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“Not Maps At All” – What Is Persuasive Cartography? And Why Does It Matter?

by PJ Mode



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"MY COUNTRY, 'TIS OF THEE"

"New Prussia. 'My Country, 'Tis of Thee,'" *Life*, "Get-Ready Number," February 10, 1916.

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“Not Maps At All” – What Is Persuasive Cartography? And Why Does It Matter?

by PJ Mode

EDITOR'S NOTE: The maps discussed and illustrated here are part of “Persuasive Cartography – The PJ Mode Collection” at Cornell University, persuasivemaps.library.cornell.edu. References in the form “#nnnn” are ID numbers of maps in the Collection. Readers are encouraged to visit the online Collection to view high-resolution images of the maps and for additional reference information.

Henry Luce, the young media baron of *Time*, *Life* and *Fortune* magazines, was increasingly concerned in the late 1930s about American isolationism and the nation's lack of military preparedness. In September 1940, *Fortune* published an extensive article raising this issue, including an “Atlas for the U.S. Citizen” with maps by Richard Edes Harrison. Harrison's “Three Approaches to the U.S.” (**Figure 1**, #1290) presented three views of American vulnerabilities: to a German attack over the Pole, through Canada; to a Japanese attack from the Northern Pacific; and to an attack on the East Coast from Latin America. Each map viewed the earth from a different point and direction. The detailed text emphasized the preparedness concern; for example, it noted that the U.S. transportation system “could put a fully equipped army of half a million men into Seattle in a matter of days—if we had the army.” And by presenting the three views on a single page, Harrison powerfully conveyed the extent of the nation's potential exposure. “Together, the three maps made it . . . nearly impossible to maintain a sense of geographical isolation. Instead, Harrison's work encouraged Americans to embrace an internationalist destiny and prepared them for a total commitment to the Allied cause.”¹

No doubt because Harrison had trained in architecture and illustration rather than as a cartographer, his maps defied existing conventions. They were “both visually

appealing and politically charged, reflecting the urgency of the war while also maintaining an elegant artistic dimension.” His work is today widely acclaimed; as Susan Schulten concluded, “Technically and stylistically innovative, ideologically potent and enormously popular with the American public, Harrison's maps are pivotal to the history of American cartography.”²

At the time, however, while many cartographic professionals applauded Harrison's work, others were sharply critical. Wellman Chamberlin of the National Geographic Society faulted him for sacrificing accuracy and precision to achieve artistic drama. He contrasted his own “objective” maps with Nazi “propaganda” maps, “implicitly questioning the morality” of Harrison's work. Charles Colby, Chairman of the Department of Geography at the University of Chicago, told Harrison that his departure from standard projections, scales and orientations was improper; his choices of colors and gradations not “agreeable;” his maps often “messy in appearance and confused in detail.” In short, he concluded, “Most of the exhibits which you call maps are not maps at all.”³

It's difficult to imagine a more damning insult to a mapmaker, a more thorough condemnation of a professional's work, particularly coming from such a normally staid community. What was behind this remarkable hostility? The answer turns on the relationship between Harrison's work and the broader world of maps and mapping.

In the years before World War II (indeed, until 1974), the Anglo-American world of cartography didn't have a name for what Harrison was producing. But now we do: “persuasive cartography,” maps intended primarily to influence opinions or beliefs—to send a message—rather than to communicate geographical information.⁴ These maps have also been called suggestive, or rhetorical or didactic cartography, and sometimes propaganda mapping (a less useful term because “propaganda” has become a pejorative).

The soft word, of course, is “primarily.” In fact, no map provides an entirely objective view of reality. Even the

Figure 1. Richard Edes Harrison, "Three Approaches to the U.S.," *Fortune*, September 1940.

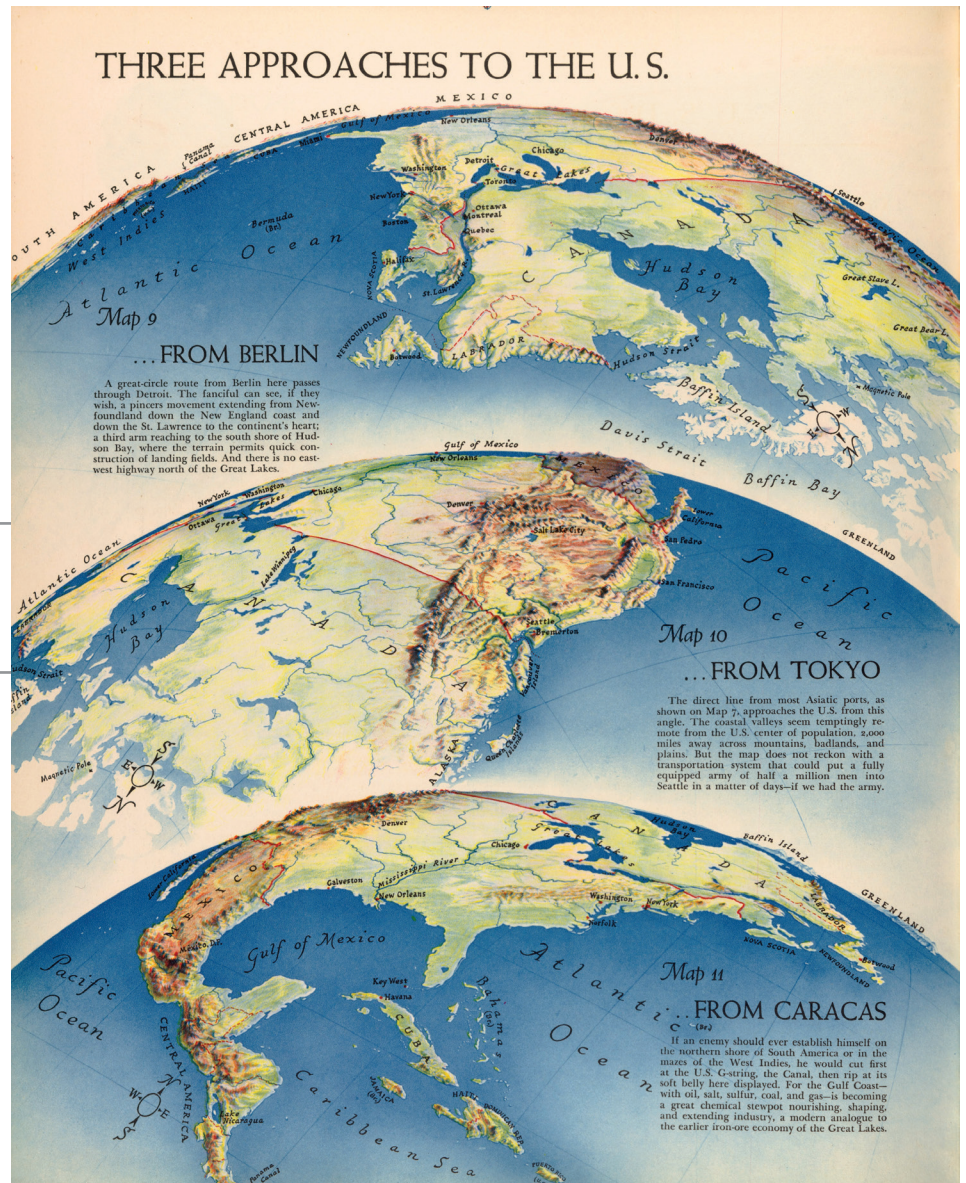
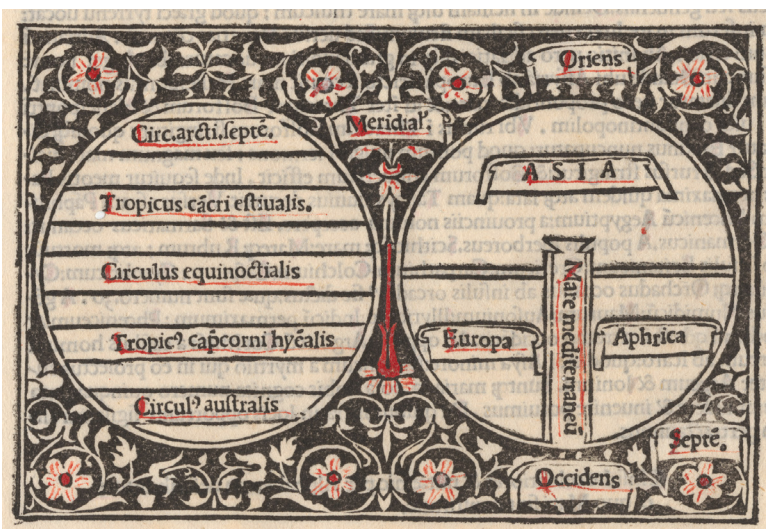


Figure 2. Zonal and "T-O" maps, Philippus Jacobus, *Novissime hystoriarum omnium repercussiones* (1503).



best-intended cartographer must decide what projection to use, what features to include and exclude, what colors, what shading, what text, what images—all of which shape the message communicated by the finished product. Every map falls somewhere along a spectrum from "objective" to "subjective," from "science" to "art." We deal here with a set of maps that are—in the admittedly subjective view of the collector—intended primarily to send some non-geographic message.

It is useful to consider persuasive maps along two "dimensions" as it were: the techniques or *methods* of the mapmaker and the intended subject matter or *messages*. The tools of the persuasive cartographer are vast, including allegorical, satirical and pictorial mapping; selective inclusion and exclusion; unusual use of projections, perspective, color, graphics and text; and intentional deception. As to messages, it is difficult to imagine an area of serious controversy—religious, political, military, commercial, moral or social—that has *not* been the subject of persuasive mapping. The Collection (see Editor's Note above) identifies eighteen specific issues—along with more than a dozen military conflicts—that have been widely addressed by mapmakers. While time and space preclude an examination of all, a look at a handful illustrates both the extent of subjects and the range of tools found in persuasive cartography.

THE SCOPE OF PERSUASIVE CARTOGRAPHY

The persuasive mapping of *Religion* has been around for more than a millennium. It dates at least to the medieval *mappaemundi*, first to the schematic "T-O" maps derived from Isidorus of Seville and known in copies from as early as the eighth century. **Figure 2** (#1003), from a work published in 1503, shows two of the most common maps from the Middle Ages side-by-side. On the left is a zonal or climatic map of the kind derived from Macrobius, communicating geographical information. It is oriented with north at the top and devoid of obvious religious meaning. On the right is an example of the well-known medieval T-O map. On these maps, east is always at the top, reflecting the biblical location of Paradise ("eastward, in Eden," Gen. 2:8). At least in its later forms, the T-O map is explicitly centered on Jerusalem ("in the midst of the nations," Eze. 5:5). The legs of the "T" that separate Asia, Europe and Africa have also been described as a symbol of the cross. By the 13th century, there are larger, pictorial versions, such as the Ebsorf and Hereford maps, dense with religious and historical illustrations. As David Woodward concluded, these medieval *mappaemundi* were intended "to instruct the faithful about the significant events in Christian history rather than to record their precise locations;" their function "was primarily didactic and moralizing and lay not in the communication of geographical facts."⁵

Certain elements of the *mappaemundi* were reflected in some of the earliest printed maps, such as the 1491 *Mer Des Hystoires* world map (#1001) and Heinrich Bunting's 1581 cloverleaf map of the world (#1008). But even as the design of later maps moved away from medieval tradition, mapmakers found new ways to reflect religious values. For example, the Heaven and Hell of Dante were carefully mapped, from crude woodcuts at the end of the fifteenth century (##1004.01-.07) to beautiful chromolithographs in the nineteenth century (##1071.01-.07). As the publication of printed bibles became more common, persuasive maps were often bound in. For example, Joseph Moxon's 1681 world map (**Figure 3**, #1012) provided a reasonably accurate view of geography as known at the time, but the lesson of this map is in the biblical illustrations surrounding it. And by centering the world not on England, but on Eden, Moxon, like many of his time, responded to the demands of believers that Christian theologians identify the precise location of Paradise. The Collection includes a number of other examples, most in the Near East, but one locating Eden in northern Florida (#1383) and another in what is today the Xinjiang Uyghur Autonomous Region of China (#2254).

Over time, virtually all of the tools of persuasive cartography have been employed on religious maps. Allegorical mapping has for centuries illustrated John Bunyan's uplifting story of the Pilgrim's Progress ("Plan of the Road From the City of Destruction to the Celestial City," ##1038, 1055), and more foreboding warnings of eternal damnation dominate the ephemeral 1825 "Les 3 Chemins de l'Eternite" (**Figure 4**, #1040). Satirical mapping attacked the Catholic Church's alleged influence on public education at the end of the nineteenth century ("The American Pope," #1118). A variety of pictorial and other techniques are found on maps encouraging and supporting missionary work, and a large Shaker teaching chart from 1887 is a riot of religious maps, timelines, genealogy, illustrations and text (#2085). In short, persuasive mapping has been used to communicate and reinforce religious values and beliefs throughout the 500-year history of printing, and before.

Imperial Geopolitics. "As much as guns and warships, maps have been the weapons of imperialism,"⁶ the late Brian Harley wrote, illustrating his point with an iconic Victorian map of the British Empire dominated by symbols and images of imperial wealth and power. **Figure 5**, #1095. During the French and Indian War, for example, competing British and French colonial American ambitions were reflected in a protracted "war of the maps." The Collection includes two examples, two dramatically different maps of North America produced at almost exactly the same time at the outset of the War in 1754.

Figure 3. Joseph Moxon, "A Map of the Earth and how after the Flood it was Divided among the Sons of Noah" (1681).



Figure 4. FrançoisGeorgin, "Les 3 Chemins de l'Eternité" (1825).

Figure 5. Walter Crane, "Imperial Federation Map of the World Showing the Extent of the British Empire in 1886," *The Graphic*, July 24, 1886.



The "Map of the British American Plantations," **Figure 6** (ID #2247), by Emanuel Bowen ("Geographer to His Majesty" George II) sets out British colonial claims to essentially all the land east of the Mississippi—including six sites explicitly labeled "French Fort," two as far west as modern Illinois and Missouri! Jean Palairé's contrasting "Carte de l'Amerique Septentrionale 1754," **Figure 7** (ID #2248), boldly marks the French view of North American colonization: the "Possessions Angloises" are narrowly cabined to the East Coast, while the entire area west of the Appalachians is "Nouvelle France" and "Louisiane."⁷

Slavery and American Politics. "Reynolds's Political Map of the United States" (**Figure 8**, #2132), supporting the Republican candidate in the 1856 Presidential election John C. Fremont and his opposition to the Kansas-Nebraska Act, is one of the most important American maps of the nineteenth century. Its central message is stated in the legend below Texas: "By the Democratic (?) legislation of 1854, repealing the Missouri Compromise, the institution of slavery *may be carried* into ALL the Territories—the area of which is greater than that of all the States combined."

The map uses a number of persuasive mapping techniques. The green of the western territories differs dramatically from the pink of the free states, giving the impression of impending slavery in the west. The map employed a projection that reduces the relative size of the northern states compared to the south (note the meridians converging to the north). The extensive text on the map "relentlessly documented the disproportionate power of slaveholders over the national economy."⁸ Inexpensive versions of this map were an iconic feature of Fremont's literature throughout the campaign, appearing on posters, handbills, pamphlets and the candidate's official campaign biography (##1058, 1059, 2101, 2199, 2264).

British Politics and International Conflict. Frederick Rose's dramatic "Serio-Comic War Map for the Year 1877" (**Figure 9**, #2272) arose out of the Russo-Turkish war. The Liberal minority in the British Parliament had long been hostile to the Ottoman Empire, and after the massacre of Bulgarian Slavs by Turkish troops in 1876, Gladstone—with much public support—called for their removal from the Balkans "bag and baggage." When Russia invaded Turkey the following year, however, the Conservatives under Prime Minister Disraeli were



Figure 6. The British View: Emanuel Bowen, "A Map of the British American Plantations, extending from Boston in New England to Georgia; including all the back Settlements in the respective Provinces, as far as the Mississippi," *Gentleman's Magazine*, London, July 1754.



Figure 7. The French View [Detail]: Jean Palairt, "Carte de l'Amérique Septentrionale 1754," from the *Atlas Methodique* (1754).

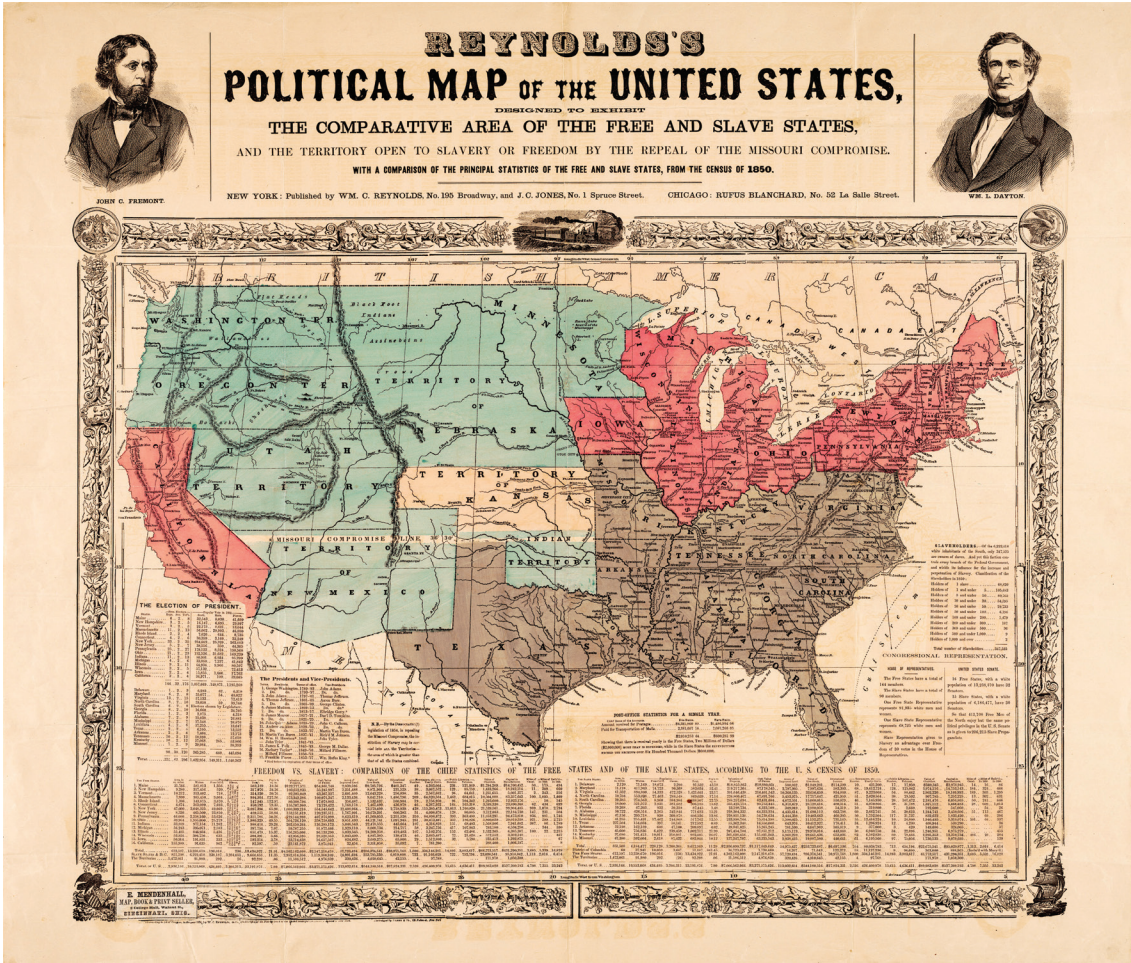


Figure 8. “Reynolds’s Political Map of the United States Designed to Exhibit the Comparative Area of the Free and Slave States and the Territory open to Slavery or Freedom by the Repeal of the Missouri Compromise with a Comparison of the Principal Statistics of the Free and Slave States, from the Census of 1850” (1856).



Figure 9. Fred W. Rose, "Serio-Comic War Map For The Year 1877. Revised Edition" (1877).

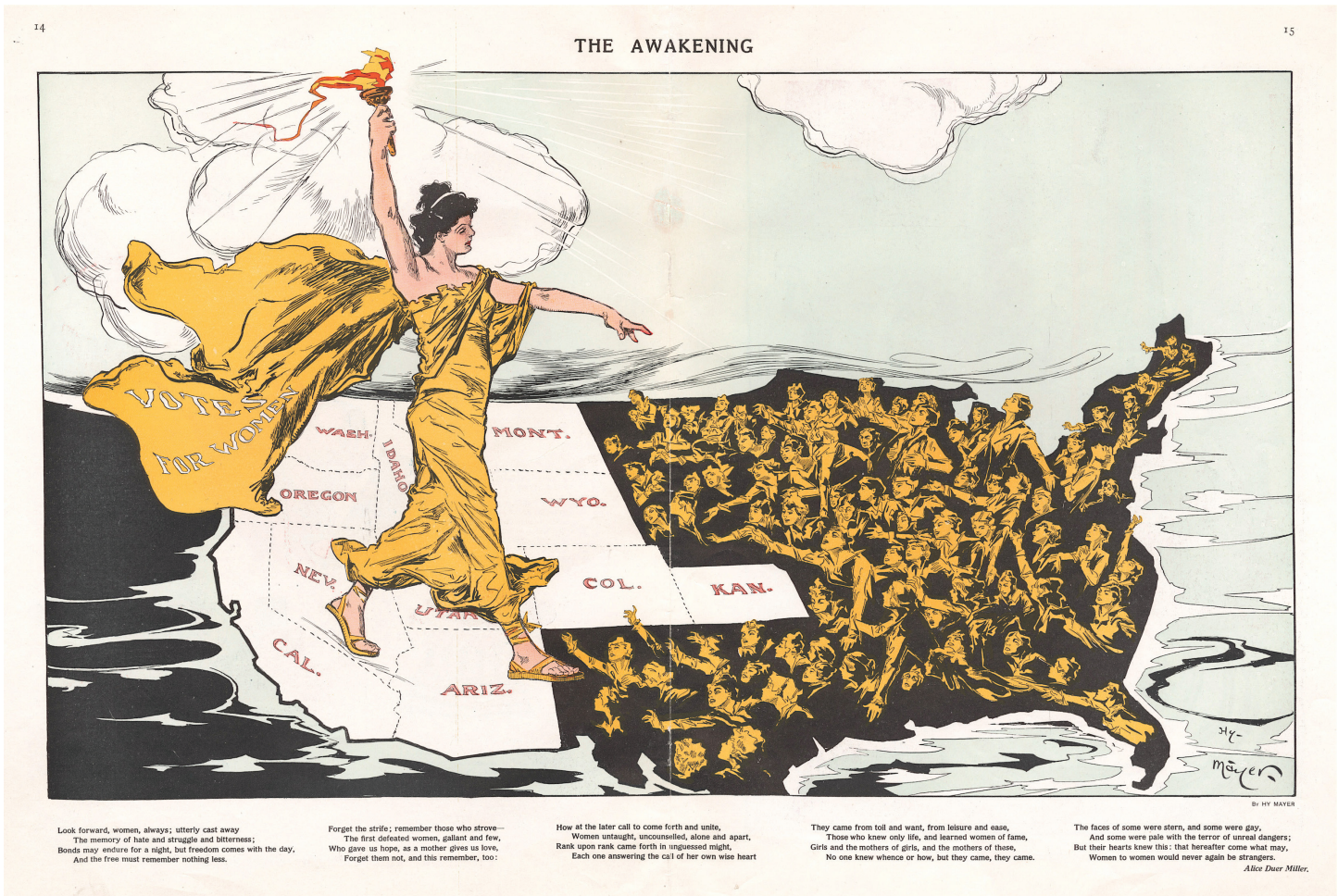


Figure 10. Hy Mayer, "The Awakening," *Puck*, February 20, 1915.

concerned; they saw the Turks as an important counterweight to Russian territorial expansion. In particular, they feared the capture of Constantinople, which would have given Russia a warm-water port on the Mediterranean uncomfortably close to the new Suez Canal.⁹

Rose was a longtime British civil servant who supplemented his income by contributing caricatures to newspapers and journals. A dedicated Tory from his teenage years, he was active in local Conservative organizations and politics. His map quietly acknowledges the slaughter (the "Turkish Empire" figure holds a gun to a "Bulgarian" skull), but it is dominated by a giant Russian octopus whose tentacles threaten the world from Finland and Poland to the Balkans and Persia. Detailed legends on the map explain the positions of the great powers and affected countries. This map was a runaway success, published in many editions not only in Britain but across Europe and in the U.S. Although

the Russians won the war and achieved gains in the Balkans, the threatened intervention of British warships kept Constantinople out of Russian hands, and Britain gained control of Cyprus to strengthen its hand in the eastern Mediterranean.

The Octopus map (as it quickly became known) combined pictorial and satirical illustration with extensive text and bold use of color. The cartographic octopus as a symbol of evil grasping—now "an internationally recognized visual propagandist trope"¹⁰—has been used in many satirical maps of territorial expansion and war, including the Russo-Japanese War of 1904 (#1145), British imperialism in the North Indian Ocean (#2149), World War I (##1185, 2286), World War II (##1318, 2123, 2169) and the Cold War (#1388). It has also been used on maps attacking a wide range of social and political targets, including a "reactionary" journalist (#1253), the Standard Oil Monopoly (#2140), "Landlordism" (#2285), and world Jewry (#2111).

Topographical Sketch of Properties The Death Valley Exploration Co.



Courage, Death, Water and Perseverance Uncovered This Golden Wealth

Figure 11. Walter Knox & Co., "Topographical Sketch of Properties The Death Valley Exploration Co. Courage, Death, Water and Perseverance Uncovered This Golden Wealth" (1929).

美国黑人抗暴斗争形势简图

一场美国历史上前所未有的黑人抗暴斗争的新风暴，以无比迅猛之势席卷美国一百一十个城市。它显示了在两千多万美国黑人中，蕴藏着极其强大的革命力量。它给陷于内外交困的美帝国主义以沉重的打击。

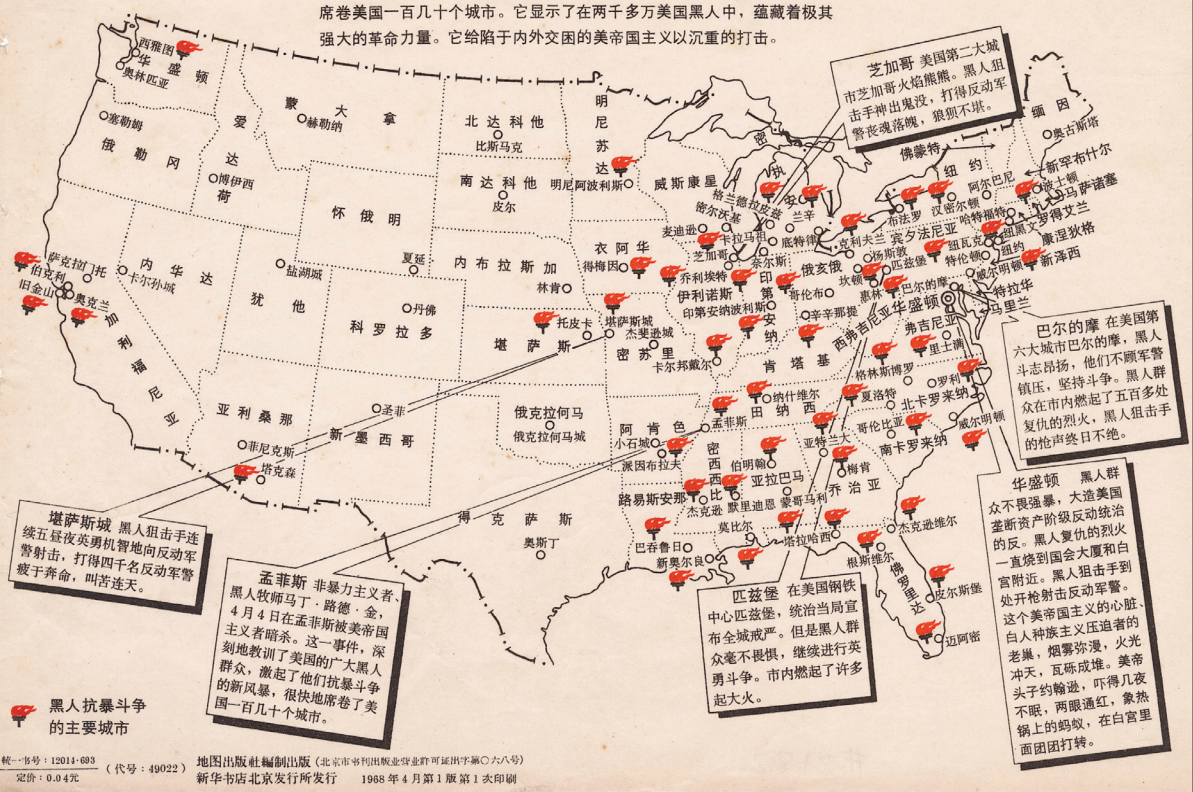


Figure 12. [Portion of broadside] [Statement by comrade Mao Zedong, chairman of the Central Committee of the Communist Party of China, in support of the Afro-American struggle against violent repression. April 16, 1968. Unprecedented Wave of Afro-American Struggle Against Violence.]

Social Movements. American social causes have employed persuasive cartography for nearly two centuries, from early maps supporting abolition (##1051, 1053.01-.02, 2058) and temperance (##1049, 1052). Perhaps the most successful example is the "Suffrage Map," which showed the steadily growing number of states that had granted voting rights for women: "Votes for Women a Success—The Map Proves It."¹¹ From 1908 to ratification of the Nineteenth Amendment in 1920, countless versions of this map appeared everywhere: in parade floats, pageants and silent films, on billboards, posters, window cards, newspaper ads and articles, paper fans and calendars. The Collection includes more than a dozen examples. Indeed, the suffrage map was so successful that the cost of reprinting it created serious financial problems for the movement, because every time any state granted additional voting rights for women, supporters demanded updated versions. It has been called "the most extensive use of a single iconic map image for persuasive purposes in the United States."¹²

One of the most vivid of these maps is "The Awakening" (#1176), shown in **Figure 10**. It appeared in *Puck Magazine* during a hard-fought referendum in 1915 on a proposed suffrage amendment to the New York State constitution. Lady Liberty, wearing a cape labeled "Votes for Women," stands astride the states (colored white) that had adopted some form of suffrage. She holds aloft her torch, bringing "enlightenment" to women in those Eastern states still in the dark, their faces turned up to the light, their hands reaching out in hope. The mapmaker here uses bold color, exclusion of all detail not essential to his message, and the striking pictorial allegory of Lady Liberty as a symbol of American freedom.

Advertising and Promotion. While all persuasive maps are in a sense "promotional," they have been widely used for commercial advertising purposes in general. Among some of the most interesting are maps promoting investments, such as **Figure 11** (#1228), "Topographical Sketch of Properties The Death Valley Exploration Co. – Courage, Death, Water and Perseverance Uncovered This Golden Wealth." This birds-eye view is the centerpiece of a 1929 brochure promoting the sale of shares in a gold mine. The map pinpoints the location of the company's property in Death Valley and the accompanying text describes the mine's "high grade" gold ore, "a very strong vein" that had "been prospected and tested its entire length." It urges immediate investment in the company because the one obstacle facing it—the "lack of water sufficient for a mill and camp"—had been overcome. The prospectors had suddenly discovered "copious and valuable water supplies," a "large stream of water running, a waterfall pouring over the rocks" and extending "along the canyon for nearly half

a mile." This happy find is featured at the lower right of the map: "HELLWINDER CANYON BIG WATER."

I have found no record of such a canyon, or of any such water in Death Valley. As to the Company, we know only that in May 1931, further sale of its stock was barred in California, in part because its promotional literature then claimed that the mine "actually is turning out gold bars."¹³ Outright fraud, of course, is another tool of the persuasive cartographer.

Protest. The power and simplicity of persuasive cartography make it ideally suited as a medium of protest. Examples in the Collection include maps opposing genocide (#2155.07), nuclear war or accident (##1369, 1393, 2155.01-.05), childhood poverty (##2155.06, .08-.09), unlimited working hours for women (##2183.01-.05), extermination of the bison (#1102), the war in Vietnam (##1382, 2278), American military expansion (#1347) and Bulgarian repression (#2113). One of the most extraordinary of these is **Figure 12** (#2182), a Chinese propaganda broadside exploiting the urban riots in the United States following the assassination of Martin Luther King. It was published on April 16, 1968, just days after the riots ended.

At the top of the broadside, in bright red characters, is a lengthy "Statement by comrade Mao Zedong, chairman of the Central Committee of the Communist Party of China, in support of the Afro-American struggle against violent repression." The map below illustrates the "Unprecedented Wave of Afro-American Struggle Against Violence." A red torch marks each of the 50-some U.S. cities where riots occurred, the "major cities of African American resistance struggle," with text balloons providing details. Mao's statement argues that King's murder "by the U.S. imperialists" was an act of counter-revolutionary violence and the "storm" that followed "shows that an extremely powerful revolutionary force is latent in the more than twenty million Black Americans." He expresses "resolute support for the just struggle of the black people in the United States" and concludes "with certainty that the complete collapse of colonialism, imperialism, and all systems of exploitation, and the complete emancipation of all the oppressed peoples and nations of the world are not far off."¹⁴

WAR AND THE GREAT WAR

No subject addressed by persuasive cartography is more significant than war. Threats to the existence of a state give rise to the most determined efforts not only to weaken the morale of its enemy, but to reassure and strengthen the resolve of its own people and to influence neutral parties. The Collection includes many examples, from the eighteenth century to Vietnam and the Cold War.



Figure 13. "New Prussia: 'My Country, 'Tis of Thee,'" *Life*, "Get-Ready Number," February 10, 1916.

Figure 14. Stanford's Geographical Establishment, "What Germany Wants. Her Claims As Set Forth by Leaders of German Thought" (1917).



World War I has a special place in this evolution. It followed a period of marked progress in cartography, including dramatic improvements in lithography and other inexpensive printing technology, and important conceptual advances, for example, in thematic mapping. For the first time, four great nations were competing in the production of persuasive maps on the same subject, some of them through newly established state propaganda agencies. The result was a marked increase in both the amount of persuasive cartography and its quality.

In the *United States*, maps were used most effectively in the effort to persuade its citizens to join and sustain the fight. Until April 1917, America was officially neutral. Pacifists and isolationists argued forcefully against intervention. German-Americans were reluctant to fight against the Kaiser and Irish-Americans to fight alongside the British. At the same time, Theodore Roosevelt and others supported an aggressive military preparedness movement, including tens of thousands who marched up Fifth Avenue in a "Preparedness Parade."

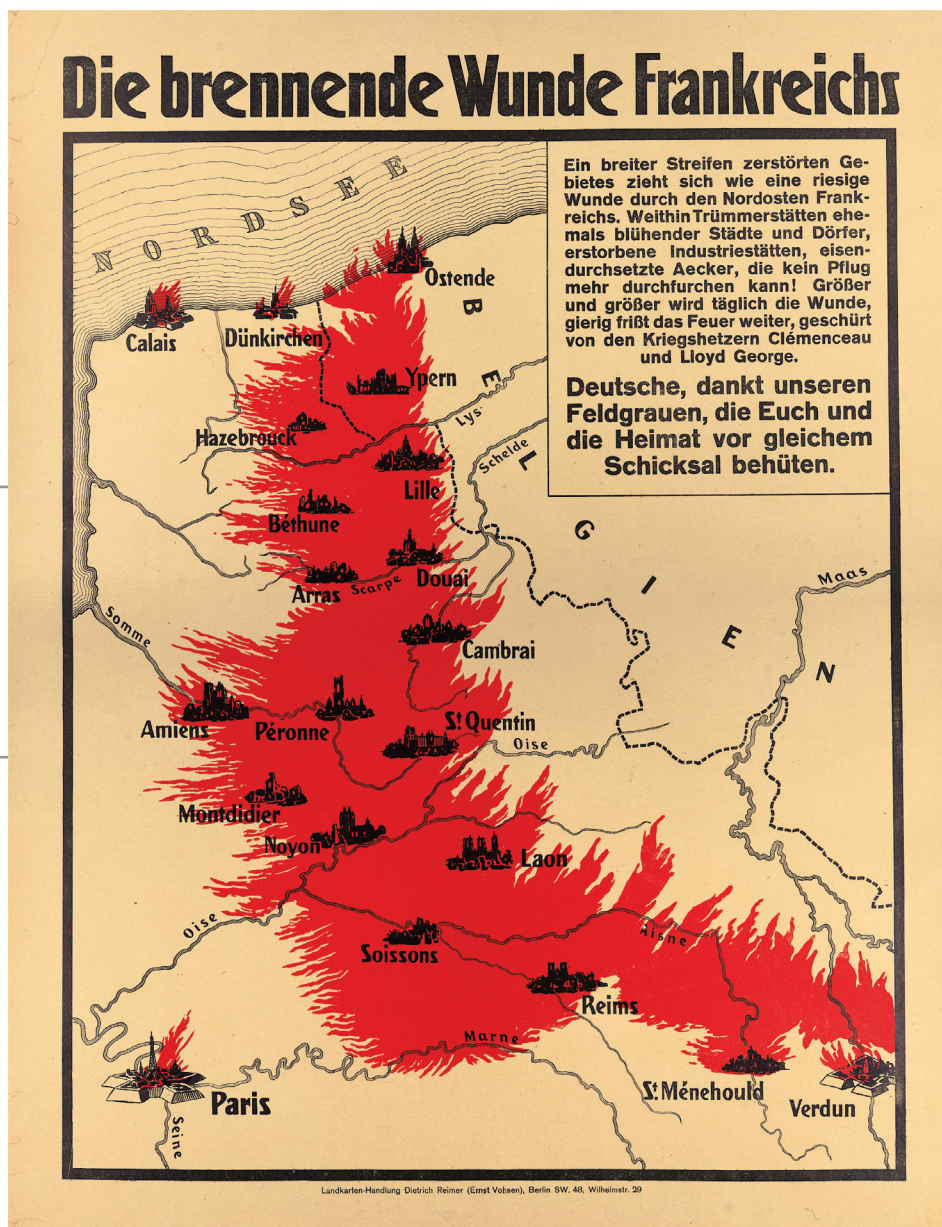
This effort is reflected on the cover of the 1916 "Get-Ready Number" of *Life* magazine, **Figure 13**, #2160. The former U.S. is "New Prussia," and most American cities have become German, e.g., New Berlin (Washington), Schlauterhaus (Chicago), Kulturplatz (Boston), Salzlagenburg (Salt Lake

City). Florida is Turconia, California is Japonica, and the northwest is dominated by Nagaseattle and New Kobe. New Mexico is an "American Reservation." This satirical work was reproduced as a handbill by the American Rights Committee, a group of distinguished New Yorkers opposing German aggression, probably in connection with a mass meeting at Carnegie Hall on March 13, 1916. See #2009.

After America entered the War, President Wilson created for the first time a formal government "Committee on Public Information," led by the public relations innovator George Creel, to mastermind all U.S. propaganda. These efforts included, for example, "The Prussian Blot" (#1192), a dramatic map poster intended to increase American support for the war effort.

France was no less active in the persuasive cartography of the War, particularly in broadsides and other maps aimed at strengthening the resolve of its people. "Le Respect des Droits de L'Homme" (#1186), for example, shows Prussian and German conquests since 1870, and "Le Plan Pangermaniste" (##1178, 1179) shows German territorial ambitions worldwide. The map of the "Etats-Unis" published immediately after the U.S. entry into the war (#2275) reassures the beleaguered French people with a quote from Wilson, "We are all brothers in the same cause." It lists the vast "provisions"

Figure 15. Militärische Stelle des Auswärtigen Amtes (MAA) [Military Authority of the Foreign Office], "Die brennende Wunde Frankreichs" [The Burning Wound of France] (1918).



soon to be on their way from "the richest country in the world," including soldiers, ammunition, food and raw material.

One of the most powerful and best-known French poster maps of the time, "La Guerre est l'Industrie Nationale de la Prusse" (#1185), shows Germany as an octopus with tentacles extending not only west to France and England, but east to Russia and south to the Balkans and Turkey. Figures chart the growth in German armies, color codes show the country's territorial expansion, and a variety of legends emphasize the message. The map was published in 1917 by La Conference au Village contre la Propagande Ennemie en France, an organization formed expressly to

strengthen the morale of the small-town and rural French population suffering under the costs of war.

Many of the *British* maps of the War focus on the Kaiser's intended expansion to the southeast, "The German Dream 'Berlin to Bushrah'" (#1190). A number of maps show the areas and populations between the North Sea and the Ottoman Empire "subject to Germany and her Allies," a total of some 47 million people (##1188, 1189, 1198). As peace negotiations gathered momentum, British maps were increasingly hostile to German initiatives (##1196.01-.03). One of the most forceful of these was a world map showing "What Germany Wants" in bright red, Figure 14, #1199. (For another version, see #1198.01.)



Figure 16. Admiralstab der Marine [Naval General Staff], "Englands Not" [England's Torment] (1918).

Each area in red is one of "Her Claims as Set Forth by Leaders of German Thought," detailed in 36 numbered statements, some by quite obscure figures. This map employs a number of the techniques of the persuasive cartographer: bold red color; selective exclusion of virtually all information other than the relevant national borders; use of an oversized legend positioned to cover the vast area of Siberia which would otherwise have reduced the ratio of red (aggressive German intent) to white on the map.

The *German* persuasive cartography of the Great War was also impressive in quality, quantity and variety. For example, after President Wilson presented the Fourteen Points as the basis for peace, a German poster mocked the

self-determination Point with a world map showing the leaders of the U.S., Britain, France and Russia as puppet masters holding the strings to their vast colonial empires (#1197). Wilson's freedom of navigation Point provoked a world map poster depicting Britain as an octopus threatening the "Freedom of the Seas" (#2286), with tentacles to some 27 places allegedly colonized or attacked by the Empire from 1609 to 1917. "What France has stolen from Germany" (#1204) used three maps to recall alleged French aggression dating to 1547! Some of the nation's persuasive maps were aimed not at the German population, but the enemy. The dramatic "L'Entente Cordiale" (#2097), in French, suggested that the longstanding

Anglo-French alliance was responsible for the war; it portrays Britain as a huge spider devouring the French army while her legs and web surround all of Europe and the Mediterranean, extending as far as the U.S. and Turkey.

Two powerful German maps were plainly intended not to mock the allies or to influence the French public but to reassure the nation's domestic population. In the spring of 1918, the Germans mounted an offensive that failed and resulted in massive casualties—230,000 in the months of March and April alone. **Figure 15**, "Die brennende Wunde Frankreichs" (The Burning Wound of France, #2231), presents a stark view of the battlefields of France, from Verdun to Dunkirk, as a sea of flame. The text begins, "A broad strip of destroyed territory extends like an enormous wound across Northeast France. Widespread collections of ruins, formerly flowering cities and villages, dead industrial plants, fields riven with iron, in which the plough can no longer make a furrow!" And it concludes—in bold face for emphasis—that the German public should "thank our Boys" because by fighting the war on French territory, "they protect you and your homes from the same fate."¹⁵

The large poster "Englands Not" (England's Torment, #1202), **Figure 16**, was produced at about the same time. It shows Britain and the North Sea with hundreds of tiny symbols, each representing one ship "sunken by our submarines" during a single "12 months of unrestricted submarine warfare." The point is supported by a quote from Winston Churchill—then British Minister of Munitions—lamenting the lack of ships to transport badly needed armaments. These two maps illustrate some of the most powerful techniques of persuasive cartography: bold choice of color; disciplined exclusion of all geographic features not essential to the core message; and careful use of text to emphasize the intended message.

In sum, the extent and effectiveness of persuasive cartography reached new levels in the Great War. It is interesting, therefore, to consider the post-War reaction of the mapping establishment: mapmakers and publishers, collectors and dealers, map librarians and archivists, scholars and teachers of geography and cartography, historians and other social scientists who work with maps.

THE MAPPING ESTABLISHMENT AND THE "EMPIRICIST PARADIGM"

It is fair to say that, until recent years, the study of maps and mapping has been somewhat a scholarly stepchild, "an antiquarian backwater with relatively limited academic significance."¹⁶ In their Preface to *The History of Cartography*, Harley and Woodward found that "treatment of maps on their own terms is sketchy. Theoretical studies of the nature and historical importance of maps are relatively few. Even basic definitions have not been clearly formulated."¹⁷ I am aware of only one paper before World War I that arguably

addressed the issues we now recognize in persuasive cartography, "On the Nature of Maps and Map Logic" by the German geographer and cartographer Max Eckert. Eckert explored subjective choices in mapmaking that affect "cartographic perception"—content, projection, scale, symbols and particularly color—as well as the relationship between art and science. He noted disapprovingly that "an artistic appearance . . . can deceive in regard to the scientific accuracy of a map." In almost every circumstance, he concluded, "illusion on maps should be eschewed," and firm adherence to "the dictates of science" must be maintained to assure that maps retain their "fundamentally objective character in spite of all subjective impulses."¹⁸

Eckert's conclusion nicely demonstrates what Matthew Edney has called "the empiricist paradigm of cartography"—that "cartography's only ethic was to be accurate, precise, and complete."¹⁹ Within the mapping community, there was a shared "faith in the progressive increase over time in the quality and quantity of [map] content and in the eventual fulfillment of cartography's potential as a science." This conceptual foundation was thoroughly settled; it had "prevailed within academic and lay circles alike since the eighteenth and nineteenth centuries."²⁰

Of course the level of artistic skill and dedication in cartographic presentation had grown dramatically over the years. And as the Collection itself demonstrates, some maps were produced with the intent to persuade in almost every time period (often by cartographic outsiders). But on the rare occasions when the academic community considered such maps at all, it disdained them. At the end of the nineteenth century, for example, the distinguished historian Raymond Beazley dismissed maps of the later Middle Ages as a "complete futility" for their want of new geographic learning, and called the Hereford and Ebstorf *mappaemundi* "monstrosities."²¹ For the mapping establishment, the proper role of the mapmaker was simply "to impart geographical information . . . in as effective and as correct a manner as possible."²²

This history helps explain the reaction to the dramatic growth in persuasive mapping during the Great War. Remarkably, and with one important exception, the cartographic community seems not to have noticed. I am unaware of a single English-language paper published in the years following the War analyzing the issues or techniques of propaganda mapping. The same is true of the larger studies on the use of propaganda in the War. The definitive work is Harold Lasswell's 1927 *Propaganda Technique in the World War*. Lasswell discusses booklets, tours, articles, conferences speeches, posters, exhibits, but the word "map" appears nowhere in this work. George Creel published his own book, *How We Advertised America: The First Telling of the Amazing Story of the Committee on Public*

Information that Carried the Gospel of Americanism to Every Corner of the Globe (1920). One map is listed, in an appendix. The leading work on British propaganda during the War, Campbell Stuart's *Secrets of Crewe House* (1920) includes some description of mapping, but apparently not enough to provoke any continuing interest from the cartography establishment.

Not so in Germany. Convinced that more effective propaganda mapping by the British had played a major role in their defeat, and eager to find ways to push back against the impact of the Treaty of Versailles, a group of German academic geographers in the early 1920s developed what they called *Geopolitik*. The cartographic product they promoted took its name from a 1922 paper by the group's leader, Karl Haushofer: "Die Suggestive Karte."²³ The goal of suggestive mapping was to achieve political objectives (while avoiding lies, which could be easily exposed) by appealing to emotions and rigorously excluding anything that didn't support the desired message. Its maps were intended specifically to engage support from the general population, and they were often "shamelessly explicit."²⁴ The movement produced "striking" results: by the early 1930s "there was a 'virtual flood' of suggestive maps" in Germany; entire atlases were devoted to them, and they appeared in "every public lecture, every newspaper, and in countless books."²⁵

Although German "suggestive" cartography developed separately from—and earlier than—the growth of National Socialism, several of its leading figures became Nazis, including Arnold Hillen Ziegfeld and Friedrich Lange. In part through their efforts (see ##1257.01–.02, 1264, 1286, 2040), German persuasive mapping between the wars was widespread and effective. It was targeted principally at the criticism of Versailles; the common heritage of German peoples everywhere (particularly in Eastern Europe); and the argument for German rearmament in the face of military threats. A good example of the latter is **Figure 17**, the 1936 "The Air Raid Threat" (Die Fliegergefahr, #1251.05), showing the entire country at risk of attacks from Belgium, France, Czechoslovakia and Poland. Maps like this one appeared in numerous magazines and newspapers, as well as virtually all contemporary school atlases.

From the late 1930s until 1941, the "German Library of Information" in New York aggressively distributed English-language propaganda materials intended to discourage U.S. confrontation with Germany. Its output included a map of a fake Anglo-French plan to invade the Ruhr before the war (##2059, 2063) and a booklet of maps extolling German military successes (##1302.01–.07). In fact, the publications of the German Library figured prominently in the first American academic paper addressing persuasive cartography. In a forceful article published three months before Pearl Harbor, the German-born American sociologist Hans Speier attacked

Germany and its "Library" for exploiting and manipulating cartography, turning "geography into a kind of magic." Propaganda mapping, he concluded, "borrows the prestige of science and at the same time violates its spirit."²⁶ Others agreed with Speier and condemned these products as willful efforts "to distort, exaggerate, or deny facts"²⁷ and more broadly as "cartohypnosis"—"perverse" and "socially poisonous."²⁸

While much of this criticism was a reaction to Nazism, the cartographic establishment was reaffirming long-standing norms. The preeminent John Kirtland Wright, in his 1942 "Map Makers Are Human, Comments on the Subjective in Maps," asserted that the most "fundamental" quality required of the mapmaker was "scientific integrity: devotion to the truth and a will to record it as accurately as possible." For Wright, avoiding the dangerously subjective was a matter of the cartographer's "moral qualities."²⁹ Arthur Robinson's influential postwar *The Look of Maps* was the most substantial exploration of cartographic design since Eckert. It dealt expressly with "propaganda mapping" and discussed the role of "art" in a balanced way. But Robinson feared that most mapmakers were not sufficiently "subjectively gifted," and therefore concluded that "the 'art' in cartography should be considerably more objective than it has been in the past."³⁰

This history helps explain the harsh criticism of Richard Edes Harrison's work as "not maps at all." In a world committed to the "empiricist paradigm," persuasive maps were "marginalized from the cartographic canon." The "propaganda cartographer" was "banished from the halls of science,"³¹ exiled to "not cartography land."³²

DECONSTRUCTING THE MAP

The empiricist paradigm began to develop cracks in the 1970s. New ideas in information theory and other areas, along with technological change, impacted cartographic thought and practice, and Anglo-American geography was "radicalized" by "younger, Marxist geographers."³³ But what finally brought fundamental change to the world of map scholarship was a series of "intellectually vibrant essays" in the late 1980s in which the late Brian Harley "advanced a more specifically conceptual view of cartography and launched a powerful critique of modern cartographic and academic practices."³⁴

In Harley's best-known paper, "Deconstructing the Map," he applied poststructuralist analysis—his own "deliberately eclectic" mix of Jacques Derrida and Michel Foucault—to treat cartography as graphic text, to "read between the lines of the map" and "discover the silences and contradictions that challenge the apparent honesty of the image." He rejected the "illusory distinction" between objective and subjective or scientific and artistic, seeking instead to understand "the social purposes as well as the

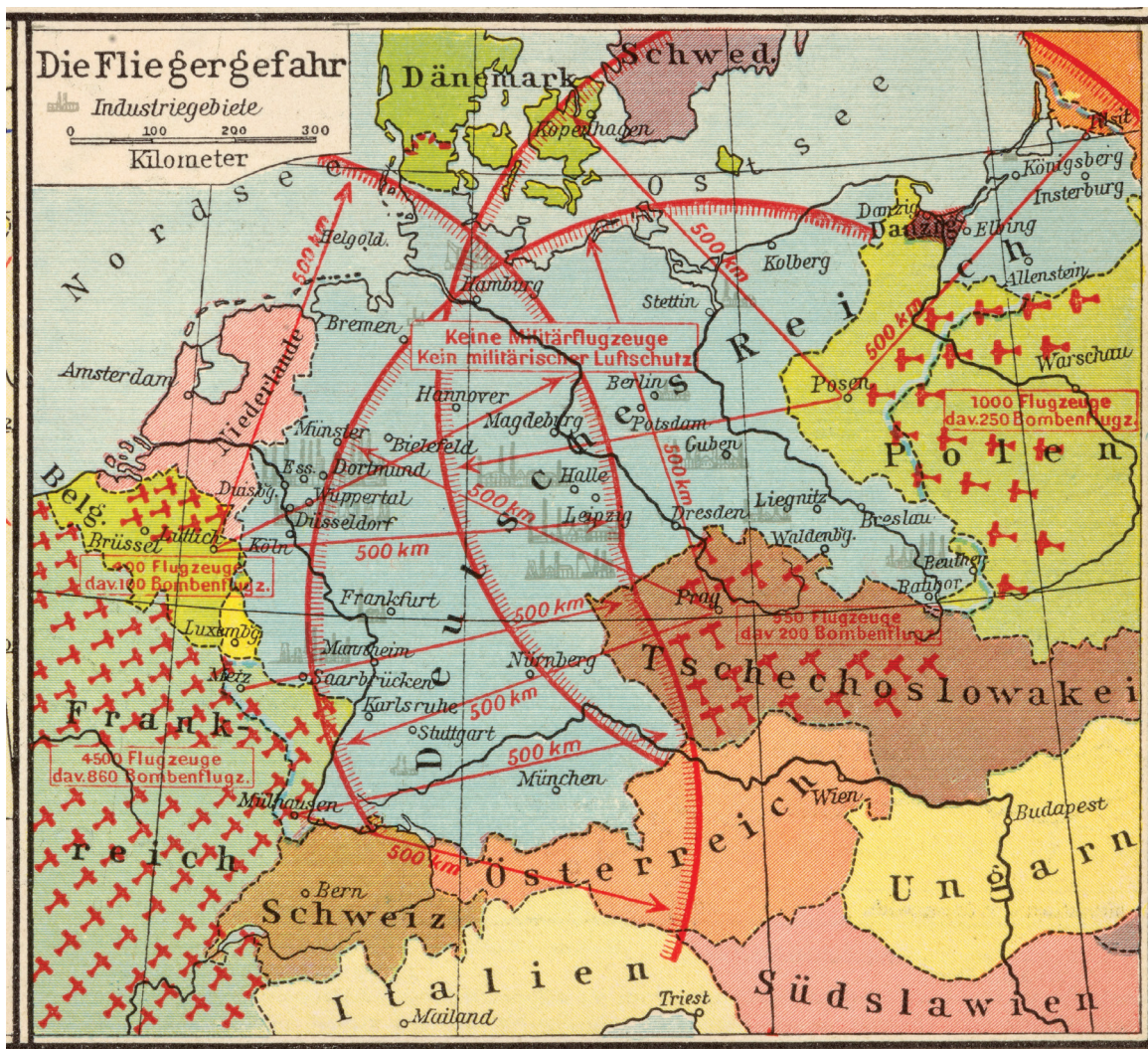


Figure 17. "Die Fliegergefahr" [The Air Raid Threat], F.W. Putzgers historischer Schul-atlas (1936).



Figure 18. Vincent Laurensz van der Vinne, "Zo gaat men veilig" [Thus Men Go Safely], in Adrienne Spinniker, *Leerzaame Zinnebeelden* (Haarlem: Izaak vander Vinne, 1714).

content of maps."³⁵ In Harley's view, the "social purposes between the lines" were typically the goals of the authoritarian elite, who used maps to legitimate their power and manipulate the weak.

Harley was not alone. Other scholars working in the same period sounded similar notes, including Mark Monmonier (*How to Lie with Maps*, 1991) and Denis Wood (whose 1992 *The Power of Maps* became a Book-of-the-Month-Club selection and a successful exhibition at the Cooper-Hewitt in New York and the Smithsonian in Washington). But something about Harley's work—not only the force of his ideas, but his longstanding reputation, his leftist, anti-authoritarian bent, his vivid polemic language—established him as "the standard bearer of the critical reconfiguration of map studies."³⁶

Over time, Harley has been accused of everything from misunderstanding and misapplying poststructuralist theory to failing to provide practical guidance for mapmakers. Aspects of his work have been attacked as overbroad, intellectually faddish, excessively political and darkly conspiratorial. One scholar recently wrote that while most of Harley's work is today "as relevant as ever," many of his "rhetorical acrobatics . . . have long passed their expiry date."³⁷

But for our purposes, postmortems on Brian Harley's work are largely beside the point: there is today a vibrant new paradigm for the study of maps and mapping. "A quarter century later, it is clear that . . . we read, interpret, and theorize maps differently," with "deep and thoughtful questioning, critique, and genealogical investigation of how particular maps came to be, or what they represent (and do not represent)." We "subject cartography to increasing scrutiny, rather than accepting it as objective, scientific, or apart from social and political influences."³⁸

WHY DOES IT MATTER?

Finally, why does it matter whether persuasive cartography is or isn't part of an academic canon of mapping? And why the particular fuss about maps? Why not paintings or prints or posters or other persuasive visual images, or for that matter, persuasion by the written word alone? Are the messages communicated by *Guernica* or *To Kill a Mockingbird* somehow less persuasive than those embodied in maps?

The answer, I suggest, is that maps are a uniquely effective medium of communication because they are uniquely *presumed* to be the source of honest, objective information. This is not a new phenomenon; we see it in **Figure 18** (#1016), a 300-year-old portrait of a mapmaker looking up from his charts. This is a plate entitled "Thus Men Go Safely" from a Dutch emblem book, chosen to illustrate the biblical passage, "I am the way, the truth and the life." More than two centuries later, Beryl

Markham wrote in *West With the Night* that a map "is not like a printed page that bears mere words, ambiguous and artful A map says to you, 'Read me carefully, follow me closely, doubt me not.'"³⁹

From our earliest memories of a parent following a road map to reach an unfamiliar destination, through our schooling and practical experience, we are conditioned today to believe the map. We instinctively see it as a trusted means of presenting "the way, the truth." That very presumption makes the map a uniquely effective persuasive tool. It can provide a marginal edge, great or small, in communicating the intended message: religious or political, military or commercial, moral or social. Particularly in these times of "alternative facts," we all benefit from a world in which the motives and interests and techniques behind *all* maps are rightly subject to more rigorous—and more skeptical—analysis.

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ENDNOTES

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- 2 Ibid., 174.
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- 4 See generally Judith A. Tyner, "Persuasive Cartography," in *Cartography in the Twentieth Century*, ed. Mark S. Monmonier, vol. 6 of *The History of Cartography* [HoC 6] (Chicago: University of Chicago Press, 2015), 1087-95.
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- Press, 1988), 282. The leftist Harley would have much enjoyed knowing, as we do now, that the map's socialist creator subtly undermined its imperialist message. See <https://digital.library.cornell.edu/catalog/ss:3293793>.
- 7 Although Palairt was born in France, he was working in England and serving as a tutor to the children of George II. Not surprisingly, he revised this map very soon after its publication, to conform to the British view expressed in the iconic Mitchell Map published in February 1755. See <https://digital.library.cornell.edu/catalog/ss:19343651>.
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- 9 See generally Peter Barber, ed., *The Map Book* (New York: Walker & Co., 2005), 284; Roderick Barron, "Mistaken Attribution: Identifying the works of Fred W. Rose," *IMCoS Journal* 146 (2016): 15–26.
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- 32 J. B. Harley, "Deconstructing the Map," *Cartographica* 26, no. 2 (1989), 4.
- 33 Edney "Origins and Development," 14.
- 34 Ibid., 1. Harley's most important papers are collected in *The New Nature of Maps: Essays in the History of Cartography*, ed. Paul Laxton (Baltimore: Johns Hopkins University Press, 2001). Detailed analysis of Harley's work is well beyond the scope of this paper, and it is widely available elsewhere. The single most thorough and scholarly assessment is Edney, "Origins and Development." See also Reuben Rose-Redwood, ed., "Deconstructing the Map: 25 Years On," *Cartographica* 50, no. 1 (2015): 1–57, essays by twelve scholars on the twenty-fifth anniversary of Harley's paper.
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