient monuments that the races had remained constant and from breeders that the crossed offspring of these races were defective, showing the races to be species. The political stakes were high, though of course no one saw their *own* science as politically tainted: if animal races turned out to be separate *species* and their offspring defective hybrids, the same must be true of humans. White and black were not of one blood, but a superior and an inferior species of genus *Homo* that interbred at the nation’s peril, spawning a population of defective mulemen, or “mulattoes”. It was a conclusion, Darwin noted, “much [...] to the comfort of the slave-holding Southerners” (CCD, vol. 4, p. 353).

With those political words, in a private letter, he damned America’s foremost naturalist, a charming young Harvard University professor named Louis Agassiz. Bankrolled by the captains of the New England slave-cotton textile industry, Agassiz was promoting the new pluralist anthropology as a non-sectarian creation-science, perfectly suited to a nation whose Constitution forbade religious establishments. What Agassiz’s science revealed was nothing less than God’s eternal “Plan” to populate the earth and place spiritual man at the

apex of the Creation. That Plan – Agassiz’s plan – had unfolded through the geological ages as wave after wave of increasingly advanced species came into existence miraculously across their entire ranges until at last, in a crowning act, the eight basic human types were separately created, each in its appointed zone, Africa for Negroes, Europe for Caucasians and so on (Lurie, 1960).

Agassiz’s authority was immense and his popularity soared throughout the 1850s. In England, Darwin wasn’t impressed, but he worried. From where he stood, after eight years of barnacle dissecting, it was far from obvious that Agassiz’s creationism would *not* prevail across the Atlantic, that the human races would *not* be found to be unrelated species and that American slavery would *not* survive. Least obvious to Darwin, perhaps, was that his moral alternative to Agassiz’s ideas, “my theory”, would *not*, as he feared, explode “like an empty puff-ball” mushroom (CCD, vol. 5, p. 187). In fact, none of the outcomes celebrated today even looked *likely* from where Darwin stood in 1854. All he could do was hope, put his shoulder to history’s wheel and push. And so, looking over his old notes, he decided it was too soon to resume writing for publication. Instead, he would tackle Agassiz’s creative Plan on a global scale – examine life “in its greatest features”, he announced that November: “I have been trying from land productions to take a very general view of the world” (CCD, vol. 5, p. 233).

The year 1855 was Darwin’s anti-slavery *annus mirabilis*, with three major research projects under way (Desmond and Moore, 2009, pp. 245-66). First, he abolished Agassiz’s worldwide creation-centres and the miraculous multiple-appearance of species by showing the simplicity of “single creations”. “I believe in single creations”, he jotted to himself, meaning that every species had appeared *naturally* only once, in one place, and then migrated (Stauffer, 1975, p. 583). His prize experimental evidence proved that even immobile plants could populate the earth by their seeds, without Divine intervention. Second, Darwin established that, having arrived in a place, a species might be flexible enough to adapt to the new environment, with none of Agassiz’s Divine pre-purposing. Here domesticated animals held the key, as Darwin knew from the unity-plurality debate, and he demonstrated that wild species had been stretched and shaped by breeders to make today’s fancy and farmyard races, and that these

same races, when crossed, produced healthy and even improved offspring. The same was true for the human races: the mulatto was not a defective hybrid, but a handsome mongrel.

Finally, Darwin amassed evidence to show how the human races had diverged from a single stock; replacing Agassiz's eight separate creations with a natural mechanism. The fact that humans were the only species to domesticate other species pointed to a profound truth: the longer a species had been domesticated, the more likely its breeds would be to exhibit differences as pronounced as the racial differences between the human groups who had bred from that species. As the animal differences had emerged, so had the human differences; the breeders and the bred formed races in tandem. Darwin's originality lay in seeing that the mechanism in both cases was the same: mate selection. Pigeons, domesticated for ages, illustrated this perfectly, and he acquired fancy varieties from every corner of the earth, co-extensive with the human groups who had kept them. Matching, mating and measuring the birds, he showed that the eleven principal races were the inter-fertile descendants of the common Rock Dove. Selective mating over countless generations had created a family tree of fancy pigeons just as "sexual selection" – competitive mate choice – had created a family tree of "fancy" people, the races. No miracle was needed (Desmond and Moore, 2009, pp. 251-258, 261-262, 279-282, 289-290).

4 THE MISSION OF ASA GRAY

The sun of creationism, far from setting in the west, was rising fast in the luminous figure of Agassiz. Peering across the Atlantic, Darwin saw abolitionists such as Garrison rising too, but there was no accompanying common-descent science to challenge the racial pluralists. Quite simply, Christian America, North and South, believed in the Bible, not evolution. How then to win an audience from thousands of miles away and coax them to understand and even accept what he, Charles Darwin, had been researching in almost total secrecy for the past two decades? How to communicate "my theory" in a great nation torn by slavery and hurtling towards war?

Neutralize Agassiz – that was the key. With his research projects continuing, Darwin began sorting his notes and drafting paragraphs.

In May 1856, after his old mentor Lyell urged him to publish before someone else did (he already had Alfred Russel Wallace in mind), Darwin took the plunge and began writing the early chapters on stock-breeding and pigeons for a huge treatise called “Natural Selection”. As he finished the chapters, his anti-Agassiz strategy fell into place. He would target the demagogue from the inside, scotch Harvard with Yale. In September, Darwin tipped his hand to the Yale University geologist James Dwight Dana, who had editorial control of the nation’s most influential scientific periodical, the *American Journal of Science*. Dana was a kindred spirit, a globe-trotting barnacle expert of evangelical anti-slavery conviction. Oddly, he was an Agassiz disciple, but Darwin gambled that a long confessional letter would turn him, and he sketched how his “19 years” of work on “the variation & origin of species” had undermined Agassiz’s Plan of creation. At the end of the letter, he left Dana in no doubt about the politics to which his “heterodox” views on species were joined. He wanted Dana to know, he wrote, “how fervently we wish you in the North to be free” – free from the incubus of slavery, free from the wretched South (CCD, vol. 6, pp. 235-237). This was Garrison’s purist message, “No Union with Slaveholders”, on Darwin’s own lips. He would see the United States broken apart.

Dana didn’t take the moral bait, and his Adamic theology remained unequally yoked with Agassiz’s pluralism as he suffered a prolonged breakdown. “Poor fellow, he believes in [the] 1st Ch[apte]r of Genesis”, Darwin groaned, and he looked elsewhere for a champion (CCD, vol. 6, p. 516). His ideal agent turned up in Agassiz’s own back yard, Harvard’s professor of botany Asa Gray, second-editor at the *American Journal of Science* (Agassiz being the third). Gray too was a common-descent anti-slavery evangelical, so sure of truth’s unity that he refused to measure his science by his religious beliefs, much less mingle them together. He referred to Darwin’s belief in “single creations” and racial common descent as “the orthodox faith”, not just because the Bible said so, but because to him “the facts” did; and thus Gray dismissed “Agassiz’[s] heresies” as both scientifically and religiously wrong².

² Asa Gray to Joseph Dalton Hooker, 21 February 1854, Asa Gray Letters, Royal

Gray's facts about plant distribution were already swelling Darwin's enormous manuscript, helping him make the case against Agassiz's separate creations. Clearly, Gray was a Yankee after Darwin's heart, and "with the warmest feeling of respect", in September 1857 he posted Gray a summary of the theory of natural selection, asking him "not to mention my doctrine" lest someone steal his thunder (CCD, vol. 6, p. 445-46). Gray was the third colleague to be told Darwin's secret, or rather part of it. For months Darwin had intended to treat the "Races of Man" together with those of other domesticated animals in his manuscript (Stauffer, 1975, p. 213; Desmond and Moore, 2009, p. 290). Now the subject was dropped. Darwin's theory of racial divergence, sexual selection, was incomplete and Gray read nothing about it either. But then Darwin had no need to persuade him of the "orthodox faith" about the human races, though he probably worried about alarming a traditionalist by revealing how far he pushed evolution.

With Gray at Harvard poised to neutralize Agassiz, Darwin pressed on with his "Natural Selection" book only to be forestalled by Wallace in 1858 – the story is too familiar to repeat here. The huge manuscript was cut, crushed and rushed into print within eighteen months as *On the Origin of Species by Means of Natural Selection, or the Preservation of Favoured Races in the Struggle for Life*. At last Darwin's self-protective and promotional strategies came into play. The *Origin* opens with a quotation from the highest moral authority he could think of, his old Cambridge professor, the Revd William Whewell, and ends on his old notebook theme of "grandeur in this view of life". Natural selection is personified as if it were the Creator and its "far higher workmanship" contrasted with that of human breeders. The word "creation" and its cognates are used over one hundred times in the text, the word "evolution" and its cognates only once (Darwin, 1859, pp. [ii], 84, 490). The *Origin* was really about "man", Darwin knew that, and he expected the world would also. But lest there be some doubt, he coat-tailed judiciously, putting "races" in

Botanic Gardens, Kew, which Darwin read approvingly (CCD, vol. 5, p. 186) (Gray [1876], 1959, pp. 216-232).

the subtitle, hinting “light will be thrown on the origin of man and his history” and suggesting “some little light can apparently be thrown” by sexual selection on “the differences between the races of man” (Darwin, 1859, pp. 199, 488). Even more striking was a passage about ant communities that exhibit “so extraordinary and odious an instinct as that of making slaves” (Darwin, 1859, p. 220). “Odious” was a clue to the *Origin*’s moral pedigree, if only the Christian world would read it that way.

For his part, Gray played John the Baptist to Darwin’s Messiah. In a slave-owning America convulsed by race and kinship questions and plunging towards open war – indeed, at a Harvard that cherished Agassiz’s creationism and condoned his race-pluralism – Gray’s mission was to bring Darwin’s meaning to the fore, to clarify his “orthodox view” of common descent, which, Gray insisted publicly, “makes the negro and the Hottentot our blood-relations”. “You see I am determined to *baptize*” the *Origin*, he told Darwin; otherwise “it will be *dammed*, I fear” (Gray, 1963, p. 76; *CCD*, vol. 10, p. 140).

The baptism was performed with an outpouring of articles as Gray agented the book and saw it published in early 1860. His thunderous anti-Agassiz review in the *American Journal of Science* (Gray being senior editor in Dana’s absence) had so pleased Darwin that he wanted the American *Origin* to be a “joint publication”, with Gray’s review at the head – *On the Origin of Species* by Darwin and Gray (*CCD*, vol. 8, pp. 54, 61-62, 75). When this fell through, Darwin seized on Gray’s three-part series in the nation’s literary flagship, the anti-slavery *Atlantic Monthly*, which Darwin thought by “*far* the best Theistic essays” he had ever read (*CCD*, vol. 8, p. 388). He paid for the series to be reprinted as a pamphlet with a telling title, *Natural Selection Not Inconsistent with Natural Theology*, and had over one hundred copies distributed to select naturalists, theologians, reviewers and libraries. The 1861 edition of the *Origin of Species* even carried Darwin’s puff for the pamphlet, giving its price and address for purchase (Peckham, 1959, p. 57; *CCD*, vol. 9, pp. 393-404).

But with the United States now at war, Gray’s voice was scarcely heard above the din of battle. And although he and Darwin were on the same side, they found they differed radically about natural selection. Gray’s God selected organisms by Design and shaped their history through His providence, including the destiny of the northern

United States. Selection to Darwin was the contingent outcome of “laws ordained by God to govern the Universe”, not the work of a Designer who favours some beings over others, including those in the northern United States (Stauffer, 1975, p. 224). Darwin could no more see God’s hand in the Civil War than in the *Origin’s* “war” of nature. He and Gray willed the same moral outcome – the end of slavery – but for Darwin the means were all too bloodily human. Yet, for all that, natural selection-versus-Design wasn’t the root problem, as he explained to Gray; it was Agassiz’s creationism-versus-evolutionary common ancestry: “[C]hange of species by descent [...] seems to me the turning point. Personally, of course, I care much about Natural Selection; but that seems to me utterly unimportant compared to question of *Creation or Modification*” (CCD, vol. 11, p. 403). So it had been since his early notebook days.

5 BEYOND EMANCIPATION

A triumphant North in 1865 counted the cost of saving the Union: a murdered president, 600,000 dead – more than the nation’s combined losses in all of its other wars from the Revolution to Afghanistan – and 4 million bewildered freed black slaves. Agassiz carried on at Harvard, his popularity waning, and he died in 1873; his students became expressly *non*-Darwinian evolutionists. Evolution stayed in the universities, where Darwin first planted it in the 1850s; it set seed but never took root in the minds and hearts of ordinary Americans, thus leaving new forms of creationism to spring up in the twentieth century. Darwin’s communication strategy failed to realize its potential. With the end of black chattel slavery in the United States and the decline of pluralist anthropology, the moral moment was lost.

But old abolitionists never forgot Darwin. Throughout the 1870s, they trekked across the Atlantic to visit him at home: urban pastors, Harvard rejects, lapsed Unitarians and freethinkers (Darwin’s eldest son married into one of their families), a Southern planter-turned-slave rescuer and even the wounded Union veteran who had led the first official black regiment made up of former slaves.

A note from Garrison’s son arrived in 1879. On his father’s deathbed he had read to him Darwin’s words about the “heart-sickening atrocities” he had encountered in South America and how

“it makes one’s blood boil, yet heart tremble, to think that we Englishmen and our American descendants, with their boastful cry of liberty, have been and are so guilty”. The aged Liberator was astonished. Those words, his son told Darwin, had “shed a new and welcome light on your character as a philanthropist”. For “in combating the enemies of freedom in this country”, the elder Garrison “had emancipated himself from that theology the destruction of which is perhaps your highest title to the honors of your own time and the blessings of posterity”³.

Religious emancipation, scientific anti-slavery, had always cohered in Darwin’s core project – it was “more humble & I believe true to consider” humans “created from animals”. Garrison was “a man to be forever revered”, Darwin replied warmly to the son. “It will ever be a deep gratification to me to know that your Father, whom I honor from the bottom of my soul, should have heard and approved of the few words which I wrote many years ago on Slavery”⁴.

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³ Wendell Phillips Garrison to Darwin, 4 October 1879, Darwin Manuscripts, Cambridge University Library (DAR), 165.

⁴ Darwin to Wendell Phillips Garrison, 16 October 1879, in the Garrison family (copy in DAR); Garrison and Garrison, 1899, p. 189n. For full transcriptions and commentary, see Moore, 2010.

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