

THE FOUR-FIELD
MODEL
OF ANTHROPOLOGY
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Abstract

This article reviews the origins and development of the four-field model of anthropology (sociocultural anthropology, archaeology, physical anthropology, and linguistics) in the United States, from both the Enlightenment and the study of North American natives (18th century) to its maximum expansion by the 1970s. A debate articulated as whether anthropology is science vs. humanities has exposed divisions of a few US anthropology departments in recent years. The long term future direction of the four-field model in an institutional sense is unclear but its establishment throughout university curricula at many institutions suggests that it will endure for some indefinite time into the future.

Keywords: history of anthropology, four-field model, US university system.

Resumo

Esse artigo revê as origens e o desenvolvimento do modelo dos quatro campos antropológicos (antropologia sociocultural, arqueologia, antropologia física e lingüística) nos Estados Unidos, a partir do Iluminismo e o estudo dos nativos norte-americanos (século XVIII) até sua expansão máxima na década de 1970. Um debate sobre se a antropologia seria ciência ou humanidades resultou em divisões em alguns departamentos de antropologia nos Estados Unidos em anos recentes. O futuro do modelo dos quatro campos em termos institucionais não é claro, mas seu estabelecimento no currículo universitário em diversas instituições sugere que irá persistir por certo tempo no futuro.

Palavras-chave: história da antropologia, modelo dos quatro campos, sistema universitário americano.

Resumen

Este artículo examina las orígenes y el desarrollo del modelo de los cuatro campos antropológicos (antropología sociocultural, arqueología, antropología física y lingüística) nos Estados Unidos, a partir del Iluminismo y lo estudio de los nativos norteamericanos (siglo XVIII) hasta su expansión máxima en la década de 1970. Un debate sobre si la antropología era ciencia o humanidades ha resultado en divisiones dentro de algunos de-

partamentos de antropología estadounidenses en años recientes. El futuro del modelo de los cuatro campos en términos institucionales no es cierto, pero su establecimiento en los currículos universitarios en varias instituciones sugiere que el irá persistir por algún tiempo en el futuro.

Palabras claves: historia de la antropología, modelo de los cuatro campos, sistema universitario estadounidense.

DEFINITIONS

In this paper, I discuss the historical and institutional origins of anthropology in the United States with an eye to understanding the four-field model and its dominance in the 20th century. Anthropology in the United States is historically distinctive because of the tenacity of its four-field model. The four fields, of course, are sociocultural anthropology (also called cultural anthropology or more seldom ethnology), archaeology or archaeological anthropology, physical or biological anthropology, and linguistic anthropology or simply linguistics. The term “anthropology” indeed has traditionally meant something different, specifically, in the anthropological tradition of the United States² from its cognate terms in other languages of other national traditions. In the first edition of a popular dictionary of Brazilian Portuguese, for example, *antropologia* originally referred to physical anthropology and it was specifically described as a “natural science” (*ciência natural*) (Holanda Ferreira n.d.: 108; see Lima et al. 2005: 29-30), whereas in the third edition of the same dictionary (Holanda Ferreira 2004), the term has come to encompass the four fields (see also Instituto Houaiss 2007: 240 for an even broader, contemporary definition)³. Generally speaking, the term “anthropology” has tended to be restricted in its range of meaning in German and French, as well as in the English spoken in the British Isles and the Republic of Ireland for most the 20th century, where it appears to have usually also meant physical an-

thropology (OED 2008) or some sort of anthropology firmly rooted in natural history. Social anthropology, the hallmark of Britain, was seen as a separate field after about 1920.

THE ATLANTIC ENLIGHTENMENT AND LEARNED SOCIETIES

The four-field model of anthropology reflects institutional arrangements as these developed over time as well as concepts about how to study the subject matter. Marvin Harris (1968: 9) [1927-2001] was often quoted as having written “all that is new in anthropological theory begins with the Enlightenment.” Harris was referring to theory concerning culture per se. The intellectual foundations of the four fields themselves are arguably also laid in the Enlightenment, dating roughly from 1690 to the end of the French Revolution in 1793. In 1786, the British Orientalist Sir William Jones (1746-1794), in an address to the Asiatic Society of Bengal, determined a relationship among Greek, Latin, and Sanskrit that for him evinced what today linguists would call the prior existence of a mother tongue, common to all three (Cannon 1990: 245). That mother tongue, of course, was Proto-Indo-European, and the “family” Jones identified by using that term is Indo-European. The discovery marked the beginning of linguistics as we know it (Hallowell 1976: 58-59). In the same period, physical anthropology may be said to begin with Linnaeus himself in 1735, in classifying the human species as an animal under the binomial rubric *Homo sapiens* (Hallowell 1976: 94). Lin-

naeus and later Blumenbach (1776) divided the human species into a total of five “races,” according to geography and minimalist criteria like skull shape and skin color, which would lead to collection of skulls of American Indians and other groups in the United States during the next century (Hallowell 1976: 94-101).

The Enlightenment included the educated elite of the United States, or what was colonial British North America before 1776, in a broader “Atlantic Enlightenment” (Shuffelton 1993). In his work on Indian mounds in Virginia, Thomas Jefferson (1743-1826) carried out the first, basically modern stratigraphic excavations (Renfrew and Bahn 1996: 21) (though he was largely ignored by subsequent archaeologists for some time), which may be considered the beginnings of archaeology in what would become the United States. Jefferson inquired into linguistics and ethnology of American Indians as well. Jefferson considered American Indians to be people who could be objectified in order to understand humanity; he directed Lewis and Clark before their exploration of the Louisiana Purchase of 1804-06 to both understand and, to a certain extent, appreciate the Indian (Adams 1999: 226; Worster 2001: 397). Such an attitude had precursors in earlier Enlightenment figures. All had been influenced by the Jesuit missionaries of the previous century who in their support of primitivism had created the idea of North American Indians as representing the “Noble Savage.”⁴ That doctrine served as a call

to freedom and equality for people everywhere, including in France, where it helped lay the groundwork of the French Revolution (Bidney 1954), a war supported by Jefferson.

In *Notes on the State of Virginia*, Jefferson (1999: 107) observed that the comparison of American Indian languages “would be the most certain evidence of their derivation which could be produced . . . it [such comparison] is the best proof of the affinity of nations.” Jefferson also would later read Sir Jones’ linguistic work on languages of Asia in the 1790s (Cannon 1990). Both Jefferson and Jones personally knew Benjamin Franklin (1706-1790), who had founded in 1769 the American Philosophical Society (Mittra 1933: 197), an academy of scholars that existed for the exchange of learning rooted in Enlightenment ideals, to which Jefferson and several other signers of the Declaration of Independence had been elected in 1780, and to which Jones no doubt would have been admitted after the American Revolution had he not died relatively young (Cannon 1990: 328). Early members of the American Philosophical Society studied languages of American Indians; the Society recognized the field of linguistics in 1815 in founding a committee called “Historical and Literary Committee when Duponceau had succeeded Jefferson.” That committee was charged with linguistics as well as other anthropological matters (Hallowell 1976: 61).

The American Philosophical Society was modeled on the British Royal Society, which had been founded in 1660;

It is the oldest such society in existence (Mitra 1933: 197), of which Sir William Jones was an elected member also. The Asiatic Society of Bengal, likewise inspired by the Royal Society, had as its specific mission the discussion of “Man and nature: whatever is performed by the one, or produced by the other” (Cannon 1990: 203). The Asiatic Society of Bengal was concerned, in other words, with *general anthropology* (the four fields of anthropology), before any such lexeme existed. The origins of learned societies, as we know them today, like the American Philosophical Society and the Asiatic Society of Bengal, date from the Enlightenment, and are critical to the birth of the four-field model.

Anthropology in the United States comes about in the context of learned societies and museums in the 19th century (Mitra 1933; Hallowell 1976; Hinsley 1981,). The learned societies, with some antiquarianism or related interest in anthropology or the study of Indians (called “Indianology” by Adams [1999]), included, in addition to the American Philosophical Society, the American Academy of Arts and Sciences (Boston, founded during the American Revolution), the American Antiquarian Society (1812), the Academy of Natural Sciences (Philadelphia, 1817), the New York Academy of Sciences (1817), the American Ethnological Society (1842), and the AAAS (American Association for the Advancement of Science) [1847] (Meltzer 1985: 250; Mitra 1933: 196-205). Lewis Henry Morgan (1818-1881) would be the first chair of the anthropology sec-

tion of the AAAS in 1851 (Mitra 1933: 203). Despite its name, the American Ethnological Society, which would undergo several changes, was originally not dedicated to the study of ethnology as we know it today but rather to the “origin, progress and characteristics of various races of man” (Mitra 1933: 202), reflecting the 19th century conflation of “race” with “culture” that predated Boasian cultural relativism as well as European social anthropology. The American Ethnological Society was revived by Boas in 1900 (Stocking 1974: 304, Stocking 1988: 18) to represent the interests of what today we would call cultural or social anthropology.

MUSEUMS AND 19TH CENTURY ANTHROPOLOGY

The principal museums of anthropological note of the United States arose in the 19th century also. These bore the makings of the four-field model because of their collections. They included crania due to the agenda of racial anthropology and the polygenist authors of the early 19th century, especially Samuel Morton (1799-1851), who invented phrenology, which essentially confused cranial form with intangible characteristics, including linguistic and cultural ones (Hallowell 1976: 96).⁵ They also included “curious objects in natural history, Indian antiquities, foreign and native works of art,” as was described specifically for the Charleston Museum (South Carolina) in 1826, which is the oldest museum in the country, dating from 1777 at the latest, having been destroyed by fire

in 1778 with earlier records lost (Mittra 1933: 183). Other museums with anthropological interests included the United States National Museum (Smithsonian Institution) [1847], the Peabody Museum of Natural History (Yale) [1866], the Peabody Museum of American Archaeology and Ethnology (Harvard [1866], the American Museum of Natural History (New York, 1869), the Bishop Museum (Honolulu, 1889), and the Field Museum of Natural History (Chicago, 1893) [Mittra 1933: 183-196]. Museums were important to the discipline because of the role these played in development of the study of material items, mostly collected in the course of Indianology (Adams 1999). These materials were arranged and examined by ethnographers, physical anthropologists, and archaeologists. They were central to the paradigm of unilinear evolutionism also, dominant in the 19th century until it was deconstructed by Boas and his students.

Otis Mason (1838-1908), following the lead of his mentor John Wesley Powell (1834-1902), who in turn had been influenced directly by Lewis Henry Morgan's cultural evolutionism (Hallowell 1976: 90), had arranged North American indigenous artifacts at the National Museum (the Smithsonian) in an exhibit of 1887, showing what he believed to be inevitable progress from savagery through barbarism to civilization (Stocking 1974: 57; Worster 2001: 457). Daniel Brinton (1837-1899) in Philadelphia, a professor of linguistics and archaeology at the University of Pennsylvania and affiliated

with the Academy of Natural Sciences, also arranged native objects according to supposedly "natural laws" of cultural evolution (Bunzl 1996: 56; also see Stocking 1974: 21, 30). A young, recently arrived immigrant from Germany named Franz Boas (1858-1942) found fault with Mason's exhibit, to the chagrin both of Mason and Powell (Bunzl 1996: 56-58; Worster 2001: 457-458). The exhibit was mainly criticized from Boas' principle that different causes may result in the same effects; everything cannot be explained by evolutionism in a single line of inevitable progress (Bunzl 1996; Stocking 1974: 61-67; Hinsley 1981: 98). Powell, who was also a member of the American Philosophical Society, had been instrumental in hiring amateur anthropologists who were veterans of either the US Civil War or Indian Wars of the late 19th century at the Smithsonian and orchestrating support for them by the Bureau of American Ethnology, of which he was the first Director in 1879 (Meltzer 1985: 250; Worster 2001: 398). His intellectual goal was to found a "science of man" on the basis of research on Indians of the United States, who were seen as being no longer enemies by the late 19th century, but rather wards of the state who needed protection and understanding (Worster 2001: 398). Powell evidently had an applied agenda as well for he had his soldier-anthropologists gather information on American Indians in order to more effectively implement military and political control of tribes already vanquished by the US army (Hinsley 1999: 183-184).

Anthropology for Powell was the linking of many distinct fields around the subject matter of the Indian (Darnell 1977; Meltzer 1985: 25). This phase of proto-anthropology in the United States was characterized, then, by what has been called “military ethnography” (Pels and Saleminck 1999: 36-37), though it is probably more often referred to as the “museum period” (Stocking 1988: 20). Anthropology included linguistics also, as originally enjoined upon Lewis and Clark by Jefferson and prominent in Powell’s own work (Hallowell 1976: 67; Hinsley 1981: 158-162; Bunzl 1996: 63-65), as in his guidebook for fieldworkers from 1877, and as in the philological work of William Whitney [1827-1894] (Hinsley 1981: 158-161; Worster 2001: 399).

In the 19th century, anthropology in the United States had developed in the context of societies and museums. It became professionalized in the university setting from 1901 to about 1920, and in this period of professionalization, museum research actually grew at a faster rate than it had before (Leslie 1963: 486; Darnell 1977: 401), perhaps because of the new PhDs that were being minted in anthropology. The Anthropological Museum at the University of California was founded in 1901 with a focus on the ethnology of California, North America, South America, and Pacific; the Southwest Museum in Los Angeles was founded in 1907 with a focus on archaeology; the Oakland Museum with a focus on Indians of the Pacific Coast was founded in 1909; and the Museum of

the American Indian was founded in 1916 in New York City (Mittra 1933: 195-196). Its collections are now part of the National Museum of the American Indian in Washington, D.C., which opened in 2004.

Although anthropology includes a field dedicated to the study of human social institutions: sociocultural or social and cultural anthropology, it is interesting to note that whereas museums are critical to understanding anthropology in the United States, they were of no consequence in the development of sociology, the sister field of sociocultural anthropology (Leslie 1963: 486)⁶. That is because anthropologists were concerned with the things people made in addition to their institutions; things people made were part of the learned experience of living in society, which was culture. That concept of culture, and cultural evolution in the 19th century, appears to have fit better with natural history than other academic consolidations. The anthropology section of the AAAS was originally assigned to section B “Natural History” in 1856 not without sense in the way people conceived of it at the time in the United States⁷. As such, the artifacts collected by anthropologists were separated from the “art” collected by galleries for the display of Western painting, sculpture, and the like. For that reason, anthropology museums are distinct from art museums. Anthropologists of the 19th century were essentially natural historians and their work “was shaped in the atmosphere of museums of natural history” (Leslie

1963: 486). Part of the problem, from the relativistic perspective of Boasian anthropology, was that these museums also existed to show progress. In the late 19th century, art museums and industrial museums showed the progress of Western civilization, whereas museum anthropology was intended to exhibit the “inferiority of other peoples” (Hinsley 1981: 83).

THE FOUR-FIELD MODEL ELSEWHERE

The four-field model is tenacious in the United States, but not historically unique to it. Certain other countries where anthropology originated also once had four fields. The four-field model, which is simply the institutional juxtaposition of cultural anthropology, linguistic anthropology, archaeological archaeology, and physical anthropology, occurred to some extent also in Europe, especially Britain, and elsewhere in the late 19th century (Adams 1999: 367-368). Indeed, in terms of pedagogy, the Board of Studies in Anthropology at the University of London as early as the first decade of the 20th century proposed, as a guide for the “study and teaching of anthropology,” courses in essentially what are the four fields as we know them now, including “physical anthropology” and “cultural anthropology,” which, in fact, explicitly subsumed courses of study in “ethnology,” “archaeology,” and “linguistics” (Haddon 1910: xiii-xiv). Boas showed conscious awareness of the existence of the four-field model, which had already congealed in museums and learned societies in the US by the 1870s (Massin 1996: 82, n. 2), in an

address delivered in 1904 to the International Congress of Arts and Sciences at St. Louis (itself part of the Louisiana Purchase Exposition--Stocking 1974: 21), by declaring that anthropology constituted “the biological history of mankind in all its varieties; linguistics applied to people without written languages; the ethnology of people without historic records; and prehistoric archaeology” (quoted in Stocking 1988: 18).

Regardless of where it occurred, the four-field approach seems to have been often connected to previously extant museum concerns as well as classical evolutionism. Ostensibly, a four-field approach (or at least physical anthropology and ethnology) existed in Brazil in the late 19th century at the Museu Nacional (since 1892 located at Quinta da Boa Vista in Rio de Janeiro), given the joint ethnographic and anthropometric interests of Edgard Roquette-Pinto (Lima et al. 2005: 29-30). It also existed in Germany at the Royal Ethnographic Museum in Berlin, founded in 1886; that museum together with the Berlin Society for Anthropology, Ethnology, and Prehistory (organized in 1869 by Rudolph Virchow and Adolf Bastian) and its associated journal, *Zeitschrift für Ethnologie* (Lowie 1937: 30), were essentially the background of physical anthropology and ethnology in Germany to which Boas had been exposed before he became an anthropologist in the United States. Virchow (1821-1902) was a pathologist and Bastian (1826-1905), who at one time studied law, natural science, and medicine had been his student (Lowie 1937, 30). Boas had met Virchow at the Ber-

lin Anthropological Society meetings in 1882 and was much impressed with his empiricism in physical anthropology (Stocking 1974: 22). After Boas did fieldwork with the Inuit of Baffin Island in 1883-1884, which convinced him to become an anthropologist, he served from 1885-86 as assistant to Bastian at the Royal Ethnographic Museum in Berlin and slightly later for a short time as *Privatdozent* at the University of Berlin, working with Virchow, who was intimately involved with the Berlin Society for Anthropology, Ethnology, and Prehistory (Lowie 1937: 129). He left Germany and settled permanently in the United States the next year, in 1887 (Bunzl 1996:17). It is interesting to note that both Bastian and Virchow were opposed to evolution by natural selection (they opposed Darwin) [Lowie 1937: 31-36; Stocking 1974: 22] on the basis that because transformation of one species into another had not been *observed per se*, it could not be proven to have occurred. Virchow and Bastian were in the tradition of German empiricism dating from Kant and Herder and their thinking along these lines appears to have been neo-Kantian, in keeping with their generation of German scholarship.

The next generation of scholars, including Boas and his first few PhDs, tended to accept Darwin and evolution by natural selection, even if they rejected unilinear cultural evolutionism or the so-called comparative method of the 19th century. Boas' dismissal

of classical evolutionism, and of cultural typologies in general, has its roots in German neo-Kantian philosophy, history, and empiricism (Bunzel 1996). Certain scholars, especially the anthropologists outside the Columbia ambit, however, maintained a link to this period, however fragile, into the early 20th century. This would include Darwinists who continued to accept aspects of classical cultural evolutionism in the sense of Tylor and Morgan.

By 1902, the year of the founding of the American Anthropological Association, anthropology was taught in 31 universities and colleges in various cities of the world; in Europe, these were found in France (Paris)⁸, Germany (Munich, Berlin, and Marbourg), and Britain (Oxford, Cambridge, and Edinburgh) [Mittra 1933: 142]. In Britain, a four-field approach to the subject matter of anthropology was clear from R.R. Marett, who in his textbook (1912:7-8) had written:

“Anthropology is the whole history of man as fired and pervaded by the idea of evolution. Man in evolution—that is the subject in its full reach. Anthropology studies man as he occurs at all known times. It studies him as he occurs in all known parts of the world. It studies him body and soul together—as a bodily organism, subject to conditions operating in time and space, which bodily organism is in intimate relation with a soul-life, also subject to those same conditions”.

For Marett, the unifying factor of a four-field approach was Darwin and evolution: “Anthropology is the child of Darwin. Darwinism makes it possible. Reject the Darwinian point of view, and you must reject anthropology also” (Marett 1912: 8). Marett was also a lecturer at Oxford, home of the Ashmolean Museum of Art and Archaeology (the oldest university museum in the world) and the Pitt-Rivers Museum, dating from 1884, an ethnological and archaeological collection organized explicitly in 19th century evolutionary terms (Stocking 1987: 264). Marett’s textbook (1912) included chapters entitled “antiquity of man,” “race and geographical distribution,” “social organization and law,” and, under “miscellaneous,” he had sections on language, art, and economics.

The four-field model thrived in museum contexts. However much Darwin and the theory of evolution by natural selection were accepted by modern British social anthropologists of the next generation, however, they nevertheless dispensed with the overall classical evolutionist paradigm itself, and with it, the institutionalization of the four fields of anthropology. After Haddon and Marett, a four-field approach ceased to exist in the UK (Adams 1999: 368-369).

ORIGINS AND DEVELOPMENT OF ANTHROPOLOGY IN THE UNIVERSITY, 1901-1945

I would arbitrarily define the beginning of professional, general anthropology in the US with the granting of Alfred

Kroeber’s PhD degree at Columbia in 1901, under the supervision of Franz Boas. Professionalization of various physical and natural sciences was also occurring around the end of the 19th and beginning of the 20th centuries (Chester 2002: 175). The American Anthropological Association had been founded on 30 June 1902 (Mitra 1933: 204). Although since that time the *American Anthropologist* has been associated as the flagship journal of the AAA (Stocking 1974: 304), it had been published originally, since 1888, by the Anthropological Society of Washington (Worster 2001: 439; cf. Stocking 1988: 17), the learned society of the Washington “School” of anthropologists, itself founded in 1879 (Mitra 1933: 126; Worster 2001: 439). John Wesley Powell had been its first president, serving nine terms, and by the end of the 19th century it still had a membership of around 500 people, including many women, though it had fallen on economically hard times (Stocking 1974: 304; Hinsley 1981: 234; Worster 2001: 439).

In 1902, the fledgling American Anthropological Association, as a learned society, represented, in fact, two groups with quite different ideologies about what the field should be. There were those with the view of anthropology as a discipline with a doctorate as the *sine qua non* of full competence in it, such as Boas and his Columbia students, on the one hand, and on the other, there were those who held the pre-professional view characterized by the museum, amateur anthropologists,

veterans of military ethnography, centered in Washington, D.C., the Washington School (Stocking 1974: 285; Hinsley 1981: 234). The culmination of the antagonism between these two groups would come about with Boas' censure in 1919 by the American Anthropological Association for opposing, in a letter to *The Nation*, the activities of anonymous American anthropologists working as spies for the United States government in Central America (Stocking 1976: 2). Boas and his students, especially Robert Lowie, would retake control of the organization and the *American Anthropologist*, which had been temporarily under control of the Washington anthropologists, again by around 1923 (Stocking 1976: 3). Perhaps the Washington anthropologists were bound to lose in the ideological dispute between cultural evolutionism and cultural relativism in their confrontation with Boas, if for no other reason than they, unlike Boas, had "left no academic progeny of their own" (Stocking 1988: 18). They were government employees, not university professors.

Anthropology in the United States became entrenched in university life mainly though not solely because of Boas and the Columbia training program he had organized. Before that, and after the Enlightenment, it had been confined to academic societies and, most of all, museums (Mitra 1933; Stocking 1976: 13; Hinsley 1981). It would be in museums that many of the first professionally trained anthropologists in the early 20th century would find work (Eggan 1963: 410). Kroeber actually

founded a new department, University of California at Berkeley in addition to becoming eventually Director of that university's new Anthropological Museum, financed by Phoebe Hearst (Mitra 1933: 195), in the first decade of the 20th century. Indeed, most of the fewer than ten anthropology departments in the United States in 1920 were associated, in one way or another, with an anthropological museum (Stocking 1976: 13).

Some claim to founding anthropology in American higher education can be laid also by Harvard, which had a strong museum program in archaeology (the Peabody Museum of American Archaeology and Ethnology, since 1866—Mitra 1933: 189). In fact, at least in an ideological sense, there were three principal American nuclei of anthropology by the early 20th century, these being New York (at Columbia), Washington, D.C. (at the Bureau of American Ethnology and the U.S. National Museum), and Cambridge (at Harvard) [Stocking 1976: 13; Stocking 1988: 17]. In Cambridge, Charles Peabody (whose PhD was in philology) taught North American archaeology at Harvard from the 1890s into the early 20th century. The first PhD at Harvard in this field was awarded in 1894 in the field of "American archaeology and ethnology" to George Dorsey (Williams 1998). Harvard's strength for many years was essentially in archaeology, and it now appears that Boas at Columbia did maintain contacts there with important figures in American archaeology (cf. Stocking 1976: 2), such

as Frederic Ward Putnam (Director of the Peabody Museum, 1876-1915) and Alfred Marston Tozzer (PhD in anthropology, 1904) [Williams 1998]; archaeology was Boas' least significant field.⁹

The first PhD in anthropology per se at Harvard, coming two years after Alfred Kroeber's PhD at Columbia under Boas, was granted to William Curtis Farabee (1903) (Williams 1998), who would later work at the University Museum at the University of Pennsylvania and carry out wide-ranging, though brief, ethnographic work in northern South America. Farabee (1865-1925) had not been exposed to the Boasian emphasis on long-term fieldwork, which of course developed independently in British social anthropology after Haddon's generation had passed, and this perhaps is reflected in Lowie's curt dismissal of Farabee's research on South American marriage customs as

“meager or confused reports” (1937: 6). For Boas' ethnography, Lowie (1937: 132) had this to say: “Boas raised field work to an entirely new level by demanding that the ethnographer's technique must equal that of a student of Chinese, Greek, or Islamic civilization.”

The Peabody Museum at Harvard and the University Museum at the University of Pennsylvania were, together with the Bureau of American Ethnology (Smithsonian Institution) (Meltzer 1985: 249), earlier institutions in the field of anthropology than Columbia dating from Boas' initial appointment in 1896 (Stocking 1974: 284), even though museums such as these hired the PhDs produced by the universities (Eggen 1963: 410). Clearly Harvard and Pennsylvania were far less influential in the initial development and professionalization of sociocultural and linguistic anthropology than Columbia.

Table 1
PhDs Granted in Anthropology in the United States, Selected Years^a

Year	no. PhD institutions	no. PhDs Granted	Source
1962	36	--	AAA 1962
1967	60	142	AAA 1967
1978	62	406	Cimino 1979; AAA 1978, 412
1987	87	369	AAA 1987
2007	94	524	AAA 2007

a. The institutions are from the United States only, and only PhDs earned in the United States are counted, though member institutions granting PhDs in the AAA sources are found also outside the United States. For that reason, the numbers in these columns do not necessarily agree with the totals given in similar tabular data in those sources.

The profession of anthropologist, apart from its dictionary meaning of the early 19th century (see note 1), really begins with Boas because of the introduction of the German system of the Ph.D. dissertation and its defense as the requirement for admission to full professional status (Eggan 1963: 410). Anthropology began at the graduate level in the US university system, and it only became a standard part of the undergraduate curriculum much later (Eggan 1963: 409). The profession grew slowly until an “acceleration” of training occurred in the 1930s (Eggan 1963: 410); at that time, the field expanded evidently due to the Great Depression and the rise of structural-functionalism in social anthropology. In the United States, applied anthropology, which is often considered the fifth field of anthropology (Darnell 2002: 2), began in the 1930s with the Great Depression, and the opening up of job opportunities from the New Deal for anthropologists (Stocking 1976: 49). Most of this work was centered on projects with American Indians in reservation life and focused on education, nutrition, culture contact, and land issues (van Willigen 1993: 23-24).

In this period of the Great Depression, anthropology also became more embedded in universities than museums (Eggan 1963: 410; Stocking 1976: 16). New graduate programs at large state universities (such as Michigan and Wisconsin) and some private universities (such as Washington and Northwestern) were also formed in this period (Stocking 1976: 16). The number of

institutions granting the PhD doubled from what it had been in 1920, the year when the field may be considered to have been consolidated and fully professionalized (Darnell 1977) and the number of PhDs increased fivefold (Eggan 1963: 410). The field in general expanded its reach beyond the traditional Indianology of North America to the Pacific, Africa, and Central and South America (Stocking 1976: 16-17). More specialization took place; modern archaeology, for example, comes into existence in this period (Eggan 1963: 410), with the founding of the Society for American Archaeology in 1934 (Meltzer 1985).

Applied anthropology began to grow exponentially during World War II. The Society for Applied Anthropology was founded in 1941 (Stocking 1976: 51). After the United States entered World War II, more than 90% of American anthropologists were involved in some professional capacity in support of the Allied war effort (van Willigen 1993: 25; Gardner and Lewis 1996: 32; cf. Stocking 1988:20). By 1943, more than half of American anthropologists were devoting full-time to the Allied war effort, and around a quarter were engaged part-time in that capacity (Stocking 1976: 51). The end of the war would see a significant alignment of anthropology toward full integration within university life, with less and less emphasis on practice.

In the period 1945-1954, the number of PhD-granting institutions doubled again, and the field increased the number of PhDs by more than had been

minted in the preceding fifty years (Eggan 1963: 410-411), due largely to the 1944 GI Bill, which afforded 2.2 million soldiers returning from the European and Pacific theaters of World War II an essentially free undergraduate education; many chose to attend Ivy League universities and first-rate liberal arts colleges (Field et al. 2008).⁹ In succeeding years, therefore, it became necessary to increase the number of institutions awarding the anthropology PhD and to hire more PhDs in order to teach the swelling ranks of undergraduate students at both private and public universities. The increase in teaching responsibilities, and embeddedness of anthropology in the university, by this time led to a marginalization of applied anthropology, which had flourished during World War II, and to the reification of an intellectualist or “pure” anthropology that did not need to have practical effects or applications on the world beyond the Ivory Tower (e.g., Pels and Salemink 1999: 3). For the most part, therefore, the dissemination of the undergraduate major in anthropology can also be traced to World War II and its aftermath.

PENETRATION AND EXPANSION OF ANTHROPOLOGY ACROSS THE UNIVERSITY CURRICULUM, 1945-2008

By the late 1960s, much of the professoriate itself had been trained partly from the GI Bill. There were only 36 PhD degree-granting institutions in 1962, but that number had waxed by two-thirds to 60 in only five years (Table 1). But of these some 60 or 70

Institutions, a few were clearly dominant, in terms of where the employed professors had received their degrees. Harvard, Columbia, California-Berkeley, and Chicago had bestowed more than 100 PhDs each on sitting faculty in anthropology departments as of 1969 (AAA 1969: 182). On a second tier of influence, in terms of degrees held by extant faculty, were, in no particular order, Yale, Michigan, Pennsylvania, Cornell, California at Los Angeles, Arizona, and Wisconsin (AAA 1969: 182). Although the number of institutions granting PhDs in the US did not increase significantly in the next ten years, the number of PhDs granted rose by more than 200%, from 142 to 406 between 1967 and 1978 (Table 1). The number of 400 doctorates per year was first reached in 1974 (Darnell 2002: 16) and from about that time onward, the number of PhDs produced yearly has not risen or fallen significantly, and the differential apportionment of the subject fields does not seem to have changed much, either (Tables 2, 3).

In 1977-78, proportionally more PhDs were awarded in sociocultural anthropology than in 2007-08 (62% to 45%), yet in both periods, the ranking in terms of number of degrees granted per field was the same: 1) sociocultural anthropology, 2) archaeology, 3) physical anthropology, and 4) linguistics (Tables 2, 3) [also see Darnell 2002:16]. Perhaps what has changed the most since 1977-78 is the category ‘other,’ in which there is a larger number of nontraditional, interdisciplinary topics that can be pursued. In fact, the largest area within the category of

Table 2

Anthropology PhD Dissertations in the United States by Field, 1977-78^a

Social/cultural ^b :	251 (62%)
Archaeology	72 (18%)
Physical anthropology:	45 (11%)
Linguistics	19 (5%)
Other ^b	17 (4%)
TOTAL	404 (100%) ^c

a. Source: AAA 1978

b. This category includes subject areas self-described as social, cultural, ethnology, urban, economic, and ecology, among others.

c. This category includes areas self-described as medical anthropology, applied anthropology, physical/cultural or cultural/physical anthropology, folklore, and history of science (in the one case a biography of anthropologist Ruth Benedict at the University of Minnesota).

c. The total is less than the total number of PhDs granted as given in Table 1 because not all departments actually report the names and titles of completed dissertations at the same time, in some cases only supplying the numbers of graduates, not their names and titles of their dissertations.

“other” would be practicing or applied anthropology dissertations, accounting in 1995 for about 7% of the total and representing a “growth industry” in anthropology at large (Darnell 2002: 16).

It is clear, of course, that the undergraduate curriculum in anthropology came to dominate in course offerings after World War II. In part this was due to the GI Bill and the expansion of university departments to accommodate teaching more students; it is logically also due to the popularity of the field of anthropology.

Although there are only about 94 PhD-granting departments, at 537 there were more than five times that number of total departments or programs of instruction with a major or concentration in anthropology in the US in 2007 (AAA 2007). Altogether, these programs have about 3200 faculty with the doctorate. It seems that many if not most of the

departments with a major in anthropology also have classes in the four fields of anthropology and many require student majors to take a distribution requirement course in each of the four fields.

THE EPISTEMOLOGICAL CRISIS IN THE FOUR-FIELD MODEL

Anthropology enjoyed a sustained period of seemingly unstoppable growth after World War II and into the economic recession of the 1970s, which was itself a period of “intellectual ferment and job crisis” (Darnell 2002: 15), in part because of the GI Bill and in part because of the breadth and depth of the subject matter. The growth rate of the field appears to have stabilized after about that time, but the production of knowledge has nevertheless kept apace in all four fields. It is often said that there was only one true general anthropologist (Boas), or at most, two (Boas and Kroeber). Indeed, of

Table 3
Anthropology PhD Dissertations in the United States by Field, 2007-08^a

Social/cultural:	209 (45%)
Archaeology	119 (25%)
Physical anthropology:	64 (14%)
Linguistics	9 (2%)
Other ^b	68 (14%)
TOTAL	469 (100%) ^c

a. Source: AAA 2007

b. This category includes areas self-described as medical anthropology, applied anthropology, anthropology of digital technology, anthropology of material culture, and other subjects outside the traditional four fields per se.

c. The total is less than the total number of PhDs granted as given in Table 1 because not all departments actually report the names and titles of completed dissertations at the same time, in some cases only supplying the numbers of graduates, not their names and titles of their dissertations.

the 70 presidents of the American Anthropological Association up to 1988, perhaps only Kroeber truly commanded as many as three of the four fields in their modern state (Stocking 1988: 19-20). It has long been recognized that individual PhDs had to specialize in one of the four fields (Goldschmidt 1970: 3). At a certain point, the production in the different fields became so great that they veered apart. In addition, debate over what was scientific (with most physical anthropologists adhering to the empirical nature of their data and to evolution as the principal paradigm) and what was humanities (many cultural anthropologists no longer considered ethnographic inquiry to be a scientific undertaking per se) [e.g., Clifford and Marcus 1986] proved to be divisive in a few venues.

On the eve of postmodernism in the mid 1980s, perhaps the greatest disenchantment with the four-field model was that it was merely institutional and historical, and that it was not based on

any compelling, contemporary theory: “Few today can seriously claim that these fields share a unified approach or object, though the dream persists . . .” (Clifford 1986: 4). In other words, even if evolution is the “elephant in the room,” as William Durham (2007) recently put it, there does not seem to be a unifying theory or dataset in general anthropology: there is no paradigm. The 1960s as a period of thought in anthropology saw the development of research programs of symbolic anthropology, cultural ecology and cultural materialism, and structuralism, some of which by the 1970s had morphed into variations on Marxism (Ortner 1984, cited in Darnell 2002: 18). These paradigms, however, disappeared with the attack on positivism and the Enlightenment that came from the new movement in postmodernism, or “interpretivist trend” (Darnell 2002: 33-34), which essentially focused on the “observer effect” (Darnell 2002: 34) and problems regarding the validity of

the results of ethnographic research (Clifford and Marcus 1986). The debate seemed to be between those who thought anthropology was a science and those who believed it belonged in the humanities.

Clearly a few departments had split across these lines. Duke University divided into a Department of Cultural Anthropology and Department of Biological Anthropology in 1988 (Shenk 2006). The biological wing of the anthropology department at Harvard was recently seeking separate status under a new Life Sciences division at that university, because its faculty considers their work closer to ecology, evolution, and organismal biology than the work of their colleagues in the other three fields (Shenk 2006). The crucial debate over whether anthropology was science vs. humanities was intimately related to the actual division of the Stanford University anthropology department in 1998 into a Department of Anthropology that was basically cultural anthropology and a Department of Anthropological Sciences, which was essentially a four-field department; a university dean took an executive decision and required the two departments to become one anthropology department again in 2007 (Albach 2007). Those in the short-lived Department of Anthropology of 1998-2007 at Stanford were essentially against the concept of holism as deriving from the four-field model because they saw it as out of date and associated with the anthropological museum (and evolutionist) mentality of the 19th century

(e.g., Yanagisako and Segal 2006; see Hinsley 1981: 83-84).

CONCLUSIONS

In the first decade of the 21st century, the four-field model of anthropology is at something of a crossroads in the United States. We know where it came from, in terms of its Enlightenment origins, its development in the context of museums and learned societies, and its penetration of and expansion across the curriculum of the university system of American academia in the 20th century. What is unclear is where it is going. The critique as to continuity of a four-field approach in the academy is not simply that it represents a mere institutional artifact of 19th century evolutionism and museum pseudo-science, or that only Boas and Kroeber could have actually mastered its early 20th century American manifestation, but rather that individual research itself has tended not to incorporate data or insights drawing upon the four fields, or even two or three of them (Borofsky 2002; see critique by Calcagno 2003).¹⁰ Boas himself thought the four fields would end up as separate disciplines due to the increase of knowledge and specialization and both he and later the linguist Dell Hymes (1972) considered the joint existence of the four fields to be something of an historical accident (Stocking 1988: 19, 23).

Literal counterexamples to that view exist, however, such as the famous discovery of the balanced polymorphism of sickle cell anemia by physi-

cal anthropologist Frank B. Livingstone (1958). That study showed that an ancient cultural practice (agriculture) led to environmental conditions (swamps) favoring the breeding of mosquitoes that, as vectors of malaria, led to microevolutionary developments in human resistance by populations living in the affected zone in the form of heterozygote survivability (Livingstone 1958). In an analysis of the infrequent appearance of the grooved fricative /f/ as a phoneme in the world's languages, Charles Hockett argued that it was due to the limited distribution of the origins of cereal grain agriculture, the human processing of which selected for a microevolutionary change in bite from an edge bite to a scissors or over bite: here were arguments based on data from archaeology, physical anthropology, and linguistics (Hockett 1985; Darnell 2002:13; Goldschmidt 2006).

More general statements can be gathered in favor of holism that are not simply based on the four-field model, but which do not entirely reject it, either. One can argue that both postmodern and scientific views are present in all four fields, and so the epistemological debate should not be couched as one that pits the fields against each other *per se* (Darnell 2002: 34). Perhaps in an effort to escape the present conundrum, Arizona State University has recently changed the name of its Department of Anthropology to "School of Human Evolution and Social Change," though the range of interests of its full-time

faculty—at 55 it is a very large department—as well as the degrees it grants and the facilities and resources it holds, all seem to fall within a four-field framework (AAA 2008). There are certainly positive reasons for the four fields to remain together because, to some extent, anthropological historian George Stocking Jr.'s words of two decades ago (1988: 24) remain relevant today: above and beyond whatever moral or intellectual value holism might have, practical issues are at stake, given that the four fields represent "a small profession before the larger world of scholarship, funding agencies and the general public." For the future of the discipline, one might say there could indeed be safety in numbers. The epistemological crisis, sometimes half-jokingly called "science wars," in general, does not seem to have spread far and deep enough into the profession to result in a major accumulation of institutional cleavages along subdisciplinary lines (Darnell 2002: 34). In summary, whether it will remain a permanent fixture in the American academy or not, the four-field model with modifications has clearly determined research and teaching agendas at many institutions, and it is unlikely to disappear or dissolve into fragments at any time soon.

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NOTAS

¹ Although Anglophone North America also includes most of Canada, I am limiting my discussion to the United States because the development of anthropology in Canada was somewhat different and not much connected to developments in the United States, at least in the 19th century. It began with Sir Daniel Wilson (1816-1892), first president of the University of Toronto, who wrote on archaeology, physical anthropology, and ethnology; like other anthropological figures in other countries speaking different languages of the 19th century, Wilson was a progressivist and he considered anthropology to be “natural history” (Trigger 1966: 17). Anthropology would become a professional field in Canada in the 20th century partly from influences coming from the United States (Trigger 1966: 26-27). A “North American” anthropology would not, therefore, be a completely coherent framework, even though some students trained in the United States at an early period of professionalization did contribute to developments in Canada, such as Edward Sapir (in Canada as director of the Division of Anthropology of the Geological Survey of the Canadian National Museum from 1910-1925) [Mandelbaum 1951: viii].

² The term was first used in Portuguese in 1712 though in a different sense (Instituto Houaiss 2007: 240). Although dictionary definitions can only be a rough and often obsolete guide to professional usage, a check of these reveals a tendency for the principal Western European languages associated with the field of anthropology to define the term “anthropology” basically as physical anthropology or some branch of it. Hence the French Academy denoted

anthropologie as the study of “distinctive traits characterizing human populations” (L’Académie Française 2001: 95) and in German, Anthropologie recently meant the “science of humankind and its development in nature” (Drosdowski 1977: 164; also see Massin 1996: 82, n. 2). Before Boas, in American dictionary English, “anthropology” was basically “physical anthropology” only, because in Noah Webster’s famous 1828 dictionary of American English, an “anthropologist” was defined as “one who describes, or is versed in the physical history of the human body” (Webster 1970). A recent American English definition of anthropology more closely approximates general anthropology: “the science that deals with the origins, physical and cultural development, biological characteristics and social customs and beliefs of humankind . . . the study of the nature and essence of humankind . . .” (Random House 2001: 88).

³ One could, of course, argue that the notion of the Noble Savage dates from classical antiquity, with instantiations of the Golden Age, such as Islands of the Blest, and hence, the idea that the Golden Age of cultural primitivism continued to survive, somewhere on the planet, perhaps among people of the distant Madeira or Canary Islands to the civilized Mediterranean world of Rome and Athens (Lovejoy and Boas 1935: 27-31, 290). For that time period, “Cultural primitivist’s model of human excellence and happiness is sought in the present, in the mode of life of existing primitive or so-called ‘savage’ peoples” (Lovejoy and Boas 1935:8). But primitivism as a philosophical construct in the Enlightenment was more strictly connected to the notion of stages of what was

perceived as real progress, even if it contrasted with these, especially in the Scottish Enlightenment, from savagery (or nature) and ultimately to civilization (or Enlightenment) and the fact that later Enlightenment thinkers, such as Thomas Jefferson, thought these stages could be studied in their own time through the objectification of the Indian (Darnell 1974: 86; Adams 1999: 225).

⁴ Boas would refute thinking of this sort in his monumental study of changes in head shape of immigrants, originally printed as a reported for Congress in 1911 (Gravelee et al. 2003), by showing that it was questionable whether cranial form was 100% heritable.

⁵ George Peter Murdock (1897-1985), who had an “electic” approach to social anthropology (Stocking 1976: 25), coming as he did from Yale University, the social sciences of which had been influenced by the sociology and evolutionism of William Graham Sumner (1840-1910), went so far as to equate social anthropology and sociology. He wrote “Social anthropology and sociology are not two distinct sciences. They form together but a single discipline . . .” (1976: 180 [orig. 1932: 200]). In the 1930s, perhaps in part because of the Great Depression and the increasing emphasis on the need for social applications of research, many anthropology departments in the US became aligned with or even joined sociology departments (Stocking 1976: 16).

⁶ It would be assigned in 1882 section H, where it is today, the same section it had been placed in by the British Association (Mitra 1933: 203).

⁷ Anthropology in France before the 1920s was essentially physical anthropology (Stocking 1987: 270; see also Massin 1996: 131-132). Instruction in this field began with the learned society, Société d’Anthropologie de Paris, founded by Paul Broca, a polygenist student of human skulls, in 1859 (whose

name is well known today to students of linguistics and aphasias, of course, as “Broca’s area” in the brain, one of the language centers); Broca later organized a group called *Ecole d’Anthropologie* with six professors in 1876 (Stocking 1987: 247-248). The Anthropological Society of London, founded in 1862 (Stocking 1987: 247), was essentially a learned society of physical anthropology modeled on Broca’s Société; British anthropologists with leanings in physical anthropology later in the 19th century were much influenced also by the activities of the Washington School of anthropologists under John Wesley Powell (Stocking 1987: 268). Few historians of anthropology would disagree that social anthropology in France is clearly connected to sociologist Émile Durkheim (e.g., Lowie 1937: 197-216).

⁸ After Kroeber, Boas’s first generation of PhDs included W. Jones (1904), A.B. Lewis (1907), R.H. Lowie (1908), E. Sapir (1909), A.A. Goldenweiser (1910), and P. Radin (1911) (Lowie 1937: 129; Mandelbaum 1951: viii). All these scholars were ethnologists or linguists. There was a “de facto division of labor” at this early time between Harvard, which produced archaeologists and physical anthropologists, and Columbia, which dominated in the training of cultural anthropologists and linguists; Columbia and Harvard together had produced 30 of the 40 anthropology doctorates granted in the U.S. during 1901-20 (Stocking 1976: 13).

⁹ The idea behind the GI Bill originated with concern in Washington that mass unemployment and a return to economic Depression would occur with the return of millions of soldiers following what was by then thought to be a successful war effort, and consequent inability of the economy to absorb all of them in gainful employment. Delaying their entry into the work force through education was a means of mitigating this possible effect (Field et al. 2008).

¹⁰ To be sure, topics in sociocultural anthropology have “always dominated” in the articles of the ostensibly four-field *American Anthropologist* (Darnell 2002: 3), which is the flagship journal of the principal learned society of anthropology in the United States, the American Anthropological Association. One could also argue that this at least partly reflects the fact that around half or more the anthropologists trained in the US have been sociocultural anthropologists (Tables 2, 3; also Darnell 2002: 16).

REFERENCES

- Adams, W.Y. 1999. *The Philosophical Roots of Anthropology*. Stanford: Center for the Study of Language and Information.
- Albach, B. 2007. Stanford anthropology merger riles some. *Palo Alto Daily News*. 18 Feb.
- AAA (American Anthropological Association). 1962. *Guide to Departmental Offerings in the Field of Anthropology for the Year 1962-63*. Washington, D.C.
- _____. 1967. *Guide to Graduate Departments of Anthropology for the Year 1967-68 and List of Members*. Washington, D.C.
- _____. 1969. *Guide to Departments of Anthropology, 1969-70, Bulletin of the American Anthropological Association, vol.2, no. 2*. Washington, D.C.
- _____. 1978. *Guide to Departments of Anthropology 1978-79, 17th Edition*. Washington, D.C.
- _____. 2007. *American Anthropological Association Guide: A Guide to Programs, A Directory of Members, 2007-08*. Washington, D.C.
- _____. 2008. *American Anthropological Association Guide: A Guide to Programs, A Directory of Members, 2008-09*. Washington, D.C.
- Borofsky, R. 2002. The four subfields: Anthropologists as mythmakers. *American Anthropologist* 104(2): 463-480.
- Bunzl, M. 1996. Franz Boas and the Humboldtian tradition: From *Volksgeist* and *Nationalcharakter* to an anthropological concept of culture in *Volksgeist as Method and Ethic: Essays on Boasian Ethnography and the German Anthropological Tradition*, ed. G.W. Stocking, Jr., 17-78. Madison: University of Wisconsin Press.
- Calcagno, J.M. 2003. Keeping biological anthropology in anthropology, and anthropology in biology. *American Anthropologist* 105(1): 6-15.
- Cannon, G. 1990. *The Life and Mind of Oriental Jones: Sir William Jones, the Father of Modern Linguistics*. Cambridge: Cambridge University Press.
- Chester, H.I. 2002. Frances Eliza Babbitt and the growth of professionalism of women in archaeology, in *New Perspectives on the Origins of Americanist Archaeology*, eds. D.L. Browman and S. Williams, 164-184. Tuscaloosa: University of Alabama Press.
- Cimino, L.F. 1979. *Revised Report of the 1978 Survey of Departments. Departmental Services Program*. Washington, D.C.: American Anthropological Association.
- Clifford, J. 1986. Introduction: Partial truths, in *Writing Culture: The Poetics and Politics of Ethnography*, eds. J. Clifford and G.E. Marcus, pp. 1-26. Los Angeles: University of California Press.
- Clifford, J and G.E. Marcus (Eds.). 1986. *Writing Culture: The Poetics and Politics of Ethnography*. Los Angeles: University of California Press.
- Darnell, R. 1974. *Readings in the History of Anthropology*. New York: Harper and Row.

- _____. 1977. History of anthropology in historical perspective. *Annual Review of Anthropology* 6:399-417.
- _____. 2002. Editor's introduction in *American Anthropology, 1971-1995: Papers from the American Anthropologist*, ed. R. Darnell, 1-36. Arlington, VA: American Anthropological Association.
- Drosdowski, G. (ed.) 1977. *Duden, Das grosse Wörterbuch der deutschen Sprache*. 6 Banden. Mannheim: Bibliographisches Institut AG.
- Durham, W.H. 2007. The elephant in the room: Evolution in anthropology. *General Anthropology* 14(2): 1-7.
- Eggan, F. 1963. The graduate program, in *The Teaching of Anthropology. Memoir 94, American Anthropological Association*, eds. D.G. Mandelbaum, G.W. Lasker, and E.M. Albert, 409- Washington, D.C.: American Anthropological Association.
- Field, K., S. Hebel, S. Smallwood. 2008. Cost, convenience drive veterans' college choices. *Chronicle of Higher Education* 54(46): A1-A14.
- Gardner, Katy and David Lewis. 1996. *Anthropology, Development, and the Post-Modern Challenge*. Chicago: Pluto Press.
- Goldschmidt, W.1970. On becoming an anthropologist: A career pamphlet for students. Washington, D.C. American Anthropological Association. Pp. 1-11.
- _____. 2006. Anthropology: The Bluebird people. *General Anthropology* 13(2):1,9-11.
- Gravelee, C.C., H.R. Bernard, and W.R. Leonard. 2003. Boas's *Changes in Bodily Form*: The immigrant study, cranial plasticity, and Boas's physical anthropology. *American Anthropologist* 105(2): 326-332.
- Haddon, A.C. 1910. *History of Anthropology*. New York: G.P. Putnam's Sons.
- Hallowell, A.I. 1976. The beginnings of anthropology in America, in *Contributions to Anthropology: Selected Papers of A. Irving Hallowell*, 36-125. Chicago: University of Chicago Press. (reprinted from 1960 in *Selected Papers from the American Anthropologist*, ed. F. de Laguna, 1-90. Evanston: Row, Peterson.
- Harris, M. 1968. *The Rise of Anthropological Theory: A History of Theories of Culture*. New York: T.Y. Crowell.
- Hinsley, C.M. Jr. 1981. Savages and Scientists: *The Smithsonian Institution and the Development of American Anthropology 1846-1910*. Washington, D.C.: Smithsonian Institution Press.
- _____. 1999. Hopi snakes, Zuñi corn: Early ethnography in the American Southwest. In P. Pels and O. Salemink, eds., *Colonial Subjects: Essays in the Practical History of Anthropology*, 180-195. Ann Arbor: University of Michigan Press.
- Hockett, C. 1985. Distinguished lecture: F. *American Anthropologist* 87(2):263-281.
- Holanda Ferreira, A.B. de. n.d. *Novo Dicionário da Língua Portuguesa*. Rio de Janeiro: Nova Fronteira.
- _____. 2004. *Novo Dicionário Eletrônico Aurélio*, versão 5.11. Positivo Informática, Ltda. [CD-ROM]
- Hymes, D. (ed.) 1972. *Reinventing Anthropology*. New York: Pantheon Books.
- Instituto Houaiss. 2007. *Dicionário Houaiss da Língua Portuguesa*. Rio de Janeiro: Instituto Houaiss.
- Jefferson, T. 1999 (orig. 1785). *Notes on the State of Virginia*. Ed. F.C. Shuffelton. New York: Penguin.
- L'Académie Française. 2001. *Dictionnaire de L'Académie Française*, neuvième édition. Deux tomes. Paris: Arthème Fayard.
- Leslie, C. 1963. Teaching anthropology and the humanities. In *The Teaching of Anthropology. Memoir 94*, eds. D.G. Mandelbaum, G.W. Lasker, and E.M. Albert, 485-491. Washington, D.C.: American Anthropological Association.

- Lima, N.T., R.V. Santos, and C.E.A. Coimbra, Jr. 2005. Introdução à Rondônia de Edgard Roquette-Pinto, in *Rondônia: Antropologia - Ethnographia*, 25-39. 7th ed. Rio de Janeiro: Fiocruz.
- Livingston, F.B. 1958. Anthropological implications of sickle cell gene distribution in West Africa. *American Anthropologist* 60:533-562.
- Lovejoy, A.O. and G. Boas. 1935. *Primitivism and Related Ideas in Antiquity*. Baltimore: The John Hopkins Press.
- Lowie, R. 1937. *The History of Ethnological Theory*. New York: Rinehart and Co.
- Mandelbaum, D.G. 1951. Introduction in *Selected Writings of Edward Sapir in Language, Culture and Personality*, ed. D.G. Mandelbaum, v-xii. Los Angeles: University of California Press.
- Marett, R.R. 1912. *Anthropology*. New York: Henry Holt.
- Massin, B. 1996. From Virchow to Fischer: Physical anthropology and “modern race theories” in Wilhemine Germany in *Volkgeist as Method and Ethic: Essays on Boasian Ethnography and the German Anthropological Tradition*, ed. G.W. Stocking, Jr., 79-154. Madison: University of Wisconsin Press.
- Meltzer, D.J. 1985. North American archaeology and archaeologists, 1879-1934. *American Antiquity* 50(2):249-260.
- Mitra, P. 1933. *A History of American Anthropology*. Calcutta: University of Calcutta.
- Murdock, G.P. 1976. The science of culture in *American Anthropology, 1921-1945: Papers from the American Anthropologist*, ed. G.W. Stocking, Jr., 180-197. Lincoln: University of Nebraska Press. (orig. published in *American Anthropologist*, vol. 34, 1932:200-215).
- OED (*Oxford English Dictionary Online*). 2008. Oxford University Press. Available: <http://dictionary.oed.com/cgi/entry/50009432>. Accessed 18 December 2008.
- Ortner, S. 1984. Theory in anthropology since the sixties. *Comparative Studies in Society and History* 26:126-166.
- Pels, P. and O. Salemink. 1999. Introduction: Locating the colonial subjects of anthropology. In P. Pels and O. Salemink, eds., *Colonial Subjects: Essays on the Practical History of Anthropology*, 1-52. Ann Arbor: University of Michigan Press
- Random House. 2001. *Webster's Unabridged Dictionary*. 2nd ed. New York: Random House.
- Renfrew C., P. Bahn. 1996. *Archaeology*. 2nd ed. London: Thames & Hudson.
- Shenk, M.K. 2006. Models for the future of anthropology. *Anthropology News* 47(1):6-7.
- Shuffelton, F. (Ed.) 1993. Introduction, in *The American Enlightenment*, ed. F.C. Shuffelton, ix-xxiii. Rochester: University of Rochester Press.
- Stocking, G.W. Jr. (Ed.) 1974. *The Shaping of American Anthropology, 1883-1911: A Franz Boas Reader*. Chicago: University of Chicago Press.
- _____. 1976. Introduction: Thoughts toward a history of the interwar years. In G.W. Stocking, Jr., ed., *American Anthropology 1921-1945: Papers from the American Anthropologist*. Lincoln: University of Nebraska Press.
- _____. 1987. *Victorian Anthropology*. 1987. New York: The Free Press.
- _____. 1988. Guardians of the sacred bundle: The American Anthropological Association and the representation of holistic anthropology. In S.B. Cohen, D. Bromwich, and G.W. Stocking, Jr., *Learned Societies and the Evolution of the Disciplines*. ACLS Occasional Paper, no. 5, 17-25. New York: American Council of Learned Societies.
- Trigger, B.G. 1966. Sir Daniel Wilson: Canada's first anthropologist. *Anthropologica* 8(1): 3-27.

van Willigen, J. 1993. *Applied Anthropology: An Introduction*. Revised ed. Westport, Conn.: Bergin and Garvey.

Webster, N. 1970 (orig. 1928). *An American Dictionary of the English Language*. New York: Johnson Reprint.

Williams, S. 1998. A discussion of the history of archaeology at Harvard University, 1870 – 1920+. A Discussion document created for the HOAC-sponsored Willey Symposium at the Society for American Archaeology Meeting, Seattle, WA. 28 March.

Worster, D. 2001. *A River Running West: The Life of John Wesley Powell*. Oxford: Oxford University Press.