CARTOGRAPHY—THE STEPCHILD OF HISTORY¹

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The text for the lesson of today is taken from the General Historie of Virginia according to Captain John Smith, published in 1624: “For as Geographie without Historie seemeth a carkaase without motion, so Historie without Geographie wandreth as a vagrant without a certain habitation.”

There are few things in this world which can ever show the effect of the best work of mankind; maps are undoubtedly among the greatest. It has taken centuries to make maps the perfect creation of the present day, and they represent the hazard, adventure, toil and attainment of millions. To the average man, a map is one of the most uninteresting of things, a purely utilitarian creation; and yet it is the result of every age in the history of the world.

History depends, to a great extent, upon the perfection of geographical knowledge for the confirmation of records, whether of war, revolution, or the far greater work of exploration. As geographical knowledge is a basic factor in history, the study of maps is essential and of first importance to the historian.

The work of explorers has added more to human greatness and happiness than any other endeavor in the march of human progress. Without exploration, the growth of knowledge and the advance of mankind is useless, and the nations that have furthered the work of exploration have reached greatness, power and prosperity with greater happiness among their people. The nations without explorers have remained small. Nations in which the spirit of exploration has been allowed to cease have lost something of their power of influence on civilization.

A short time ago in one of our large universities, where there is a small library of Americana and other rare source material, ar-

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rangements were made for a visit of inspection by the student graduate club. Manuscripts, rare books and other valuable exhibits, a few brought forth with awesome ceremony from within safes or from behind locked doors, were shown and their value and potential and actual use explained. It seemed as if the visitors were duly impressed. Finally, they came to a fair-sized room where was filed one of the notable map collections of the country. The curator of this collection had carefully spread out on tables some of his rarest and meatiest samples. When all were gathered, he proceeded to describe these in detail, went into explanations of their significance as examples of different phases of cartographic art and science and then called attention to the extensive files of all these different kinds of maps. They covered practically all the periods of world history, with particular emphasis on the history of our own country. Feeling that he had done a pretty good job, he paused for questions. The first came as a bombshell: "What good are maps anyway?"

It might be well to take up our discussion on the basis of that simple, if somewhat disconcerting, question. But I have a major premise, which I boldly throw in at this point. Cartography—"the art or business of drawing maps or charts"—is the child of geography. But cartography has become, too, the much neglected and much abused stepchild of history.

In the early days of the making of maps, they were signposts or guides to the unknown. They expressed the concepts of a little-known or unknown world, and therefore were expressions of a basic philosophy. As knowledge increased in accuracy and extent, the basic philosophy element decreased and finally dropped out entirely, and maps became signposts to new geographic principles and historical development, as well as to social and economic progress. In the earlier days, even the few educated laymen would as soon have thought of doing without maps as without the current printed matter. In the eighteenth century, even in homes of moderate circumstances, the maps of the period were common fare.

But today! Is this true today? Are there many homes, classrooms, seminar rooms or books where maps are used, commonly, familiarly and as a matter of course? We must all somewhat guiltily, answer no. Perhaps we have so much to read, there is not time to study the maps. Perhaps we have grown mentally
lazy. Perhaps, when we have made maps, we have tried to be too economical. One of the severest criticisms of maps made today is that there is such a conglomerate mass of material superimposed on them that they are nearly impossible to read and therefore lose their entire significance. It has been found, on examination, that such writers as Latane, Schlesinger, Hosmer, and a number of others seem to have little, if any, use for maps. Furthermore, many of the deans of historiography—Schouler, Hildreth, Osgood, Von Holst, Andrews, for example—use few or no maps to illustrate and augment their superior writings. On the other hand, the exceptions that prove the rule are found in Justin Winsor’s *Westward Movement*, some of Bancroft’s works, the *American Nation* series and the series on *Diplomatic History* prepared by S. M. Boggs. It is interesting to note here the criticism of William A. Dunning of Winsor’s *Narrative & Critical History*, which, while it may be poor history, is a “must” source for every student. Dunning calls it “that peculiar example of monographic method.” He then goes on to say: “Its portentous tomes followed one another from the press in mastodonic and microtypographic majesty from 1889 till the editor’s death in 1897. Winsor’s vast and minute information and his unquestionable gifts as an editor did not save his masterpiece from a general verdict of failure except as a mass of material.” The plentiful sprinkling of maps greatly increases the importance of this work.

Even the current and best known works commonly found in and about Pennsylvania and other coastal colonies and states during the eighteenth century do not escape this criticism. To some writers of the nineteenth and twentieth centuries may be given the credit for much of the cartographic inspiration we have. One of Francis Parkman’s biographers says: “Geographers who have berated historians for paying little heed to the physiographic setting of historical events and movements have had no quarrel with the writings of Francis Parkman.” The activities and inspiration of Frederick Jackson Turner in this respect can never be measured. There were always in his classrooms and files countless maps, plotted to show many sorts of information, particularly votes of Congressmen on measures of all kinds. Dr. Craven in writing of Turner, says: “Turner gave the United States census maps a new place in the historian’s equipment. By his work the char-
acter of map materials used in history books was to a degree, at least, altered for the better."

Men have always, within the records, crude or otherwise, attempted to show their location and surroundings, to keep their bearings and record their discoveries on some form of a map. Study of these efforts has greatly aided the student, whether lay or professional, in throwing light on controverted questions of geography, ethnology and history.

Detailed accuracy was unknown in maps prior to the Columbian era. However, at a very early period, it was found that accuracy in latitude and longitude must be based on astronomical observations. The Greek cartographers led in this and we find the best example in Anaximander’s map of the world of 560 B.C. Later, Ptolemy embodied much of this early work, with many of its inaccuracies in his map. This made Ptolemy famous as a cartographer, for it served as a basis for many other maps up into the beginning of the sixteenth century. It is interesting to note that the very errors of Ptolemy—the elongation of the Mediterranean, the accordion effect on Europe, and too-far-east extension of Asia—well established Columbus’ faith in the possibility of reaching Asia by sailing into the setting sun. The greatest period of cartographic development on the old world came in the fifteenth, sixteenth and seventeenth centuries. In this country, the sixteenth, seventeenth and eighteenth centuries, with an overlapping of period and some notable cartographers, showed the greatest expansion and growth. The question arises: which came first, colonial and national expansion or the cartographic story? Penn himself sent Thomas Holme into the business of making a map for the site of a great city before he sent the settlers. The map furnished information and was also propaganda. Legitimate? Both Penn and Holme were sure of it and I think most of us agree with them.

In the seventeenth and eighteenth centuries, it was sometimes difficult to differentiate in relative importance, between the actual cartographers and the publishers. Sometimes one might in reality be both. Often the publisher lent an authoritativeness not found in the name of the cartographer, and occasionally there was no cartographer mentioned at all.

Cassini de Thury, a French scientist, may be said to have
inaugurated the present era so far as map-making is concerned. A very strong factor in the inception of this era was the idea of nationalism and of empirical science. Nationalism was spreading rapidly everywhere in the eighteenth century. Now, nationalism has become an ideology, purely symbolical and extremely difficult of definition, even by those professing this belief most ardently. Any representation of this ideology must be symbolical, too. The basis of the entire symbolism is territorial. Therefore, the map presents a ready and useful vehicle for the symbolism, or "an inevitable corollary to the national ideal." In the face of this concept, map-making received a great impetus with the growth and spread of national consciousness.

Jean Baptiste Bourguignon D'Anville was, without doubt, the greatest geographer of the eighteenth century. He represented most fully the scientific trend in the elimination of all semi-information not based on good authority, and worked for as great accuracy as was possible. For about the first time, geographers became acutely conscious of the great differences between what was known and what was only half-known. The concomitant result of this was increased interest and activity in exploration.

With more and more attention being given to various sorts of expeditions and their attendant map-making, with a growing consciousness of the need for as much accuracy as was possible, and then the urgency of placing this material before the people, either for purposes of information or as propaganda, there grew up a great school of publishers. Some of these stand today almost in the light of map-makers, because of the authoritative connotations of their names. Some such that may be mentioned were John Cary, John Gibson, Thomas Kitchin, Thomas Jeffreys, the Robert de Vaugondy family, Sayre and Bennett, Bellin, Couvens et Mortier, the Homans, and, in this country, B. Franklin and later Franklin and Hall.

The writers of the seventeenth and eighteenth centuries, among whose works travel books and geographies loomed large, were generally of the clergy or civil office. In the list appear such noble names as John Winthrop, William Bradford, the Mathers, Hakluyt, Samuel Purchas, Cadwallader Colden, William Hubbard, Thomas Thacher and John Higginson. These men knew little of the mechanics of map-making, were intent upon their words and
ideas, and so offered little, if anything, in maps to illustrate their ideas. The notable exceptions were in Hakluyt and Purchas. With the advent of the eighteenth century, however, and the increase of colonization and the beginning of westward expansion, which in turn brought up new problems of territorial control and political boundaries, there arose a need for maps to illustrate and prove various claims. As a further result, the eighteenth century became the heyday of map production. It is safe to say that more progress was shown in the 1700's in technicalities and minute details of areas covered in mapping than in any hundred year period either before or after. A strong desire and need for as good maps as could be produced, a realization of this feeling, and the effort to meet the challenge produced a noteworthy list of explorers and travelers, who turned their findings into the best and most accurate maps, for the most part, that we have for any period of our history.

I feel very strongly that in no way can the student or reader—or even, perhaps, the professor and writer—gain as keen a perception of the feelings, ambitions, trends and philosophy of any given period as by a careful study of the maps of the period. Sir Henry Fordham, the famous British contemporary student of historical cartography, says: “Maps can save the mind an infinitude of words.” We have come to realize, in our modern day, that the majority of people are eye-minded; hence our stress in the field of modern education on visual education and its methods. But, for some reason, in our work in this field, we often forget or ignore the possibilities of maps.

There are certain well known maps, chiefly of the seventeenth and eighteenth centuries, that I feel are in the “must” class for students of Pennsylvania history. We should go back to Captain John Smith’s map of Virginia, for the first picture of the southern part of the Pennsylvania area. Augustine Herrman, in the middle seventeenth century, was important because both his accuracies and inaccuracies were copied without question for the next fifty years or so. And what could be more important to a study of the founding of the Pennsylvania settlement than the maps of Thomas Holme? These are valuable, and the price of $6,500 paid a few years ago for a copy of his map of Philadelphia is an indication of what collectors will pay. The middle of the eighteenth century
is replete with cartographic material in the maps of the two Sculls, Fry and Jefferson, Dr. Mitchell and Lewis Evans. Adlum and Wallis depicted the early development of transportation and Reading Howell made the first map of the state of Pennsylvania, both in 1792.

One of the most important cartographers of the eighteenth century, Lewis Evans, was so far-reaching in his influence that I must pause here for a brief analysis of his work, even though I can add nothing to the scholarly and excellent study of Dr. Gipson. In his *An American Bookshelf, 1775*, referred to by Dr. Gipson, Dr. Lawrence C. Wroth also emphasizes the cartographic influence of Evans on Pennsylvania history.

The journey of Lewis Evans into the country of the Six Nations, together with John Bartram and Conrad Weiser, had several far-reaching results. First, there came peace between the Iroquois and the Virginians, expressed in Weiser’s treaty. Secondly, there was the Lancaster treaty between the Six Nations and Pennsylvania, Virginia and Maryland. In the third place, the publication of Bartram’s *Observations* became important in furnishing information on the inhabitants, climate, soil, rivers, production, animals “and other matters worthy of notice.” Fourthly, and by no means least, came Evans’ maps of 1749 and 1755 and the *Geographical Essays*. While the Evans’ maps, *per se*, were most far-reaching in their results, in that they became the prototype of most of the important maps subsequently published up into the nineteenth century, the *Essays* were, without doubt, far more important at that period. The basic points brought out in both the maps and *Essays* were: (1) a careful description of the country to the west of settlements; (2) information of practical value to potential traders and settlers; and (3) an appeal for settlement on the western border. We are all familiar with the opposition to, and criticism of Evans. He was an honest man, telling what he found with no embellishments of description. But he placed himself in the wrong light, at least with governmental authorities and those having what they thought were vested interests, through some of his ideas. He urged the admission of French rights, made a strong statement of the superiority of the Potomac route west over the Pennsylvania route, recognized the great importance of the Ohio country
to the British interests, and warned against private and chartered land companies. Today, I suppose we would call him a non-conformist, possibly even a "fifth columnist."

During the middle of the eighteenth century, it was charged that the French cartographers were deliberately revising their maps to show boundaries which confined the English colonies to a narrow Atlantic seaboard. The ones said to be particularly guilty in this respect were Bellin, DeLisle, and DeFer. Bellin made answer, however, that in France one followed the royal commands. The English colonists, in turn, wished for maps showing the English side of the argument. In 1755 were published two in answer to this demand, the Mitchell map and the Evans map. Mitchell's map was chiefly a political document prescribing the boundary between the Thirteen Colonies and Canada as the St. Lawrence River and the Great Lakes and was the first map carrying this boundary. Part of the writings of Evans were associated—while colonization in the east was still in process—with western expansion and a new frontier. The controversy with the French was finally settled by the Treaty of 1763 and was expressed, cartographically, in Bowles' *New Map of North America & The West Indies*, published in London in 1781.

There are, of course, many sorts of maps desirable for this or that phase of our history that are not already prepared for our consumption. Then we are forced into compilation, a fascinating but tricky field. Too many people, who feel the need of a new map, think it is a simple matter to place a mass of economic, social, agricultural, labor, political or other material on a political-division or outline map. A map compiled in this manner almost surely shows its careless and hurried formation, and generally—perhaps because of supposed necessity for economy—has so much information crowded together that its reading is difficult or impossible. I would make a strong plea for many small and very simple maps. Make them so simple that a child may understand them. A noted geographer, after many years of experience in teaching and writing, once said to me: "I think that about all one wants to say can be resolved into words of one syllable." This same idea of simplification can be used with our maps. And have you ever tried superimposing your historical data on a map
showing, by very simple methods, the physical aspects of the area under discussion? The one person now doing that sort of thing best, is Dr. Edwin Raisz of Harvard University. His maps are extremely clear-cut, instructive, simple, and at the same time are works of art. His illustrations in James Truslow Adams’ *March of Democracy* and in other works has added greatly to their value.

Let us, then, give maps a better chance of proving their worth. But let us remember, too, that maps in themselves cannot produce their highest degree of value without careful use. A map becomes intelligible only when one uses discrimination in the selection of basic forms, application to the text, information used, amount of material placed on the map, and the method of symbolism. All these requirements may be met but finally, if there is little or no intelligence used in the interpretation of the information given on a map, then it is ineffective. What I really want to say at this point can be expressed in another way in the words of Walter William Jervis, a British writer:

To travel, to visit new places and see new sights, is surely the most desirable thing in the world, but the essential of travel is freedom, complete freedom, to do, think and feel just as one pleases, and its purpose is to leave ourselves behind as much as to be rid of others. The best of all Good Companions to take with you to a strange place is undoubtedly A MAP. If you have attained to that most enviable state, of being able to be alone; if you do not need the solace of human companionship; if you can be your own philosopher and your own friend, then a map need be your only guide. A map is more than a cheap, concise and portable guide. It is as a guide that the map appeals to the ordinary user. Having none of the drawbacks, and many of the best characteristics of the human guide, a map is greatly preferable to a second-rate guide. It speaks a language that needs no interpreter, whatever your nationality; it is vivid, picturesque and accurate, without being officious, statistical or dry. A good map is clear and easily understood. If it sometimes gets lost, at least it never retires from business on the accumulated gratuities of its clients.