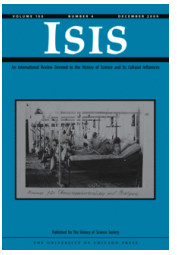


# The *Race prussienne* Controversy

## Scientific Internationalism and the Nation

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**ABSTRACT**

This essay examines a dispute between the French and German anthropological communities in the aftermath of the Franco-Prussian War. While the debate ostensibly revolved around the ethnological classification of the Prussian population presented in Jean Louis Armand de Quatrefages's *La race prussienne*, this overlays much deeper points of contention, presenting a case study of how commitments to nationalism and internationalism in late nineteenth-century science were not mutually exclusive but could operate in a highly synergistic manner, even during periods of intense international crisis. In the controversy, a group of scholars attempted to reconcile national rivalries with a commitment to scientific universalism and define how anthropological ideas of race and progress related to political developments. The French and German communities retained similar views that anthropology was an international science and that politically defined nationality was separate from scientifically discerned race. Yet they nevertheless regarded their work as strongly affected by processes of national consolidation and employed the language of scientific universalism to accuse their rivals of misusing science for political purposes.

THE DUAL PULL of nationalism and internationalism is a major theme in the history of modern science. The observation that scientists aspire to be universal in their conclusions and methodologies, but nevertheless become institutionalized on a national basis and embroiled in international conflicts, is something of a commonplace. Studies of these themes have usually taken the early twentieth century as their focal point.[1] Over-

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[1] On the theme of nationalism and internationalism see Elisabeth Crawford, *Nationalism and Internationalism in Science, 1880–1939: Four Studies of the Nobel Population* (Cambridge: Cambridge Univ. Press, 1992), esp. pp. 1–3, 11–27; and Jean-Jacques Salomon, "The *Internationale* of Science," *Science Studies*, 1971, *1*:23–42. For other studies that focus on the early twentieth century see Nikolai Krementsov, *International Science between the World Wars: The Case of Genetics* (London/New York: Routledge, 2005); A. G. Cock, "Chauvinism and Internationalism in Science: The International Research Council, 1919–1926," *Notes and Records of the Royal Society of London*, 1998, *37*:249–288; Daniel J. Kevles, "'Into Hostile Political Camps': The Reorganization of International Science in World War I," *Isis*, 1971, *62*:47–60; Ronald E. Doel, Dieter Hoffmann, and Krementsov, "National States and International Science: A Comparative History of International Science Congresses in Hitler's Germany, Stalin's Russia, and Cold War United States," *Osiris*, N.S., 2005, *20*:49–76;

whelmingly, scholars have seen a steady rise in international cooperation from the late nineteenth century shattered by the disruption of World War I, during which scientists and intellectuals were mobilized behind their national war efforts. The interwar period saw further disruptions of transnational contacts, first through the exclusion of German science from the international community in the 1920s and then by the increased ideologization of scientific knowledge in the 1930s. The dominance of this set of case studies means that internationalism and nationalism in the sciences are often simply taken as opposites or competing trends, with wars, conflicts, and processes of national integration seen as inevitably disrupting international connections or claims to universalism.[2] Yet, as Ralph Jessen and Jakob Vogel highlight, the much-cited "Golden Age" of scientific internationalism in the late nineteenth and early twentieth centuries corresponds very neatly to the great period of national consolidation identified in the "modernist" school of studies of national development.[3] The relationship between these simultaneous and at first sight conflicting developments has been little studied.

The interaction between French and German scientists in this period serves as one of the most dramatic examples of international rivalry feeding into both nation building and scientific development. France and Germany, two closely intertwined leaders in many fields of scientific research, came to regard one another as principal geopolitical rivals, even "ancestral enemies." Yet, particularly in the French case, this antagonism was coupled with close interest in and frequent attempts to emulate the scientific methods of their rivals.[4] This was a process defined by both national rivalry and continued transnational contact. While Kai Torsten Kanz has shown that the deep roots of this problematic relationship stretched back at least to the revolutionary and Napoleonic wars, rivalry between French and German "national" science certainly entered a new period of intensity following the Franco-Prussian War of 1870–1871.[5] This conflict had far-reaching general

and Brigitte Schroeder-Gudehus, "Challenge to Transnational Loyalties: International Scientific Organizations after the First World War," *Sci. Stud.*, 1973, *3*:93–118.

[2] The principal exception to this trend would be Paul Forman, "Scientific Internationalism and the Weimar Physicists: The Ideology and Its Manipulation in Germany after World War I," *Isis*, 1973, *64*:151–180. While this essay also focuses on "the cold war in international scientific relations which followed World War I" (p. 152), it highlights the wider relationships and frequent compatibility of drives for national prestige and international competition within the ideology of scientific universalism.

[3] Ralph Jessen and Jakob Vogel, "Die Naturwissenschaften und die Nation: Perspektiven einer Wechselbeziehung in der europäischen Geschichte," in *Wissenschaft und Nation in der europäischen Geschichte*, ed. Jessen and Vogel (Frankfurt/London: Campus, 2002), pp. 7–37. For the founding texts of this approach to the growth of the nation-state see Ernest Gellner, *Nations and Nationalism* (Oxford: Blackwell, 1983); and Eric Hobsbawm, *Nations and Nationalism since 1780: Programme, Myth, Reality*, 2nd ed. (Cambridge: Cambridge Univ. Press, 1990).

[4] See Claude Digeon, *La crise allemande de la pensée française, 1870–1914* (Paris: Presses Univ. France, 1959), for a general survey. For the specific effects on science and technical institutions see Robert Fox, "The View over the Rhine: Perceptions of German Science and Technology in France, 1860–1914," in *Frankreich und Deutschland: Forschung, Technologie und industrielle Entwicklung im 19. und 20. Jahrhundert*, ed. Yves Cohen and Klaus Manfrass (Munich: Beck, 1990), pp. 14–24; and Harry W. Paul, *The Sorcerer's Apprentice: The French Scientist's Image of German Science, 1840–1919* (Gainesville: Univ. Florida Press, 1972).

[5] Kai Torsten Kanz, *Nationalismus und internationale Zusammenarbeit in den Naturwissenschaften: Die Deutsch-Französischen Wissenschaftsbeziehungen zwischen Revolution und Restauration, 1789–1832* (Stuttgart: Steiner, 1997). Maurice Crosland, "Science and the Franco-Prussian War," *Social Studies of Science*, 1976, *6*:185–214, observes these trends during the conflict itself. The wider dimensions of Franco-German enmity have been discussed in Mark Hewitson, *National Identity and Political Thought in Germany: Wilhelmine Depictions of the French Third Republic, 1890–1914* (Oxford: Oxford Univ. Press, 2000); Michael E. Nolan, *The Inverted Mirror: Mythologizing the Enemy in France and Germany, 1898–1914* (New York/Oxford: Berghahn, 2006); and Michael Jeismann, *Das Vaterland der Feinde: Studien zum nationalen Feindbegriff und Selbstverständnis in Deutschland und Frankreich, 1792–1918* (Stuttgart: Klett-Cotta, 1992). Crosland, Hewitson, Nolan, and Jeismann all see the Franco-Prussian War as beginning a new phase in the relationship.

effects, reordering the European balance of power, causing major political shifts in both Germany and France, and putting the changed nature of modern warfare into sharp focus. Attempts to comprehend the war's course, causes, and implications gripped much of Europe. As the idea that France had been defeated by more advanced German science became a common theme, some of the most provocative examples of these evaluations occurred within the sciences themselves. A particularly heated controversy gripped the discipline of anthropology. This was sparked by a leading French scholar, Jean Louis Armand de Quatrefages de Bréau, a prominent member of the Société d'Anthropologie de Paris and chair of anthropology at the Muséum d'Histoire Naturelle.[6] His work *La race prussienne*, written while Paris was besieged by German forces and under artillery bombardment, claimed that Prussia—the dominant German state and engine of unification—was racially distinct from the rest of the country, being essentially "Finno-Slavic" rather than Germanic in origin. This argument, coming from one of the discipline's most eminent authorities, was received with horror by the leading German anthropologists, who engaged in a protracted campaign to reject these conclusions.

This controversy was crucial for the development of nineteenth-century anthropology, and brief references to it seem almost obligatory in works on concepts of race and the development of the French or German human sciences. Yet while it has been widely mentioned, these accounts tend to be barely paragraph-long restatements of the analyses found in earlier works, particularly Léon Poliakov's *Le mythe aryen* and George L. Mosse's *Towards the Final Solution*, which primarily presented it as a rather simplistic racial diatribe. More recently, Helga Jeanblanc and Hans-Konrad Schmutz have examined the main arguments more closely in specialist collections on German anthropology, although they have continued to interpret the impact of this controversy in terms of essentialist racial discourse and the "Aryan question."[7] As a result, while their conclusions, particularly relating to the discrediting of "Aryanism" in the contemporary German anthropological community, are certainly valid and of great interest, this persistent narrow focus means that broader elements of significance in the dispute have been missed. The debate had more immediate and far-reaching implications with regard to the assumed role of science in the modern world, in fact orienting itself around two important linked areas: how claims to scientific universalism could be reconciled with contemporary processes of

[6] Despite his high contemporary standing, Quatrefages has been largely neglected in studies of anthropology. He is normally mentioned only for his pronounced monogenism and reactions to Darwinism or for his position as the first "official" anthropologist in France. He is specifically discussed in Martin S. Staum, *Labeling People: French Scholars on Society, Race, and Empire, 1815–1848* (Montreal/Kingston: McGill-Queen's Univ. Press, 2003), pp. 147–148, 152–153, 178–179; and Claude Blanckaert, Claudine Cohen, Pietro Corsi, and Jean-Louis Fischer, eds., *Le muséum au premier siècle de son histoire* (Paris: Editions du Muséum National d'Histoire Naturelle, 1997), pp. 85–123.

[7] Léon Poliakov, *Le mythe aryen: Essai sur les sources du racisme et des nationalismes* (Paris: Calmen-Lévy, 1971), pp. 269–275; George L. Mosse, *Towards the Final Solution: A History of European Racism* (London/Melbourne: Dent, 1978), pp. 90–91; Helga Jeanblanc, "Rudolf Virchow et la 'Race Prussienne': Anthropologie et idéologie," in *Quand Berlin pensait les peuples: Anthropologie, ethnologie et psychologie*, ed. Céline Trautmann-Waller (Paris: CNRS, 1984), pp. 77–92; and Hans-Konrad Schmutz, "Vermessene Nation: Eine Skizze der imagologischen Anthropologie nach 1860," in *Anthropologie nach Haeckel*, ed. Dirk Preuβ, Uwe Hoβfeld, and Olaf Breidbach (Stuttgart: Steiner, 2006), pp. 184–194. For some briefer mentions see, e.g., Benoit Massin, "From Virchow to Fischer: Physical Anthropology and 'Modern Race Theories' in Wilhelmine Germany," in Volksgeist *as Method and Ethic: Essays on Boasian Ethnography and the German Anthropological Tradition*, ed. George W. Stocking, Jr. (Madison/London: Univ. Wisconsin Press, 1996), pp. 79–154, esp. p. 100; and Andrew Zimmerman, *Anthropology and Antihumanism in Imperial Germany* (Chicago/London: Univ. Chicago Press, 2001), p. 291.

national integration and international rivalry; and the relationship of the key anthropological concepts of race and social development to national and international politics.

Examining the dispute in these terms extends its importance by allowing it to provide a significant case study of the impact of a major conflict on scientific institutions, showing how the tensions between nationalism and internationalism could become manifest in this transitional period. In the course of the arguments, a group of nineteenth-century scientists, committed to universalism and internationalism by ideology, institutional connections, and the founding principles of their discipline, responded to a wide crisis that threatened to tear these conventions apart. The war and the succeeding controversy opened a breach between the German and French anthropological communities. Yet the fundamental positions expressed by both sides retained a great deal of agreement, despite the polemical tone and bitter underlying feelings. It was consistently asserted that anthropology was a neutral, objective, and universal science whose racial findings were separate from politics, even if they did have important national dimensions. These national differences and loyalties were not seen as intrinsically threatening to scientific internationalism but, instead, as powerful, mutually reinforcing trends that needed to be deployed in the promotion of common human development. Thus while the debates and conflicts raised by the war reached a violent intensity, they did not reflect a collapse of the commitment to internationalism. They instead served as a means through which this synergistic relationship could be defined, with each community accusing the other of misusing universal science for narrow political purposes.

Moreover, the controversy highlights an important aspect of the self-assumed role of the nineteenth-century human sciences. Studies of scientific internationalism have tended to ignore these, focusing instead on the "hard" physical and biological sciences. Indeed, the strongly ideological implications of contemporary ideas of history, race, and culture have frequently led to the assumption that the disciplines that studied them, such as archaeology, ethnology, linguistics, and anthropology, were closely tied to nationalistic frameworks and committed to promoting divisive notions of innate racial differences, misusing scientific language to bolster national "myths of origin" of "nos ancêtres les Gaulois" or "unsere germanischen Vorfahren."[8] Yet closer examination shows that practitioners of the human sciences of the period adhered to the same principles of international exchange, methodological standardization, and the universal applicability of their conclusions as their colleagues in the physical sciences. While their researches had important national dimensions, these needed to be balanced within a wider international context. In order to gain credibility, they could not simply couch their arguments in terms of national particularism but needed to develop strong transnational connections.

The founding generation of anthropologists certainly regarded national themes, such as ancient European history and the racial makeup of modern populations, as being of great interest. However, rather than regarding their nations as homogenous racial monoliths,

[8] For a French example see Michael Dietler, "'Our Ancestors the Gauls': Archaeology, Ethnic Nationalism, and the Manipulation of Celtic Identity in Modern Europe," *American Anthropologist*, 1994, *96*:584–605. More nuanced works that study these processes in Germany are Rainer Kipper, *Der Germanenmythos im Deutschen Kaiserreich* (Göttingen: Vandenhoeck & Ruprecht, 2001); and Ingo Wiwjorra, *Der Germanenmythos: Konstruktion einer Weltanschauung in der Altertumsforschung des 19. Jahrhunderts* (Darmstadt: Wissenschaftliche Buchgesellschaft, 2006). More generally, Bruce Baum, *The Rise and Fall of the Caucasian Race: A Political History of Racial Identity* (New York: New York Univ. Press, 2006), pp. 118–161, argues that anthropology in the European context was primarily responsible for "racializing" nations and institutionalizing senses of ethnic divergence.

they instead saw them as collections of diffuse ethnic elements, bound together by progress, history, and culture rather than blood and soil. The existence of this outlook has been tentatively noted in some of the secondary literature. The recognition that "it was difficult for scientists to formulate racial theories of the nation," or even that "the ideology of 'race' has tended to destabilize rather than strengthen the concept of the nation," has been put forward in several recent studies. Hans-Konrad Schmutz's account of the controversy itself has stated that researchers frequently expressed the view that their nations were ethnic "bricolages."[9] Unfortunately, none of these works have sufficiently highlighted the significance or extent of the notion that racial diversity and the progressive integration of diverse peoples were often presented as *characteristics* of nineteenth-century nations, not just problems or curiosities for racialist scholars. Yet this was a key factor in the human sciences in this period, one that grew out of the relationship between universal methodologies, international connections, and national consolidation, which defined their development and flared dramatically in the controversies following 1871.

## THE GROWTH OF ANTHROPOLOGY

In order to examine the dispute over *La race prussienne* fully, it is first essential to trace the development of the new form of anthropology that arose in the mid-nineteenth century and provided the disciplinary field on which the conflict played out. While terms analogous to "anthropology" had been used across Europe in the eighteenth and early nineteenth centuries, their precise meanings were usually vague, varied significantly between languages, and lacked clear institutional bases.[10] This shifted over the 1860s, as a wave of national anthropological associations were formed with the aim of creating a unified "Science of Man," reworking both the term and the subject on a self-consciously novel and positivistic basis. The historiography of these trends is large and well developed. A host of works have amply shown the discipline's important place in the constellation of the nineteenth-century sciences and within the contemporary intellectual and cultural landscape.[11] However, a significant common limitation is that almost all these studies adopt highly national, or at most imperial, focuses, examining how anthropological communities in individual countries dealt with questions of human diversity and the study of the usually non-European "Other." While this has probably been necessary in order to give coherence and structure to the earlier literature, it means that the importance nineteenth-century anthropologists attached to their international status and the vigorous interchange of ideas and approaches between practitioners in different countries have been sidelined. This is a significant omission, as the growth of anthropology in each country

[9] Hewitson, *National Identity and Political Thought in Germany* (cit. n. 5), p. 12; Clive Christie, *Race and Nation: A Reader* (London: Tauris, 1998), p. 122; and Schmutz, "Vermessene Nation" (cit. n. 7), p. 186.

[10] For the early usage of "*anthropologie*" in France see Elizabeth A. Williams, *The Physical and the Moral: Anthropology, Physiology, and Philosophical Medicine in France, 1750–1850* (Cambridge: Cambridge Univ. Press, 1994). For the character of philosophical *Anthropologie* in eighteenth-century Germany see John H. Zammito, *Kant, Herder, and the Birth of Anthropology* (Chicago/London: Univ. Chicago Press, 2002).

[11] The most relevant for France are the works of Claude Blanckaert, particularly the edited volume *Les politiques de l'anthropologie: Discours et pratiques en France, 1860–1940* (Paris: L'Harmattan, 2001); and Elizabeth A. Williams, "Anthropological Institutions in Nineteenth-Century France," *Isis*, 1985, *76*:331–348. For Germany see Woodruff D. Smith, *Politics and the Sciences of Culture in Germany, 1840–1920* (New York/Oxford: Oxford Univ. Press, 1991), esp. pp. 100–114; Zimmerman, *Anthropology and Antihumanism in Imperial Germany* (cit. n. 7); Paul Weindling, *Health, Race, and German Politics between National Unification and Nazism, 1870–1945* (Cambridge: Cambridge Univ. Press, 1989); Trautmann-Waller, ed., *Quand Berlin pensait les peuples* (cit. n. 7); and Stocking, ed., Volksgeist *as Method and Ethic* (cit. n. 7).

was defined as much by the discipline's European networks and interests as by national and extra-European factors. The discipline itself grew from interactions between the national and transnational levels: institutionally, it was based on a series of national metropolitan societies linked within a broader international community; and while the members' theories and interests often drew inspiration from nationally specific traditions in ethnology, archaeology, and linguistics, they nevertheless persistently asserted their commitment to a common scientific project that transcended national boundaries.

These factors are demonstrated in the development and role of the seminal association, the Société d'Anthropologie de Paris, founded in 1859 under the leadership of the eminent physician Paul Broca. Asserting the subject's scientific nature was crucial not only for building credibility, but also for securing the necessary authorization from the Ministre de l'Instruction Publique, which initially assumed that "*anthropologie*" could be a cover for forbidden political discussions.[12] It was imperative to assert that anthropology was a universal "Science of Man" or, following Armand de Quatrefages, "the natural history of man conducted monographically as a zoologist studies an animal." However, the complexity and social nature of humanity meant that the discipline needed to be much broader than simply a study of anatomical structures. It was based on "multiple and unlimited investigations, requiring the simultaneous cooperation of zoology, anatomy, physiology, hygiene, ethnology, history, archaeology, linguistics, palaeontology, converging towards the same goal, the final creation of a Science of Man or *Anthropology*."[13]

While such statements have been dismissed as "institution-building" rhetoric, the collaborationist vision conditioned the character of the discipline, ensuring that it became far more wide ranging than its often given modern definition as "the study of the Other" would suggest.[14] The stated aim of the anthropologists was to combine the approaches of these various fields into a universal science of humanity. In doing so, they would combat the earlier tendencies to speculation, supposition, and description that they saw as marring the isolated disciplines they drew on. These could now be combined as branches of a single positivistic anthropological science.

Claims to superior scientific methods enabled the anthropologists to extend their authority. Great efforts were made to absorb ethnology, as the Société d'Ethnographie de Paris, also founded in 1859, presented a clear potential rival. Yet rather than opposing that discipline directly, the anthropologists sought to subsume it within their universalist rhetoric. Defining ethnology as simply the investigation of human diversity, they acknowledged that it was "one of the most important branches of anthropology, but one which leads investigators away from the scientific path and takes them to the most conjectural speculations."[15] Anthropologists claimed to monopolize the scientific comprehension of

[12] Broca's life and career are described in Francis Schiller, *Paul Broca: Founder of French Anthropology, Explorer of the Brain* (Los Angeles/London: Univ. California Press, 1980); for the society's initial difficulties see pp. 133–135.

[13] Jean Louis Armand de Quatrefages, "Discours de M. de Quatrefages," *Mémoires de la Société d'Anthropologie de Paris*, 1865, 2:i–vi, on p. iii; and Paul Broca, "Histoire des travaux de la Société d'anthropologie (1859–1863)," *ibid.*, pp. vii–li, on p. ix. Here and throughout this essay, all translations into English are mine unless otherwise indicated.

[14] Regarding "institution-building" rhetoric see Richard Fogarty and Michael A. Osborne, "Constructions and Functions of Race in French Military Medicine, 1830–1920," in *The Color of Liberty: Histories of Race in France*, ed. Sue Peabody and Tyler Stovall (Durham, N.C./London: Duke Univ. Press, 2003), pp. 206–236, esp. p. 298.

[15] Paul Broca, *Histoire des progrès des études anthropologiques depuis la fondation de la Société* (Paris, 1870), pp. cx–cxi.

humanity through their wider remit and superior methodological tools. They devoted much attention to developing standardized procedures and typological principles, particularly in craniometry and anthropometry, so that the characters of human population groups could be defined and reduced to statistics, charts, and formulas. These were frequently inspired by the works of foreign anatomists and ethnologists, such as Samuel Morton, Anders Retzius, Joseph Barnard Davis, and Hermann Welcker, and were utilized to yield vast collections of data that could be compared and analyzed in a manner befitting an authoritative science.

The anthropologists also sought to be at the cutting edge of radical new research and were some of the earliest supporters of the ideas of human antiquity being promoted in both Britain and France at this time. As such, the field of prehistoric archaeology increasingly came under the anthropological rubric. They also began to dominate a related field: the study of the ethnological composition and ancient history of European nations. This was seen as being of critical importance. At the very first meeting of the Société d'Anthropologie, Broca himself noted that "among the questions, so numerous and diverse, that anthropology takes into its vast domain, there are doubtlessly none which have as much interest for us as the origins of our nation."[16] In consequence, a series of surveys of military conscripts were organized; the purpose was to identify the racial descent and characteristics of the French population, which was classified as deriving from the peoples described in Greek and Roman accounts as inhabiting ancient Gaul. These projects were seen as critical to the anthropologists' project of "knowing thyself" and, despite the subject's claims to political neutrality, could present important material for domestic projects of social reform and national definition.

These strategies appear to have been successful: despite its earlier difficulties, the society was recognized by the French state in 1865 as being of "public utility," and by 1870 it had a very respectable 404 members. Yet while the success of the society was said to have confirmed France's status as "the *patrie* of progressive ideas," a wider sense of mission meant that this "Science of Man" could not be just a French project. It needed to be adopted elsewhere if it were to live up to its claims. Therefore, in parallel to its entrenchment in France, anthropology grew on an international basis. By 1867, "sister" anthropological associations had been formed in London, Manchester, Madrid, and Moscow; others followed in Florence and Rome soon after.[17] While considerable intellectual and conceptual differences existed both between and within these institutions, all expressly drew inspiration from Broca's project, aiming to link, unify, and annex a range of approaches and disciplines behind a common positivistic framework. These consistencies allowed a great deal of collaboration and interchange through a variety of channels: associate memberships were awarded to prominent foreign scholars, journals and books were exchanged and occasionally republished in translation, and methodologies developed abroad were discussed and emulated. The anthropological community also played a leading role in establishing the migratory Congrès International d'Anthropologie et d'Archéologie Préhistoriques (CIAAP) from the mid-1860s. Meetings were attended by

[16] Paul Broca, "Recherches sur l'ethnologie de la France," *Mém. Soc. Anthropol. Paris*, 1860–1863, *1*:1–60. Broca's argument will be discussed below.

[17] Franz Pruner-Bey, "Discours d'ouverture," *Bulletins de la Société d'Anthropologie de Paris*, 1865, *1*(6): 1–9, on pp. 3–4 ("*patrie* of progressive ideas"); on the membership figures see Pierre Gaussin, "Discours d'ouverture," *ibid.*, 1870, 2(5):2–7, on p. 4 (35 of the 404 were foreign associates). On the "sister" associations elsewhere see Jean Louis Armand de Quatrefages, *Rapport sur les progrès de l'anthropologie* (Paris, 1867), pp. 51–52.

scholars from all over Europe (and sometimes beyond) and put the discipline on a firm international footing.[18]

Anthropology also made significant inroads in the German lands, which were home to many specialists of international renown. However, the fragmentation of German political and intellectual life ensured that the formation of national institutions was difficult. While an anthropological congress organized by Karl Ernst von Baer and Rudolph Wagner—who were hoping to emulate the Parisian association—was held in Göttingen as early as September 1861, this was an isolated event. It was acknowledged "that Germany has no central point, such as Paris forms in France or London in England," and that institutional unity could be realized only through local societies bound together in a loose federation. Unification proceeded slowly. A quarterly journal, the *Archiv für Anthropologie*, was established in 1866 as the initial link, bringing together writings that had been "dispersed up until now in anatomical, medical, archaeological and learned society journals."[19] The first anthropological association, the Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte (BGAEU), was founded in 1869 by Rudolf Virchow, a prominent social reformer, medical expert, and liberal politician, and Adolf Bastian, an ethnologist and global traveler.[20] This was to become a branch of a wider Deutsche Gesellschaft für Anthropologie, Ethnologie und Urgeschichte (DGAEU), founded in 1870, a federative association incorporating members and societies throughout Germany.

German anthropology, like the discipline's other national manifestations, drew from native intellectual traditions while simultaneously placing itself within the new international frameworks. There were certainly very strong culturalist and idealist strains within some schools of German ethnography and anthropology, particularly those influenced by the developing approach of *Völkerpsychologie*, of which Bastian was a leading proponent.[21] Yet in the mainstream of the German anthropological associations work along these lines coexisted with positivistic physical studies based on anthropometry, comparative anatomy, and craniometry, of the same type as were practiced in France. Even in the context of growing international mistrust arising from the wars of German unification and fears of the expansionism of Napoleon III's empire, these overlaps provided opportunities and impetus for contact and mutual admiration. Leading figures like Alexander Ecker, later editor of the *Archiv für Anthropologie*, spoke approvingly of Broca's "worth-reading

[18] These developments are discussed in Marc-Antoine Kaeser, "L'internationalisation de la préhistoire, une manoeuvre tactique? Les conséquences épistémologiques de la fondation de la Congrès internationaux d'anthropologie et d'archéologie préhistoriques," in *Les politiques de l'anthropologie*, ed. Blanckaert (cit. n. 11), pp. 201–230.

[19] On the Göttingen congress see Karl Ernst von Baer and Rudolph Wagner, *Bericht über die Zusammenkunft einiger Anthropologen im September 1861 in Göttingen zum Zwecke gemeinsamer Besprechungen* (Leipzig, 1861). For the quotations see Franz Romeo Seligmann, "Verhandlungen der Section für Anthropologie und Ethnologie bei der 43. Versammlung deutscher Naturforscher und Aerzte in Innsbruck vom 16. bis 24. September 1869," *Archiv für Anthropologie*, 1870, *4*:144–150, on p. 149; and "Ankündigung," *ibid.*, 1866, *1* (this prefatory text is in fact included in all the early volumes).

[20] For information on Virchow see Byron A. Boyd, *Rudolf Virchow: The Scientist as Citizen* (London/New York: Garland, 1991); Christian Andree, *Rudolf Virchow als Prähistoriker*, 2 vols. (Cologne: Böhlau, 1976); and Constantin Goschler, "Deutsche Naturwissenschaft und naturwissenschaftliche Deutsche: Rudolf Virchow und die 'Deutsche Wissenschaft,'" in *Wissenschaft und Nation in der europäischen Geschichte*, ed. Jessen and Vogel (cit. n. 3), pp. 97–114. Bastian is discussed in Klaus-Peter Koepping, *Adolf Bastian and the Psychic Unity of Mankind: The Foundations of Anthropology in Nineteenth Century Germany* (St. Lucia/New York: Univ. Queensland Press, 1983); and Annemarie Fiedermutz-Laun, *Der kulturhistorische Gedanke bei Adolf Bastian* (Wiesbaden: Steiner, 1970).

[21] Contemporary *Völkerpsychologie* is well examined in Smith, *Politics and the Sciences of Culture in Germany* (cit. n. 11), esp. pp. 46–50, 115–128.

essays on the ethnology of France" and suggested that his methods and conclusions could be applied to parts of Germany. The exciting prehistoric human skeletal remains discovered in France throughout the decade—far less controversial and problematic than Germany's own Neanderthal finds—were presented in German journals.[22] More formal associational contacts were also built: anthropologists from German territories had attended the meetings of the CIAAP since its inception; a number became foreign associate members of the Parisian society; and the BGAEU initiated a journal exchange with the French anthropologists only three months after its establishment, sending its *Zeitschrift für Ethnologie* and receiving the *Mémoires* and *Bulletins de la Société d'Anthropologie de Paris* in return.[23]

## THE IMPACT OF THE FRANCO-PRUSSIAN WAR AND *LA RACE PRUSSIENNE*

Yet these connections were soon to be overturned by the Franco-Prussian War, which broke out in July 1870. An immediate effect was that the fifth CIAAP, scheduled to take place that autumn in Belgium, was cancelled owing to its proximity to the war zone. The next would be held the following year in Bologna.[24] More significantly, the anthropologists themselves participated in the war. Rudolf Virchow, who represented a Rhineland constituency in the Prussian Landtag that felt directly threatened by France, supported the war and took an active role in organizing a system of hospital trains for the Prussian forces. After a series of stunning victories, the German armies surrounded Paris and the Musée des Antiquités Nationales in Saint-Germain-en-Laye, which employed two prominent members of the Parisian anthropological society—the prehistorian Gabriel de Mortillet and the archaeologist Alexandre Bertrand—was converted into a military hospital. Meanwhile, Paul Broca was involved in treating wounded soldiers and later held a leading position in the Assistance Publique, a welfare organization that took over the provision of medical care and relief to the beleaguered population of Paris.[25]

Armand de Quatrefages also remained in the French capital. He continued his work at the Muséum d'Histoire Naturelle for the duration of the siege of Paris and was involved in many of its key symbolic episodes, sending post by balloon and carrier pigeon to his family and associates outside the encircled city and allegedly persuading a group of Communards who had barricaded themselves in one of the museum's galleries prior to the "Bloody Week" to abandon their arms and return home before the arrival of the *Versaillese*. Having studied in Strasbourg and married a native Alsatian, Quatrefages would have been particularly tied to the tribulations of that province, which first became a front line in the war—Strasbourg itself came under siege, and its library and museum were

[22] Alexander Ecker, *Crania Germaniae Meridionalis Occidentalis* (Freiburg, 1865), p. 2; and Ecker, "Die Höhlenbewohner der Rennthierzeit von les Elyzies," *Arch. Anthropol.*, 1870, *4*:109–125.

[23] On the foreign members of the society see *Bull. Soc. Anthropol. Paris*, 1871, *2*(6):xxxii–xxxiv; these included Alexander Ecker, Hermann Schaaffhausen, Rudolf Virchow, and Carl Vogt. Regarding the journal exchange see Christian Andree, "Geschichte der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte, 1869–1969," *Mitteilungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte*, 1969, *3*:9–142, esp. p. 20.

[24] CIAAP, *Compte rendu de la cinquième session à Bologne, 1871* (Bologna, 1873), p. xvi.

[25] On Virchow's role see Andree, *Rudolf Virchow als Prähistoriker* (cit. n. 20), Vol. 1, p. 28. Pascal Beyls, *Gabriel de Mortillet, 1821–1898: Géologue et préhistorien* (Grenoble: Collection "Portraits de Meylan," 1999), pp. 229–231, notes that Mortillet came to an agreement with the Germans not to interfere with the collections, although later commentators would present him as playing a heroic role in rescuing artifacts from destruction by the Prussians. On Broca's involvement see Schiller, *Paul Broca* (cit. n. 12), pp. 237, 244–246. Broca was also instrumental in rescuing the cash reserves of the Assistance Publique from seizure by the Commune.

destroyed—and was then annexed into the new German *Reich* by the Treaty of Frankfurt, to serve as the totemic emblem of Franco-German enmity for nearly fifty years. However, the most significant event occurred on 8 January 1871, when, during the bombardment of the city by Prussian artillery, "projectiles rained down upon the museum." While the damage was not too severe, being largely limited to the death of a parrot, the "beheading" and "disembowelment" of several stuffed reptiles, and some hits in the mollusk galleries and botanical sections, the apparent breach of principle affected Quatrefages greatly. In targeting the museum, the Prussians had been "absolutely certain to hit only humble buildings devoted to humanity and science, and strike only the sick and the wounded, the doctors and the scholars."[26] More than anything else that had occurred during the war, this was a clear and unequivocal demonstration of barbaric disdain for the ideals of science, civilization, and progress, something that needed to be vigorously opposed for the sake of humanity.

This sense of outrage provided much of the impetus for the composition of *La race prussienne*, which was written and disseminated with considerable speed. The first version appeared as an article in the *Revue des Deux Mondes* in February 1871. A summary was read to the Société d'Anthropologie in September; an expanded single-volume book appeared by the end of the year and an English translation in 1872.[27] It is perhaps ironic that this work, which sought to disprove the relevance of anthropology to politics and nationality using internationally accredited methodologies and conceptions, should in fact have become one of the most politically contentious works of anthropology ever produced, with its scientific credibility fiercely disputed on a national basis. Yet while it was certainly polemical, Quatrefages's argument needs to be analyzed and contextualized carefully, as it quite easily lends itself to caricature if viewed in the simplistic terms of nineteenth-century essential racialism. Even otherwise excellent works have briefly characterized it as presenting a "contrast between a Prussia dominated by a people with the violent, primitive tendencies of the Finnish race and a France of superior Celts" or charged that it "suggested that the 'Prussian race' was corrupted by dark Mongoloid Finnish and Slavonic elements" and that "the true Aryan aristocrats were the French and Southern Germans."[28] Both brief descriptions largely miss the wider significance of the work and its implications because they fail to place it in the perspective of the discipline's institutions and networks and to consider the manner in which European ethnology was understood in anthropological circles following a number of studies conducted over the 1860s.

Quatrefages's basic premise was that the Franco-Prussian War was the latest phase in a program of racial pan-Germanism. German unification had not grown out of a broader national movement, cultural or historical similarity, or great power politics but was being driven by a politicized anthropology "put into play and exploited with Machiavellian ability." While he did not deny the existence of racial differences, Quatrefages felt that the alignment of race with national politics would be catastrophic. At the beginning of his

[26] Jean Louis Armand de Quatrefages, "La race prussienne," *Revue des Deux Mondes*, 1871, *15*(2):647–669; the quotations are taken from pp. 666–668. Incidents during the siege of Paris are described in *À la mémoire de Jean-Louis-Armand de Quatrefages de Bréau: 10 Février 1810–12 Janvier 1892* (Lille, 1893), pp. 15–17.

[27] Jean Louis Armand de Quatrefages, "La race prussienne," *Bull. Soc. Anthropol. Paris*, 1871, *2*(6):182–185 (summary); Quatrefages, *La race prussienne* (Paris, 1871); and Quatrefages, *The Prussian Race: Ethnologically Considered* (London, 1872).

[28] Fox, "View over the Rhine" (cit. n. 4), p. 17; and Weindling, *Health, Race, and German Politics between National Unification and Nazism* (cit. n. 11), p. 48.

book he drew a distinction between national identity and race and noted the dangerous results of attaching political sentiments to the latter:

> The application of anthropology to politics is not only a source of errors; it is above all full of almost inevitable dangers. Far from preparing for the universal peace that has been promised in its name, it is not afraid to promote a spirit of hatred that will eternalize war.
>
> Between *peoples*, between *nations*, and between *states*, ambitions can be restrained by a spirit of generosity, or at least justice, which will create reciprocal affection; struggle, peaceful or armed, can remain courteous, allow sincere reconciliation, and lead to durable peace.
>
> It is not the same between *races*. To this term is attached the idea of something primordial and inevitable. . . . When two races, equal but separate, come to arms, each of them will regard themselves superior by right of birth. Victorious, they will pitilessly exterminate the populations which they hate; vanquished, they will keep an inerasable hostility in the bottom of their hearts, ever ready to explode.[29]

This raised the possibility of permanent racial war, something the discipline needed to oppose for the sake of civilization itself. As was wholly consistent with anthropology's mission as a progressivist and international science, Quatrefages set out to defuse the situation by proving that the alignment of anthropology and politics was not only dangerous but nonsensical.

At the core of the work was an attempt to disprove any anthropological basis for the unification of Germany through an examination of the ethnic descent of the Prussian population itself. Using a combination of ethnological, historical, and geographical reasoning, Quatrefages claimed that Prussia was a remote Baltic region originally inhabited by Finnic and, later, Slavonic peoples. The only "German" influence came from its conquest by the Teutonic Knights in the Middle Ages, and this was balanced by an influx of Huguenot refugees fleeing France following the Edict of Nantes. Yet these were only thin ethnic superstructures, as "in the truly Prussian provinces, that is to say the two Prussias, Pomerania and Brandenburg, the population is essentially Finno-Slavic in its ethnological origins."[30] Prussians and Germans were racially distinct from one another, and German unification under Prussia was based on an "erreur anthropologique."

There was nevertheless an inflammatory element in this argument, deriving from the characterization of the Finno-Baltic peoples who were presented as Prussia's ethnic bedrock. This characterization was connected with one of the greatest scientific reevaluations of the 1860s: the discovery of prehistoric man. As stated earlier, the anthropological societies had been some of the most forceful promoters of the new ideas of human antiquity. However, considerable ambiguity remained as to the racial character of Stone Age Europeans. Most scholars, including Broca and Virchow, had opposed the alignment of the few prehistoric human remains with identified modern races, considering this to be largely baseless speculation rather than credible science. As such, anthropologists generally used vague descriptive terms for the peoples of prehistory that were based on their geological periods or assumed lifestyles—for example, "*Driftvolk,*" "*l'homme quaternaire*," "*Höhlenbewohner*," or "*troglodytes*." The terms "allophylian" and "autochthonous," literally meaning "other-stem" and "indigenous," were also used extensively, but they were rather more loaded. While they carried no direct associations with existing racial groups, they implied that Europe's prehistoric races were distinct from the Indo-

[29] Quatrefages, *La race prussienne* (cit. n. 27), pp. 6, 5.
[30] *Ibid.*, p. 101.

European or Aryan peoples that earlier generations of philologists had established as migrating to Europe in the distant past and providing the basis for modern nations.[31]

Other scholars, however, were less cautious and did attempt to classify Europe's prehistoric inhabitants racially. A powerful stereotype, derived from the widely translated and publicized early nineteenth-century studies of the Swedish anatomist Anders Retzius, still persisted in European ethnology and archaeology. It divided the continent's early inhabitants into two groups: an indigenous population that was short, dark, and "brachycephalic" (round skulled); and later Indo-European invaders, who were tall, blond, and "dolichocephalic" (longer skulled).[32] This model was updated by some anthropologists in terms of the new concept of prehistory. The most notable of these was Franz Pruner-Bey, a Bavarian-born member of the French society who asserted that prehistoric Europeans, along with Lapps, Eskimos, Basques, and modern Balts, represented a general "type mongoloïde," marked by a dark complexion, short stature, and a rounded skull.

The continuation of this binary typology did not meet with universal acceptance, and it was in fact being significantly revised. Broca himself led the way, having shown that prehistoric Europeans, Balts, and Basques were anatomically diverse and could not be classed as a single racial "type." However, it was maintained by Quatrefages, who had identified similarities between three Estonian skulls held in his museum collections and the "typical" cranial forms of prehistoric skulls recently discovered in Belgium. As early as 1866, he had argued that these similarities demonstrated that "the man who hunted the *Ursus speleus* and the *Elephas primigenius* lives in our time on the coast of the Baltic Sea." While this remark gained little attention when delivered, it acquired a whole new significance in the context of the arguments of 1871: if the Prussians were "Finnic," they were descended from those races that "had preceded the Aryans in Europe."[33]

It should be stressed that the idea that part of the modern European population was descended from pre-Indo-Europeans was not particularly controversial. Quatrefages himself noted that anthropology "shows us that most populations, possibly all, have partly received allophyllic blood to differing degrees—often true Finnic blood. It is not difficult to recognize the presence of this ethnological element in France, even in the capital." Partial allophyllic origin was not necessarily a marker of absolute national inferiority. Yet Quatrefages followed these points to argue that the character of the modern Prussians had remained primitive and barbaric. He did so in part by falling back on notions of intrinsic moral types, which had been prevalent in French ethnology and certain strands of historical writing in the first part of the century. Quatrefages noted that the Finns were "hard-working, moderately industrious, patient, even obstinate, hospitable," and "never forgive a real or imagined offense, taking revenge at the first opportunity." While the "spirit of conquest has never animated the Finnish populations . . . this spirit on the contrary is shown amongst the Slavs, as with all the Aryans who have appeared in

[31] See Maurice Olender, *The Languages of Paradise: Race, Religion, and Philology in the Nineteenth Century* (Cambridge, Mass./London: Harvard Univ. Press, 1992); and Poliakov, *Le mythe aryen* (cit. n. 7).

[32] For the fortunes of this typology see Claude Blanckaert, "L'indice céphalique et l'ethnogénie européenne," in *Histoire de l'Anthropologie: Hommes, idées, moments*, *Bulletins et Mémoires de la Société d'Anthropologie de Paris*, 1989, *1*(3–4):166–202.

[33] See Broca's observations on the Cro-Magnon remains in Thomas Rupert Jones, ed., *Reliquiae Aquitanicae* (London, 1875), p. 111; and Paul Broca, "Sur les caractères du crâne des Basques," *Bull. Soc. Anthropol. Paris*, 1862, *1*(3):579–591, esp. p. 579. For Quatrefages's views see Jean Louis Armand de Quatrefages, "Sur trois crânes d'Esthoniens et sur le prognathisme chez les Français," *ibid.*, 1866, *2*(1):284–290; and Quatrefages, *La race prussienne* (cit. n. 27), p. 43.

Europe."[34] While the Finno-Slavic Prussians therefore retained a mix of these Aryan and pre-Aryan characteristics, these inherited mental traits were not really the crux of the matter, as has generally been argued in descriptions of the dispute.[35] While national and racial differences were certainly important for Quatrefages and most other contemporary anthropologists, they were thought of in terms of social and cultural development as well as with regard to permanent heredity. The lower civilizational level of Prussia was ascribed primarily to historical factors, caused by the manner in which the various ethnic groups within the "Prussian race" had combined.

Quatrefages seems to have interpreted the mechanisms driving this ethnological development of Prussia in a manner inspired by the dominant views of the ethnology of France. As has been mentioned, over the course of the 1860s the Société d'Anthropologie had organized a major survey of the ethnological makeup of the French population. Far from using the results to assert the racial purity or unambiguously Aryan origin of the French people, this work had led to a complex model that saw the nation as a mixture of several ethnic types, dating from the Gaulish period: a brachycephalic, short, dark-complexioned "Celtic" type in the south and west; and a dolichocephalic, tall, light-complexioned "Gallic" type in the north and east.[36] These types had overlain a prior "Ligurian" population that was thoroughly absorbed in most regions but survived in a reasonably pure form among the Basques. To complicate matters further, these had also been subjected to a range of smaller-scale infusions over the historical period from a variety of other peoples, including Romans, Greeks, Germans, and Phoenicians. Four years previously, then, Broca had observed that ethnic purity was not a characteristic of the French:

> The *French race* is often spoken of, and perhaps I have sometimes employed this defective expression myself. The fact is that our nation does not belong to a single race, but to two essentially distinct races, whose characteristics have survived in countless mixtures. And I will not speak of the new entrants who, from the Romans up until the Normans, have conquered, colonized or occupied every part of our territory; and still less of those peaceful foreigners that we have taken into our sphere of attraction and which France adopts as her children.

Quatrefages agreed; he even furthered these arguments against racial purity in terms of national pride, rhetorically asking, "Are the Basques, who are a pure race, superior to the mixed French? It cannot be denied that they are an attractive race . . . but, in all other respects, they are inferior to the French. They appear to have very little aptitude for scientific and industrial progress, and have remained stationary for a long time."[37] In these contexts, not only was the French nation seen as racially mixed; but racial mixture between related types was a manifestation of universal trends of development. France was at the forefront of modern progress and therefore was believed to show these tendencies to a greater degree than less advanced nations, but they were present throughout Europe.

The conventions of the discipline ensured that Quatrefages universalized these ideas

[34] Quatrefages, "La race prussienne," *Rev. Deux Mondes*, 1871 (cit. n. 26), pp. 651, 653. Reliance on the notion of intrinsic moral types is a consistent theme in Staum, *Labeling People* (cit. n. 6).

[35] See, e.g., Poliakov, *Le mythe aryen* (cit. n. 7), pp. 269–271; and Jeanblanc, "Rudolf Virchow et la 'Race Prussienne'" (cit. n. 7), p. 80.

[36] Broca, "Recherches sur l'ethnologie de la France" (cit. n. 16); for its additional significance and relation to the French colonial enterprise see Claude Blanckaert, "Of Monstrous Métis? Hybridity, Fear of Miscegenation, and Patriotism from Buffon to Paul Broca," in *Color of Liberty*, ed. Peabody and Stovall (cit. n. 14), pp. 42–70.

[37] Paul Broca, *Sur la prétendue dégénérescence de la population française* (Paris, 1867), pp. 37–38; and "Discussion sur le croisement des races humaines," *Bull. Soc. Anthropol. Paris*, 1860, *1*(1):190–218, on p. 199 (Quatrefages's observation amid the larger discussion).

and transposed a variation of the model onto Prussia, albeit in a qualified manner. Prussia, like France, contained a mixed race, but "the elements that compose it are still not entirely fused. Despite a veneer of civilization, brought in above all from France, this race is still in the Middle Ages." Prussian history showed a similar process of ethnic coalescence and unificatory elevation, but one that had started later and was stymied and incomplete. Only two new ethnic types had been introduced: the Germanic Teutonic Knights, who had established a brutal feudal-religious system during the Baltic Crusades of the Middle Ages, and the French Huguenots, who had introduced the superficial elements of higher culture two centuries previously. However, Quatrefages was careful not to disparage the Germans here. The differing impacts of these Germanic and French infusions were assessed in terms of their relative historical development rather than their intrinsic racial characters:

> I do not want to speak here of either Germanic or French races. In the present circumstances, I could too easily be accused of prejudice or partiality. I would only want to signal the different roles played by each of those in the country they now occupy. The Germans arrived in Prussia as pitiless conquerors, and imposed on the populations a dominance which led to a number of terrible rebellions. It was by iron and blood that they assured their power. The French carried with them a civilization incontestably superior, with arts, industry, and a host of elements of peaceful progress. The difference of time and circumstances is obviously the greatest part of this contrast.[38]

At most, each "race" was, at a given historical moment, the bearer of a particular culture. The main argument was conditioned on contemporary anthropological conceptions of the nation—it was not something essential but, rather, the product of a long-term process of fusion. In Prussia, the combination of historical circumstances had brought out the worst elements of each grouping: the mixed Prussian race possessed the tenacity and vengefulness of the Finns, the warlike nature of the early Slavs, the fanatical militarism of the medieval Crusaders, and the superficial affectations of the higher culture of early modern France. The processes and constituents that had formed this population were both distinct from those in the rest of Germany and at a decidedly lower cultural level. And this was the main thrust of the work: by accepting unification under Prussia, the Germans were being duped into subjecting themselves to an inferior civilization that would misuse modern technology and military power for wholly destructive purposes.

## THE SOCIÉTÉ D'ANTHROPOLOGIE AND THE WAR

*La race prussienne* was greeted with some enthusiasm by the Société d'Anthropologie when it reconvened in the summer of 1871, after a year of disruption. Quatrefages presented the work to his fellows, and two other lectures directly engaged with the argument. The artist Charles Rochet showed some sketches he had made of soldiers in the German victory parade through the Champs-Elysées in March 1871, making a clear physical and psychological distinction between the troops from different regions of the new *Reich*. The Bavarians "appeared to me very worried, fearful, tired, bothered, exhausted and brutalized by the war." They were a civilized German people who, like the French, had experienced the conflict as a dehumanizing disaster. Meanwhile, the Prussian troops were of "Finno-Slavic origin, this descent betrayed by the smallest contours of their

[38] Quatrefages, *La race prussienne* (cit. n. 27), pp. 80, 75–76.

physiognomy," which "more closely approached the Mongolian or mongoloid type than the European," with "a face which is too strong, revelling in brutal instincts and base appetites."[39] Their character was totally different from that of both the French and the Germans: built as stiff, militaristic brutes, their ability to endure the horrors of a protracted war was not a strength but, rather, evidence of an innate barbarism. In this manner, the racial distinctiveness and lack of development of the Prussians was stressed, in an even more direct way than in Quatrefages's own work.

In addition to Rochet's rather impressionistic observations, Gustave Lagneau, the society's leading authority on European ethnology, presented his own discussion of northeast Germany, surveying the descriptions of classical authors such as Tacitus, Diodorus of Sicily, and Jornandes and modern ethnologists such as James Cowles Pritchard, Rudolf Virchow, and Izydor Kopernicki. While Lagneau concluded that the Prussian population was most likely more Slavonic than Finnish (which rather diminished its links to the prehistoric "troglodytes"), he nevertheless asserted that this corroborated Quatrefages's argument that "the modern Prussians, whose blood is more or less mixed, are less justified than the other peoples of modern Germany to invoke ethnology when they declare themselves to be the promoters of German unity and pan-Germanism."[40]

Despite their variations in methodology and conclusions, these additional accounts agreed on the fundamental points of Quatrefages's argument. The ostracism of Prussia—along with the retention of the idea that the ethnic Germans were people like the French—illustrated a desire to limit the enmity raised by the conflict. The true enemy was not the German people but, rather, Prussian barbarism and misdirected, nationalized anthropology. As such, notions of ancestral hatred were sidelined, and the road to reconciliation and future cooperation with Germany lay open—once the Prussian elements had been expunged or elevated. Yet the specification of these fine points also reinforced the tragedy of the conflict: the Germans, who should by all rights have maintained a high position in the European family of nations, had been overcome by the brutal Prussian race.

No one expressly disputed Quatrefages's reasoning. The broad acceptance of *La race prussienne* is perhaps surprising on a methodological level, given that it was based on an elaboration of Pruner-Bey's "type mongoloïde," which Broca himself had spent much time refuting and which was rapidly falling out of favor in prehistoric research. To understand the reasons for this general acceptance, it is important to examine the wider reactions of the French anthropological society to the war and its results. In most respects, the society refused to allow the conflict to disrupt its important work and attempted a speedy return to normalcy. A new edition of the *Bulletins* was hastily published in 1871, and talks were held that year on the Andaman Islanders, "the origin of civilization," and the unusual skull elongation Broca had identified in the population of Toulouse. Yet the legacies of the conflict still loomed. Much was made of the fact that Léon Guillard, one of the members and Broca's secretary, had been killed during the conflict. A chair was left empty in his memory and a eulogy, the tone of which clearly indicates the anthropologists' view of the war and its effects, was delivered by Eugène Dally. Guillard, a young man

[39] Charles Rochet, "Communication sur la type prussienne," *Bull. Soc. Anthropol. Paris*, 1871, *2*(6):75–77, on p. 77; and Rochet, "Communication sur la type prussienne," *ibid.*, pp. 188–196, on p. 194 (two articles with identical titles appear in the issue).

[40] Gustave Lagneau, "Sur l'ethnologie des populations du nord-est de l'Allemagne," *Bull. Soc. Anthropol. Paris*, 1871, *2*(6):196–202, on p. 202.

"poorly prepared for war, devoted by profession and taste to office-work, with precarious health and a philosophical horror of all violence," had nevertheless enlisted in a National Guard division, composed of members of "all classes, all social conditions, all ages," for the defense of his homeland once the Prussians threatened Paris. In memory of his death at the Battle of Buzenval, and of the defeat and loss it symbolized, Dally urged, "We must not fill our hearts with hatred and vengeance, but with the desire to put to an end these 'glorious' cycles of slaughter and see France reconquer through liberty, science and will all that the accidents of war and the crimes of government have lost."[41]

Thus Dally invoked Guillard as a symbol of the waste of the war, while highlighting the role of science within the sphere of international relations and the need for national rejuvenation through scientific and republican principles. This was part of an early attempt by the Société de Anthropologie to place anthropology at the center of efforts for national reform, an aspect of the wider deployment of science for national purposes that became a major theme under the Third Republic. The idea that France had been defeated by superior German scientific organization and research resonated, but so too did the suggestion that the emulation of this expertise and its redirection to peaceful ends offered potential salvation and an opportunity to regain lost glory. The war had devastated the French nation, but blame could be apportioned to wider trends of militarism, chauvinism, and the misuse of scientific knowledge. These found their fullest expression in Prussia, but France was now potentially freed from their malign influence. Even if there was wide agreement that the seizure of Alsace-Lorraine needed to be righted, future national unity and strength could not come from turning toward aggression and *Revanche* but, instead, from deploying science in the service of universal improvement. Again, therefore, as in the institutional foundation of the discipline and its core models of national identity, the promotion of the nation and its unity was critical. However, this needed to take place within an international and universal idiom if it was to be meaningful. Defeat in the war did not destabilize these calls but made them appear all the more imperative. This allowed Quatrefages's message to acquire a broader resonance. He had explained the now almost proverbial Prussian barbarism in a manner directly aligned with anthropological understandings of historical development, race, and nationality and asserted the discipline's important role in opposing the militaristic misuse of scientific ideas that was seen as having bought ruin to France and threatened the whole of European civilization.

## RECEPTION IN GERMANY

Even though Quatrefages and his colleagues had seen politicized anthropology as a key aspect of German unification, the details of this program had to remain fairly abstract. In *La race prussienne*, Quatrefages was in fact unable to cite any German anthropologists who had made racially based arguments for unification under Prussia. This is unsurprising. The German anthropological establishment had not only been formally (and by legal necessity) apolitical but faced a great problem in being unable to identify an anthropological "German." While no studies on the scale of Broca's survey of France had been conducted prior to the war, several scholars had attempted to analyze and classify the populations of their own states. The two most developed were Alexander Ecker's *Crania Germaniae Meridionalis Occidentalis*, which examined the Grand Duchy of Baden, and

[41] Eugène Dally, "Notice sur Léon Guillard," *Bull. Soc. Anthropol. Paris*, 1871, *2*(6):3–7, on pp. 4, 6.

Herman Hölder's survey of historical skull forms in the Kingdom of Württemberg. Their results were at best inconclusive. The two scholars claimed to have found racially pure remains in post-Roman burial mounds; these were overwhelming dolichocephalic and were almost reflexively assigned to the ancient *Germanen*—the Teutonic peoples, such as the Alamanni and Franks, who had migrated across Europe at the time of the fall of the Roman Empire. These were associated with the long-standing stereotypes, drawn from Tacitus's *Germania*, of a free and elevated people who were tall, blond, and light complexioned.[42] While these ideas were certainly drawn from existing views of the importance of the ancient Germanic past for the modern German national community, further findings made the anthropological contribution toward this *Germanenmythos* rather more problematic. Both scholars acknowledged that the modern inhabitants of their regions, the *Deutschen*, did not bear much resemblance to the conventionally long-headed and blond *Germanen*. Not only did their research demonstrate that much of the present population was short, dark, and brachycephalic; they also found many "large black-haired and small blond-haired" modern specimens, and large numbers of skulls with intermediate characteristics were found in archaeological digs.[43] This indicated that "mixed types" (*Mischformen*) were widespread—and had been throughout history.

It was therefore agreed that most modern Germans could not be the pure descendants of the *Germanen*, even if there was some dispute as to whether the dark, broad-headed elements were descended from a pre-Germanic aboriginal population, North Italian or Celtic settlers in the Roman period, or Slavic invaders in the Dark Ages. However, there was no doubt that they had inhabited these lands for a very long time and had been fully "Germanized" over history. They were now indisputably part of the common national community, whatever their original racial descent. German anthropology was therefore also based around a view that racial unity was not a feature of modern states, as even those as small as the South German principalities contained populations made up of a mixture of at least two identifiable types. In this respect, common racial origins could not serve as a model for national unification.

German anthropology's conception of the nation was better reflected in its institutional organization than in the results of its researches. The field represented the free association of individuals from a single cultural area cooperating in a common search for truth, a markedly liberal-national perspective masked by scientific neutrality. Yet this voluntarist idea of collaboration between "German" scholars shifted with the foundation of the *Reich* of 1871. While the new nation-state remained highly federal and regionalized, unification presented a clearly defined "German" territory around which research could be organized.[44] Therefore, even though anthropological associations were established in German-speaking Austria, these were excluded from membership in the DGAEU, which increasingly came to be defined in terms of the new empire.

These two factors meant that Quatrefages's arguments, made directly accessible to German anthropologists through the subject's existing transnational networks, were received by a community in the midst of considerable institutional reorientation and facing difficulties in interpreting what its ethnological researches actually meant. Their reaction to Quatrefages was not only concerned with refuting his inflammatory statements but was

[42] The wider role of these ideas is discussed in depth in Kipper, *Der Germanenmythos im Deutschen Kaiserreich* (cit. n. 8); and Wiwjorra, *Der Germanenmythos* (cit. n. 8), pp. 222–245.

[43] Ecker, *Crania Germaniae Meridionalis Occidentalis* (cit. n. 22), p. 85; and Herman Hölder, "Beiträge zur Ethnographie von Württemberg," *Arch. Anthropol.*, 1867, *2*:51–100, esp. pp. 79–99.

[44] Goschler, "Deutsche Naturwissenschaft und naturwissenschaftliche Deutsche" (cit. n. 20), pp. 101–102.

used as a means of resolving the wider issues of understanding the mixed ethnic character of the modern German population and defining the place of anthropological institutions within the new nation-state and a realigned international system.

These trends can be clearly seen in the two-pronged assault launched against *La race prussienne* by Adolf Bastian and Rudolf Virchow in the pages of the 1872 edition of the *Zeitschrift für Ethnologie*. Of the two articles, Bastian's review was the more combative. He aggressively defended the Old Prussians from the charge of "Finnic" ancestry, emphasizing that the Lithuanians, their closest modern relatives, spoke a language long renowned as "the closest sister of Sanskrit"—and therefore unquestionably Indo-European. Moreover, the dynamics of the German conquest had settled Prussia with colonists from all over the German lands, as "the systematically regulated administration of the Teutonic Order made each part of the country fully German, more German than Germany." It was actually this that provided the basis for "Prussia's mission to lead Germany's destiny, for on its soil it united all the German peoples [*alle deutschen Stämme*] into a new type."[45] In this respect, while adopting a Prussocentric interpretation of German history and asserting the intrinsic "German-ness" of Prussia, Bastian presented a vision of identity similar to that of his French counterparts, based on historical fusion: Prussia, containing ethnic representatives of all the diverse peoples of the German *Volk*, was the state best suited to promote the unity of the whole.

More significant, however, was his tone, which in many respects mirrored that of Quatrefages. A major line countered the accusations of Prussian barbarism by raising similar charges of French hypocrisy and unimpressive contributions to wider European civilization. This can be judged by the opening:

> Our dear neighbors on the other side of the Rhine have overwhelmed the world with a large number of insane writings [*Tollhausproducte*] over the past few months. The tone of these works shows how deeply pathological resentment can take hold of them, and leaves one fearful that one of these powerful paroxysms is able to cause such an incurable destruction of brain-functions. It would in this respect be truly sad, if so useful a member of the European Family of Peoples [*europäischen Völkerfamilie*] as the French should be ruined through insanity. They have given us the best hairdressers, dancing teachers and cooks, are a genteel, agreeable and amusing people, and have greatly aided many branches of the sciences, particularly the systematic analysis of their own discoveries (and sometimes also foreign ones), which have often have taken the first rank in general opinion, and always in their own.

Beyond this mockery, Bastian made much of France's own history of aggression, chauvinism, and crimes against civilization; his examples were drawn from as far back as the Thirty Years' War and continued right up to the Paris Commune and the "sad scenes which in 1871 played out before the eyes of Europe, and with which similarities cannot even be found in the orgies of barbaric tribes, but only in the cruelty of the first Revolution." The French had an unnatural savagery of their own, expressed through political instability and misdirected development, and should be lowered in respectable European opinion. Conversely, Germany was presented as being at the forefront of development: despite "Romano-Celtic verbosity, . . . Europe's Germanic branch [*der germanische Stamm Europas*]—in England, Scandinavia and Germany—has for a long

[45] Adolf Bastian, "Quatrefages: La Race Prussienne: Paris 1871," *Zeitschrift für Ethnologie*, 1872, *4*:45–64, on pp. 58, 61–62.

time now been the bearer of cosmopolitan culture."[46] In this, Bastian's arguments again displayed a mixture of the national and international: despite the vitriolic tone and appeals to a domestic German audience, he nonetheless called on the universal values of culture and civilization. France was reprimanded for failing to live up to these ideals, and German scholars were encouraged to take their rightful place in the vanguard.

These themes were even more pronounced in the responses of Rudolf Virchow, who was at the forefront of German attempts to reengage with the French scientific community. At the conclusion of the war, he published an article entitled "Après la guerre" in the *Revue Scientifique de la France et de l'Étranger*. He hoped to see "science exercise all its influence during the ensuing peace to lead to a reconciliation and community of spirits in the interests of all," and he argued that "national development must perfect itself through a universal communion of ideas. This alone is capable of elevating men to the supreme goals of humanity, beyond those narrowly derived considerations of nationality." Yet despite these lofty sentiments, the same themes as in Bastian's response were present. Virchow highlighted the brutality of the war but placed the blame squarely on the French: the German people had never wanted the conflict, which was provoked by imperialist chauvinism and the inflammation of public opinion in France. Similarly, he suggested, the conventions of war had broken down owing to the irregular guerilla warfare of the *francs-tireurs* and the brutal military tactics learned by French officers in oppressive colonial wars. However, Virchow wanted to keep these feelings from extending further into public life, where they threatened to taint all relations, including the scientific. To prevent this, the connection between science and nationality was explicitly spelled out:

> Science itself has a national value, but not in the sense that each nation must exploit it in an exclusive manner. On the contrary, each nation must advance science following its own aptitudes, and then deliver the results which it obtains to the common treasury of humanity. For us, science is purely human in its essence and national only in its form; we know how to differentiate between exclusively national politics and universal human science. In France, by contrast, the appreciation of this difference still does not seem to have entered into some of the best heads.[47]

This idea—that there was no contradiction in science being affected by differences in national character while engaging in a common international mission—had echoes throughout contemporary discourse. Nations certainly existed and were distinct from one another, but the ideal was for them to cooperate. Science and politics therefore needed to be kept separate, as mixing the two was potentially disastrous to the overarching progress of humanity. This required collaboration between nations. However, even as he elaborated these potentially inclusive ideals, Virchow condemned the French for failing to appreciate them.

His direct response to *La race prussienne*, entitled "Ueber die Methode der wissenschaftlichen Anthropologie," appeared in the *Zeitschrift für Ethnologie* in 1872 and was republished in translation for a French audience in the *Revue Scientifique de la France et de l'Étranger* in April 1873. Like Quatrefages, Virchow repudiated the application of anthropology to politics, while asserting that this had also made it irrelevant to German unification:

[46] *Ibid*., pp. 45, 63–64, 50.

[47] Rudolf Virchow, "Après la guerre," *Revue Scientifique de la France et de l'Étranger*, 26 Aug. 1871, Ser. 2, an. 1, no. 9, pp. 195–203, on pp. 195, 200.

> I would also like to renounce political discussions. Where would European politics lead if the construction of states should be based on long-forgotten similarities of ethnic characteristics [*Stammeseigenthümlichkeiten*]? Particularly, what would become of France if the Franks and Burgundians, Celts and Basques, Romans and Ligurians, were put in an array? . . . Mr. Quatrefages also knows this, for he himself stated, on the 21st September 1871, that "all political organization based on ethnology immediately leads to the absurd," when he presented his book on the Prussian race to the Parisian anthropological society. . . . But does the learned Professor of Anthropology not therefore conceive that German unity is as little founded on ethnology as the French? That it was such a great spiritual and material necessity that our nation was not only ready to make every sacrifice for it, but also, when the time came, brought it to the greatest extent without hesitation? Anthropology had not the least to do with it.[48]

In Virchow's eyes, German unity rested on exactly the same basis as that of the other European nations: it was a consolidation of a range of distinct elements through historical similarity and a shared mission. Even if nations were different in their precise characters and histories, the mechanisms that drove their formation were the same everywhere.

However, the main thrust of Virchow's argument was scientific rather than political. Taking issue with Quatrefages's methodology gave Virchow an avenue of attack that could assure him of victory on a higher level. In particular, he had misgivings regarding ideas of the allophyllic nature of the Baltic population. He had already investigated this to some degree, having made a study of a number of skulls held in Danish collections during his visit to Copenhagen to attend the CIAAP in 1869, and he had found "no possibility of the existence of commonality or even a relationship" between prehistoric, Lappish, and Finnish skulls. Quatrefages's studies, based on a mere handful of prehistoric and Baltic skulls, were far too small to lead to credible conclusions, and his arguments were based on politicized speculation rather than science. He had "first made the Prussian into a Finn, and then made the Finn the prime example of the worst characteristics, without even making the first attempt to prove one or the other."[49]

While Virchow's complaint was principally directed against Quatrefages, it contained a criticism of the French anthropological community as a whole for not contesting his flawed methodology. Existing transnational networks meant that Virchow was well aware that Broca had already argued against the equation of prehistoric and Baltic skulls and had "proved the dissimilarity of both series." He wondered, then, "Would it not have naturally been that Mr. de Quatrefages had rebutted the worthy General Secretary of the Société d′anthropologie? Instead he was silent about this divergence of opinion . . . and Mr. Broca was also silent."[50] In this manner, Virchow subtly reprimanded the French society for allowing political considerations to interfere with scientific discourse.

## WIDENING, AFTERMATH, AND CONCLUSION

Importantly, it was not only German scholars that Quatrefages managed to offend. Several European peoples traced their ethnological origins more unambiguously to non-Aryans, and their developing anthropological communities interpreted *La race prussienne* as an

[48] Rudolf Virchow, "Ueber die Methode der wissenschaftlichen Anthropologie: Eine Antwort an Herrn de Quatrefages," *Z. Ethnol.*, 1872, *4*:300–320, on pp. 301, 302. For the French translation see Virchow, "La méthode scientifique en anthropologie," *Rev. Sci. France Étranger*, 9 Apr. 1873, Ser. 2, an. 2, no. 42, pp. 981–989.

[49] Rudolf Virchow, "Die altnordischen Schädel zu Kopenhagen," *Arch. Anthropol.*, 1870, *4*:55–92, on p. 64; and Virchow, "Ueber die Methode der wissenschaftlichen Anthropologie," p. 304.

[50] Virchow, "Ueber die Methode der wissenschaftlichen Anthropologie," p. 306.

indirect attack on them. Raising the issue at the 1871 CIAAP, the Hungarian Paul Hunfalvy argued that

> Mr. de Quatrefages has attributed all the evil that the Prussian or, preferably, the German armies have made in France "to the dark hostility of the Finns, to the jealous hatred of the half barbarian for a superior civilization." Here is thus an accusation against the Finns, who during the war were perhaps supportive of France, and also against the Hungarians, who carry almost the same hostile sentiments towards the Prussian government.[51]

This unintended insult had wide effects. Finnish and Baltic anthropologists invited Virchow to tour their countries and conduct investigations, following which he reported on his findings and invited these colleagues to speak to the BGAEU. This both consolidated and extended the international links of Virchow's association and allowed him to conduct and publicize studies that disproved Quatrefages's arguments. Contrary to the "dogma" that the non-Indo-European Finns were universally small and dark, Virchow and his Finnish collaborators demonstrated that they were in fact tall and blond—"so blond, that there is a proverb in Russia: 'blond as a Finn.'" Not only did this demolish Quatrefages's core model; it also led to something of a reevaluation of European racial ideas. Contrasting the blondness of the "Turanian" Finns and the darkness of the "Indo-European" gypsies, Virchow sought to draw attention to the fallaciousness of the general "formula that all that is blond is Aryan, and all that is dark is Mongolian. This is a pure fiction."[52] In this respect, anthropological researches destabilized reductionist equivalences of Indo-European origins with blond hair and light complexions, making them fallacies science needed to oppose.

The arguments of *La race prussienne* were also disproved on a more national basis through increased study of the ethnology of Germany itself. The culmination of this work was the school survey of the mid-1870s, in which a committee of the DGAEU under Virchow's leadership worked with the German education ministries to classify more than six million schoolchildren according to hair, eye, and skin color.[53] The results showed that light complexions broadly predominated but that there was a gradual increase in the prevalence of dark complexions in southern regions. Importantly, there were no significant variations in the number of blonds in Prussia and other parts of northern Germany, which directly contradicted Quatrefages's characterization of dark "mongoloid" Prussians. Also, mixtures were common throughout the empire, with large numbers of children being classed as having dark hair and light eyes or light hair and dark eyes. This firmly established for the whole of Germany what Hölder and Ecker had earlier asserted about

[51] Paul Hunfalvy, "Sur la langue de l'homme préhistorique," in CIAAP, *Compte rendu de la cinquième session à Bologne, 1871* (cit. n. 24), pp. 436–439, on p. 437.

[52] Virchow made these observations and cited the proverb in response to Dr. Schöler, "Messungen etnischer Schädel," *Verhandlungen der Berliner Gesellschaft für Anthropologie, Ethnologie und Urgeschichte*, 1873, pp. 163–166, on p. 163. On the fallaciousness of the general "formula" see Virchow, in *Verhandl. Berliner Gesell. Anthropol. Ethnol. Urgeschicht.*, 1875, p. 33; this is further discussed in Jeanblanc, "Rudolf Virchow et la 'Race Prussienne'" (cit. n. 7), pp. 86–92. Virchow recounts his Finnish trip in "Die physische Anthropologie der Finnen," *Verhandl. Berliner Gesell. Anthropol. Ethnol. Urgeschicht.*, 1874, pp. 185–189.

[53] This effort has been extensively described in a number of works, particularly Wiwjorra, *Der Germanenmythos* (cit. n. 8), pp. 228–232; Mosse, *Towards the Final Solution* (cit. n. 7), pp. 91–93; Weindling, *Health, Race, and German Politics between National Unification and Nazism* (cit. n. 11), pp. 48–49; Andrew Zimmerman, "Anti-Semitism as Skill: Rudolf Virchow's 'Schulstatistik' and the Racial Composition of Germany," *Central European History*, 1999, *32*:409–429; and Zimmerman, *Anthropology and Antihumanism in Imperial Germany* (cit. n. 7), pp. 135–146.

their home states: that the modern population was a mixture of physical types. These findings therefore reinforced the earlier pronouncements that Germany was a political, cultural, and territorial community rather than a racial one.

Yet beyond this, the project had varied implications for the relationship between anthropology and the German nation, as the two were redefined and drawn closer together. Andrew Zimmerman's studies of the school survey focus on the separate counting of Jewish pupils in the recording of the results, arguing that this implicitly bolstered a wider sense of anti-Semitism and exclusion. This view certainly holds some weight in drawing attention to subtexts and the wider place of the project in the development of racial ideas in Germany, although it is impossible to ignore the direct conclusions of the exercise: that race had nothing to do with nationality and that therefore all groups, the Jews not excepted, could be included within the modern German nation.[54] More significantly for the themes of this essay, the survey shows how the discipline of anthropology, constituted over the course of the 1860s by a self-defined community of national and international scholars, had used its methodologies, skills, and resources in a gigantic project to facilitate the integration of the new nation-state. The unified German *Reich* was legitimized as the field of anthropological endeavor and organization as practitioners took its political borders as the boundaries of anthropological study.

Yet more broadly, even given the strong national basis of this form of population investigation, the study was not purely "German." The school survey was by far the largest project of its kind conducted by any anthropological community, and it was looked upon by foreign scholars with a great deal of interest, seen as having much wider scientific importance. As the methods, approaches, and conclusions could be easily adopted abroad, similar surveys gathering statistics on the complexions of large numbers of schoolchildren were conducted over the following decades in Belgium, Switzerland, Austria, Italy, Sweden, Norway, and Poland.[55] Again, these national projects occurred within a much broader context, gaining credibility through being internationally accepted while also bringing greater scientific prestige to the German anthropologists in recognition of the scale and formative role of their scientific endeavors.

However, tensions still manifested themselves: French scholars were rather less impressed by the survey than some others, pointing out flaws in what they termed the "méthode allemande" of surveying schoolchildren. Gabriel de Mortillet argued that even though "the study of children is certainly of interest and utility, it can never provide more than a general result, as hair and even eye color are subject to great variation at this young age." There may have been a wider personal dimension to his objections: Christian Andree notes that Virchow's contacts with Mortillet, which had become increasingly frequent and friendly in the years immediately preceding the Franco-Prussian War, broke off almost entirely in 1870 and were never fully resumed.[56]

The bitter feelings that arose during the war had soured relations between French and German anthropologists on a number of levels. While the anthropologists' earlier statements had declared their commitment to the reestablishment of close international con-

[54] Zimmerman's emphasis has been critiqued effectively in these terms by Andre Gingrich, "The German Speaking Countries," in Fredrik Barth, Gingrich, Chris Hahn, Robert Parkin, and Sydel Silverman, *One Discipline, Four Ways: British, German, French, and American Anthropology* (Chicago/London: Univ. Chicago Press, 2005), pp. 61–156; see esp. pp. 87–88.

[55] See Wiwjorra, *Der Germanenmythos* (cit. n. 8), p. 230.

[56] Gabriel de Mortillet, *Anthropologie de la Haut-Savoie* (Paris, 1893), p. 7; and Andree, *Rudolf Virchow als Prähistoriker* (cit. n. 20), Vol. 1, pp. 122–123.

nections, the tense atmosphere acted as a brake on actual exchanges and cooperation between them. Formal contacts were restored only gradually: it was not until 1877 that any members of the Parisian society—Broca and Alexandre Bertrand—were offered corresponding memberships in the BGAEU. Both accepted, but Broca's accompanying note, even if gracious on the surface, gave clear evidence of significant tensions:

> You express sentiments which are very much my own. I consider science to be neutral ground, situated outside of politics. It must not be included in anthropology, as it is equally not in geometry. If it is said, and correctly, that the sciences are a republic, it is because scholars of all nations have one common goal: the research of truth.
>
> Please accept, Mr. President and very honoured colleague, the expression of my highest regard. Paul Broca.
>
> P.S. A small hand abscess has delayed my response for a few days.[57]

It was also some time before the gesture was reciprocated. While the German foreign associate members of the Société d'Anthropologie de Paris admitted prior to the war continued to be listed in its membership rolls, no new ones were invited until July 1882, when Hermann Hölder and the Bavarian Johannes Ranke were both elected with very little fanfare.[58]

Despite this evidence of a slow rapprochement at the upper echelons, nothing could keep Quatrefages from becoming a figure of hate in German anthropological circles. Almost every observation of the ethnography of Germany in the following two decades would begin or conclude with a denunciation of "Herr de Quatrefages." While he maintained an authoritative position in French institutions, even a biographical obituary published in his memory briefly passed over *La race prussienne* as something "German scholars never forgave him for." He had attempted to answer Virchow's criticisms in the *Revue Scientifique de la France et de l'Étranger*, but this response essentially amounted to a restatement of his original points and a series of assertions that his descriptions of the prehistoric population of Europe were rather more complex than he had been given credit for. This was by no means forceful enough to deflect Virchow's sustained attack. More tellingly, Quatrefages did not link the modern Baltic peoples with the Quaternary allophyles in his subsequent works. Later editions of his key study, *L'espèce humaine*, contained an entire chapter on "Races humaines fossiles" that very carefully highlighted the diversity of the various prehistoric races and the limitations in "the *mongoloïde* theory."[59]

The closest attempt to revisit these themes was a study published in 1884, entitled *Hommes fossiles et hommes sauvages*. This included an entire chapter on the Finns, where Quatrefages cited both *La race prussienne* and his responses to Virchow. However, referring back to his three Estonian skulls, he noted that while he had previously "regarded [them] as the modern representatives and as the immediate descendants of the troglodytes of La Lesse . . . a more attentive study of more numerous materials has led me to partially

[57] For Broca's letter see *Verhandl. Berliner Gesell. Anthropol. Ethnol. Urgeschicht.,* 1877, p. 238.

[58] See *Bull. Soc. Anthropol. Paris*, 1882, *3*(5), p. 543 for a passing mention of their election and p. 548 for a similarly brief note of their acceptance.

[59] *À la mémoire de Jean-Louis-Armand de Quatrefages de Bréau* (cit. n. 26), p. 16; Jean Louis Armand de Quatrefages, "Réponse de M. de Quatrefages," *Rev. Sci. France Étranger*, 9 Apr. 1873, Ser. 2, an. 2, no. 42, pp. 989–1000; and Quatrefages, *L'espèce humaine* (Paris, 1896), pp. 215–258, esp. p. 224.

modify my initial views."[60] Now he claimed that these were representative of a different "type laponoïde," which had been identified by French, British, Scandinavian, and Austrian scholars as inhabiting much of Stone Age Europe and was still found among some modern peoples of the Arctic Circle. While this enabled him to retain a limited version of his previous theory, he nevertheless argued for the existence of three distinct racial types in Finland: the aforementioned Lappish; a white and blond "Tavastian" type, related to the Scandinavians; and a darker "Karelian" form, tentatively aligned with the Berbers owing to certain physiological similarities. There was no "Finnic race," as these were distinct racial groupings that could not be placed in a single anthropological category. While this could have been an attempt to argue that Virchow's studies of Finland's blonds were irrelevant to the old controversy, it was still a retreat from the clearly defined conclusions of *La race prussienne*. References to any of these types existing in Prussia were conspicuously absent.

Yet Quatrefages's assertion that the population of a country as distant and peripheral as Finland was racially mixed shows that the disputes covered a fundamental agreement in the core models of anthropology and illustrates what the conflict and the war meant to the subject as a whole. This was emphatically summarized by Gustav Lagneau upon his election as president of the Parisian society in January 1872. Referring back to the memory of Guillard and other casualties, Lagneau asserted:

> Their memory will remind us of an implacable war, wrongly considered to be a racial war. Between civilized nations of such complex ethnological composition, racial difference cannot be a motif of mutual destruction. Menacingly for the future of Europe, ambitious pretensions hidden under the veil of Pan-Slavism, Pan-Germanism and other theories, more linguistic than ethnological, could provoke war as a goal of conquest; the anthropological sciences, which allow us to identify numerous dissimilar ethnic elements within an individual nation, do not in the least legitimize—but disavow completely—these disastrous pretensions, which cost humanity so many thousands of victims. If, as Frenchmen, we were ready to support all hardships during the war and make all sacrifices to oppose the invasion of our land, as anthropologists, our studies—symbols of unity rather than discord—liberate the frontiers of nations, embrace all peoples universally and show how baseless are certain political principles which, on the pretext of the commonality of origin from only one of the constituents of a diverse nation, do not take any account of their other ethnological elements.[61]

Lagneau's statement drew together the main threads that had animated both communities. All through the storm of national recriminations, French and German anthropologists had remained committed to the idea that their discipline was a progressive science whose conclusions (if interpreted correctly) made international conflict nonsensical. A shared view of nationality was at the core of this commitment. Far from using their researches to feed into essentialist identity politics or ideas of ancestral enmity, they saw their countries as developing from similar processes of progress and ethnic fusion. This continued agreement meant that Franco-German anthropological disputes were based on accusations that their foreign rivals were deviating from these international ideals and misusing anthropology by aligning scientifically discerned "race" with politically or historically defined "nationality"—something that was at best absurd and at worst extremely dangerous.

[60] Jean Louis Armand de Quatrefages, *Hommes fossiles et hommes sauvages: Études d'anthropologie* (Paris, 1884), pp. 575–576.

[61] Gustav Lagneau, "Discours d'ouverture," *Bull. Soc. Anthropol. Paris*, 1872, *2*(7):1–5, on pp. 4–5.

Nevertheless, the controversy over *La race prussienne* presented the rather odd spectacle of scientists going out of their way to insist on the insignificance of their researches for politics in a manner that had unambiguously political implications in both the national and the international spheres. Despite the anthropologists' rhetoric and appeals to universalism, both the war and the disciplinary dispute that followed had inflamed international tensions and tied the discipline to the new political regimes established after 1871. While Brigitte Schroeder-Gudehus is certainly correct to state that "wars, especially those felt to be struggles for national survival, do not provide a convenient testing ground for transnational loyalties," in this particular case it was nothing so simplistic as war and nationalism inevitably disrupting the commitment to scientific internationalism.[62] Instead, a disagreement raised by a national conflict was conducted within the universalist idiom around which the discipline of anthropology had originally been built.

While relations between French and German scientists remained tense over the succeeding decades, the ideals of universalism and internationalism established and expressed in the 1870s were strong enough to continue to serve as the general foundation of scientific relations—even as international rivalry exploded and science was deployed in nation-building projects such as Virchow's school survey and in the calls for national rejuvenation in the French Third Republic. In this manner, the origin, course, and results of the *Race prussiene* controversy highlight an important aspect of the relations between national and international loyalties in late nineteenth-century science. Far from being mutually exclusive, these could easily be synergistic, feeding into one another even when international disputes were at their most violent. A broad conception persisted that scientific projects needed to use national institutions and differences as vehicles for common human development. Yet, almost paradoxically, these principles could give a harsh edge to international debates by providing a firm basis for accusations that rival national scientific communities were abusing them. Far from leading inevitably to harmony in the transnational republic of scholars, scientific universalism and claims to a status beyond formal politics could just as easily lay the ground for heated controversy, rivalry, and discord.

[62] Schroeder-Gudehus, "Challenge to Transnational Loyalties" (cit. n. 1), p. 114.