

Definitional Argument in Evolutionary Psychology and Cultural Anthropology

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The role of disciplinary history in the creation and maintenance of disciplinary autonomy and authority has been a target of scholarly inquiry at least since Thomas Kuhn's (1970) claim that such histories were key indicators of a reigning paradigm. In the United States, the history of psychology is a recognized subdiscipline of psychology and histories of psychology serve to inculcate students into psychology as well as to establish and maintain the authority of research programs (Ash 1983; Leahey 1992; Samelson 1997; Samelson 2000). We should not be surprised, therefore to find evolutionary psychologists to appeal to the history of the social sciences when they make their appeals for the necessity and value of their nascent discipline.

In this paper I will examine how evolutionary psychologists use the history of science in order to create space for their new discipline. In particular, I am interested in how they employ a particular account of the origins of American cultural anthropology at the beginning of the twentieth century. Evolutionary psychologists offer a particular history of cultural anthropology as an argument for why we now need evolutionary psychology. I will show that each discipline (EP and anthropology) attempted to create space for itself by defining a central term, "culture." In defining "culture" each discipline also defined their scientific program: defining the nature of scientific inquiry by defining the central object of study. These definitional moves are not necessarily explicit in the argument, however; rather than arguments *about* definition, these scientists are offering an argument *by* definition. An argument *by* definition should not be taken to be an argument *about* (or *from*) a definition. In some sense, an argument *by* definition does not appear to be an argument at all:

The key definitional move is simply stipulated, as if it were a natural step along the way of justifying some other claim.... One cannot help noticing an irony here. Definition of terms is a key step in the presentation of argument, and yet this critical step is taken by making moves that are not themselves argumentative at all. They are not claims supported by reasons and intended to justify adherence by critical listeners. Instead they are simply proclaimed as if they were indisputable facts (Zarefsky 1997, 5).

My argument is that evolutionary psychologists proclaim that culture is biological (the stipulated definitional move) in order to demonstrate that in order to make psychology a science, one *must* accept their account for the origin of culture. This definitional move is what Edward Schiappa (2003) has called an argument from “*real* definition: A *real* definition takes the form “What is X?” In this view, we should use the word “X” in a particular way because that is what X *really* is. Hence, for evolutionary psychologists, we should view culture as biological because that is what culture really is. This definitional move frames the argument often made by evolutionary psychology that any explanation of social or cultural phenomena *require* invocation of biological capacities.

That culture “really is” biology, the evolutionary psychologists argue, is denied by the modern social sciences. In the next section of the paper, I examine the historical account offered by evolutionary psychologists exemplified by the “Standard Social Science Model” (SSSM). Evolutionary psychologists claim that the SSSM represents a sharp bifurcation between the natural and social sciences. As Hampton (2004) recently argued, “The contrast between the Standard Model and the evolutionary model which Tooby and Cosmides propose legitimises the claim that, as a whole, evolutionary psychology is a new approach” (16). They tell a history about the history of social science in the United States wherein cultural anthropologists and sociologists banished Darwin from their disciplines. A key move here is the claim that social scientists posited concepts of “culture” and “society” that were expressly non-biological. One of the standard villains of this history is cultural anthropologist Alfred Kroeber (1876-1960) who argued that culture was “superorganic” and hence biology could play no part in the kind of explanations in cultural anthropology.

Next, I turn to Kroeber’s work to see if the history offered by the evolutionary psychologists adequately captures his views.¹ Here, I argue that Kroeber was not making an ontological claim about the superorganic but a pragmatic claim. He was, in other words, engaging in what Schiappa (2003) called

¹ The present paper is one of two at this conference that discuss Kroeber’s attempt to create an autonomous discipline of cultural anthropology. My argument on Kroeber parallels that of Maria L. Kronfeldner’s excellent paper, “‘If there is nothing beyond the organic...’: Heredity and Culture at the Boundaries of Anthropology in the work of Alfred L. Kroeber.”

a *pragmatic* definition, which takes the form, “How should we use the term X?” In this view, an arguer puts forward reasons for using the term “X” in a particular way. In other words, Kroeber accepted that humans were biological organisms and were the products of natural selection, but that science would be better off if such biological claims did not play a part in anthropological explanations of culture.

In the final section, I argue that Kroeber’s definition of culture was widely adopted because it offered advantages to both the biological and the social sciences. Evolutionary psychologists’ claims for the unity of biological and social sciences fail because they offer no such advantages.

The Broad Sense of Evolutionary Psychology

John Tooby and Leda Cosmides, often considered the founders of the discipline proclaimed that there were two sense of EP, “Evolutionary psychology in the narrow sense is the scientific project of mapping our evolved psychological mechanisms; in the broad sense, it includes the project of reformulating and expanding the social sciences (and medical sciences) in light of the progressive mapping of our species' evolved architecture” (Tooby and Cosmides 2005, 6). This broad vision of EP manifests itself in their claims to provide the necessary tools to unify the social and natural sciences. Philosopher Richard Hamilton recently noted that evolutionary psychologists’ “commitments to massive modularity” were matched by their “equally strong commitment to the unity of science” (Hamilton 2008, 107). Evolutionary psychologists’ claims for the unity of science, particularly how those claims rely on specific historical claims, have seldom been the focus of critique.² David Buller, who finds evolutionary psychologists “wrong in every detail” masterfully unpacks those details except for their claim to provide a “Grand Unified Theory” of the human mind itself (Buller 2005, 481)

John Dupré, a well-known philosophical opponent of the unity of science does not make EP’s claims for unity a centerpiece of his critique. Dupré (2001) writes, “Tooby and Cosmides’s rather vague

² Hampton (2004; 2006) and Winston (2006) are two authors who have examined the historical case presented by evolutionary psychologists.

appeals to the unity of science are wholly irrelevant to the plausibility of evolutionary psychology” (Dupré 2001, 73) while also admitting that “reductionism clearly has a role in explaining the attractions of evolutionary psychology” (75). In other words, while *philosophically* unsupportable, EP’s claims to unify the social and natural sciences are nonetheless *rhetorically* successful; that is to say, scientific audiences have found the appeal to unity persuasive and have therefore allowed EP to gain a foothold in the academy.

While philosophers are often scrupulous about distinguishing popular from mainstream versions of sociobiology and evolutionary psychology (e.g. Kitcher 1985), citation patterns indicate that evolutionary psychologists have no hesitation in drawing on popular accounts for their scholarly papers, especially in their invocation of the SSSM and claims for unifying the sciences. Pinker (2002) and Wilson (1998) are both popular works heavily cited in the scholarly literature of EP. As Andrew Winston (2006) noted regarding the historical narrative I will discuss in this paper, “Pinker’s popularized version draws on Tooby and Cosmides, but then becomes support for their subsequent academic version of the narrative.” If EP is gaining a foothold in the academy it is probably because of the popular accounts it offers rather than the more technical aspects of the research program. “Evolutionary studies of human behavior are receiving extraordinary attention from the popular media” and “most academics are too busy to read primary literature unrelated to their own specialization, and we are all increasingly relying on popularized syntheses.” (Smith, Mulder, and Hill 2001, 129-130). If EP is gaining stature in the academy, there is some reason to think it is *not* because their technical claims about the Environment of Evolutionary Adaptiveness and the massive modularity of the mind have withstood rigorous academic scrutiny; rather we must look to their claims about the nature of science and their promises to transform the social sciences into natural sciences. “One reason for evolutionary psychology’s popularity among psychologists must surely be this promise of unification” because “unity is regarded by most in psychology as a good thing” (Derksen 2005, 140). “The appeal of evolutionary theory is its potential to serve as a unifying theory in the human sciences” says Linnda Caporael (Caporael 2001, 621). Nigel Nicholson claims that “The EP goal, as might be wished for all scientific inquiry, is a unity of knowledge

that assists the translation between disciplines and across levels of analysis. This is an essential part of the EP project – to restore the link between the social sciences and other bodies of knowledge (Wilson, 1998)” (Nicholson 2005, 402). Maarten Derksen (2007) concluded:

One of evolutionary psychology’s main selling points is its promise to restore wholeness. Readers of the many popular and semi-popular works by evolutionary psychologists are put back in touch with their inner mammal: their natural propensities to choose youthful and slim-waisted, or mature and well-off mates, to prefer realist over abstract art, and family life over the commune, in short: human nature, from which they have been alienated by decades of political correctness. For the academic audience the message of wholeness is focussed on overcoming the disciplinary boundaries that have sustained this alienation. Evolutionary psychology presents itself as the foundation of an integrated social science, tying sociology, anthropology, economics and other disciplines to the anchor of biology, from which they have been drifting away since the 1920’s. (189).

Evolutionary psychologists’ claims about the unity of science are based in a historical account about the origin and prevalence of the SSSM, particularly as offered by John Tooby and Leda Cosmides (1992) “manifesto” for EP. As I will show later, this historical account is presented in EP textbooks, scholarly articles, and even has appeared in an article in *History of the Human Sciences* (Dunbar 2007). Seen this way, the massive modularity thesis becomes a warrant for the larger claim that the social sciences must embrace Darwinism and that biology must inform explanations offered in the social sciences. Robert Richardson (2007) argued, “The evolutionary explanations offered by evolutionary psychologists are a means to an end, where the end is the reform of psychology” (20).

Unity of Science in Evolutionary Psychology

Those in the science studies disciplines who have looked for evidence of the unity of science have failed to find much. Peter Galison has written extensively on how difficult communication is even within

the limited domain of high-energy physics (Galison 1997). John Dupre has written on the difficulty of seeing biology as a unified field of inquiry (Dupré 1993; Dupré 1996, 101-117). John Beatty has written on how, even in limited domains of biology, we do not have a unified science, rather “theoretical pluralism and relative significance controversies occur at every level of investigation in biology. (Beatty 1997, S434)

Moreover, in recent survey of evolutionary approaches to the social sciences, of which EP is only one, there was little hope that Darwin could do much to unify the social sciences because “beneath this apparent unity lie serious theoretical and methodological disagreements. Given the diverse backgrounds of the practitioners, it is hardly surprising that evolutionary social science contains several distinct styles of analysis, reflecting the methodological and conceptual habits of the parent disciplines” (Smith, Mulder, and Hill 2001,128).

In the philosophy of science, the notion of the unity of science has fallen on very hard times. “The Unity of Science Movement is dead,” Philip Kitcher recently declared:

If philosophers ever believed that science could be organized as a hierarchy of theories founded on general principles with the basic generalizations of "higher level" theories derivable from those of more "fundamental" theories, then they do so no more. The doctrine that chemistry is reducible to physics, biology to physics and chemistry, psychology to biology, and the social sciences to psychology has suffered from scrutiny of crucial junctions--particularly those between biology and the physical sciences, and between psychology and biology. (Kitcher 1999, 337)

News from the sciences studies disciplines has not yet reached communities of scientists. The views Kitcher describes are still widely held by many scientists who still hold fast to the idea of a hierarchy of science, with “more basic” sciences (physics, chemistry) serving as a foundation (in some unspecified way) for “more derivative” sciences (biology, psychology). As Hacking (1996) argued such beliefs are ideological rather than fully articulated arguments in the sciences. Evolutionary psychologists tap into the ideology of the unity of science in order to bolster the appeal of their research agenda.

In their case for the unity of science, Tooby and Cosmides (1992) start with an ontological claim about the “vast landscape of causation” from the Big Bang, through “account for the types of entities that emerge (pulsars, tectonic plates, ribosomes, vision, incest avoidance).” In argument *by definition*, the key definitional move is often stipulated rather than argued for and Tooby and Cosmides simply stipulate that incest avoidance is the “same sort” of ontological entity as a ribosome or pulsar. If culture is the same type of thing as a pulsar, then the social/cultural sciences are doing the same thing as the natural sciences. As they develop their argument it will look something like this: because culture *really is* nature, the kinds of explanations in the social sciences must look the same as those in the natural sciences.

Following from the ontological claim about the nature of culture are claims about nature of science: since nature is unified, science is unified. As Tooby and Cosmides (1992) frame it, this is more an empirical claim than a normative one: “Such a history—in its broadest outlines—is well on its way to being constructed” by the natural sciences (19). The business of science, in this view, is to reconstruct the causal chain from the Big Bang to human culture. The natural sciences are then unified because the universe is unified. Tooby and Cosmides (1999) declare that the natural sciences

extraordinary florescence throughout this century has resulted in far more than just individual progress within each field. These disciplines are becoming integrated into an increasingly seamless system of interconnected knowledge and remain nominally separated more out of educational convenience and institutional inertia than because of any genuine ruptures in the underlying unity of the achieved knowledge. In fact, this development is only an acceleration of the process of conceptual unification that has been building in science since the Renaissance. (19).

Other writers urging the unification of the social sciences write admiringly of “One of the great triumphs of twentieth-century science was the seamless integration of physics, chemistry, and astronomy, on the basis of a common model of fundamental particles and the structure of space-time” (Gintis 2007, 1). All this talk is very vague and such claims about the existing unity of the natural sciences are completely unsupported by a footnote or reference. Nonetheless, as they develop their

arguments for the unity of science, evolutionary psychologists develop “unity” in two different ways: a consistency thesis and an “explanatory coherence” thesis.

Scientific Consistency Thesis

In a weak version of their claim, Tooby and Cosmides invoke unity of science to mean that each science must produce knowledge that is not contradicted by what they claim is a more basic science. The hierarchy is familiar: physics constrains what chemistry may claim, chemistry constrains biology, and biology should, in principle constrain what the social sciences may claim. For Tooby and Cosmides (1992), “valid scientific knowledge--whether from the same or different fields--should be mutually consistent” (22). Pinker (2002) argues that such mutual consistency can be described as “good reductionism....[that] consists not of *replacing* one field of knowledge with another but of *connecting* or *unifying* them” (70). Jerome Barkow (2006) offers the most irenic version of the “consistency” asked for by EP: “What evolutionists are asking is only that sociology and social-cultural anthropological accounts be *compatible* with what we think we know of human evolution and psychology: that is all.

Incompatibles indicate errors at one level or the other and must drive research. The aim is never to *replace* sociology or anthropology with psychology and biology” (29). Barkow even allows that the discovery of an incompatibility might lead to a correction in a more basic science rather than assume that the social science must be erroneous. Tooby and Cosmides (2005) are much more strident, assuring us that after EP unites the social sciences with evolutionary biology, “the resulting changes to the social sciences are expected to be dramatic and far-reaching” because “the existing superstructure of the social and behavioral sciences...will have to be dismantled” (6-7; see also Richardson, 21).

All these writers are a little vague in how this unification might occur and, as noted, science studies scholars might question if such compatibility exists even in the natural sciences. Nonetheless, the call to make the social sciences “compatible” with the natural sciences are prevalent in EP (Barkow 2006, 348-349; Geher 2006; Gintis 2004; Grosvenor 2002; Mesoudi, Whiten, and Laland 2006). Such claims

follow from the, often elided, definitional move that places culture in the same ontological process that produces the objects of study in the natural sciences. Such claims about the requirement of compatibility of explanatory regimes leads to a stronger sense in which evolutionary psychologists call for the unity of science: the requirement of explanatory coherence.

Explanatory Coherence Thesis

According to many evolutionary psychologists, each level of science *must* incorporate the more basic science in their explanation. Tooby and Cosmides (1992) claim the natural sciences have been "weaving themselves together through accelerating discoveries of their mutual relevance" social sciences have been clinging to the "doctrine of intellectual isolationism." (22). Afraid of being "reduced to more basic sciences," for social scientists, "conceptual unification became an enemy, and the relevance of other fields a menace to their freedom to interpret human reality in any way they chose. Thus, despite some important exceptions, the social sciences have largely kept themselves isolated from the crystallizing process of scientific integration" (Tooby and Cosmides 1992, 21). It is this isolation that results in the stagnation of the social sciences claims Jerome Barkow (2006): "Sociocultural anthropology clearly has not progressed in the cumulative fashion of evolutionary biology." (347; see also Mesoudi 2006, 330). Such a stance has been adopted wholesale in the textbooks that have started to appear in evolutionary psychology. Bruce Bridgeman (2003) writes, "All of the natural sciences are tied together—facts of biology are explained in terms of chemistry, chemical processes are understood in terms of physics, and so on.... The social sciences in contrast talk to one another much less; each works independently of the others" (6).

The upshot of this isolation is that explanations found in the social sciences are "incoherent." Tooby and Cosmides argue that social scientists, because they refuse to incorporate any biology into their explanations for human behavior, produce incoherent explanations. All explanations generated by the

social sciences are strictly environmental and make no mention of biological capacities for social behavior. This, they argue is incoherent:

Incoherent environmentalists...are those who propose theories of how environments regulate behavior or even psychological phenomena without describing or even mentioning the evolved mechanisms their theories would require to be complete or coherent. In practice, communities whose rules of discourse are governed by incoherent environmentalism consider any such trend toward explicitness to be introducing vague and speculative variables and—more to the point—to be in bad taste as well. The simple act of providing a complete model is to invoke evolved design and, hence, to court being called a genetic or biological determinist. (Tooby and Cosmides 1992, 37)

Other evolutionary psychologists are even more outspoken in their condemnation of social or cultural explanations. David Buss (1995) argues that an explanation for a cultural trait *must* include biological mechanisms if that explanation is to explain anything:

Without these mechanisms, the 'cultural differences' literally could not occur. There are two profound implications that follow: (a) Cultural variability, far from constituting evidence against evolved psychological mechanisms, depends on a foundation of evolved mechanisms for its very existence; and (b) cultural variability is not explained merely by invoking 'culture' (which merely mystifies the actual causal processes involved) but rather represents phenomena that require explanation (13).

In this view social scientists are unworthy to claim the mantle of “science.” Irwin Silverman (2007) claims, “The epistemology of science is rooted in the search for definable causes. The concept of culture has no explanatory value unless it includes the ultimate question of how and why cultural traits evolved in the ways that they did (Baumeister, 2005; Tooby and Cosmides, 1992)” (542).

These claims for explanatory coherence go far beyond the minimal requirements that the social scientist not contradict the “more basic” natural sciences and it is worth noting the strength of the claim: to explain cultural or social phenomena, the social science is *required* to include the biological capacity

for culture in the explanation because culture, by itself, explains nothing. Buss (1995) is quite clear on the point: “‘Culture,’ ‘learning,’ and ‘socialization,’” he writes, “do not constitute explanations, let alone alternative explanations to those anchored in evolutionary psychology. Instead, they represent human phenomena that require explanation. The required explanation must have a description of the underlying evolved psychological mechanisms at its core.” (13) Irwin Silverman (2007) agrees, “Until psychologists become involved in questions of ultimate causation, they will continue to function on a comparable level to tribal weatherman and children. It is noteworthy that none of the natural sciences other than the behavioral sciences ignore their ultimate questions. Biologists of all stripes are concerned with the origins of life, physicists with the origins of matter, and progress on these questions is a mark of the progress of the disciplines” (544).

I will return to the idea that an explanation for social/cultural behavior *must* have a basis in biology at the end of this paper. At this point, however, let us examine the context in which this claim is made. Evolutionary psychologists’ claims for unification come into clearest view when they offer an account of the history of the social science disciplines and how those disciplines banished Darwin in the early part of the twentieth century. Such a narrative sets the stage for evolutionary psychologists to sweep the rescue; transforming the incoherent social sciences into truly scientific natural sciences.

The Standard Social Science Model

Evolutionary psychologists have a ready explanation for why the social sciences hold themselves apart from the natural sciences: the Standard Social Science Model. The SSSM, according to Tooby and Cosmides (1992) rejects the idea that the social sciences must rest on a foundation of biology because it portrays the mind as a blank slate and the only possible input into it were social/cultural ones, “The mind could be seen complex, but its procedures were still assumed to be content-free. As long as environmental input could enter and modify the system, as it clearly could, environmental input was presumed to orchestrate the system, giving its functional organization. It doesn't matter if the clay of the

human mind has some initial shape (tendencies, dispositions), so long as it is soft enough to be pounded by the external forces into any new shape required.” (29) Thus, according to the SSSM, biology had no part in culture and the social sciences must not acknowledge that humans are the products of evolution. The result is the complete autonomy of the social sciences from the natural sciences, which Tooby and Cosmides (1992) argue, “has been a conscious, deeply held, and strongly articulated position, advanced and defended since the inception of the social sciences.” In cultural anthropology, whatever their methodological differences, “the founders of American anthropology, from Kroeber and Boas to Murdock and Lowie, were equally united on this point.” (22).

Evolutionary psychologists delve into the history of science in order to show the terrible mistakes made by the founders of American cultural anthropology. Here we can hand the bulk of the exposition over to Tooby and Cosmides’s colleague, Stephen Pinker and his bestselling book, *The Blank Slate* (Pinker 2002). Pinker tells a historical tale of the growth of cultural anthropology and behavioral psychology in the 20th century. Both of these disciplines, Pinker maintains, held that the mind is a blank slate, and hence, anything the mind contains must be explained by reference to culture, which is taken to be a free-floating, autonomous, metaphysical, mysterious *something*.

Pinker explains that at the dawn of the twentieth century, the doctrine of the blank slate was used to great effect against the racist and sexist sciences of the time. The key term was “culture” which was severed from its foundations in race most effectively by Franz Boas. Boas used idealism to “lay a new intellectual foundation for egalitarianism. The differences among human races and ethnic groups, he proposed, comes not from their physical constitution but from their *culture*, a system of ideas and values spread by language and other forms of social behavior” (Pinker 2002, 22). This explanation for the rise of Boasian anthropology is both a compliment and a condemnation. On the one hand, the social and political impact of racial egalitarianism is praised. On the other, the clear implication is that, because Boas’s success was political, it could not have been scientific. The notion that the SSSM owed its success to ideological, not scientific means, is an important theme in EP’s presentation of their foe. That Boasian anthropology was BOTH a scientific and political success is never even offered as a possibility.

Boas argued, according to Pinker, unless the contrary can be proven, we must assume that all differences are socially determined not heredity. Boas's students went further, palming cards from Carl Degler,³ Pinker points the accusing figure straight at Boas's first PhD student at Columbia, Alfred Kroeber. "Boas had created a monster," Pinker (2002) writes, "His students came to dominate American social science, and each generation outdid the previous one in its sweeping pronouncements.Kroeber did not just deny that social behavior could be explained by innate properties of minds. He denied that that it could be explained by *any* properties of minds. A culture, he wrote is *superorganic*, it floats in its own universe, free of the flesh and blood of actual men and women" (23). Pinker argues that because Kroeber wrote at a time of rampant scientific racism and the vestiges of vitalism in biology, he could perhaps be forgiven for thinking that biology had nothing do to with culture. However, we know have enough evidence from evolutionary psychology to put aside the notion that culture can only be explained by reference to culture. Evolutionary psychology has arrived and it is time for social scientists to fall into line behind the program.

Such a view of the SSSM and its history are ubiquitous in EP. In their manifesto Tooby and Cosmides were reticent about attributing the SSSM as views anyone actually held, rather they claimed they were distilling several views into a model that was not necessarily embraced by any individual social scientist. Thirteen years later, they lost such diffidence:

For almost a century, adherence to the Standard Social Science Model has been strongly moralized within the scholarly world, immunizing key aspects from criticism and reform (Pinker, 2002; Tooby & Cosmides, 1992). As a result, in the international scholarly community, criteria for belief fixation have often strayed disturbingly far from the scientific merits of the issues involved, whenever research trajectories produce results that threaten to undermine the credibility of the Standard Social Science Model (Tooby and Cosmides 2005, 7).

³ Pinker gives no indication he has ever read any works by Kroeber, indeed he even gets Kroeber's name wrong, referring to him as "Albert" Kroeber (see Pinker 2002, 23). Every quotation of Kroeber in *The Blank Slate* is taken from Degler (1991) and none of Kroeber's 600 or so publications appear in Pinker's bibliography. For an analysis of Pinker's misuse of Degler's work see Winston (2006).

In an EP textbook, Workman and Reader (2004) argue that Boas used the SSSM to fight racism and classism. "From these honourable beginnings, Tooby and Cosmides argue that the SSSM became the dominant approach to the study of human behaviour and tended to stifle alternative approaches (see Pinker 2002). Many social scientists developed an almost pathological fear of biological explanations of human behaviour, a disposition that sociologist Lee Ellis (1996) termed *biophobia*" (14). In his EP textbook, Bruce Bridgman (Bridgeman 2003) parrots that "What [the social sciences] have in common is the SSSM, the idea that the critical variables for understanding human behavior, experience, and social structure are primarily environmental and cultural rather than biological. Human nature in this view is reduced to not much more than a capacity for culture" (6).

Such claims can begin to sound conspiratorial—evil social scientists have blocked free inquiry and shut off fruitful avenues of exploration (Winston 2006). Consider Gandolfi, Barash and Gandolfi's (2002) claim that the SSSM "has tremendous influence on the way late twentieth century Americans think about social problems. Even those who have never taken a formal course in anthropology, psychology, or sociology use some version of it in their thinking. It dominates all the social sciences (except for economics), including history and political science" (10). Like Pinker, they claimed that Alfred Kroeber deserved a share of the blame for this, with his "immensely influential article published in 1917" on the superorganic (10). Somit and Peterson, (2003) who argue for an evolutionary approach to public policy, also cite Tooby and Cosmides when they argued that, "For at least the past fifty years, the so-called Standard Social Science Model (SSSM) has dominated the behavioral sciences, colored popular thought, and, by its pervasiveness, directly and indirectly influenced public policy" (3) Against this "hegemonic SSSM" which has been "long the reigning paradigm" they claim that the evolutionary approach is a "near 180-degree shift in orientation." (4).

Far from being an ancillary claim unnecessary to the advancement of their program, the historical portrayal of the dominance of the SSSM forms the central appeal in the call for EP in the broad sense. It allows them to tap into the ideology that there is only one way of doing science because there is only one universe in which we live. Social scientists are not really scientists at all: Social scientists offer

descriptions of the social world “any way they please” which means that their descriptions are completely unmoored from reality. All explanations for culture or social behavior offered by social scientists are incoherent because they leave out necessary parts of the explanation: that of the biological grounding for social behavior. Finally, social scientists hold to these views, not from any scientific motive, but because of political and ideological views that may have been justified a century ago but are now antiquated and unjustifiable.

All of this flows from the stipulated definitional move that culture *really is* nature and that the scientific task is to trace the causal chain that gave rise to culture out of our biology. Let us now turn to Alfred Kroeber, the key figure in the history of American cultural anthropology who called for a superorganic view of culture to discover if he, indeed, thought that biology played no part in human culture.

Alfred Kroeber and the Superorganic

Like their claims that the natural sciences are unified, the most obvious thing about evolutionary psychologists’ claims about the dominance of the SSSM and the absence of biological explanations in the social sciences is that they simply are not true. Like their claims about the unity of the natural sciences, no evidence is ever offered to show how biology has been banished from the social sciences apart from scattered quotations from celebrated social scientists like Kroeber or Durkheim. And, like their claims about the unity of science, science studies scholars who have actually researched the history of the social sciences, come to the opposite conclusion as the evolutionary psychologists. If, as Kuhn claimed, you know a paradigm by its textbooks, surveys of textbooks in twentieth-century social sciences have demonstrated that biological explanations have never disappeared even on such hot-button issues as race and gender (Winston 2006). Even eugenics, supposedly banished from proper thought by World War II, persisted in biology textbooks until the 1970s. Mark Largent (2008) traced the presence of eugenic thought in American biology textbooks and noted that “biologists’ advocacy of eugenics began in the 10s.

The percentage of textbooks that advocated eugenics continuously increased until the end of the 1960s... Throughout the 1960s and 1970s there was no critical discussion of eugenics or of compulsory sterilization in American biology textbooks.” (128). In short, when historians look for evidence of the hegemony of the SSSM, it is not forthcoming. It is worth looking at the rise of cultural anthropology and the superorganic concept in a little detail to see if the specific claims of the evolutionary psychologists have any basis in the historical record.

Franz Boas and the founding of American cultural anthropology is a topic that has spawned a vast literature (Baker 1998; Barkan 1992; Briggs and Bauman 1999; Cravens 1978; Darnell 1990; Degler 1991; Gilkerson 1986; Gossett 1963; Handler 1990; Helbring 1994; Hoover 1981; Risjord 2000; Stocking 1968; Williams 1996). Boas’s project for an autonomous cultural anthropology was predicated on freeing anthropology from Herbert Spencer’s notion of lockstep cultural stages and passive adaptation to competitive environments, which in the context of late 19th century America carried classist, racist, and sexist implications. Epistemologically and methodologically, Boas achieved this by bringing to America the neo-Kantian German academic discourse that divided generalizing from particularizing, or law-governed from interpretive, sciences (Bunzl 1996; Lyman and O’Brien 2004). George Stocking (2001) has discussed how Boas’s own conception of anthropological science was influenced by the “traditional distinction in German thought between the *Naturwissenschaften* and the *Geisteswissenschaften*, between the sciences dealing with physical nature and those dealing with human spiritual activity” (37). This enabled him to predicate the autonomy of cultural anthropology as an interpretive inquiry on distancing it from the notion of evolutionary progress that was, at the same time, being undermined by Weismannism.

Boas, however, is not the villain of the set piece offered by the evolutionary psychologists, indeed Pinker has relatively kind words regarding Boas. It is Boas’s first Ph.D. student, Alfred Kroeber who is blamed for exiling Darwin from cultural anthropology. Alfred Kroeber was the “first Boasian,” receiving his Ph.D. under Boas’s direction in 1901 and moving to Berkeley, California to build a museum and an anthropology department (Jacknis 1993; Jacknis 1996; Jacknis 2002). Historians have focused on Kroeber’s work with American Indians (eg. Buckley 1989; Buckley 1996) because Kroeber never

considered himself a “formal theoretician” of the culture concept, and claimed that his thoughts on the theory of culture was a “by-product” of his empirical work in anthropology “sweated out piecemeal and slowly over fifty years” (Kroeber 1952, 3). I will focus on a series of works Kroeber published in the first two decades of his career (Kroeber 1915; Kroeber 1916; Kroeber 1916; Kroeber 1917; Kroeber 1918; Kroeber 1923) where he most fully articulated his belief that anthropology was a separate discipline from biology.

Unlike his teacher Boas, Kroeber’s division of culture and biology had less to do with the European traditions, which turned on the possibility to reduce the “human spirit” to a materialist base and relied instead on a pragmatic definition of culture that was not ontological in nature, although it could appear to be so. For Kroeber, the actual division of biology and culture was not at issue; it was about what phenomena we should invoke in our cultural explanations and what phenomena should be assumed as part of our background assumptions. Despite evolutionary psychologists’ implication that Kroeber was hostile to Darwin and biology, Kroeber was a staunch Darwinist and, what is more, embraced Weismannian doctrines of hard heredity. Moreover, Kroeber believed in the very “psychological universals” that evolutionary psychologists deny he did, although he did not speak of “mental modules” but of “instincts” and “tendencies” of the human mind. However, Kroeber offered a pragmatic definition of culture in which biology and psychology had no place in cultural explanation *despite the reality of humans as products of natural selection with psychological universals*. Kroeber, far from being leery of Darwin and seeing Darwin as a threat to the autonomy of his discipline, saw Darwin as a scientific hero and he took arms against those who proclaimed themselves Darwinians without ever really understanding the master’s work.

Eugenics, Race, and Heredity

Despite evolutionary psychologists’ claims about the century of hegemony of the SSSM, the early twentieth century was marked by heated debates about the relationship of biology to social life: eugenics

(Kevles 1985), the instinct debate in psychology (Hampton 2004; Hampton 2006), and debates about the racial basis of civilization (Barkan 1992; Cravens 1996; Jackson and Weidman 2004).⁴ Kroeber was facing the American eugenics movement, particularly the hard core of racist anthropologists exemplified by Madison Grant. Civilization was a product of biological race according to Grant and hence the subtitle of his most famous work was “The Racial Basis of European History” (Grant 1916). Kroeber detested these views, “So far as civilization is concerned, there is no such thing as an Anglo-Saxon breed or a white man’s burden” he declared in 1914 (Anonymous 1914, 1). One motivation for Kroeber was to carve a place for anthropology as a discipline with a subject matter of its own precisely to stop the kind of academic racism represented by Grant. Writing to Edward Sapir in 1917, Kroeber declared, “I’m tired of anthropologists being a charity orphan allowed to pick up a profusion of scraps until biologists or geographers or psychologists or Madison Grants take a fancy to having them again.... We don’t get respect now: we get kindness and tolerance. And I’m fed up on it” (quoted in Golla, 234).

Kroeber had two targets for his definitional work that was dedicated to clearly explicating culture’s relationship to biology. His first enemies were the racist anthropologists of the eugenics movement typified by Grant. His second target was the social scientific community. He felt the responsibility was theirs to fight back the eugenics movement and that they were not doing so. Kroeber believed that audacious racists and the timorous social scientists were confused about a central scientific matter: the inheritance of acquired characteristics, which he referred to as “use inheritance.” By the early twentieth century, Mendel had been rediscovered and Weismann’s work was making its way into the United States however Lamarckian doctrines still held significant sway among many scholars and in most of the debates that Kroeber was joining about race formation and instincts in psychology. Kroeber believed that by clarifying the notion of use inheritance, he could simultaneously create a space for anthropology as a non-biological science while clearing away mistaken ideas about evolution itself for the

⁴ Kroeber also needed to evade the evolutionism inspired by Herbert Spencer. According to Spencerian views of culture, there was a natural hierarchy of civilization and a certain inevitability of ranking of societies. Cultures in the Spencerian tradition were more evolved or less evolved and could be understood by reference to an inner drive that made the progress. In the interests of shortening this already too-long paper, I will not discuss this aspect of Kroeber’s work.

biological sciences. As George Stocking (1968) wrote Kroeber, “seems to have been virtually alone among social scientists in realizing what had been the implications of Lamarckianism for the independent development of the social sciences” (259). The roots of Kroeber’s attack on use inheritance can be found in his very first publications, indeed he sets the stage in his doctoral dissertation.

Kroeber and Universal Psychological Mechanisms

In telling critiques of evolutionary psychologists’ account of the SSSM, Simon Hampton (2004, 2006) points out that they are often quite ambiguous about exactly how long the SSSM has been dominant; sometimes they claim sixty years, sometimes a century, sometimes it dates back to Locke or Descartes. Hampton argues that one major debate completely missed by the evolutionary psychologists was on the existence of psychological instincts in the early part of twentieth century psychology. After a detailed account of the instinct debate, Hampton (2004) concludes that “psychological and behavioural thinkers have for long periods been immersed in the implications of Darwinism. It is plainly and factually incorrect for evolutionary psychology to deny this. And it is disingenuous to down-play it. Evolutionary psychologists who use the term 'Standard Social Science Model' and rhetorical equivalents such as "the neo-behaviourist tradition" (Nicolson 1999: 5) and the "the tabula rasa view" (Crawford 1998: 4) undermine their own much-vaunted rigor” (38). Indeed, Hampton (2006) finds that much of the current debate about psychological adaptations mirrors the earlier instinct debate quite closely.

Hampton’s discussion of the instinct debate should frame any examination of Kroeber’s ideas concerning culture because he needed to frame his ideas against these widely discussed notions about the existence of psychological universals. Looking at Kroeber’s work, it is clear that he was willing to admit that such universals existed, but simply denied that they had a part to play in explanations of culture. For example, in his doctoral dissertation Kroeber (1901) examined decorative artwork among the Arapoho Indians. Kroeber's dissertation did not fully embrace the cultural relativism that would later be a calling card for self-respecting Boasians. He wrote in terms of "higher" and "lower" civilizations in this early

work, terminology that would soon disappear from the repertoire of the Boasians. Other aspects of the work did bear the marks of Boas: close attention to detail, ample description of Arapaho artwork, and an insistence that the researcher have contact with the culture under study.

Beyond providing a rich description of Arapaho artwork the larger point Kroeber was about the cultural function of art: was primitive art meant to represent reality or to be purely decorative? Kroeber answered this question by refusing to accept the binary; he argued that primitive art was bound by aesthetic convention but, within those conventions, was meant to be realistic. So, "the main characteristic of Arapaho art [is] its fusion (which is more truly an undifferentiation) of the realistic and decorative tendencies" (324).

Kroeber had a universalist point to make about "all primitive art" (324). Kroeber cataloged examples of the undifferentiation of the decorative and realistic function of art from all over the world and while warning of the danger of generalizing from "selected examples such as these" nonetheless concluded:

This fusion of two differing tendencies is not merely a frequent or widely distributed occurrence, as are a great many special ethnic phenomena, such as circumcision or doctoring by sucking or angularity of ornament, but this fusion is a rule practically without exceptions. It is universal because it is necessary. Both the representative tendency and the decorative tendency are deep rooted in the human mind, so that it must be virtually impossible to suppress them for any length of time or among any considerable number of men. (326).

"Every culture" Kroeber wrote, "must contain among its motive forces more or less of every tendency, because the tendencies are in the human mind and hence ineradicable" (327). But while admitting that the origins of art could indeed be found in the universal psychological mechanisms of the human mind, Kroeber denied that such mechanisms could play an explanatory role in anthropological science. Those searching for the origins of art, Kroeber argued were faced with intractable problems, Kroeber argued. If the origin of pictorial representation was very old and emerged gradually over long periods of time, then the origin was lost to the investigator in the mists of time. "But if it, therefore, were comparatively recent

in origin,” Kroeber (1901) continued, “there must until a certain time have been no art among the Arapaho, while at that moment it sprang up full-blown, not as a crude undifferentiated thing, but a highly-specialized pictorial art. Such an event would be extremely remarkable, not to say marvelous, and more in need of an explanation than the phenomenon it explained” (329). There would be no principled reason to stop the causal chain that led to art and declare it as *the* origin of events. Hence, the search for origins was futile, because “no myth, no artistic convention, nor any other thing human, ever sprang up from nothing” (333). Understanding the pattern of culture (a phrase later made famous by another Boasian, Ruth Benedict (1934)) was the goal of anthropology, not a search for origins of culture. Hence, since the causal chain of any cultural event was, more or less, infinite, Kroeber rejected the idea that one could explain culture by pointing to a previous event and declaring it *the* cause.

A second problem Kroeber identified was what we would call the “overdetermination” problem. In examining rival accounts for the origins of mythology, Kroeber (1901) reviewed rival accounts for such origins, each rooted in a psychological capacity, or “tendency,” of human beings. Each theory captured a tendency of human behavior but none of them could stand as *the* explanation of the origin of myth. “This multiplicity of tendencies or causative forces necessarily refutes any explanation that uses and allows only one of them” (332). Hence, Kroeber defined away the psychological as the province of anthropological inquiry. “These tendencies,” Kroeber argued, “being inherent in mind, are everlasting.” However, the universal psychological tendencies which Kroeber admitted were “at the root of all anthropological phenomena” were not themselves the object of study for anthropologists (332). For while the psychological mechanisms of the mind were fixed, the cultural patterns they produced were infinitely varied; the *products* of mind were the object of study, not the mind itself. “The phenomena of activity have changed as these tendencies and their relations to one another have become modified,” Kroeber (1901) concluded, “Therefore the products of mind (the phenomena studied by anthropologists) are, like mind itself, beginningless (for us)” (333). The last two words here are significant: it is not that culture is a mystical force without beginning, it is that *for us* it is so. The definition here is a pragmatic one, drawing a boundary around the proper domain of inquiry for cultural anthropologists.

Kroeber thus rejected the very idea of science that the evolutionary psychologists are claiming are as the hallmarks of science: explaining events by reference to previous events. Kroeber argued that such an explanatory scheme would doubly fail; first, because the causal chain stretched back forever, and, second, because there were a multiplicity of causes to a cultural trait and there was no principled way to privilege one over any other. Yet, Kroeber clearly offered a demarcation between the mind and the products of the mind. The mind he relegated to psychology and biology, but the products of the mind were the province of cultural anthropology. As he would develop this idea, it was culture that he would label *superorganic*. This definitional move, however, was not an ontological claim. His definition of the superorganic was a pragmatic one: he argued that there were good reasons for treating culture as separate from biology, and it was irrelevant that culture was biological in origin. Such a pragmatic move would rid the social sciences of the specter of Lamarck and rid the biological sciences of the hated eugenicists.

Kroeber and the Pragmatic Definition of the Superorganic

In the early part of the twentieth century every industrialized country embraced some form of eugenics (Dikötter 1998; Kevles 1985; Largent 2008; Nye 1993; Paul 1998). Eugenics was a science characterized as, “not so much a clear set of scientific principles as a ‘modern way’ of talking about social problems in biologizing terms (Dikötter, 467). For Kroeber, the eugenics movement was worse than a political mistake, it was a scientific blunder because it confused biological phenomena with social phenomena. Harking back to the idea that one could conceivably trace a causal chain back infinitely, he noted that, “Chemists do not feel impelled to expound the rise of genius in chemical terms or explain the variety of moral codes by valences and atomic weights. They therefore leave civilization alone, or if they pronounce judgments in its field, do so avowedly as laymen. But biologists view the province of the social from their very doorsteps.” (Kroeber 1916, 38). Kroeber chafed at the eugenicists’ encroachment into the province of the cultural and social and was thus the most outspoken scientific critic of eugenics in

the United States in the nineteen-teens. In that time period no other American scientist said things like this:

[Eugenics] is more refined but no less vain than the short cut which the savage follows, when, to avoid the trouble and danger of killing his foe in the body, he pierces, in the safety and amid objurgations uttered in the convenience of his own home, a miniature image addressed by the name of the enemy. Past ages have had their dragons of superstition to fight. Our battles against this ever re-arising brood dawn no smaller and as unceasing; and it would be shallow to try to defer or soften the inevitable conflict by withholding from this movement its true designation. Eugenics...is a fallacy. It is a mirage like the philosopher's stone, the elixir of life, the ring of Solomon, or the material efficacy of prayer; and to those who are led by its learned modernity to receive it earnestly, it is a destructive snare. (Kroeber 1917, 188-189).

Kroeber took this position, not because he rejected evolutionary theory but because he embraced it. Evolution, Kroeber (1916) argued, was an ancient idea and offered evolutionary myths of many cultures to prove the point. So Darwin was certainly not the first evolutionist, rather, Kroeber argued, Darwin's genius was to combine three ideas (variability, heredity, competition) into the *process* of natural selection.⁵ While Kroeber was sure that Darwin's ideas might undergo some further modification as new developments in shed further light on the process "but the world must probably forever believe that natural selection is of some influence in the shaping of life" (1916, 25).

It was left to August Weismann, and his doctrine of hard heredity, to complete Darwin's theory, according to Kroeber (1916) because Darwin did not break with the "older pseudo-process of Lamarck" of use inheritance (25). Kroeber maintained that Weismann "was as clear a thinker as Darwin; and his accomplishment will in the end be rated in proportion" (26). Under Weismann's "onslaught," Kroeber declared, "the Lamarckian structure" proved to be "absolutely hollow. Experiment failed to produce even a scrap of positive evidence in its favor. Renewed examination demonstrated that there was not a single

⁵ Kroeber understood what the modern evolutionary psychologists appear not to: evolution is a study of *processes* rather than *products*. This point is made ably by Buller (2005, 428-429).

alleged instance which was more than logically possible. Practically every case of use inheritance was explicable by selection” (26).

The power of Darwinian natural selection combined with the overwhelming evidence for hard heredity left Kroeber with a puzzle: biologists had stopped talking about use inheritance, but few were really trying to stamp it out as a “pernicious heresy” as he thought they should (28). Indeed, “Scarcely anywhere since Weismann,” Kroeber (1916) noted, “is there any zeal against the doctrine of acquired heredity as something radically and vitally and destructively wrong. Biology....scarcely professes a cardinal article of faith on acquired heredity. What brings it about that there exist so much weak condemnation, half tolerance, and hankering” (28-9)?

The reason, Kroeber argued, was that there were actually two evolutionary processes: a biological one in the Darwinian/Weismannian mode and a social/cultural one. In this second mode, “use modification is permanent and transmittal of the acquired exists” (Kroeber 1916, 31). Civilization was inherited, Kroeber (1916) argued, but strictly in a non-organic process:

Speech, knowledge, arts, learning, and all our activities except the bare substratum of physiological abilities, are not inborn. Heredity gives us the slate and the pencil in good working order. Our individual kinds of slates and the sharpness of the pencils are also wholly from heredity. But with the writing on the slate, which is the part we play in civilization, heredity has nothing to do. That comes from social situation, in other words the existing civilization into which we are born (31).

Unlike organic evolution, civilization was cumulative and progressive. It was the fundamental confusion between social inheritance and biological heredity that perpetuated the mistaken doctrines of use inheritance in the scientific and public minds and, simultaneously, led to the mistaken doctrines of eugenics. “The entire doctrine of eugenics is an endeavor to attain moral ends by biological means.” Kroeber (1916) argued, “Moral of course is social; and yet the open protests have come--strange partnership!--from the orthodoxly religious and the professedly skeptical, but rarely from the enlightened camp of science” (34).

While he raged against the popularizers like Madison Grant in his letters, there were plenty of academic targets who held such views for Kroeber to criticize in his professional publications. An example from Kroeber's "Superorganic" article, was Gustave Le Bon, who, in his *Psychology of People* took as his task, "to describe the psychological characteristics which constitute the soul of races, and to show how the history of a people and its civilization are determined by these characteristics" (Le Bon 1912, xvii). Kroeber (1917) was clearly disgusted by this because "as a scientific concept or tool, a race soul is as intangible and useless as any phrase of mediaeval philosophy" (185). If, Kroeber (1917) argued, Le Bon "had said spirit of civilization, or tendency or character of culture, his pronouncements would have commanded less appeal, because seeming vaguer; but he would not have had to rest his entire thought upon a supernatural idea antagonistic to the body of science to which he was trying to attach his work; and if non-mechanistic, his efforts at explanation would at least have earned the respect of historians" (185). Worse, Le Bon did not seem to understand the science upon which his work was supposedly based. Le Bon argued that the progress of civilization depended on the accumulation of racial traits. Once again, Kroeber leapt to the defense of Weismann by distinguishing organic heredity from civilizational inheritance. Kroeber argued that characteristics don't accumulate in natural selection and only arise out of response to a local environment. Civilization, considered as the superorganic, non-biological culture *does* accumulate as knowledge progresses over time. "If there is anything that heredity does not do," Kroeber declared (1917), "it is to accumulate. If, on the other hand, there is any one method by which civilization may be defined as operating, it is precisely that of accumulation" (186). By refusing to understand the difference between biology and culture, Le Bon had produced a work that was neither scientific nor historical. Only by keeping each discipline in its own realm, could each produce worthy works, Kroeber concluded.

It was not just returning biologists to the organic realm that interested Kroeber, however. For Kroeber (1916), social scientists had a greater responsibility than the biologists for repairing the damage done by the eugenics movement:

...biology has been born in the last century of two. It has forged its weapons, taught itself their use, conquered a territory and stands forth a young giant of prowess. What wonder that it has proceeded by the divine right of power to annex the antiquated realm of history that lay adjacent, and to impose its rule and laws without inquiring whether they were fit? The greater fault is not with the biologists who have explained historical phenomena by organic processes, but with the sociologists who have accepted and welcomed these alien explanations (34).

Kroeber's exemplar here was Lester Frank Ward, first president of the American Sociological Association who spoke out forcefully against Weismannism in a number of influential publications (Ward 1891a; Ward 1891b; Ward 1903; Ward 1907). Ward was perfectly willing to accept that Weismann and his followers have disproved the existence of use inheritance in animals, but "when the human species is to be treated, the tables are, in a manner, turned" (Ward 1891b, 315). Ward looked to use inheritance to transmit those intellectual and moral traits that make us human:

The whole point at issue is whether there is a causal relation between the cultivation of these faculties and their development; in other words, whether the increment gained by their exercise is transmitted to posterity. Professor Weismann and most of his followers, constituting what is now generally known as the school of Neo-Darwinians, deny such transmission. If they are right, education has no value for the future of mankind, and its benefits are confined exclusively to the generation receiving it. (Ward 1891b, 319).

George Stocking (1968) noted that Ward's embrace of use inheritance was an attempt to keep the biologists at bay. "In the absence of a concept of culture severed from all biological connections, to abandon Lamarck and accept Weismann would be yield up the social sciences to an unrestricted biological determinism" (256).

Kroeber's solution to the problem was to offer up just a concept of culture that Stocking says was needed. Kroeber (1917) pointed out that Ward argued forcefully for heredity by acquired characteristics because that is the only way we can get "permanent progress for humanity." Kroeber held, "It is, if not a deep view, a common one; and for that reason Ward's formulation is, however worthless intrinsically,

representative and significant” (187). Ward, Kroeber argued was simply following the traditions of sociological inquiry begun in the nineteenth century by Spencer and Comte before him. Indeed, Kroeber (1917) had borrowed the term “superorganic” from Spencer himself, but “in spite of his happy coinage of the term which has been prefixed as a title to the present essay, he did not adequately conceive of human society as holding a specific content that is non-organic” (188). All these writers failed to adequately recognize that culture could be treated as a completely separate entity. “Civilization” Kroeber wrote (echoing back to his dissertation), “is not mental action but a body or stream of products of mental exercise. Mental activity, as biologists have dealt with it, being organic, any demonstration concerning it consequently proves nothing whatever as to social events” (1).

Kroeber was not putting forth a metaphysical claim about the reality of the superorganic, as Pinker charged. Rather, he was arguing for a pragmatic and pluralistic approach to science. For him, the success of biology and psychology were impressive but hardly the only way one could approach understanding humans. “Mechanistic science has accomplished wonders in a brief space by adhering ever more rigidly to its own peculiar methods, and allowing no limits to be set to its application of these methods.” Kroeber (1917) admitted, “Yet that a tool has proved its service for a purpose, does not affect the value of other purposes or the utility of other tools for these other purposes” (207). The view one took of humanity, Kroeber (1917) concluded depended entirely on the goals one had for inquiry: “The applicability of science to any and all domains of human cognizance must be expressly affirmed. But the same phenomenon can after all be viewed with different ends” (208). Or, as he expressed it privately to Sapir, ““I don’t give a red cent whether cultural phenomena have a reality of their own, as long as we treat them as if they had. You do, most of us do largely, but most of [us] hang back and fear to avow it and let geographers and biologists...walk over us. If we’re doing anything right, it deserves a place in the world. Let’s take it, instead of being put in a corner. That’s not metaphysics: it’s blowing your own horn” (quoted in Golla, 1984, 244). Indeed, when Sapir took to print to criticize aspects of Kroeber’s proposal, the title of his article was not “Is There a Superorganic?” but “Do We Need a Superorganic?” (Sapir 1917). The question was not an ontological one, but a pragmatic one.

Conclusion

Derksen (2004) recently argued that “As numerous studies in the sociology, history and philosophy of science have shown, the organization of science is not a straightforward consequence of natural relations, nor can the ideal of a unity of science be deduced from the unity of reality” (147-8). Such work in the science studies disciplines is unknown to evolutionary psychologists who naively proclaim that the natural sciences are unified and that such unification flows naturally from the unity of nature. Kroeber had a much clearer understanding of how modern disciplines function. He understood that by limiting cultural explanations to cultural factors he could create autonomy for cultural anthropology as well as for the biological sciences. Whether or not culture *really was* superorganic was not the issue for him, it was that if we pragmatically treat it as if it were, both the social and biological disciplines would flourish.

The imperialist rhetoric of EP holds no such promises for disciplinary growth. By yoking their discipline to a claim that culture *really is* biology, they absolve themselves of any promises to bring benefits to the colonized social sciences. Moreover, despite their claims that they will bring “coherence” to social/cultural explanations, they embrace such explanations when arguing for their discipline. Evolutionary psychologists’ proclaim that cultural/social factors cannot explain anything. “That it is done, all the time,” write Leiter and Weisberg (2007), “is, alas, a problem for claims like these. (Impossibility claims are always defeated by the actual!).... All behavioral phenomena may have a biological dimension; and all biological phenomena may have a physical dimension. But there is *no evidence* that in order to explain and predict behavioral phenomena you need biology, or that to explain and predict biological phenomena you need physics” (34).

Indeed, despite their normative claim that cultural explanations *require* biology in their account of the rise of the SSSM, evolutionary psychologists point to nothing except cultural factors: social scientists fearing reductionism, loathing of racism and sexism, etc. One searches in vain in their account for the mental module that created the capacity for early cultural anthropologists to engage in the behaviors they did. And yet, despite being incoherent, by evolutionary psychologists’ own normative

standards of explanation, they accept and repeat the purely social/cultural explanation for the rise of the SSSM. It seems that evolutionary psychologists understand that cultural explanations, absent biology, are perfectly coherent after all.

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