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Race in Marshall's Economics

Colin Danby 

Interdisciplinary Arts and Sciences, University of Washington, Bothell
E-mail: danby@uw.edu

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Alfred Marshall used an evolutionary theory of race to ground individual psychology and explain economic behavior. The psychological theory, drawn from Herbert Spencer, explained British and US industrial leadership by the innate excellences of Anglo-Saxon workers and entrepreneurs, without invoking colonialism or other uses of state power. It also asserted the internal solidarity of Anglo-Saxons. Because they were inclined to help each other, argued Marshall, Anglo-Saxons could handle laissez-faire. The paper situates Marshall in conversation with Anglican liberals like F. D. Maurice, and argues that a shared racial consciousness worked as a common ground among Coleridgean Romantics and radicals like Mill and Spencer who needed a category of the nation that did not rely on the state.

Introduction

Alfred Marshall used an evolutionary theory of race to ground individual psychology and explain economic behavior. Psychologies were common to a race, but differed between races and across long spans of time. Most of his writing is about the English or “Anglo-Saxons,” whom he regarded as uniquely advanced; other races appeared mainly for purposes of unfavorable comparison. This psychological theory explained British and US industrial leadership without invoking colonialism or other uses of state power: such leadership could be fully explained by the innate excellences of English workers and entrepreneurs.¹ It also asserted the internal solidarity of Anglo-Saxons: because they were racially inclined to help each other, and avoid destructive competition, Anglo-Saxons could handle laissez-faire. This was an effort to meet the charge made by Romantic critics like Coleridge, Maurice, and Ruskin that laissez-faire was socially corrosive.

Marshall drew his evolutionary theory from Herbert Spencer, most importantly the idea that a society is the product of gradual changes, over long periods, in the mental capacities of average people. Those capacities are developed through use. Marshall argued that the most important of these mental capacities are those we

¹Marshall used both “Britain” and “England” for the country he lived in but preferred the latter, especially when he was writing about history or racial character. I use “Britain” when it seems better in context, “England” and “English” when discussing Marshall’s writings that specify them. I use “Anglo-Saxon” and “white” as Marshall used them.

use in our everyday economic lives. They could change slowly. Such change might be progressive, as in Marshall's argument that the English working class could be converted into "gentlemen," or regressive, as in his worries about the dangerous fecundity of its squalid "residuum."² But by deferring change to the future, Spencerian evolution asserted innateness in the here and now: over long periods of time a race might change, but for the time being people's racial characters were fixed. Spencer also gave Marshall the idea that advanced societies are internally altruistic.

The Spencerian theory from which Marshall started relied on Lamarckian inheritance: prosperity and freedom encouraged better habits, and those better habits were built into the characters of the next generation. But in Marshall's version of social evolution, progress required increasing investment in the education and socialization of the young. In particular, racial progress required increasing specialization by women in child raising. Marshall also spoke favorably of Octavia Hill's social work, which leveraged the landlord's power to modify the behavior of working-class families. Here Marshall came into contact with the thicker social ontologies of Romantic thinkers, who understood authority as not just functional, but constitutive of society, necessary for the formation of individuals and the ongoing regulation of their behavior.

While generalizing across a large literature is hazardous, most mainstream historians of economic thought have treated Marshall as a close follower of the first generation of marginalists, and treated his ethical themes as dusty Victorian moralizing.³ Most writings on racial themes and eugenics in Marshall do not treat them as integral to his economics. This article pays attention to the theoretical content of Marshall's work on economic history and comparative development, notably 1919's *Industry and Trade*.⁴ It asks why Herbert Spencer, now largely forgotten, was a compelling figure for the young Marshall.⁵

After reviewing the Spencerian ideas that inspired Marshall, I begin with his youthful papers for an Anglican discussion group at Cambridge, and then move

² Alfred Marshall, "The Social Possibilities of Economic Chivalry," *Economic Journal* 17/65 (1907), 7–29, at 7. On Marshall's eugenics see John Aldrich, "Eugenics in British Economics from Marshall to Meade" (2019 working paper, University of Southampton), 8–14; Peter Groenewegen, *A Soaring Eagle: Alfred Marshall 1842–1924* (Cheltenham, 1995), 479–86; John Toye, *Keynes on Population* (Oxford, 2000), 132–4; Sandra Peart and David Levy, "Denying Human Homogeneity: Eugenics and the Making of Post-classical Economics," *Journal of the History of Economic Thought* 25/3 (2003), 261–88.

³ Joseph Schumpeter, *A History of Economic Analysis* (Oxford, 1954), 837; Mark Blaug, *Economic Theory in Retrospect* (Cambridge, 1990), 420–21. John Maynard Keynes, "Alfred Marshall, 1842–1924," in *Memorials of Alfred Marshall*, ed. Arthur Pigou (London, 1925), 1–65, at 37. For a recent example see Agnar Sandmo, *Economics Evolving: A History of Economic Thought* (Princeton, 2011), 213–37. Exceptions include Neil Hart, *Equilibrium and Evolution* (London, 2012); and the references in note 38 below. David Reisman, *Alfred Marshall: Progress and Politics* (London, 2011), keeps Marshall's ethical commitments in view.

⁴ Alfred Marshall, *Industry and Trade* (London, 1920). Groenewegen, *A Soaring Eagle*, relegates it to a late chapter titled "Some Final Volumes." John Whitaker, "Marshall, Alfred (1842–1924)," in Matias Vernengo, Esteban Pérez Caldentey, and J. Barkley Rosser, eds., *The New Palgrave Dictionary of Economics* (London, 2017), 1–26, terms *Industry and Trade* "largely factual," adding that "lacking an obvious theoretical skeleton, it has not received from economists the kind of attention lavished on *Principles*." In my view it does have a robust theoretical skeleton.

⁵ Keynes, "Alfred Marshall," dismissed Spencer as "unreadable"; Groenewegen, *A Soaring Eagle*, gives him short shrift. Whitaker, "Marshall, Alfred," regards the influence of "Kant, Hegel, H. Spencer, and others" as "uncertain, partly because evidence is slight or absent."

to his construction of a Spencerian economics. The article examines how Marshall explained British prosperity through the evolving qualities of the worker and entrepreneur, considers how heritability worked, and concludes with the roles of race and state in the thought of Marshall and his Cambridge colleagues.

Spencer

Herbert Spencer (1820–1903) proposed that all things tend of their own accord to differentiate into specialized parts, and the specialized parts reknit themselves into more advanced wholes. He thought this applied to everything that exists, from the solar system to human language.⁶ For example, in his history of biological organisms, Spencer starts with the “lowest” type, a sponge, which can be cut in half with both halves surviving. It has neither any “distinction of parts” nor any “greater completeness.”⁷ He works up to vertebrates, which do not survive being chopped in half because their brains and “muscular, respiratory, nutritive, excreting, absorbent, circulatory” systems are complexly interconnected.⁸

Spencer contended that a human society may be understood as a “social organism” following an evolutionary path. He contrasted a primitive social organism—a fisible foraging band composed of generalists—with an advanced society of interdependent specialists:

In Lancashire, millions have devoted themselves to the making of cotton-fabrics; in Yorkshire, another million lives by producing woollens ... These are large facts in the structure of English society; but we can ascribe them neither to miracle, nor to legislation. It is not by “the hero as king,” any more than by “collective wisdom,” that men have been segregated into producers, wholesale distributors, and retail distributors ... And this economic organization, mark, is the all-essential organization. Through the combination thus spontaneously evolved, every citizen is supplied with daily necessities; while he yields some product or aid to others ... could it be suddenly abolished, multitudes would be dead before another week ended.⁹

Note both the tight interdependence of the parts of this complex organism—“dead before another week ended”—and a process of specialization-plus-connection that can be attributed to neither God nor the state.¹⁰

Within this framework Spencer built a historical theory of the human mind.¹¹ The evolving social organism makes its individual members more enterprising

⁶Herbert Spencer, “Progress: Its Law and Cause,” *Westminster Review* 67 (1857), 445–85, at 446–7.

⁷Herbert Spencer, *Social Statics* (London, 1851), 436–37.

⁸*Ibid.*, 439.

⁹Herbert Spencer, “The Social Organism,” *Westminster Review* 73 (1860), 90–121, at 191–2.

¹⁰Spencer, “Social Organism,” 98, is emphatic that “the community as a whole has no general or corporate consciousness.” His carefully delimited, materialist “social organism” should not be confused with idealist “organismic” theories circulating in Germany and filtering into Britain in via Coleridge and Carlyle. Karl Pfißram, *A History of Economic Reasoning* (Baltimore, 1983), 209–44.

¹¹Works that situate Spencer in the history of psychology are Robert M. Young, *Mind, Brain, and Adaptation in the Nineteenth Century* (Oxford, 1970); Rick Rylance, *Victorian Psychology and British Culture 1850–1880* (Oxford, 2000); Théodule Ribot, *English Psychology* (London, 1873). More general

and independent because it gives them wider scope for choice. Lamarckian inheritance played a critical role: when you exercise your mental capacities you strengthen them, and then, when you conceive children, you pass your strengthened capacities on to them—hardwired into their minds. Thus Lamarckian inheritance over deep time provided a story about how complex and independent human minds could emerge gradually, generation after generation, in a close causal nexus with the development of a more complex society. More rational and interesting people produce a more complex and interesting society, which produces even more rational and interesting people, and so forth.

It was a fundamental Spencerian tenet that *all* relations of dominance and submission are relics of the barbaric and primitive past.¹² It was wrong to enslave a person, to constrain a woman to domestic duties, or to relieve the hunger of a pauper because by doing so you deprived that person of the opportunity to make their own choices, learn from the results, and develop a better mind.¹³ By Lamarckian reasoning the person whose mental growth is stunted, whether by force or charity, will pass those stunted capacities on to their children and thus harm posterity.

A further consequence of Lamarckianism was that what is transmitted through a race over time is *single* mental character, a type, an average mentality.¹⁴ Because such a mentality must work for everyone, it functions as a biologized categorical imperative: a society of cheats or bullies would be dysfunctional. It was Spencer's contention that advanced social evolution produced humans who were *both* enterprising *and* averse to hurting each other. This meshed with his understanding of a society as an integrated organism: if your internal organs are fighting you will not last long. Social evolution by this logic *must* produce internally harmonious societies. It will be a central argument in this article that Marshall's racial claims about "national character" are not just dusty stereotypes, but do theoretical work to ground social unity.

This is enough Spencer to set up Marshall. But because Spencer is often pigeonholed as a "social Darwinist," a word of distinction may be in order. The work summarized above was published before Alfred Russel Wallace and Charles Darwin announced the theory of natural selection in 1858. More importantly, Spencer and Darwin had very different projects. Spencer was a system-building theorist who started from a bold conjecture about the nature of everything in the universe, almost like a pre-Socratic philosopher. Within that, he theorized the joint development of the human mind and human society across history. Darwin was a painstaking naturalist who generalized with legendary reluctance. He started with humble organisms and discussed humans and human societies only in the 1871 *Descent of Man*. Spencer's core mechanism of change and transmission was

accounts of Spencer include J. W. Burrow, *Evolution and Society: A Study in Victorian Social Theory* (Cambridge, 1966), 179–227; George Stocking, *Victorian Anthropology*, (New York, 1991), 128–37, 224–8.

¹²Spencer, *Social Statics*, 162–9.

¹³"Command cannot be otherwise than savage, for it implies an appeal to force, should force be needful. Behind its 'You shall,' there lies the scarcely hidden 'If you won't, I'll make you.'" Spencer, *Social Statics*, 162.

¹⁴Spencer, like many other figures at the time, assumed that races were endogamous. See Robert J. C. Young, *Colonial Desire* (London, 1994), 87–93; and Young, *The Idea of English Ethnicity* (London 2008).

solidaristic and continuous Lamarckian development, not competitive selection.¹⁵ Mutations do not provoke change in Spencer. Marshall read both Spencer and Darwin, but, as we will see, it is Spencer the *psychological* theorist who mattered to him.

The Grote papers

In 1865 Alfred Marshall (1842–1924) finished his Cambridge undergraduate career with an impressive second place in the Mathematical Tripos. His reward was a fellowship with minimal duties, which he used to read philosophy. He had read John Stuart Mill's *Logic* as a schoolboy, and his interest in the subject was rekindled by contemporary debates over religious knowledge.¹⁶ Moral philosopher Henry Sidgwick (1838–1900) took Marshall under his wing, and in 1867 Marshall was admitted to the "Grote Club," an elite discussion group of Cambridge fellows.

We do not know the exact dates on which Alfred Marshall read four papers to the Grote Club, but they were probably in 1867 and 1868, when he was in his mid-twenties. The club had formed under the leadership of moral philosopher and clergyman John Grote (1813–66), and was named for him after his untimely death. It carried on a strain of liberal Anglican thought influenced by Romantic conservative Samuel Taylor Coleridge (1772–1834).¹⁷ Frederick Denison Maurice (1805–72), the most prominent liberal Anglican theologian of the mid-1800s, was appointed to his professorship, and attended Grote Club meetings. Maurice had been John Stuart Mill's friend and sparring partner in the late 1820s, one of the people who introduced Mill to Coleridge's writings.¹⁸

This was a curious launching pad for the scholar who became the leading anglophone economist by the century's end. It is still more curious that the young Marshall used this Anglican forum to explore the ideas of the patently

¹⁵It gets slightly harder to disentangle them after 1859 because of mutual influence: Spencer incorporated natural selection in his 1864 *Principles of Biology*, while Darwin adopted some of Spencer's terminology, and Lamarckian inheritance, in the *Descent of Man*. But the portrayal of Spencer as a mere vulgarizer of Darwin, widespread in popular and tertiary literature today, is badly misleading. Indeed, nineteenth-century readers would have understood Darwin as a "biological Spencerian." Jonathan H. Turner, *Herbert Spencer: A Renewed Appreciation* (Beverly Hills, 1985), 11. See Robert C. Bannister, *Social Darwinism: Science and Myth in Anglo-American Social Thought* (Philadelphia, 1989); I. W. Howarth, "Natural Selection and the Survival of the Fittest," *Scientific Monthly* 5/3 (1917), 253–7; Robert M. Young, "The Development of Herbert Spencer's Concept of Evolution," in John Offer, ed., *Herbert Spencer: Critical Assessments*, vol. 2 (London, 2000), 378–83.

¹⁶Groenewegen, *A Soaring Eagle*, 62.

¹⁷On the Anglican liberals and Grote Club see Alfred Marshall, "Notes Taken during Discussions at the Grote Club Meetings, February–November 1867," *Marshall Studies Bulletin* 6 (1996), 49–64; J. B. Schneewind, "Sidgwick and the Cambridge Moralists," *The Monist* 58/3 (1974), 371–404; Tiziano Raffaelli, "The Early Philosophical Writings of Alfred Marshall," in Warren J. Samuels, ed., *Research in the History of Economic Thought and Methodology, Archival Supplement 4* (Stamford, 1994), 53–103; Groenewegen, *A Soaring Eagle*, 109–13; John R. Gibbins, "John Grote and Modern Cambridge Philosophy," *Philosophy* 73/285 (1998), 453–77; Simon Cook, *The Intellectual Foundations of Alfred Marshall's Economic Science* (Cambridge, 2009) 95–108. On Coleridge's influence on the Anglican liberals see Peter Mandler, *The English National Character* (New Haven, 2006), 49–52; Duncan Forbes, *The Liberal Anglican Idea of History* (Cambridge, 1952).

¹⁸John Stuart Mill, *Autobiography* (London, 1873), 152–5.

irreligious Herbert Spencer. In later life, Marshall sometimes described these years as a period of wandering in philosophy and psychology before he found his proper calling in economics.¹⁹ But the figures who rubbed shoulders, metaphorically or physically, in those Cambridge rooms—Coleridge, Mill, Spencer, Grote, Maurice, Sidgwick—set up a field of inquiry and debate that remained important to Marshall throughout his life.²⁰ Even as his confidence as an economist grew, he remained not only sensitive to Romantic criticisms of political economy, but actively sympathetic to many of them. When he emphasized “deliberateness” over “competition,” or argued that economic growth improved the moral character of the working class, it is as though Maurice, founder of Christian socialism and fierce critic of *laissez-faire*, was still in his audience.

In the four papers that Marshall read to the Grote Club in the late 1860s,²¹ he developed Spencer’s solution to the contemporary debate between associationist and intuitionist theories of mind.²² In brief, associationists contended that humans are born knowing nothing, and gain all their understanding and know-how from sensory experience of the world, plus tracking *associations* between those experiences. Intuitionists, by contrast, believed that some truths are so obvious and necessary that we grasp them without experience. Associationism, promoted by James and John Stuart Mill, drew on the latest research on the nervous system, and its materialism had an attractive simplicity and rigor. John Stuart Mill gibed that intuitionists could arbitrarily declare any widely held prejudice an intuitively established fact. On the other hand, Marshall’s liberal Anglican friends were drawn to intuitionism because it provided a way to ground religious truth. They were also sensitive to problems with associationism’s theory of knowledge.²³ Spencer’s move in this controversy was to accept Mill’s premise that knowledge comes from direct experience, but add Lamarckian inheritance: everyone is born with a distillation of everything their ancestors figured out. Rather than making every toddler build a mind out of nothing but direct experience, a race could do that over millennia. Hence upon a materialist foundation Spencer cleverly got two intuitionist *results*: the ancestral know-how that you are born with appears intuitively obvious to you, and it will be already spread among others of your race.

¹⁹Alfred Marshall, *The Correspondence of Alfred Marshall, Economist*, ed. John K. Whitaker, 3 vols. (Cambridge, 1996), 2: 285 (23 Sept. 1900).

²⁰Peter J. Cain, “Empire and the Languages of Character and Virtue in Later Victorian and Edwardian Britain,” *Modern Intellectual History* 4/2 (2007), 249–73, notes Ruskin’s influence. Marshall’s 1873 “Lectures to Women,” in *Alfred Marshall’s Lectures to Women*, ed. Tiziano Raffaelli, Eugenio Biagini, and Rita McWilliams Tullberg (Aldershot, 1995), 85–138, for example, reproduces Ruskin’s polemic against fashionable dress. John Ruskin, *Munera Pulveris* (London, 1891).

²¹He did not publish them. They are “The Law of Parsimony” (*sic*), “Ferrier’s Proposition One,” “Ye Machine,” and “The Duty of the Logician.” Raffaelli’s “The Early Philosophical Writings of Alfred Marshall,” in Samuels, *Research in the History of Economic Thought and Methodology, Archival Supplement 4*, is the essential introduction.

²²Herbert Spencer, *The Principles of Psychology* (London, 1855), 580. On the larger philosophical context see Frederick Copleston, *A History of Philosophy*, vol. 8 (New York, 1994) 121–45; Raffaelli, “The Early Philosophical Writings of Alfred Marshall”; Young, *Mind, Brain, and Adaptation*; Rylance, *Victorian Psychology and British Culture*.

²³John Grote, *Exploratio Philosophica*, part 1 (Cambridge, 1900), published in 1865, critiques the naivety of association psychology.

In the first two of the four papers, Marshall sided with his Anglican listeners on their critiques of association psychology, and pointed to Spencer's deep-time associationism as an alternative.²⁴ The last of the four papers directly expounds Spencer, using Kant as a foil. When Kant calls ideas true a priori, writes Marshall, that ultimately means that he "does not see how they could be evolved from experience." Spencer could have helped him out: "with Kant '*a priori*' means 'of which the origin is unknown'; with H. Spencer it means 'of which the origin probably dates from a long time back.' I often wonder what Kant would have said if he had had H. Spencer's interpretation of the words shewn to him."²⁵ Marshall uses a geometrical example to explore intuitions. He develops what he regards as an intuitively obvious definition of a straight line, and writes that "on H. Spencer's [theory] it would be easily formed in the race by experience." Thus, as Raffaelli writes, Spencer let Marshall discard the associationist assertion that the mind starts as a blank, and *also* steer clear of Kantian idealism, because Spencer provided an alternative theory that made "the mind a complex structure, formed through the ages, capable of reacting on external phenomena and imposing its own changing pattern of knowledge."²⁶

It is the third of the four Grote papers, "Ye Machine," that is the most original.²⁷ In it Marshall built a psychological model to explore the Spencerian alternative. To clothe abstractions, he wrote it as a whimsical account of a society of mobile, coal-powered, autonomous robots. The robots have sense organs that perceive the outside world and transmit perceptions to a mechanical brain. The brain works under two constraints: (1) it seeks pleasure and avoids pain (pleasure is essentially finding coal), and (2) computation is costly. The brain is divided into a lower and an upper part. The lower part registers incoming perceptions, remembers associations between them, chooses actions, and transmits instructions back out to the body. It learns by trial and error and automates successful routines. Routines become instinct, and are inherited: "the Machine ... might make others like itself. We thus get hereditary and accumulated instinct. For these descendants, as they may be called, may vary slightly, owing to accidental circumstances, from the parent. Those which were most suited to the environment would supply themselves

²⁴Spencer's critique of Bain is referenced twice in "The Law of Parcimony" (96, 99). There Spencer traces human emotions "up through the various grades of the animal kingdom" and then to "the emotional differences between the lower and the higher human races." Originally 1860, reprinted in Herbert Spencer, *Essays: Scientific, Political, and Speculative*, 3 vols. (London, 1891), 1: 250. Marshall endorses Spencer's critique of Mill once in "The Law of Parcimony" (100) and once in "Ferrier's Proposition One" (109). There Spencer writes that if an inquirer "allows himself to suppose that this moulding of thoughts into correspondence with things, has been going on through countless preceding generations; and that the effects of experiences have been inherited in the shape of modified organic structures; then he is able to interpret all the phenomena." Herbert Spencer, "Mill versus Hamilton," reprinted in Spencer, *Essays*, 2: 213. See also Tiziano Raffaelli, *Marshall's Evolutionary Economics* (London, 2003), 12–13, with additional evidence from Marshall's notebooks. Cf. Cook, *The Intellectual Foundations of Alfred Marshall's Economic Science*, 109, who ignores Marshall's references to Spencer in the first two papers, and sets aside the fourth (most patently Spencerian) paper as "not part of this project."

²⁵Raffaelli, "The Early Philosophical Writings of Alfred Marshall," 135.

²⁶Raffaelli, *Marshall's Evolutionary Economics*, 32.

²⁷It is an extraordinary text, dense, playful, and mathematically rigorous in a way reminiscent of Edwin Abbott's *Flatland* (London, 1884).

most easily with fuel, etc. and have the greatest chance of prolonged activity.”²⁸ Here Marshall includes both Lamarckian inheritance and Darwinian natural selection.

When the machine’s lower brain encounters problems it cannot solve, it refers them to an upper brain that is specialized in running simulations.²⁹ The upper brain has no access to the outside world, but keeps a copy of everything the lower brain has learned. It can use this data to work out the chains of consequence that are likely to follow different actions, and point the lower brain to the action with the greatest benefit in the long run. Though computationally costly, simulations add problem-solving capacities. Marshall provides an analogy: “When a man is playing at chess ... his character is displayed in the way in which he grasps at immediate advantages or, on the other hand, tries to look further. But it will depend on his power whether he can do so or not.”³⁰ This provides a theory of that Victorian touchstone, “character.”³¹ In chess, everyone has the goal of winning. The difference is between the player who can work the game out many moves ahead, and another player who either lacks the ability to do this, or who perhaps *can* perceive disaster far ahead, but cannot resist the satisfaction of an immediate advantage. This kind of planning became central to Marshall’s theory of the English entrepreneur as a creative business builder rather than a wily opportunist.

A threat appears: “a monkey was in the habit of stealing coals from the boxes of the Machine.” The machines learn to warn each other when they spot the monkey. From this starting point they develop language. They develop sympathy for each other. “In different Machines there would be what I shall call different moral characters,” he writes, which would determine how great was “the pleasure derived” from observing another machine’s happiness. He adds, “I ought incidentally to call attention to the power of Natural Selection in preserving those races in which the principle of sympathy was most powerful, and thus increasing the pleasure attached to the idea of another’s pleasure.”³² On this point Marshall appears to be referencing Darwin, whose *Origin of Species* discussed altruism among insects, but the argument fits Spencer’s view that the members of an advanced society do not hurt each other.³³ Note that trouble comes from *outside* the society of machines, in the form of the thieving monkey. As inhabitants of an advanced

²⁸ Alfred Marshall, “Ye Machine,” in Samuels, *Research in the History of Economic Thought and Methodology*, Archival Supplement 4, 116–32, at 119.

²⁹ While Marshall provides no references, he names the upper and lower brains “cerebrum” and “cerebellum.” This conceptual organization was popular at mid-century with Alexander Bain and others: the lower cerebellum was integrated into the nervous system and suitable for study by physio-motor neuroscience, mainly pursued by experiment on luckless animals. In their view the cerebrum, where human consciousness lived, could be studied by introspection. Attributing any role in motor activity to the cerebrum would breach this animal/human divide, though that later proved to be the case. Young, *Mind, Brain, and Adaptation*; Rylance, *Victorian Psychology and British Culture*.

³⁰ Marshall, “Ye Machine,” 122.

³¹ Stefan Collini, “The Idea of ‘Character’ in Victorian Political Thought,” *Transactions of the Royal Historical Society* 35 (1985), 29–50.

³² Marshall, “Ye Machine,” 124.

³³ It was not until the 1871 *Descent of Man* that Darwin made this argument about humans. Spencer made an argument of this kind 1872 as he sought to incorporate bits of Darwin in the second edition of *Principles of Psychology*, but it is not in the 1855 version.

Spencerian society, the machines do not loot each other. They need no external authority, whether family, church, or state, to educate them, guide their choices, or regulate their behavior. Born adult, they need no education.

“Ye Machine,” then, turns Spencer’s deep-time associationism into a rigorous model. Marshall develops two ideas that will be important to his economics: foresight and mutual sympathy. Both are theorized as racial traits, which develop, bit by bit, through daily activities, and are then passed to progeny. The model contains no institutions or cultural glue: no family, kinship, religion, law, state, or schooling.³⁴ In that sense it does what a good model should: it demonstrates the power lurking within a small set of assumptions.

The core theoretical commitments evident in this paper, which carried through the rest of Marshall’s career, were hardly exclusive to Spencer. Natural causation, of a steady slow kind (no supernatural intervention, catastrophes, or shocks) may be traced to Charles Lyell’s uniformitarian geology of the 1830s, and evolutionary ideas had a longer history.³⁵ Liberals like Mill mistrusted institutions and traditions. But Spencer, who was at his most radical in the 1850s, pushed those ideas farther and earlier than anyone else. It took Darwin until 1871 to bring an evolutionary theory to bear on humans. The young Mill famously passed through a period of doubt about utilitarianism’s explanatory capacity, and he limited the social sphere in which the laws of political economy held. Doubts, carve-outs, and qualifications were foreign to Spencer’s thinking. Marshall wrote of him in 1904,

younger students of today are often inclined to find little that is both new and true in a saying of him which had sent the blood rushing through the veins of those who a generation ago looked eagerly for each volume of his as it issued from the press. There is probably no one who gave as strong a stimulus to the thoughts of the younger Cambridge graduates thirty years or forty years ago as he. He opened out a new world of promise; he set men on high enterprise in many diverse directions; and though he may have regulated English intellectual work less than Mill did, I believe he did much more towards increasing its vitality.³⁶

The reference to Mill was both swipe and concession. Marshall’s formation and entire career were downstream of Mill, a much subtler philosopher and social scientist than Spencer. The Grote Club worked in the intellectual space opened by Mill’s engagement with Coleridge in the 1820s, and Marshall’s earliest economic writings, which appeared in the 1870s with Sidgwick’s encouragement, proceeded by critique of Mill’s political economy. But Mill never offered a comprehensive *evolutionary* theory of human society.³⁷ Spencer’s fealty to uniform natural causation would have made abundant sense to the young Alfred Marshall, because he had just

³⁴Mandler, *The English National Character*, 25–58, provides a map of the theories of character available.

³⁵Burrow, *Evolution and Society*, 112.

³⁶Alfred Marshall, *Correspondence*, 3: 97 (Letter 811). On the campaign Marshall was supporting with this letter see Hannah Gay, “No ‘Heathen’s Corner’ Here: The Failed Campaign to Memorialize Herbert Spencer in Westminster Abbey,” *British Journal for the History of Science* 31/1 (1998), 41–54.

³⁷Mill had advocated investigation into national characters with his proposal for a science of “ethology,” but got no farther. Mill, *Collected Works*, vol. 8 (Toronto, 1963).

completed a rigorous undergraduate program in Newtonian physics, crowned with success in the Mathematical Tripos.

Developing a Spencerian economics

Spencer provided a theory of social evolution that worked through the practical know-how of ordinary people.³⁸ In the 1870s, as he turned himself into an economist, Marshall drew the inference from this that people's economic lives are the motor of history. This is because it is in their economic activity—their work, their consumption, their businesses—that people use their minds most often and have the most experience making choices and learning from the results. The automata of “Ye Machine” formed their minds through the humble activity of seeking coal.

Marshall made this claim more than once, with pointed comparisons to competing theories. In a lecture following his 1875 research visit to the United States,³⁹ Marshall criticized Tocqueville for failing to “examine minutely the influence which the daily occupations of men exert on their character.” Thus, says Marshall, he “spent little of his time, where I spent most of mine, in American workshops.” The claim reappears on the first page of the introduction to his 1890 *Principles of Economics*:

man's character has been moulded by his every-day work, and the material resources which he thereby procures, more than by any other influence unless it be that of his religious ideals; and the two great forming agencies of the world's history have been the religious and the economic ... Religious motives are more intense than economic, but their direct action seldom extends over so large a part of life. For the business by which a person earns his livelihood generally fills his thoughts during by far the greater part of those hours in which his mind is at its best; during them his character is being formed by the way in which he uses his faculties in his work, by the thoughts and the feelings which it suggests, and by his relations to his associates in work, his employers or his employees.⁴⁰

³⁸On Spencer's influence on Marshall's economics see Raffaelli, “Early Philosophical Writings of Alfred Marshall”; Raffaelli, *Marshall's Evolutionary Economics*; Geoffrey Hodgson, *Economics and Evolution* (Ann Arbor, 1993); Hodgson, “Alfred Marshall versus the Historical School?”, *Journal of Economic Studies* 32/4 (2005), 331–48; Hodgson, “Come Back Marshall, All Is Forgiven? Complexity, Evolution, Mathematics and Marshallian Exceptionalism,” *European Journal of the History of Economic Thought* 20/6 (2013), 957–81; John Laurent, “Alfred Marshall's Annotations on Herbert Spencer's Principles of Biology,” *Marshall Studies Bulletin* 7 (2000), 1–6; John Laurent, “Darwin, Economics, and Contemporary Economists,” in John Laurent and John Nightingale, eds., *Darwinism and Evolutionary Economics* (Cheltenham, 2001), 15–35.

³⁹He visited almost two dozen places in New England and the upper Midwest, and made a trip west that included San Francisco and Virginia City, Nevada. He did not visit the US South. In addition to the 1875 lecture see Alfred Marshall, “Some Features of American industry,” in *The Early Economic Writings of Alfred Marshall*, vol. 2, 1867–1890, ed. John K. Whitaker (London, 1975), 355–77. Marshall can be read in a larger tradition of English accounts of the United States, including Charles Dilke's *Greater Britain* (London, 1869); and James Froude's *Oceana* (London, 1886), but those writers did not share his interest in workplaces.

⁴⁰Alfred Marshall, *Principles of Economics*, 9th (variorum) edn (London, 1961), 1–2.

Marshall distinguishes sharply between economic and religious motives, and puts the latter aside: his is a materialist theory. In the 1875 lecture, Marshall argues that US conditions have made workers more mobile, readier to move from place to place and to change careers, and thus more accustomed to relying on their “own powers of analysis and judgement,” than their counterparts in England, who were more influenced by community and custom.⁴¹ As a result, Americans, he says, develop “a firm will through the overcoming of difficulties” that

does not glide carelessly into conformity with the conditions by which it is surrounded, but submits every particular action to the judgment of reason: this sits ... as a judge, disentangling the problem, simplifying it for the comprehension of the jury: the jury consisting of his instincts—those which he has acquired during his life, and those which were born with him, transmitted into his life as I believe from the experience of his ancestors ... under such conditions, a generation may differ widely from that which went before it ...⁴²

What is being biologically transmitted here is not quite as elaborate as the problem-solving algorithms that the robots in “Ye Machine” bequeath to their clones, but the claim is still strong: responding to a new social/economic environment that encourages mobility, American workers are developing a firmer will, a habit of making their own judgments, and better “instincts” for assessing their options. They are then passing those qualities to their descendants *at birth*.

In the 1890 *Principles of Economics*, Spencerian underpinnings are most explicit in the chapter on industrial organization.⁴³ There Marshall endorses Spencer’s doctrine of “unity of action between the laws of nature in the physical and in the moral world” and the principle that an organism, “whether social or physical,” develops via “an increasing subdivision of functions between its separate parts on the one hand, and on the other a more intimate connection between them.”⁴⁴ He repeats the theory of economic history, we have already seen—“This influence of heredity shows itself nowhere more markedly than in social organization. For that must necessarily be a slow growth, the product of many generations: it must be based on those customs and aptitudes of the great mass of the people which are incapable of quick change”⁴⁵—and makes the argument we saw in “Ye Machine,” that “deliberate, and therefore moral, self-sacrifice” characterizes advanced races:

The races in which these qualities are the most highly developed are sure, other things being equal, to be stronger than others in war and in contests with famine and disease; and ultimately to prevail. Thus the struggle for existence

⁴¹However, in *Principles of Economics*, 744, Marshall uses essentially the same language to describe English workers: “The firm resolution to submit every action to the deliberate judgment of the reason tends to make everyone constantly ask himself whether he could not improve his position by changing his business, or by changing his method of doing it.”

⁴²Marshall, *The Early Economic Writings of Alfred Marshall, 1867–1890*, 375–76.

⁴³Laurent, “Darwin, Economics, and Contemporary Economists,” 21–3; and Hodgson, “Come Back Marshall,” pursue this connection.

⁴⁴Marshall, *Principles of Economics*, 241.

⁴⁵*Ibid.*, 244.

causes in the long run those races of men to survive in which the individual is most willing to sacrifice himself for the benefit of those around him; and which are consequently the best adapted collectively to make use of their environment.⁴⁶

The *Principles of Economics* also provides an evolutionary theory of consumption. In Marshall's view, "uncivilized man" has only animal needs, but as civilization develops, new activities bring new *wants*. "Activities" should be read in a Spencerian sense: the things people do every day, their routines, the substance of their daily lives, which shape them and their desires.⁴⁷ People come to want better housing and clothes and a greater variety of food, as well as more interesting leisure: "Leisure is used less and less as an opportunity for mere stagnation; and there is a growing desire for those amusements, such as athletic games and travelling, which develop activities rather than indulge any sensuous craving."⁴⁸ He is discussing the English here, as he makes clear in a footnote about the moderation of alcohol consumption, in contrast to

the West Indian negro, using his new freedom and wealth not to get the means of satisfying new wants, but in idle stagnation that is not rest; or again look at that rapidly lessening part of the English working classes, who have no ambition and no pride or delight in the growth of their faculties and activities, and spend on drink whatever surplus their wages afford over the bare necessities of a squalid life.⁴⁹

Despite its title, *Principles of Economics* is not an exposition of a universal, a priori economic science. Indeed when the historian William Cunningham attacked it in 1892 for assuming that "it is possible to formulate economic laws which describe the action of economic causes at all times and in all places,"⁵⁰ Marshall replied indignantly that "the leading motive of its argument is the opposite of that which Dr. Cunningham ascribes to it."⁵¹ "On the contrary," he wrote, "the subject-matter of a science passes through different stages of development, the laws of one stage will seldom apply without modification to others; and my definition of an economic or other social law is 'a statement that a certain course of action may be expected under certain conditions from the members of a social group.'"⁵²

⁴⁶Ibid., 243.

⁴⁷See Talcott Parsons, "Wants and Activities in Marshall," *Quarterly Journal of Economics* 46 (1932), 101–40; Burrow, *Evolution and Society*, 217.

⁴⁸Marshall, *Principles of Economics*, 89.

⁴⁹Ibid., 89–90. "New freedom" is presumably a reference to the abolition of slavery in the British West Indies in 1838; it is not clear what new wealth Marshall had in mind.

⁵⁰W. Cunningham, "The Perversion of Economic History," *Economic Journal* 2/7 (1892), 491–506, at 493.

⁵¹Alfred Marshall, "A Reply," *Economic Journal* 2/7 (1892), 507–19, at 508.

⁵²Ibid., 507. This theme is developed at length in Marshall, *Principles of Economics*, 762–4. Burrow, *Evolution and Society*, 98 and *passim*, argues that theories of social evolution sought to reconcile evidence of the diversity of human societies with the theoretical need for a rational man. The rational man stood at the end of the series, the top of the evolutionary ladder. See in particular Burrow's suggestion (ibid., 97) that the assumption of the superiority of European civilization served as an axiomatic basis for ethics for

To see the racial frame more clearly, let us go back to the writings on Marshall's 1875 trip to America, because we must qualify the phrase "American workers." Like Spencer, Marshall understood social evolution as a process that happened across a very wide range of types of human. His write-ups of factory visits categorize workers racially, with observations, based on his observations of their bodies and faces and conversations with managers, about their capacities for work. The "American worker" with the "firm will" in the earlier quotation is an Anglo-Saxon who has had the stimulus of US conditions for several generations. Recent immigrants from England, Canadians, and Protestant Germans are a step below "Americans" in the qualities he names, but within a generation or two, Marshall writes, their descendants should have attained these qualities. Somewhere farther back are Americans of Irish descent, whom he treats with a mixture of condescension and contempt. He allows that US-born children of Irish immigrants are an improvement over their native stock, but expresses no definite view about when or whether their descendants will achieve Anglo-Saxon excellence.⁵³ Americans of African descent appear only once in his writings on this trip: in a letter Marshall writes that the Missouri valley is "full of swamps, negroes, Irishmen, agues, wildly luxuriant flowers and massive crops of corn."⁵⁴ Native Americans are entirely absent from his accounts. So are Asian immigrants, but in a passage in the 1890 *Principles of Economics*, Marshall treats Chinese workers in the US as not only unassimilable but parasitic:

a race does not establish its claim to deserve well of the world by the mere fact that it flourishes in the midst or on the surface of another race. For, though biology and social science alike show that parasites sometimes benefit in unexpected ways the race on which they thrive; yet in many cases they turn the peculiarities of that race to good account for their own purposes without giving any good return. The fact that there is an economic demand for the services of Jewish and Armenian money-dealers in Eastern Europe and Asia, or for Chinese labour in California, is not by itself a proof, nor even a very strong ground for believing, that such arrangements tend to raise the quality of human life as a whole.⁵⁵

The history of English racial thinking shows an older races-for-places school whose most prominent exponent was Robert Knox (1791–1862); it dealt in climates, gross anatomy, and sometimes frank polygenism. These writers looked backward to origins, in the English context typically to Teutonic or "Saxon" migrants from late

thinkers who no longer found "Christianity or doctrinaire utilitarianism" adequate for that role. See also Stocking, *Victorian Anthropology*, 225; Catherine Hall, "The Nation Within and Without," in Keith McClelland, Jane Rendall, and Catherine Hall, eds., *Defining the Victorian Nation: Class, Race, Gender and the British Reform Act of 1867* (Cambridge, 2000), 179–233, at 181.

⁵³Robert W. Butler, "The History of the Future: Alfred Marshall's American Tour, 1875" (unpublished master's thesis, Durham University, 1989), 42, 96–97, 115. Robert W. Butler, "The Economic Condition of America: Marshall's Missing Speech at University College, Bristol," *History of Political Economy* 27/2 (1995), 405–16.

⁵⁴Marshall, *Correspondence*, 1: 73.

⁵⁵Marshall, *Principles of Economics*, 244.

antiquity.⁵⁶ But around the middle of the nineteenth century, we can detect a new set of ideas clustered around the term “Anglo-Saxon.” As Robert J. C. Young writes, the term “was originally used predominantly in North America, and introduced into English precisely to describe the English abroad, the diasporic population.”⁵⁷ Anglo-Saxons were dynamic and forward-looking, capable of overspreading the earth rather than being confined to a few rainy isles.⁵⁸ This vaguer term de-emphasized origins: “Anglo-Saxon” often included Britons who could not claim “Saxon” ancestry; some writers (though not apparently Marshall) included the Irish. As Catherine Hall, Young, and others have shown, this redefinition was linked to a reformulation of the British imperial project in terms of trans-national whiteness, with increasing disdain and hostility toward blacks and Asians.⁵⁹

Marshall participated in this latter school. Spencerianism provided a theory of dynamic racial improvement, as we have seen. His US visit was a pilgrimage to the leading edge of Anglo-Saxondom; his commitment to this diasporic project remained undimmed in later life. In 1904, rebuking British protectionists who called the United States a “foreign country,” he protested that it contained “many more of our race than do all our colonies and dependencies together”: “But higher than this material consideration I place the belief, which means to me far more than any opinion which I hold about tariffs. It is that our true ideal is to be found not in little Anglosaxondom, but in great Anglosaxondom.”⁶⁰

His write-up of US economic development in 1920’s *Industry and Trade* treats the US workforce as white, a “strong mixed race” composed of European races of various talents. He starts with “English, Scotch, and German immigrants, and then moves to Italians, Irish, and Slavs, who, he says,

may lack the resolute will and self-control which put many British, German, and Scandinavian immigrants on terms of equality with native Americans. But they are quick withal, versatile; and, as a rule, easily moulded; they take readily to the use of machinery ... Thus America has suddenly obtained a plentiful supply of people who are able and willing to do the routine work of a large factory for relatively low wages, and whose aptitudes supplement

⁵⁶On Saxonism see Young, *Colonial Desire*, 11–39.

⁵⁷Young, *Colonial Desire*, 181. Catherine Hall, *Civilizing Subjects: Colony and Metropole in the English Imagination, 1830–1867* (Chicago, 2002), 368; Stocking, *Victorian Anthropology*, 62–3. As Young, *Colonial Desire*, notes, some people used “Saxon” and “Anglo-Saxon” interchangeably; there is no bright line between the two schools. Dilke, for example, is a transitional figure, a cheerleader for global Anglo-Saxonism who remains anxious about unfamiliar climates.

⁵⁸Young, *Colonial Desire*, 203: “Darwin and Spencer’s work allowed the development of an evolutionary paradigm not of degeneration but of transcendent identity according to which the English had evolved by means of a special destiny into a more advanced race set above all others.”

⁵⁹Catherine Hall, “The Nation Within and Without,” 182–3; Edward Beasley, *The Victorian Reinvention of Race* (New York, 2012), 14–23. Burrow, *Evolution and Society*, 52, traces this to the 1770–1830 period. He finds a key text in James Mill’s *History of British India*: “the urbane tolerance and even qualified admiration of the eighteenth century for alien and barbaric cultures was giving way to censoriousness and denigration.” *Ibid.*, 43.

⁶⁰Marshall, ‘Discussion of Mr. Schuster’s Paper’, *Journal of the Institute of Bankers* 25 (1904), 94–8, at 98.

those of the stronger races that constitute the great bulk of the white population.⁶¹

Peter Mandler has sought to limit “race” to Knox-style “biological racism” characterized by a “branching tree of peoples and nations.” In his view the “civilizational perspective,” with a single ladder that all might climb, is not racial.⁶² This seems unduly narrow. First, as we have seen, a single-ladder theorist like Spencer theorized a heritable *mental* capacity for civilization.⁶³ It was *embodied*, though not in a way a scalpel-wielding anatomist could detect. More broadly it is anachronistic to impose a contemporary category of “biological” on nineteenth-century thinkers who used different mental maps and thought about inheritance in very different ways.⁶⁴ Most broadly, racial claims were and are *political*: they are about who merits power over whom. Marshall’s 1890 claims about Jews, Armenians, and immigrant Chinese, quoted above, were written in a global context of private and state violence against these people, often accompanied by the charge of parasitism that Marshall leveled: their economic presence within the nation was intolerable. His claims about the “West Indian negro” quoted earlier should be read against the repression of the 1865 Morant Bay rebellion and abolition of the Jamaican Assembly; at the same time white-majority colonies were allowed increasing political participation. The ladder “civilizational perspective” was considerably *more* dangerous to nonwhite populations on colonial frontiers than the older, branching, races-for-places view, because it argued that they were doomed to perish as Anglo-Saxon settlement spread over the entire earth.

People who make racial claims may choose to ground them in gross anatomy, subtle qualities of the brain, climate, culture, or what have you, but these groundings are secondary and often shifting and opportunistic.⁶⁵ Nor can we reduce the material above to the banal fact that Marshall, as an individual, held racial stereotypes. What matters is that the stereotypes did political and theoretical work. Part of that work was explaining the global distribution of wealth.

⁶¹Marshall, *Industry and Trade*, 149. However, in *Principles of Economics*, 752, Marshall writes that “Australia ... has indeed some advantage over the United States in the greater homogeneity of her people ... nearly all of them belong to one race: and the development of social institutions can proceed in some respects more easily, and faster than if they had to be adjusted to the capacities, the temperaments, the tastes, and the wants of peoples who have little affinity with one another.”

⁶²Peter Mandler, “‘Race’ and ‘Nation’ in Mid-Victorian Thought,” in Stefan Collini, Richard Whatmore, and Brian Young, eds., *History, Religion, and Culture* (Cambridge, 2000), 224–44, at 233; Mandler, *The English National Character*. Cook has tried to drive a similar wedge between “physiological” race and “metaphysical” nationality based on what he believes to be Marshall’s Hegelianism; on that see note 82 below. Simon Cook, “Race and Nation in Marshall’s Histories,” *European Journal of the History of Economic Thought* 20/6 (2013), 940–56.

⁶³Alfred Russel Wallace’s contention that beyond a certain point in human evolution natural selection worked only on minds is analogous. Stocking, *Victorian Anthropology*, 148.

⁶⁴See Young, *Colonial Desire*, 46–49 and *passim*; also Stocking, *Victorian Anthropology*; Douglas Lorimer, “From Natural Science to Social Science,” in Duncan Kelly, ed., *Lineages of Empire: The Historical Roots of British Imperial Thought* (Oxford, 2009), 181–212.

⁶⁵See Stuart Hall, “Conclusion: The Multi-cultural Question,” in Barnor Hesse, ed., *Un/Settled Multiculturalisms: Diasporas, Entanglements, Transruptions* (London, 2000), 209–41, at 224.

The English worker and the English entrepreneur

In another letter in 1875, written during his voyage to the United States, Marshall described shipboard discussions with an Irish priest on a number of topics. One was economic development. Challenging the priest's claim that the Irish are "naturally industrious," Marshall asked why Irish manufacturing lagged. "He could only say that (i) *some* Irishmen succeed as manufacturers in the United States, & that some at least of these are of *purely* Irish blood, & (ii) Irish manufactures used to flourish before they were destroyed by English tyranny."⁶⁶ Marshall riposted, "since that time (i) the character of the English people has changed (ii) the change that has come over the mode of conducting manufacture is such as to give a higher premium than before to the specially Anglo-Saxon qualities of enterprise, daring without recklessness, the power to organize & the power to command & to obey."⁶⁷ Note that the racial explanation was a response to the claim of "English tyranny." Marshall was well aware of alternative explanations for English manufacturing dominance. He was, for example, an appreciative reader of Friedrich List and Gustav Schmoller, who, like the Irish priest, attributed English commercial and manufacturing dominance to force and fraud.⁶⁸

English workers, wrote Marshall in 1890, lead the world in stamina and capacity for hard work, and in the ability to handle "expensive machinery and materials." By contrast, "backward races" are "unable to keep on at any kind of work for a long time ... they have not the requisite assiduity, and they can acquire it only by a long course of training": "it is probable that not one-tenth of the present populations of the world have the mental and moral faculties, the intelligence, and the self-control that are required for it: perhaps not one-half could be made to do the work well by steady training for two generations."⁶⁹ These qualities have deep roots:

The English archer was the forerunner of the English artisan. He had the same pride in the superiority of his food and his physique over those of his Continental rivals; he had the same indomitable perseverance in acquiring perfect command over the use of his hands, the same free independence and the same power of self-control and of rising to emergencies; the same habit of indulging his humours when the occasion was fit, but, when a crisis arose, of preserving discipline even in the face of hardship and misfortune.⁷⁰

Marshall has to allow that these qualities "remained latent for a long time," as English manufacturing lagged continental Europe until the 1800s.

The English entrepreneur who employs these workers also has innate qualities. He has escaped traditional ways of doing things, and evaluates each situation anew.⁷¹ We saw his antecedent in "Ye Machine," whose lower brain was capable

⁶⁶ Marshall, *Correspondence*, 1: 41–2, original emphasis.

⁶⁷ *Ibid.*, 42.

⁶⁸ Marshall, *Principles of Economics*, 767; Marshall, *Industry and Trade*, 34; Takeshi Nakano, "Alfred Marshall's Economic Nationalism," *Nations and Nationalism* 13/1 (2007), 57–76.

⁶⁹ Marshall, *Principles of Economics*, 205. See Gillian Hewitson, "Economics and the Family: A Postcolonial Perspective," *Cambridge Journal of Economics* 37/1 (2013), 91–111.

⁷⁰ *Ibid.*, 741–2.

⁷¹ On the extent to which Marshall's theory of the firm is his theory of the entrepreneur see A. L. Levine, "Marshall's Principles and the 'Biological Viewpoint': A Reconsideration," *Manchester School* 51/3 (1983),

of arriving at roundabout production methods, and whose simulation-running upper brain was able to explore novel solutions to hard problems. This is the “daring without recklessness” in the passage quoted above. Marshall historicizes it this way:

The habit of distinctly realizing the future and providing for it has developed itself slowly and fitfully in the course of man’s history. Travellers tell us of tribes who might double their resources and enjoyments without increasing their total labour, if they would only apply a little in advance the means that lie within their power and their knowledge; as, for instance, by fencing in their little plots of vegetables against the intrusion of wild animals.⁷²

He provides counterexamples of people in India and Ireland who save assiduously, but for festivals: “They make intermittent provision for the near future, but scarcely any permanent provision for the distant future: the great engineering works by which their productive resources have been so much increased, have been made chiefly with the capital of the much less self-denying race of Englishmen.”⁷³ In addition to his powers of perceiving and pursuing long-term advantages, the English entrepreneur has special powers of organization and command. Marshall traces these to ship’s captains: “The process by which he was developed into a capitalist manufacturer was gradual and continuous ... he needed qualities of mind and character somewhat similar to those of a capable captain of a ship trading on long voyages far from home: and these also were natural to the English and had been developed by their work in the world.”⁷⁴ The English entrepreneur is honest in trade. Marshall acknowledges that “opportunities for knavery are certainly more numerous than they were,” but denies that dishonesty is on the rise in England. For this purpose he reverts to an a priori argument about the nature of modern trade, bolstered by comparisons with backward countries and the European past:

modern methods of trade imply habits of trustfulness on the one side and a power of resisting temptation to dishonesty on the other, which do not exist among a backward people ... those who have tried to establish a business of modern type in a backward country find that they can scarcely ever depend on the native population for filling posts of trust ... Adulteration and fraud in trade were rampant in the middle ages to an extent that is very astonishing ...⁷⁵

276–93, at 279. See also David Blaney, “Late-Victorian Worlds: Alfred Marshall on Competition, Character, and Anglo-Saxon Civilization,” in Tarak Barkawi and George Lawson, eds., *International Origins of Social and Political Theory* (Bingley, 2017), 127–52.

⁷²Marshall, *Principles of Economics*, 224.

⁷³Ibid., 225.

⁷⁴Marshall, *Industry and Trade*, 48.

⁷⁵Marshall, *Principles of Economics*, 1–2.

He adds an important distinction. The English, he writes,

had not originally, and they have not now, that special liking for dealing and bargaining, nor for the more abstract side of financial business, which is found among the Jews, the Italians, the Greeks and the Armenians; trade with them has always taken the form of action rather than of manoeuvring and speculative combination. Even now the subtlest financial speculation on the London Stock Exchange is done chiefly by those races which have inherited the same aptitude for trading which the English have for action.⁷⁶

Note the English “action” as opposed to sterile “manoeuvring and speculative combination.”⁷⁷

Among races, whose intellectual capacity seems not to have developed in any other direction, and who have none of the originating power of the modern business man, there will be found many who show an evil sagacity in driving a hard bargain in a market even with their neighbours. No traders are more unscrupulous in taking advantage of the necessities of the unfortunate than are the corn-dealers and money-lenders of the East.⁷⁸

“Even with their neighbors” is more than moral indignation. It is an argument that the social evolution, the racial development, of these Eastern people has yet to produce internal solidarity. In these paragraphs he is speaking directly to English critics of *laissez-faire* who argued on a priori grounds that market competition set members of a community against each other. He is driving a racial wedge between the cheating merchant and conniving speculator on the one side, and the bold and virtuous entrepreneur on the other.

Finally, the English entrepreneur is a benevolent employer. Marshall is aware of the standard economic argument that if employers follow their narrow self-interest, they will spend less on training workers than is socially optimal.⁷⁹ But good employers, he writes, will nonetheless train generously, “partly because the character that fits them to take the lead in the arts of production is likely also to make them take a generous interest in the wellbeing of those who work for them.”⁸⁰ “Character” is the critical term. He stresses that he is not describing every employer, only the leading, “liberal” employers who represent the direction in which the English race is moving. Such employers join the best parents, whom we will consider below, in sacrificing narrow individual interest for the progress or the race.

⁷⁶Ibid., 741.

⁷⁷Likewise, “The abundance of capital gave scope for men with marketing ability of a constructive order. This is to be clearly distinguished from a laborious astuteness in bargaining ... skill in buying a thing for less than it is worth, and selling a thing for more than it is worth. That miserable ingenuity is no doubt barren ... The constructive trader, on the other hand, aims high, and sees far.” Marshall, *Industry and Trade*, 47.

⁷⁸Marshall, *Principles of Economics*, 7.

⁷⁹Because workers can change jobs, employers cannot be sure of recovering the full expense of training. Marshall, *Principles of Economics*, 565.

⁸⁰Ibid., 565.

It is tempting to see this as mere national chauvinism. But it has several functions. One, noted above, is to deny that geopolitics or colonialism played an important role in British economic history. Another explanation that he heads off is the accumulation of physical capital. Marshall certainly understood the arguments and facts. He had read the first volume of Marx's *Capital*, made many factory visits, and took pride in understanding production processes. But while accumulation of physical capital is recognized in his work it bears little explanatory weight. Instead what mattered to Marshall was the gradual accumulation of human capital in the population as a whole. This is explicit. He wrote that the English "middle and especially the professional classes"

have always denied themselves much in order to invest capital in the education of their children; while a great part of the wages of the working classes is invested in the physical health and strength of their children. The older economists took too little account of the fact that human faculties are as important a means of production as any other kind of capital; and we may conclude, in opposition to them, that any change in the distribution of wealth which gives more to the wage receivers and less to the capitalists is likely, other things being equal, to hasten the increase of material production ...⁸¹

In sum, there are two guiding ideas in Marshall with clear Spencerian roots. The first was a theory of gradual, continuous historical change that explains the present: people's daily lives, their mundane decisions about how to work and how to live, are the motive force in economic history and social history in general.⁸² The social world that we see around us is the product of slow evolutionary forces, moving through gradual changes in the mental capacities of average people. The differences we see in wealth and income are the consequence of different levels and kinds of social evolution. This section of the article has explored how Marshall developed that argument in the figures of the English worker and entrepreneur.

The second idea was that advanced societies are *internally* altruistic. This was Marshall's response to the charge that *laissez-faire* was socially corrosive:

⁸¹Ibid., 229.

⁸²Hence the implausibility of Simon Cook's claim that Marshall made a "journey from Spencer to Hegel." Cook, *The Intellectual Foundations of Alfred Marshall's Economic Science*, 198. This claim grounds Cook's reading of the role of race in Marshall (ibid., n. 62.) Marshall read Hegel's *Philosophy of History* in the early 1870s and references it a number of times, but his mature work shows no journey of this kind. Never was a thinker less dialectical than Spencer, and Marshall followed him in zealously expounding the principle of continuity, both historical (slow gradual change, not abrupt shifts) and social (societies are undivided and cohesive), e.g. Marshall, *Principles of Economics*, vi–ix, 52, 218, 378–79, 660–63; Marshall, *Industry and Trade*, 5–7. Talcott Parsons made this point in "Economics and Sociology: Marshall in Relation to the Thought of His Time," *Quarterly Journal of Economics* 46/2 (1932), 316–47, at 331–2. On continuity see also Reisman, *Alfred Marshall*, 340–49. Compare e.g. Marshall's assertion that English history since 1066 was "never disturbed for long by any sort of grievous violence" with Hegel's discussion of the English religious wars. Marshall, *Industry and Trade*, 35. Georg Wilhelm Friedrich Hegel, *The Philosophy of History* (New York, 1956), 435. On Cook's claims see Tiziano Raffaelli, "On Marshall's Presumed Idealism: A Note on The Intellectual Foundations of Alfred Marshall's Economic Science," *European Journal of the History of Economic Thought* 19/1 (2012), 99–108; Peter Groenewegen, "Simon J. Cook, The Intellectual Foundations of Alfred Marshall's Economic Science," *Journal of the History of Economic Thought* 33/1 (2011), 137–9.

Anglo-Saxons could handle it. Workers worked harder and took better care of machinery. English households spent more on the education and care of their children and less on drink and other dissipation. English merchants did not cheat their customers. English entrepreneurs were generous employers; they fixed their eyes on distant horizons and pursued long-term goals.

Marshall remained quite faithful to these ideas. Compare Walter Bagehot's 1872 *Physics and Politics*. The book begins in a Spencerian vein, with a Lamarckian argument about character development that draws on association psychology. But Bagehot quickly moves on to inherited "custom," with arguments about law, military organization, and family that we would now call cultural or institutional. He also claims that the habits of influential people spread through populations by imitation.⁸³ Such eclecticism was foreign to Marshall. His historical writing, notably in the historical appendix to the *Principles of Economics* and in *Industry and Trade*, is logically parsimonious, hewing closely to the guiding ideas named above. There are no great men; no transformative inventions; no breakthroughs, leaps, or crises.⁸⁴

Transmission of racial qualities

In Herbert Spencer's system, the quality of the human capital stock improved as long as people got the freedom to make choices and learn from them. In his 1851 *Social Statics* he boldly extended this argument to childhood, looking forward to a time when children would be born with characters so elevated that they could be raised and educated with no coercion at all. It is safe to say that Marshall did not buy this (Spencer himself, in later writings, conceded that this ideal was a long way off).⁸⁵ In his 1875 lecture on America, he asserts, "The American woman ... will harden her hands with unceasing drudgery so her daughters may be nurtured in delicacy."⁸⁶ The *Principles of Economics* likewise stresses child-raising:

For when a man has got together a great business, his descendants often fail ... He himself was probably brought up by parents of strong earnest character; and was educated by their personal influence and by struggle with difficulties in early life. But his children ... are perhaps left a good deal to the care of domestic servants who are not of the same strong fibre as the parents by whose influence he was educated.⁸⁷

⁸³Beasley, *The Victorian Reinvention of Race*, 63–96; Mandler, *The English National Character*, 78–81.

⁸⁴As Burrow, *Evolution and Society*, 67, writes, such histories "represent a middle-class revolt against the treatment of history as a chronicle of the deeds of an aristocratic and military caste, and a demand instead for history which shall concern itself with the man in the street."

⁸⁵Herbert Spencer, *Social Statics* (London, 1851). By 1876 he had come to a position close to Marshall's: "any extensive change in the education of women, made with the view of fitting them for businesses and professions, would be mischievous." Spencer, *Principles of Sociology*, vol. 1 (London, 1876), 769. This arguably put Marshall and Spencer in logical difficulties, because by Lamarckian logic the capacity to make better choices is favored because *individuals capture the benefits of those choices*. But I find no evidence that either of them worried about this.

⁸⁶Marshall, *The Early Economic Writings of Alfred Marshall, 1867–1890*, 370. See also Hewitson, "Economics and the Family," 98–100.

⁸⁷Marshall, *Principles of Economics*, 299–300.

If genetic inheritance sufficed, being raised by servants would not matter. How much of this was due to a loss of faith in Lamarckian inheritance? It is hard to say. At this point Marshall was aware of Weismann's 1880s critiques of Lamarck, but the *Principles of Economics* still includes an exposition of Lamarckian inheritance which, though qualified in the second edition, remained in the book through the eighth edition of 1920.⁸⁸ Still, despite a few Lamarckian resonances, the essential feedback loop in the *Principles of Economics* runs from greater prosperity to greater attention to the raising and education of children.⁸⁹

Yet 1920's *Industry and Trade* is surprisingly Lamarckian.⁹⁰ It goes out of its way to emphasize that national characters are diffused among an entire population. Marshall provides this exegesis of the book's epigraph, "The many in the one, the one in the many":

economic conditions ... which prevail at any place and time, reflect the habits of action, thought, feeling and aspiration of the whole people, or at least some large part of them. Each reacts on the character of the population: but the roots of all are deep set in the human characteristics of the place and time: thus the One is seen in the Many. And conversely each tendency embodies in some degree almost every influence, that is prominent then and there ... thus the Many are seen in the One.⁹¹

These shared mentalities change slowly, and are rooted in the distant past: "The present indeed never reproduces the past: even stagnant peoples gradually modify their habits and their industrial technique. But the past lives on for ages after it has been lost from memory: and the most progressive peoples retain much of the substance of earlier habits of associated action in industry and in trade."⁹² Then there is an extraordinary passage at the start of his chapter on "Britain's Industrial Leadership." How is it, Marshall asks, that English industry lagged its European rivals in the Middle Ages, but caught up in the seventeenth century, and surpassed them in the eighteenth? He acknowledges complex causes, but picks out "the peculiar character of Englishmen," and explains,

⁸⁸Ibid., 247–8. But the 1891 second edition still insists that there is "no conclusive case" that "children of those who have led healthy lives, physically and morally, will not be born with a firmer fibre than they would have been had the same parents grown up under unwholesome influences" An 1894 letter makes the same grudging argument in greater detail: Marshall, *Correspondence*, 2: 114. Note too Marshall's decision to pick a public fight with Karl Pearson in 1910 over Pearson's finding that a father's alcoholism did not damage his children. Groenewegen, *A Soaring Eagle*, 479–82. John Toye, *Keynes on Population* (Oxford, 2000), 141–2.

⁸⁹This is similar to the pattern that George Stocking, *Race, Culture, and Evolution* (Chicago, 1968), 265; and A. L. Kroeber, *The Nature of Culture* (Chicago, 1952), 20–21, discern in the ways US social scientists shifted away from Lamarckianism to what we now call "culture." As they write, it was the demise of Spencer that made the anthropological concept of culture concept possible, because it de-biologized a large set of behaviors.

⁹⁰The late volumes—*Industry and Trade* and *Money, Credit, and Commerce*—contained material that had been written earlier, making rigorous intellectual chronology difficult. Groenewegen, *A Soaring Eagle*, 702–36.

⁹¹Marshall, *Industry and Trade*, 6.

⁹²Ibid., 6.

When a cyclist is learning to ride, each adjustment needed to save him from falling demands the whole attention of his mind: and yet practice enables him to make such an adjustment, while thinking of other things and wholly unconscious of the unevenness in the road or the puff of side-wind which has demanded it. Again, as Prof. Bücher's *Arbeit und Rhythmus* has shown, musical rhythm has been called in to the aid of elementary industrial work by almost all races: and the Englishman, even when not specially musical, has ever been prone to an exact regularity of movement, a firm coordination of eye and hand, that have in them something of the rhythm as well as the regularity of machinery ... the ceaseless flight of English arrows, each straight to its aim, was in some measure the mediaeval counterpart of the quick uniform flow of bullets from a modern machine gun.⁹³

We saw the archer story earlier in this article. What is interesting about this passage is not so much the explicit points as the implicit connections between them. The bicycle example is pure association psychology: a skill you learn by hardwiring it into your nervous system. He jumps to Bücher, who argues for racial memory. This sets up a claim that a complex skill like archery lingered among people who had not lifted a bow in generations. This is Lamarckianism without Lamarck. Explicitly biological connections are no longer written down, but "race" continues to designate a group with a common deep-historical mentality that is reflected in capacities for economic activity.

This helps us recapitulate what "race" means, as Marshall used the term. It means that certain capacities are (a) built into people, (b) characteristic of a large group, (c) rooted in its past, and (d) capable of changing only over generations. The "built-in" part need not rest on "biology," however "biology" is conceived. As Stocking pointed out about US social scientists, August Weismann's 1880s critique of Lamarck did not destroy Lamarckianism, but rather made it "implicit rather than explicit" as former Lamarckians found other ways to ground the racial natures they considered obvious facts about the world.⁹⁴

Conclusion

Let us return to Cambridge in the late 1860s, and the encounter between the young Marshall and the elderly F. D. Maurice. After taking up his Cambridge professorship in 1866, Maurice offered a series of lectures on "social morality," setting out a three-part social theory: family, nation, religion.⁹⁵ Individuals begin, says Maurice, as part of a family, accepting the authority of the father. From family, the individual enters the nation, accepting its law and developing ties of community and obligation. Only then, says Maurice, can a person properly become a Christian, passing from the law of the father to the law of the nation to the law of God. There is no biology in this, no reference to inheritance or physical reproduction, no bodies at

⁹³Ibid., 55–56.

⁹⁴Stocking, *Race, Culture, and Evolution*, 134–69.

⁹⁵Frederick Denison Maurice, *Social Morality: 21 Lectures Delivered in the Univers. of Cambridge* (London, 1869).

all. But Maurice is talking about more than cultural ambience. Values must be made habitual, pressed into the individual psychology until they are *felt*. They became part of the dailiness of life, embedded in the relations to family and community that ground the individual.

When he gave a series of “Lectures to Women” in 1873, Alfred Marshall praised social worker Octavia Hill, a disciple of Maurice.⁹⁶ Hill (1838–1912) is a fascinating late Victorian figure. She persuaded John Ruskin in 1866 to lease several buildings for working-class lodgers in London, which she managed. A combination of close sympathetic attention to the lives of her lodgers and strict discipline (missing rent payments got you evicted, as did immorality), she claimed, developed habits of thrift and order. She parlayed success into a housing empire of several thousand units, staffed by women she trained. Hill was influenced by Maurice’s “emphasis on divine order as constituted in the harmonious interdependence of the familial, the civil and the spiritual.”⁹⁷ She was trying to repair that order from the familial level up, by providing better housing, training in regular habits of payment, and personal ties to women of a higher class. Marshall singled out Hill’s insistence that the poor need “the development of every power that can open to them noble sources of joy.”⁹⁸ These sources include cleanliness, independence, feeling shame, and “rejoicing as their children grow in everything that they would have them grow in.”⁹⁹

We have seen in other contexts Marshall’s hope that the working class would develop better desires. Hill had a sophisticated social-work doctrine that paid close attention to people’s everyday practice, to their material surroundings and how their time was structured. This was also thoroughly Mauricean: religion was something lived and felt, ingrained in thought and affection. Hill opposed government provision of social services because that would bureaucratize and formalize work that needed to be, in her view, private: it was in the personal connection between the social worker and the tenant that change happened. The national society she wanted to repair lived in the common understanding and activities of its members, not in the state.

Maurice sought to ground Anglicanism in a shared, felt, English consciousness, and a religion intuited by ordinary people. He imagined a national consciousness, shared among English minds, *that does not depend on the state*. Spencer argued something similar. Middle-class radicals like Mill and Spencer, from religiously dissenting backgrounds, saw the existing British state as a congeries of aristocratic rackets. For both analytical and political reasons they postulated a distinct, self-coherent *national society*, a stable category of the *nation* that did not rely on the *state*. All these thinkers, rational or Romantic, materialist or Christian, developed

⁹⁶Marshall, “Lectures to Women.”

⁹⁷Jane Garnett, “At Home in the Metropolis: Gender and Ideals of Social Service,” in Elizabeth Baigent and Ben Cowell, eds., *Octavia Hill, Social Activism and the Remaking of British Society* (London, 2016), 243–54, at 246.

⁹⁸Marshall, “Lectures to Women,” 117. Marshall is quoting Octavia Hill, “Organized Work among the Poor: Suggestions Founded on Four Years’ Management of a London Court,” *Macmillan’s Magazine* 20/117 (1869), 219–26, at 226.

⁹⁹Marshall, “Lectures to Women,” 118.

some concept of a nationally shared mind, a common consciousness that was ingrained, historically deep, shared, and different from other national consciousnesses.

Hence race. If you wanted to critique and displace the state, you needed to theorize a national society that did not flow from it. If you wanted your nation/society to have useful built-in qualities, race provided a rich discourse of arguments and just-so stories. As Toye writes, “race” became “the site of community altruism,” the unit among whose members sympathy could be assumed, in contrast to others to whom it was denied.¹⁰⁰ This sympathy might still be problematic—the standard eugenic lament was that excessive sympathy enabled the multiplication of the unfit—but it was still something assumed, something that had to be taken account of. If you were outside the bounds of sympathy, you were a competitor in a global zero-sum game. The racialization of “Anglo-Saxon” was closely linked to political rights, both the gradual extension of the franchise within Britain, and the sharp distinction between white colonies whose inhabitants could be granted political rights, and nonwhite colonies for which that was out of the question.¹⁰¹

In the nineteenth century, “economy” emerged as a way to discuss the racial unity of the British nation. For Coleridge, laissez-faire was a threat to national unity, but *economy* was still a discourse in which obligation and solidarity were discussed. Marshall accepted the terms of debate from Coleridge, via Maurice, and sought to show that laissez-faire was compatible with the sentimental unity of the nation. Later economists were sometimes embarrassed by Marshall’s “moralizing,” but his moral language is neither superfluous nor naive. Race invokes a sentimental discourse, a longing for a lost or deferred social wholeness. *Principles of Economics* is a nationalist text, committed to Anglo-Saxon unity and greatness, upon which he rebuilt political economy.

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¹⁰⁰Toye, *Keynes on Population*, 127.

¹⁰¹Hall, “The Nation Within and Without.”