

The Limits of Possibility: Rand McNally in American Culture, 1898-1929

In the early twentieth century, Rand McNally held a large share of the commercial market for maps and atlases in the United States. How the company built its reputation as an American cartographic authority—by both accepting and resisting change—is the subject of this essay. Critical to the company's success was its ability to design materials that reinforced American notions of how the world ought to appear, an indication that the history of cartography is governed not just by technological and scientific advances, but also by a complex interplay between map-makers and consumers.

For millions of Americans, the name Rand McNally is synonymous with maps. For over a century the company has held a disproportionate share of the educational and general market for atlases and maps, and has enjoyed a reputation of cartographic authority in America rivaled only by the National Geographic Society. In the wake of the Civil War, Rand McNally introduced new, less expensive techniques into the historically costly and time-consuming craft of mapmaking, and in the process brought maps and atlases within reach of an entirely new segment of the American population. By the late 1890s, the nation's activist politics abroad sparked in Americans a keen interest in world geography; thus the Spanish American War proved a boon to Rand McNally as well as Hearst and Pulitzer. This widened audience—boosted by technological change, the nation's expansionist posture abroad, and a growing leisure market at home after World War One—encouraged Rand McNally to adopt more aggressive and sophisticated strategies in the hope of controlling its increasingly national market. More specifically, the company strengthened its reputation in these years by designing maps and atlases that balanced its own cartographic imperatives against the public's expectations of what a map and an atlas *ought* to be. How the company negotiated its success in the early twentieth century—by both accepting and resisting change—is the subject of this essay.

At the turn of the century, American mapmaking had only recently become a truly mass phenomenon. This dramatic change was largely attributable to the introduction of a new process known as wax engraving, exploited most successfully by Rand McNally. A small printing firm founded in the 1870s, Rand McNally initially produced railroad tickets and timetables, and soon noticed a demand for railway maps as well. The decision to adopt the new technique of wax engraving brought an entirely new style of map into circulation. Technically, the process allowed the inclusion of as much type as desired on a map, while earlier hand lettering techniques had naturally circumscribed the amount of information possible. In this regard, the advent of wax engraving coincided nicely with the expansion of railroads, as the former could easily detail the individual routes of an expanding national transportation network. Soon American

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INTRODUCTION

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THE ENTRENCHMENT OF AN AMERICAN STYLE

mapmaking firms were living by the credo that “more is better,” loading the maps with as much information as possible rather than limiting the number of place names to emphasize the largest or most important (Figure 1). Ironically, it was the apparently democratic practice of including as many towns as possible on the map—facilitated by wax engraving—that transformed the nature and character of American mapping. By identifying as many locations as possible, regardless of size, the maps offered little indication of relative population density. In addition to suggesting that all areas were equally settled, these maps encouraged readers to identify discrete locations rather than to explore relationships, a fact confirmed by the ever more comprehensive indexes at the end of the atlas that listed virtually every town or village. This reference quality was perhaps the atlases’ strongest selling point, but in the process topographic contours and spot elevations were sacrificed. For this and other reasons contemporary cartographers and geographers often judged wax engraving an aesthetically inferior process that diminished the need and opportunity to learn map-making skills such as feature selection. Over time, this prevailing style began to entrench itself, transforming a historical practice into a cartographic ideal, an accidental aesthetic that transcended the circumstances of time and technology.¹

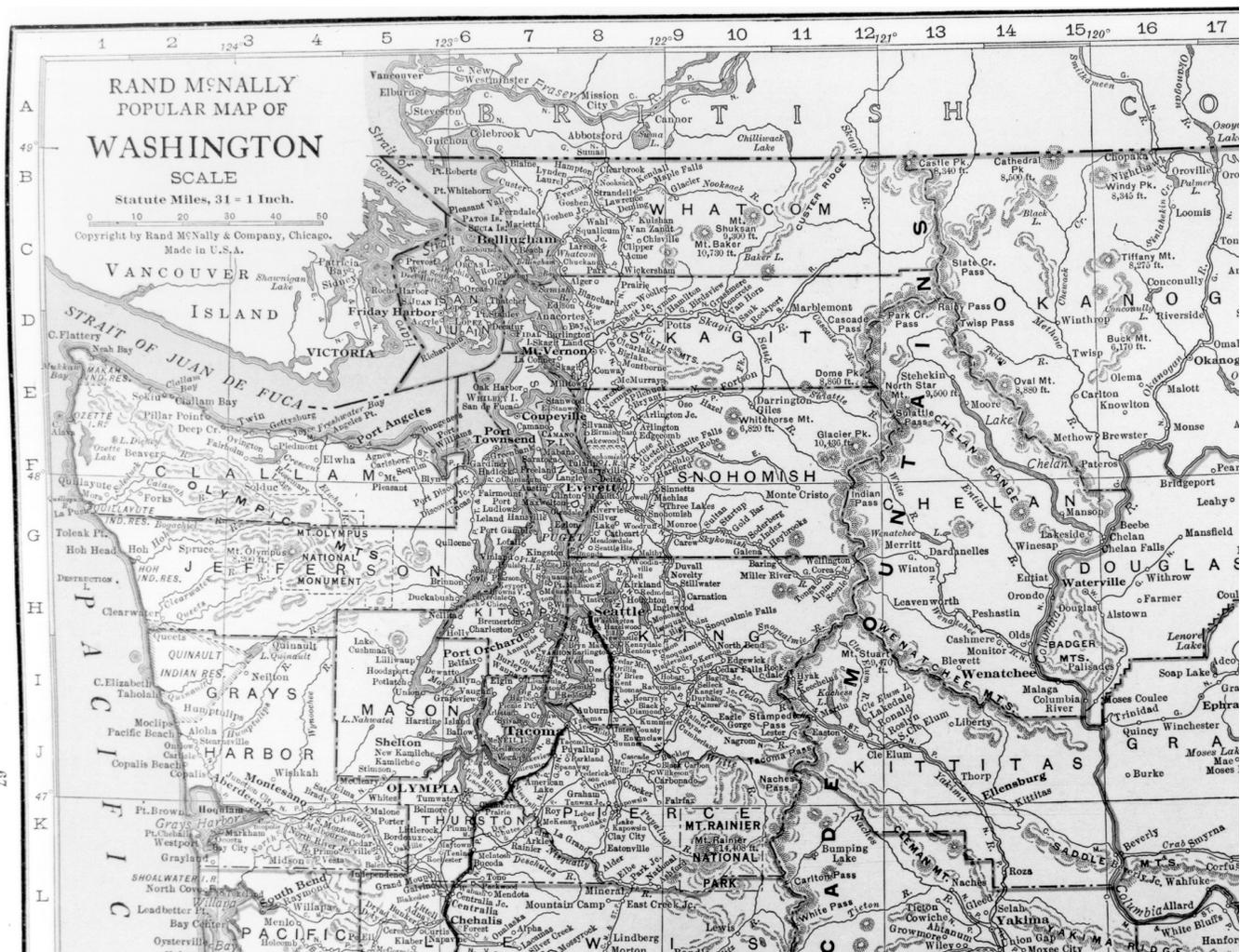


Figure 1. Detail of a wax engraved map from Rand McNally's Premier Atlas of the World (1924). Notice the emphasis on place names at the expense of the terrain itself, particularly suitable for an age of rail travel and national expansion westward.

Despite the stylistic inflexibility of the wax-engraved maps, the early twentieth century represents a turning point for the world atlases that contained them. In the 1880s and early 1890s, from 75 to 80 percent of atlas maps were devoted to the United States. The *New Household Atlas of the World* (1885) gave two pages to a map of Alabama but covered the African continent in a single page. Though designated as “world” atlases, the vast majority of the atlas maps were dedicated to the United States, which the format of the atlas separated from the rest of the world. The atlases organized the world according to levels of progress—savage, enlightened, civilized—achieved by the different races, nations, and continents, categories that were themselves conflated through prominent illustrations of the “four quarters of the globe.” Generally, the atlases brought the world home to Americans largely as a spectacle, a distant reality that conformed to existing notions of racial and cultural hierarchy.

The flurry of American activity abroad in the 1890s, however, recast many of the conventions in the world atlas. Territorial acquisitions as well as the “rediscovery” of Alaska after the Yukon gold strike encouraged Rand McNally to design cheap, mass-produced “war atlases” for the public in 1898 and 1899. These brief atlases—the first of their kind in America—as well as the peacetime world atlases that followed began to narrate their geographical subjects in terms of resources and commerce rather than race. This reconceptualization of the world around resources and commerce dominated the atlases both as a motive for acquiring territory and as an evaluative framework. The reorientation of foreign policy at the turn of the century accelerated this shift from a world of racial hierarchy in which the United States stood apart to an economic world in which the nation was actively involved. This unconditional support for American economic and territorial expansionism is reflected in new maps and descriptions of Cuba, the Philippines, and other areas under American jurisdiction. Maps of these acquisitions were prominently and proudly featured in war atlases, indicating that the goal was not just to chronicle the conflict but also to defend the territorial spoils of war. In Rand McNally’s 1898 *War Atlas*, for instance, “vital information” printed about the Philippines, Cuba, and Puerto Rico focused on exports and resources rather than culture or race. In the same year Rand McNally introduced and evaluated the new territories according to their actual and potential commercial value. These profiles were typified by frequent histories of the Philippines that emphasized the islands’ economic wealth but made only cursory mention of social or political life. Commercial profiles were also used to introduce America’s emerging relationship to Hawaii, Cuba, and Puerto Rico, as well as the newly discovered riches of Alaska (Rand McNally 1898a, 8-9, 12-13). War atlases, like the wartime issues of the *National Geographic*, were graphic arguments for the American mission abroad. Both media visually introduced the public to the new possessions and celebrated their potential contribution to American wealth. In both cases, the “science” of geography had translated controversial events and policies into matters of fact for middlebrow consumption.

After the turn of the century the number of United States maps declined to about 50 percent, making twentieth-century atlases significantly more cosmopolitan than their predecessors.² And while late-century atlases began with maps of the world and the hemispheres, those designed in the wake of the Spanish American War rushed to narrate the nation’s past and future gain by first featuring the new territories of the Pacific and the Caribbean. As late as World War I, Rand McNally’s *Imperial Atlas*—the name itself significant—opened with a map of America’s epic growth across the west and around the world (Figure 2). The *Imperial Atlas* had reinvented the United States by extending its borders beyond the continent.

MAPPING EXPANSION

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As one reviewer commented,

It does look a little bit odd to see Puerto Rico, Hawaii, and the distant Philippine islands on the United States map. But they are there and printed as carefully and described as carefully as if they had been for a whole generation in their present honored company.³

The nation had arrived on the world stage, a claim conveyed by Rand McNally's decision to separate maps of the European powers from those of their colonies rather than to group them according to the principle of imperial unity applied to the United States.⁴

These atlases disproportionately covered the nation's new territories, a trend mirrored in the contemporary issues of the *National Geographic*. Rand McNally's *Imperial Atlas* of 1904 boasted four maps of Manila Bay but only three for all of Africa. A 1912 atlas introduced an elaborate map of the Philippines, and one marketed in 1915 devoted two full pages to the West Indies. The detail of these maps, like American interest, peaked



Figure 2. Rand McNally's map of expansion, 1900. Rather than convincing readers to support the Spanish-American War, the map simply framed the territories as the latest installments in a progressive, unfolding national history. Through cartography—which gave these changes a kind of authority and permanence—the divisive war had been transformed from controversial politics into immutable history.

prior to World War One.⁵ As one company employee candidly remarked, the degree of attention given to any region was a function of, among other things, its “relative commercial or industrial importance.”⁶ Hammond’s *Pictorial Atlas* of 1912 used a thematic map to organize the world not according to language spoken—a common practice in the nineteenth century—but according to language used to conduct commerce.

The changing narrative text of the atlas over time also indicates the fluid nature of the atlas. The 1887 edition of the *Pocket Atlas*, Rand McNally’s most popular series, described Japan as a social hierarchy with an absolute monarchy and compulsory school attendance, and then briefly enumerated its chief agricultural products (Rand McNally 1887, 38). Yet by 1900 the atlas focused on Japan’s rising manufacturing, trade, and mineral wealth, and described its principal cities in terms of the commercial infrastructures such as the extent of rail connections, ports, and industry. The Philippines, briefly passed over in the 1887 edition, were lovingly described by 1900 as having both “undeveloped” and “unsurpassed” resources (Rand McNally 1900, 331, 334, 339). In a similar vein, the profiles of Cuba changed radically between 1887 and 1900. In 1887 the colony was profiled briefly in a larger section on the West Indies through statistics on population, ethnic breakdown, geographical features, mineral wealth, and education (Rand McNally 1887, 179). Not surprisingly, in 1900 the American protectorate was given its own section apart from the West Indies, with a more comprehensive history of the island, including dates of discovery and exploration, wars, emancipation, and the details of the American occupation after the war with Spain. Following the island’s history, extensive descriptions of Cuba’s climate, forests, and mineral wealth accompanied a substantially more hopeful profile of its resources.

Forests [are] among [the] most valuable resources of the island. . . . Soil of almost inexhaustible fertility and highly favorable climatic conditions entitle Cuba to rank among the foremost agricultural countries of the world. Resources, however, are largely undeveloped, but possibilities of the island are almost incalculable. . . . Minerals abundant and valuable. (Rand McNally 1900, 219, 222-223)

With “innumerable varieties” of fruit trees that grew “luxuriantly,” the atlas enthusiastically advertised the island’s potential for trade. All these qualities gave Cuba tremendous commercial promise, a far cry from the description of 1887. Yet while the 1900 edition of the atlas pronounced Cuba’s mineral wealth “abundant and valuable . . . in some, deposits are inexhaustible” (Rand McNally 1900, 222, 228), by 1936 enthusiasm had died and the minerals were simply noted as “not of great commercial importance” (Rand McNally 1936, 246).⁷ In these and other instances, characterizations of the natural world were themselves negotiable, as subject to change as political boundaries or foreign policy.

In the wake of the Spanish American War, newspapers and mass-circulation monthlies were full of cartoons using cartographic imagery to persuade readers of the nation’s urgent mission abroad. Illustrations of Uncle Sam extending his reach around the globe or of Spain’s pathetic retreat across the Atlantic translated the distant geography of the war into a comprehensible spatial narrative that implicitly endorsed American expansion. Similarly, while nineteenth-century atlases had underscored the gulf that lay between the United States and the rest of the world, those of the early twentieth century began to imagine an international community centered on a more activist, interventionist home country.

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WORLD WAR ONE

Europe's descent into war generated a slew of popular war atlases in America, almost all of which were produced by private map companies. In many cases, though, the firms had little incentive to design maps specifically for the conflict, and simply repackaged existing maps of Europe. Symbolic was Rand McNally's *Atlas of the European Conflict* (1914a), which opened with a map of the world centered on the United States, one that necessarily divided Europe itself.⁸ In the *Graphic Representation of the Battle Fields of Today*, Rand McNally used an existing commercial map of Germany that featured towns, sea routes, and shipping schedules. The map was difficult to read, overlettered, and strewn with details appropriate to an interest in peacetime commerce rather than wartime strategy.⁹ Much of the difference between the European and American war maps was one of scale: generally the maps made in Europe depicted areas on a larger scale, which allowed for clearer relational descriptions. But because the American maps were taken from existing collections, their scales were qualitatively smaller and unsuitable for more than a cursory overview of the battlefields.¹⁰

Even the National Geographic Society, highly sensitive to public taste, replicated existing cartographic styles. The Society had long issued maps with its magazines, the earliest of which were designed to chronicle political conflicts such as the Sino-Japanese War, the Spanish-American War, the Boer War, and the Russo-Japanese War. But it was not until World War One that any of these maps were drawn by the Society itself. The 1918 map of the western front—the first to be created by the Society's new Cartographic Division—looked much like those made by Rand McNally, dull in appearance and with the overall contours of battle lost in an infinite jumble of place names. Yet it was this apparent "flaw"—the inclusion of every conceivable place name regardless of its significance—that was eagerly welcomed by the Society's own members. One member, who kept the map on his office wall, was thrilled with its inclusion of "more towns and villages than any other"; it was this quality that allowed him to follow the battles with precision.¹¹ Albert Holt Bumstead, the Society's head cartographer from the 1910s until his death in 1940, confirmed this sentiment in a letter to the *Geographic's* editor Gilbert Grosvenor in 1915. Discussing possible improvements for the look of the Society's maps, Bumstead decided to erase the contour lines that marked elevation, explaining that

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Contours mean much to me, but I must admit with disappointment that to most map users they are nothing but a confusion. Elevation is probably the least important of the information given on the map, so lets [sic] not sacrifice the clearness of anything else for its emphasis.¹²

Caleb Hammond, head of the Hammond map company from 1948 to 1968, concurred: Americans made sense of maps through towns that were relevant to them, and relief markings simply competed with and detracted from that goal. Though surely a generalization, occasionally the public confirmed Hammond's assumption, such as this suggestion sent to the National Geographic Society during the war:

I would like to have an atlas showing every TOWN in EUROPE and ASIA big enough to have a POST OFFICE and every STREAM long enough to have a NAME.¹³

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Though the maps were slow to reflect change, the text of the war atlases quickly responded to changes in American foreign policy. From Archduke Ferdinand's assassination in 1914 to Woodrow Wilson's declaration of war three years later, the United States maintained formal, if not actual, neutrality in Europe. Ethnic divisions and the desire to continue trading with members of both the entente and the alliance delayed what might have been an earlier commitment to defend Britain, and these atlases—as perfectly aligned with the state as they had been in 1898—reflected the same. Rand McNally's 1914 *Atlas of the European Conflict* characterized the war as a result of "the thirst for aggrandizement of empire, political, military, and commercial, and the mutual fear and jealousy of kings." For years, the atlas claimed, the world lived in fear of the inevitable clash between the nations of Europe,

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each shouldering immense burdens of armament, each straining to surpass the other in strength, and power to destroy. Engines of war have been perfected until man's ingenuity in the preparation of catastrophic elements has been exhausted. (Rand McNally 1914a, n.p.)

But after the nation's entrance into war in April 1917, the company placed blame squarely on America's new enemies. Prussia had "foisted itself upon the confederacy of German states as the dominant power, the seat of an hereditary autocracy, and the controller of the constitution and the armed forces of the newly created empire" (Rand McNally 1917, 6). The war could now be understood as a result of Prussia's expansionist drive, yet this by no means translated into a denunciation of imperialism. As the atlas explained,

The power and wealth of a nation may be measured to a certain extent by the amount of territory she controls at home and abroad. Every square mile of territory is a source of revenue and mineral, agricultural, or manufactured products, offers a field for export and commercial exploitation, and yields land and customs revenue for the state. (Rand McNally 1917, 10)

These atlases immediately integrated Wilson's decision to enter the war by vilifying the ideology of America's new enemies: it was world domination, not economic expansion, that the atlases judged unacceptable.¹⁴

World War I brought dramatic upheaval to the boundaries of Europe. As a result of Wilson's Fourteen Points, the Austro-Hungarian and Ottoman Empires were dismantled to make way for Czechoslovakia, Yugoslavia, and a newly independent Poland. States in the Middle East also gained independence from the breakup of empire, leaving Turkey a small state, while Palestine, Jordan, and what is today Iraq were taken by the British, and Lebanon and Syria by the French. Africa was similarly redistributed among the victors. In Europe and the Middle East the war had dramatized the flexible nature of geography and left many Americans confused. Cartographic companies were quick to capitalize on this sense of epic geographic change. The romantic adventures of Lindbergh's flight across the Atlantic and Byrd's explorations of the South Pole also contributed to this swell of interest in geography. International radio news broadcasts of the 1920s encouraged listeners to follow events with an atlas, and the immensely popular *American School of the Air* became required listening in 200,000 classrooms over the course of its eighteen-year life from 1930 to 1948. Educational and popular radio programs exposed young listeners

THE POLITICAL AS NATURAL

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to world events, exotic locales, and the feats of American explorers in the interwar era. The American public also became increasingly accustomed to reading maps after the automobile revolution of the 1920s. Oil companies began to give away road atlases at service stations, a practice that brought countless Americans into contact with maps on a daily basis and prompted one comment that “Map reading is no longer the trying, difficult schoolroom task it used to be.” Within this responsive set of circumstances after World War One, Rand McNally embarked on an aggressive campaign to protect and enlarge its sales through advertising, public relations, and even tariffs. In the process, the company secured not just its dominance of the atlas market but also its reputation among Americans as a cartographic authority.¹⁵

Despite the upheavals in Europe and the expanding consumer market at home, the world atlas emerged from the war with much of its prewar form and content intact. Rand McNally’s revised *Ideal Atlas of the World* introduced even more focused information about the natural resources of the world presented through a candid discussion of America’s need for markets and the commercial gains it had made in the war. The continuing commercial focus of the postwar atlases accompanied an increasing interest in the world as a physical manifestation, which reflected a growing interest in the physical world brought by professional geographers under the leadership of William Morris Davis and the physical surveys of North America carried out by the United States Geological Survey and the Army Corps of Engineers. The same agencies had surveyed the American territories in the early twentieth century; in the 1920s and 1930s, private cartographers conducted surveys of the United States, Europe, Japan, and South America.

These new surveys of the non-American world brought attention to the physical world, and new maps began to emphasize the physical layout of the land by charting climatic patterns, elevation, and sea currents. Yet the major American map companies generally excluded this information from their popular atlases after judging it appropriate for school students but not for the general population. This is nicely illustrated by the arrival of Rand McNally’s *Goode’s School Atlas* in 1923, introduced to fill the rising demand for physical atlases in the secondary schools. The atlas was conceived and executed by John Paul Goode, a professor of geography at the University of Chicago and since 1900 the chief cartographic advisor to Rand McNally. Overall, Goode’s atlas, like most others in the interwar years, continued to be dominated by economic and commercial maps and information. Even so, the atlas was innovative in its rejection of the Mercator projection and its focus on the physical nature of the earth.

Until this point, the world had consistently been depicted on the sixteenth-century Mercator projection. Widespread recognition of the limits of this projection did not develop until the 1930s and 1940s. (Woodrow Wilson was far ahead of his time when in 1913 he asked Americans to turn toward the globe in order to realize that nearly all of South America lay east of North America [Paterson 1989, 505].) The concept of projection was simply not yet part of American culture, and would not be until well after the First World War. By comparison, the 1882 edition of Stieler’s *Hand Atlas*, one of the most widely printed German atlases, displayed no less than nine different projections on its title page, implicitly suggesting the malleability of cartography (Scharfe 1997). Such a display would not have been culturally meaningful—and therefore possible—for the American public until the mid-twentieth century. This made the publication of *Goode’s School Atlas* in 1923 even more provocative, as it argued the irrelevance of the Mercator projection and emphasized the limits of any attempt to map the earth ac-

curately. Suddenly students were confronted with multiple “truths”—projections of all kinds that reconfigured the earth in startling ways—and then learned the distortions of each, the Mercator projection being only the most egregious case. As students turned the pages of the new atlas they found a strange new alternative based on Goode’s own homolosine projection (Figure 3), an attempt to correct for Mercator’s long-accepted flaws (Figure 4). With interruptions at the northern and southern latitudes, the new map challenged the cartographic sensibilities of both the general public and professional mapmakers. Andrew McNally recalled that although *Goode’s School Atlas* sold well in schools, the unfamiliar homolosine world map made it insufficiently “unified” to pass muster with the general public. One employee called it “a very confusing book” for its depiction of the world as “four irregular ovals connected at the North Pole, one a bit longer than the others and with a jagged tooth on its eastern side.” *National Geographic* editor Gilbert Grosvenor, writing to his new chief cartographer after the armistice, called attention to Goode’s new homolosine projection as clearly

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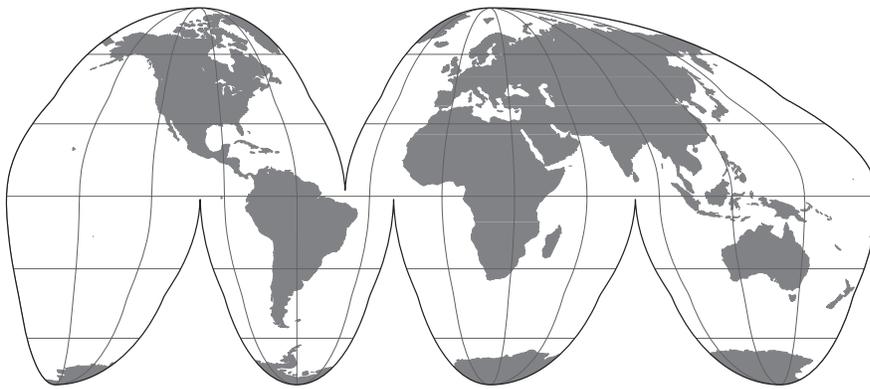


Figure 3. The twentieth-century homolosine projection.



Figure 4. The sixteenth-century Mercator projection.

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superior to the “atrocious” Mercator projection, but like McNally found it lacking in intelligibility and visual appeal. Grosvenor offered \$2,000 for a new projection that combined the improved accuracy of the homolosine projection but with the graphic appeal of Mercator’s world.¹⁶

The orientation of the map was equally jarring. American students surveyed the world map to find Europe, rather than their own country, at its center. In this respect Goode challenged a long tradition that dated back to 1850, the publication of the first American-made map known to place the western hemisphere at the middle, rather than to the left.¹⁷ With few exceptions later atlases continued to divide Eurasia rather than sacrifice the centrality of the United States, a practice encouraged by the growing importance of the Pacific to the nation in the twentieth century. In fact, the National Geographic Society mapped the world with the United States at the center almost without exception until 1975.¹⁸ This made the appearance of Goode’s homolosine world map even more disruptive.

The content of *Goode’s* maps were as disorienting as their shape. The first edition of the atlas did not even include a political map that divided the world along national lines. Though the later editions introduced more traditional political maps, far more central were the extensive maps of ocean currents, climate, vegetation, and elevation (Figure 5). The physical maps were a clear departure for Rand McNally, rarely if ever included previously though a matter of course in European atlases. Though the company was assured a readership for the atlas within schools, many doubted the extent to which it would draw public interest. Andrew McNally II, then president of the company, was especially skeptical. Though he recognized the scientific superiority of the physical maps, he was wistful for the more romantic political maps that had become customary representations of the world. As one interviewer wrote,

a world made up of only slightly varying shades of green and brown hasn’t half the appeal (or the romance) of a world of pink and blue and yellow. And while it’s nice to know that the city of Manchester is situated (say) ninety feet above sea level, still it is more fun to be able to pick out all over the world the little pink spots of the British Empire. (Grant 1956, 20-21).

The political map, dividing the world into empires and nations, had itself become normative, a kind of metageography. Many of Goode’s revolutionary physical maps and projections were therefore only gradually introduced into the popular atlases. Not until 1937 did Rand McNally include world physical relief maps, maps of temperature provinces, and annual rainfall maps in its mass-marketed atlases. Even though it might have presented a more comprehensive picture, *Goode’s* world was disturbing to many at Rand McNally.¹⁹ As one employee commented,

The total impression, once you get over the shock of a world so grievously sundered, is good; . . . political lines are so subordinated to physical features that one is brought up sharply in the realization that . . . France actually does run over into Germany, and Germany into Austria; that one isn’t permanently separated from the next by a line and a band of color. But again, the absence of all familiar color makes the book a purely utilitarian object, and not the glamorous gateway to romance that an atlas used to be.²⁰

One of Rand McNally’s reigning credos had been to create “a harmonious and pleasant looking world.” This translated into one divided along



Figure 5. Detail from Goode's physical map of the American northwest.

political lines, as for many this had become the normative representation of the world on a map.²¹ The rise of physical mapping challenged the familiarity of the political map that had dominated for decades, and highlighted the degree to which the latter had come to be understood not as a representation of the landscape, but as the landscape itself. In this regard maps are strongest and most persuasive—most scientific and powerful—when they tell consistent messages. More than a decade would pass before Goode's odd looking maps, though highly successful in American schools, were deemed acceptable for popular consumption and incorporated into the company's general atlases. In the meantime Rand McNally had made clear decisions about the kind of world the public would see.

Rand McNally cultivated its authoritative reputation in the interwar years in part through public relations, in part by producing custom maps, globes, and geographic displays for corporate clients and well-known individuals. American Airways, Texaco Oil, CBS Radio, the Bureau of Reclamation, International Harvester, National Cash Register, and the *Christian Science Monitor* were just a few of the organizations that contracted with

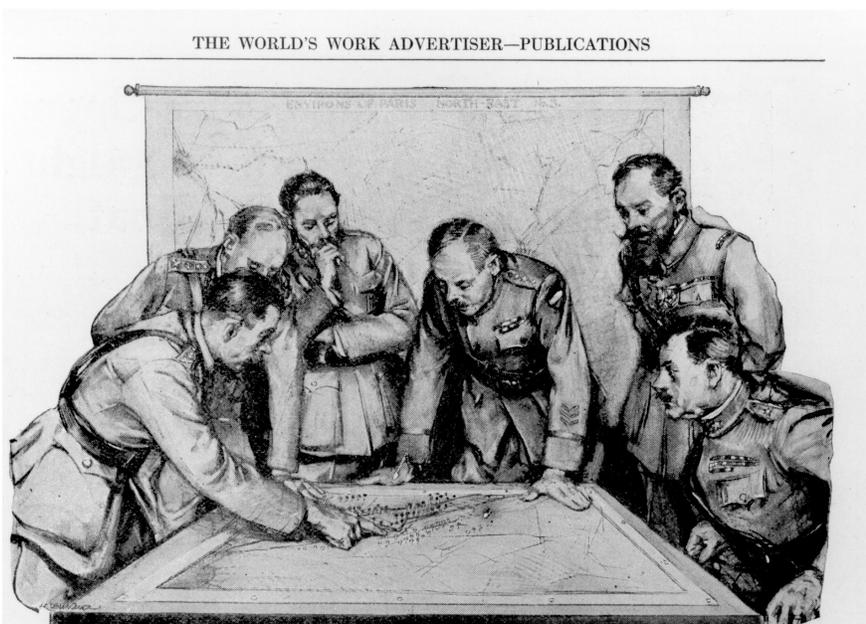
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PROTECTING A MASS MARKET

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Rand McNally to build massive public maps and globes in company lobbies, expositions, store windows, and railway terminals. Dozens of these projects helped build the company’s name as a ubiquitous, reliable, and authoritative source of knowledge about the world between the wars.²²

The company also initiated aggressive advertising campaigns to capitalize on the prosperity of the 1920s and the interest in geography brought by the war, an investment that also reflected the growing competition in the cartographic industry. Competition from Europe was a particularly sore subject among American mapmakers, a reminder of the long alleged inferiority of their own work. Max Mayer (1930, 976, 1663), an American cartographer, sarcastically commented in 1930 that Americans “have had nothing worth the name of an atlas. To claim there is such a publication is



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Accurate maps are part of the essential equipment in the enlightenment of the human family.

Accurate maps are the guide-posts of knowledge and the blazed trails of modern business enterprise.

RAND McNALLY Maps are accurate. They are the products of a highly skilled organization that has made map-making in all its branches a specialty for more than half a century.

RAND McNALLY Maps are helpful alike to the child in the school, to the student of civic and economic affairs, to the business man developing a market for his goods, to travelers everywhere.

RAND McNALLY Maps are made in various sizes to meet all needs. Besides their great educational value, they are an indispensable feature of every modern business establishment.

Generals gathered at Staff Headquarters planning a campaign. The fate of men and nations dependent on the accuracy of a map. Here, if ever, a sure test! The result is history.

RAND McNALLY maps have never rendered more valiant, more vital service than in The World War.

Pershing chose them because of their accuracy, simplicity and quick readability. For the same reasons, they were used by practically every other nation in the war.

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All of them—each and every one of them—is as accurate and as up-to-the-minute as it is possible for a map to be. RAND McNALLY has thousands of correspondents in all parts of the world—checking up—seeing to it that not even the least of the world’s changes is overlooked.

When you buy a map, buy a good map—a map you can depend on—a RAND McNALLY!

RAND McNALLY & COMPANY
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RAND McNALLY MAPS ARE AMERICAN MADE

Figure 6. Rand McNally ad from 1920, touting the precision of its maps and their wartime utility.

to admit our poor aesthetic sense." American atlases, he continued, were simply lost in "a wilderness of meaningless names" (Mayer 1930, 1663).²³ This ongoing debate over the appeal and merit of American cartography erupted into a legal and economic question in 1929, when Rand McNally led a campaign to include European maps on the list of imports eligible for duties under the Smoot-Hawley Tariff. To critics like Mayer, the very question of protectionism indicated the superiority of European cartography. For Rand McNally, however, the question was more a reflection of its struggle to maintain dominance in America after having adopted new and more expensive physical maps for *Goode's School Atlas*. In fact, the threat came not from European atlases themselves but the increasingly common practice of American textbook and atlas publishers contracting with European cartographers for maps that were imported and then reproduced in the United States. Though European production methods were more time-consuming, the relative scale of wages in the two countries still favored imports. Companies importing these maps claimed that no comparable product existed in the United States. Faced with increasing losses in their share of the educational atlas market, Rand McNally and the Map Engravers and Publishers of America fought but failed to raise the tariff on all European maps.²⁴

In the hopes of capitalizing on postwar interest in world events—and to protect the market it had previously dominated with relative ease—Rand McNally also embarked on an advertising campaign that paradoxically celebrated both the romance and the utility of its maps. The association of Rand McNally with accuracy was one of the primary goals of the interwar advertising campaign, and thus the geographic upheavals wrought by the armistice were frequently at the center of these advertisements. One 1921 ad featured a curious young boy asking his father to locate newly independent Czechoslovakia on the map. The ad suggested that such a question might easily embarrass any parent who had not kept up with the news, an error easily remedied through the purchase of a Rand McNally atlas, which could always be depended upon to print the latest boundary changes.²⁵ Like the legendary mouthwash ads that preyed on personal anxiety in the 1920s, these ads acknowledged the confusing nature of the postwar world and insisted that this knowledge be readily available to every American family. Hammond sold its 1920 *Modern Atlas* through a similar appeal:

See If Your Atlas Shows

The Seat of the League of Nations . . . The Status of the City of Danzig . . . The New Country of Poland . . . The Plebiscites of Silesia and Schleswig . . . The New Countries of Czechoslovakia and Jugoslavia . . . The Empire of Mongolia . . . The Mandatory Control of Former German Colonies in Africa . . . The Territory Awarded to France and Belgium . . . The Republic of Esthonia . . . The Roosevelt River in Brazil.

IF IT DOES NOT SHOW THESE, IT SHOWS

A World That No Longer Exists

Notice here that the focus is not geographical relationships but locations, and that an "accurate" map was one that identified every city, town, or village. The talisman of comprehensiveness was exemplified by a 1920 ad boasting that Rand McNally maps included villages found nowhere else, including "the little dot that stands for New Dongola." Though few people would ever visit this village, situated between the Sahara and Nubian deserts, they could rely on the company to map its precise location. Whether a reader was looking for New York or Nigeria, Rand McNally

"The ongoing debate over the appeal and merit of American cartography erupted into a legal and economic question in 1929 . . ."

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The White-washed City Where Stalks Decay

High up, in the mountains of Tibet, is the forbidden city of Lhasa, where the Christian is excluded and where decay stalks in the streets, past the white-washed buildings. The past—with its mystery, its customs, its stand-still civilization, lifts its ugly head and leers at the modern and uplifting. Dogs and pigs roam at will. The rough lanes are rutted with the traffic of ages. Every house is shared by humans and yaks, the common beast of burden.

You'll find Lhasa on the map of Asia, page 225 of the RAND McNALLY INTERNATIONAL ATLAS. This forbidden city has lived for centuries in a little world of its own. In the sunlight it is a gorgeous spectacle which fades upon close approach into a sordid abode of the unwashed and crafty. It is a part of the great romance of Geography, made clear by maps.

No matter what or where the place, you'll find it on a RAND McNALLY MAP. The uttermost parts of the earth are included, as they are now and as they were in olden times. There is a RAND McNALLY MAP for every person and every purpose. People think of maps when they think of RAND McNALLY—which is a world-known name that stands for education and progress.



The RAND McNALLY International Atlas of the World

contains 419 pages size 11 x 14 inches closed, bound in cloth and in full leather. For the general reader, student, business man. 128 pages of maps covering the entire world in detail. New countries, new boundaries, new groupings of islands.

The reverse side of each map contains information about that particular country or state.

24 pages of full color illustrations showing interesting and important sights and scenes in all parts of the world.

135 pages of indexes giving location on the maps and latest population figures of practically all cities, towns and important places throughout the world.

RAND McNALLY & CO.

RAND McNALLY & COMPANY Map Headquarters

536 S. CLARK ST., CHICAGO

42 E. 22ND ST., NEW YORK

Figure 7. Many of Rand McNally's advertisements also included appeals to the adventurous and the exotic.

promised they would be mapped with equal accuracy, for "maps are worthless unless they are exact" (Figure 6).²⁶

These ads also suggest that atlases—long considered reference tools—were now marketed as leisure commodities, the keys to unlocking the adventures of "Conrad's seas and Kipling's India." Rand McNally atlases would help both children and adults to imagine worlds they might never

see; exploring civilizations as old and distant as China, “without stirring from your easy chair.” As the advertisement concluded, “[e]very member of your family will profit in culture and knowledge from a Rand McNally Atlas.”²⁷ In previous decades, few if any advertisements or reviews had so directly suggested the cultural value of cartography, rather they stressed its utility as a reference source for businessmen and students. Central to this new strategy was an appeal to the romance, adventure, and even voyeurism of distant lands. In 1922, the company imagined the “Forbidden City of Lhasa” as simultaneously compelling and repulsive to western eyes (Figure 7), a city where

the Christian is excluded and where decay stalks in the streets. . . . The past—with its mystery, its customs, its stand-still civilization, lifts its ugly head and leers at the modern and uplifting. Dogs and pigs roam at will. . . . This forbidden city has lived for centuries in a little world of its own. In the sunlight it is a gorgeous spectacle which fades upon close approach into a sordid abode of the unwashed and crafty. It is a part of the great romance of Geography, made clear by maps.²⁸

Rand McNally’s general turn towards “adventure” in the 1920s also reflects the explosive growth of the National Geographic Society. With a membership that reached one million by 1926, the Society had clearly tapped the public’s desire to learn about the world beyond its borders. With its richly illustrated monthly, the Society brought the distant reaches of exotic lands into American living rooms and libraries, thereby creating a kind of culture around geographic knowledge that could not have gone unnoticed at Rand McNally. In fact, the latter advertised regularly in the pages of the *Geographic* until the Society judged the company a direct competitor and ended the relationship in 1928. These ads suggested precisely the sophistication and cosmopolitanism sought by those guarding their membership in the Society.²⁹

The early twentieth century brought a slow and steady stream of Americans into contact with maps and atlases. Geography was gradually becoming not just a school subject or a reference tool, but a cultural commodity as well. Rand McNally translated this interest into a broadened audience for cartography, aided particularly by the booming demand for domestic road maps in the 1920s. This ability to strengthen their reputation as a cartographic authority would prove central to their success in the 1940s. Like the National Geographic Society, Rand McNally strove to create a world that made sense to its public. Though it capitalized on the upheavals brought by World War One and the Treaty of Versailles, the company designed a world that fit American notions of how the world ought to appear. In fact, what is most striking about these atlases is the degree to which they maintained a tradition begun years earlier. Rand McNally kept new maps out of mass-market atlases in the 1920s because the company was wary of directly challenging a public whose visual sense of the world had been cultivated by years of exposure to political maps and the Mercator projection. However appropriate Goode’s maps were for “educational” purposes, Rand McNally was cautious about their acceptability as products for mass consumption. This suggests that the history of cartography is governed not just by technological and scientific advances, but also by a complex interplay of expectations between mapmakers and consumers. While the atlas remained relatively stable through the interwar years, by the late 1930s news of conflict in Europe and East Asia once again drew

“Rand McNally’s general turn towards ‘adventure’ in the 1920s also reflects the explosive growth of the National Geographic Society.”

CONCLUDING REMARKS

“The history of cartography is governed not just by technological and scientific advances, but also by a complex interplay of expectations between mapmakers and consumers.”

American eyes abroad, and the World War that followed, together with the revolution in air transportation, challenged the representations as well as the realities of world geography.

NOTES

1. See Adams (1912, 198-201 and *passim*) and Raisz (1938, 50), quoted in Woodward (1977, 124-125).
2. Dörflinger's (1997, 244-246) study of Austrian atlases indicates that this trend was mirrored in Europe. The number of non-European regional maps in these atlases rose from about 20% in the 1870s to 30% by World War I, corresponding to a decrease in the number of Austro-Hungarian and European maps. In these atlases, the United States was the first non-European area to be mapped with more detail, followed by east Asia, particularly China and Japan.
3. Quote is from the *Chicago Inter Ocean* review of Rand McNally's *Business Atlas*, March 6, 1899, found in II Cartographic Publishing, Box 1, Rand McNally Collection, Newberry Library, Chicago.
4. The Cram atlases of the early twentieth century also emphasized the growth of American territory; their *Ideal Reference Atlas* (1902) opened with full-page maps of the new territories and of the proposed Nicaraguan and Panama Canals, while all of South America was divided into two maps.
5. Interestingly, none of the African maps covered either the West African coast or the Congo region. Rand McNally's *New Family Atlas of the World* (1914b) also devoted a large map just to Luzon, though by 1916 the Philippines were no longer mapped together with the United States, but rather with the other Pacific Islands in the *Imperial Atlas*.
6. Quote is from Alfred Sidney Johnson (1922, 1166), an employee in the Map Department of Rand McNally.
7. Another example was the changing description of the soil in Cuba. In 1900 the atlas enthusiastically characterized the soil as having inexhaustible fertility, while twelve years later it was considered only "highly favorable."
8. Rand McNally produced eight atlases geared to the war.
9. Rand McNally, *Graphic Representation of the Battle Fields of Today* (1915); Rand McNally's *Atlas of the World War* (1918); rival companies produced similar atlases, such as Hammond's *New Map of Europe, Showing Seat of Austro-Servian War* (1914), and Cram's *Atlas of the War in Europe* (1915).
10. An exception of an American atlas that used small scale maps was C.S. Hammond's (1918) *Brentano's Record Atlas* (New York: CS Hammond, 1918). With maps of the western front drawn on a scale of 1-10 (1 inch to 10 miles), they were able to illustrate political boundaries, railways, altitudes, wireless stations, fortresses, fortified towns, arsenals, aircraft depots, forests and woods, and canals.
11. Letter of J.R. Purser, Charlotte, North Carolina, to National Geographic Society, dated September 14, 1918, in "Suggestions—Film 1915-1923," Records Division, National Geographic Society.

12. Albert Holt Bumstead, memo to Gilbert Grosvenor dated December 24, 1915; item 11-10015.837, Records Division, National Geographic Society.
13. Letter of A.F. Henning, Dallas, Texas, to National Geographic Society, dated February 5, 1917, in "Suggestions—Film 1915-1923," Records Division, National Geographic Society. Caleb D. Hammond, interview with the author, March 3, 1995, Maplewood, New Jersey.
14. See also Rand McNally (1918; 1921).
15. On radio broadcasts, see Dunning (1976, 28-29) and Buxton (1972, 12). On the relationship between commercial mapping and automobile culture, see Akerman (1993a; 1993b). Quote is from Ruth Leigh, "Selling Globes and Atlases," reprinted from *Publishers' Weekly* (Chicago: Rand McNally & Co., 1929), in "History" Box, Rand McNally Collection, Newberry Library, Chicago.
16. Quote is from Bruce Grant (1956, 21), quoting W.G. North in interview with Andrew McNally III. Gilbert H. Grosvenor, letter to Albert Holt Bumstead dated November 14, 1918, in National Geographic Society, Records Division, GHG 11-10015.837. Though Bumstead devised numerous projections of his own, the Society relied on the Van der Grinten projection for all its world maps from 1922 - 1988, a projection that—as Jeremy Black (1997, 31) has noted—continued to exaggerate the temperate latitudes, a flaw appropriate to Cold War mapmakers' tendency to emphasize the Soviet Union's power and size.
17. See Henrikson (1980, 95 fn 9). Even earlier, in 1811, a nationalistic Congress had contested the prime meridian of Greenwich, and replaced it with their own *national* meridian which ran first through Philadelphia, and then the District of Columbia. Only with the international recognition of Greenwich as the sole prime meridian in 1884 did the United States relinquish its own. See Edney (1994).
18. Exceptions occurred in National Geographic maps of 1935 and 1941, where the world was mapped as two separate circular hemispheres, necessarily placing the Western Hemisphere on the left side of the map. Generally the widest circulating atlases of the late nineteenth and early twentieth century—Century, Rand McNally, Hammond, Colton, and Mitchell, to name a few—also placed the United States at the center of their Mercator-based world maps.
19. This is not to say that *Goode's* atlases were not successful: among high schools it has been the atlas of choice, and was extensively used in Army War Colleges during the Second World War.
20. Grant (1956, 21), quoting W.G. North in interview with Andrew McNally III.
21. See *Rand McNally World Atlas: Premier Edition* (1932, 1937). Rand McNally's other contemporary series—*World Atlas: Commonwealth Edition*—also did not include physical maps of any kind. C.S. Hammond delayed introducing physical maps into its best-selling atlases; as late as 1937, its *Modern Illustrated Atlas of the World*, and *Unabridged Atlas and Gazetteer of the World* still included no physical maps.

22. Other institutional clients included The Pure Oil Company, Rock Island Lines, American Surety Company, Chicago North and Western Lines, the Bureau of Air Commerce, Pan American Airways, and the Monsanto Chemical Company. See Rand McNally Photograph Collections, illustrating different custom made maps, globes, and displays for corporate clients, found in Box 7, Photographs and Scrapbooks, Rand McNally Collection, Newberry Library, Chicago.

23. Even J. Paul Goode recognized the excellence of the German and British atlases yet took care to argue for the democratizing influence of wax engraving on the American map industry.

24. "Brief On Behalf of Map Engravers and Publishers in Support of an Increase of Duties on Maps," Finance Committee, United States Senate, 71st Congress, "History" Box, Rand McNally Collection, Newberry Library, Chicago. Also see Clow (1929).

25. Advertisement in *Review of Reviews*, November 1921. All Rand McNally advertisements collected in unmarked folder, Rand McNally Collection, Newberry Library, Chicago.

26. Advertisement in C.S. Hammond Company Records. Advertisement in *The American*, September 1920. Other ads that referred to the accuracy of Rand McNally world atlases can be found in *World's Work*, November 1920; *Century*, March 1924; *Asia*, April 1924; *Atlantic Monthly*, August 1924; *Sunset*, March 1926; *Sunset*, November 1926; and *Review of Reviews*, May 1928.

27. *Red Book*, 1926. For other ads invoking the romance of the atlases, see *Sunset*, June 1926; *Sunset*, May 1927; *Review of Reviews*, September 1928; *World's Work*, December 1928. Advertisement with an interest in China appeared in *World's Work*, October 1922.

28. Advertisement found in *Geographic*, February 1922.

29. Andrew McNally III, interview with the author, June 14, 1994, Chicago, Illinois. This growth of geography as a leisure activity was also evident in the sales strategies for globes, which were no longer simply schoolroom fixtures but now sold in furniture stores as decorative pieces. See Ruth Leigh, "Selling Globes and Atlases," reprinted from *Publishers' Weekly* (Chicago: Rand McNally and Company, 1929).

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REFERENCES

Adams, Cyrus C. 1912. Maps and map making. *Bulletin of the American Geographical Society* 44: 194-201.

Akerman, James. 1993a. Blazing a well-worn path: cartographic commercialism, highway promotion, and auto tourism in the United States, 1880-1930. *Cartographica* 30/1 (spring): 10-20.

Akerman, James. 1993b. Selling maps, selling highways: Rand McNally's 'Blazed Trails' program. *Imago Mundi* 45: 77-89.

- Black, Jeremy. 1997. *Maps and Politics*. Chicago: University of Chicago Press.
- Buxton, Frank. 1972. *The Big Broadcast, 1920-1950*. New York: Viking.
- Clow, H. B. 1929. Why a tariff on maps? American made maps superior to foreign made maps. *Publishers' Weekly* 116: 2161-2162.
- Cram, George F., Co., 1902. *Ideal Reference Atlas*. Chicago.
- Cram, George F., Co., 1915. *Atlas of the War in Europe*. Chicago.
- Dörflinger, Johannes. 1997. Austrian atlases of the late nineteenth and early twentieth centuries. In John A. Wolter and Ronald E. Grim, eds., *Images of the World: The Atlas Through History*. New York: McGraw-Hill, 233-256.
- Dunning, John. 1976. *Tune in Yesterday: The Ultimate Encyclopedia of Old-Time Radio, 1925-1976*. Englewood Cliffs, NJ: Prentice Hall.
- Edney, Matthew H. 1994. Cartographic culture and nationalism in the early United States: Benjamin Vaughan and the choice for a prime meridian, 1811. *Journal of Historical Geography* 20: 384-395.
- Grant, Bruce. c1956. History of Rand McNally (unpublished manuscript), Rand McNally Collection, Newberry Library, Chicago.
- Hammond, C. S., Co. 1914. *Hammond's New Map of Europe, Showing Seat of Austro-Servian [sic] War*. New York.
- Hammond, C. S., Co. 1918. *Brentano's Record Atlas*. New York.
- Hammond, C. S., Co. 1937a. *Modern Illustrated Atlas of the World*. New York.
- Hammond, C. S., Co. 1937b. *Unabridged Atlas and Gazetteer of the World*. New York.
- Henrikson, Alan K. 1980. America's changing place in the world: from 'periphery' to 'centre'? In Jean Gottmann, ed., *Centre and Periphery: Spatial Variation in Politics*. Beverly Hills and London: Sage Publications, 73-100.
- Johnson, Alfred Sidney. 1922. How maps and atlases are made. *Publishers' Weekly* 101: 1033-1034, 1102-1104, 1166-1169, 1226-1228.
- Mayer, Max. 1930. Maps and their making. *Publishers' Weekly* 118: 70-78, 973-976, 1663-1666.
- Paterson, Thomas G., ed. 1989. *Major Problems in American Foreign Policy: Volume I, to 1914*. Lexington, MA: D.C. Heath and Co.
- Raisz, Erwin. 1938. *General Cartography*. New York: McGraw-Hill.
- Rand McNally and Co. 1887. *Pocket Atlas of the World*. Chicago.
- Rand McNally and Co. 1898a. *History of the Spanish-American War*. Chicago.
- Rand McNally and Co. 1898b. *Rand McNally's War Atlas*. Chicago.

- Rand McNally and Co. 1900. *Pocket Atlas of the World*. Chicago.
- Rand McNally and Co. 1912. *Library Atlas*. Chicago.
- Rand McNally and Co. 1914a. *Atlas of the European Conflict*. Chicago.
- Rand McNally and Co. 1914b. *New Family Atlas of the World*. Chicago.
- Rand McNally and Co. 1915a. *Graphic Representation of the Battle Fields of Today*. Chicago.
- Rand McNally and Co. 1915b. *Ideal Atlas*. Chicago.
- Rand McNally and Co. 1917. *New Reference Atlas of the World and the War*. Chicago.
- Rand McNally and Co. 1918. *Atlas of the World War*. Chicago.
- Rand McNally and Co. 1921. *Atlas of Reconstruction for Schools*. Chicago.
- Rand McNally and Co. 1932. *Rand McNally World Atlas: Premier Edition*. Chicago.
- Rand McNally and Co. 1936. *Pocket Atlas of the World*. Chicago.
- Rand McNally and Co. 1937. *Rand McNally World Atlas: Premier Edition*. Chicago.
- Scharfe, Wolfgang. 1997. German atlas development during the nineteenth century. In John A. Wolter and Ronald E. Grim, eds., *Images of the World: The Atlas Through History*. New York: McGraw-Hill, 207-232.
- Woodward, David. 1977. *The All-American Map*. Chicago: University of Chicago Press.