Abstract

Due to an embargo on the publication and spreading of new colonial information, the Netherlands Royal Geographical Society developed its own means to secure its scientific magazine with a steady flow of new topographic and cartographic knowledge about the Dutch Colonial area. Except for a fascinating program that trained young academics how to become a explorer, the society compiled and sent out hundreds of circulars to Dutch diplomatic agents, military and colonial servants abroad, to urge them to gather new topographical and cartographical knowledge on the areas they managed. Along with this circular - that provided a manual how to collect scientific knowledge on the land(scape), its population and its topographical and geological features -, went detailed instructions how to make a good accompanying map. Due to the remarkable fact that most of the colonial servants had no knowledge whatsoever on this field, the society sometimes even facilitated them with compasses and other geodetic instruments to guarantee a ample degree of accuracy. In my paper I will discuss the compilation and contents of these circulars and other initiatives taken up by the Society to raise the level of Dutch colonial cartography.

The map published in 1892 entitled the “Keij or Ewaf Eilanden voor het Kon. Ned. Aardrijksk. Genootschap trigonometrisch opgenomen door den Luitenant ter Zee H.O.W. Planten” [Keij or Ewaf Islands trigonometrically measured for the Royal Dutch Geographical Society by Lieutenant H.O.W. Planten] is one of the most important maps that was ever composed and published on behalf of the Society. The significance of the map – the most important result of an expedition that Navy officer and hydrographer Planten undertook to the Kei islands in 1889 and 1890 – is based upon more than simply the painstaking cartographic surveying of the archipelago or the precision with which topographic information about the waterways between the individual islands is delineated. The value of Planten’s masterpiece lies chiefly in the accessible manner in which he utilized a huge amount of spatial information in his travel report as well as the way he justified the methods that he used. Even before his return to the Netherlands that work earned Planten honourable membership in the Society, a remarkable demonstration of respect such as was normally only bestowed upon superior foreign geographers and explorers.

The surveying of the Kei islands is the best conceivable illustration of the cartographic task the Society set for itself. According to the founder and honourable chairman of the Society, Dr P.J. Veth, the most important expert publicist on the topic of Indian geography and cartography, with his map Planten demonstrated why it was specifically cartography that was the focal point for the Society. And he went even further; the symbiosis that was created between the map and the travel story yielded indisputable evidence of the great significance of purely geographic study in the
opening up and visualization of the Dutch colonial empire. This involved the collection of detailed geographic descriptions and their critical processing in both overview and detail maps.

Such purely geographic investigation was the core of all the cartographic activities that the KNAG carried out, both during expedition studies and during activities within the contours of the Dutch landscape. What was concerned was a collection of detailed geographic descriptions and the critical processing of these data in overview and detail maps. In its efforts to fulfil the goal it had set for itself, making its own contribution to the geographic and cartographic delineation of the Netherlands and its colonial possessions, the Society assigned itself a Herculean task. When it came to the Netherlands, after all, one could always make use of various topographic and hydrographic map series on various scales that covered its entire land mass, the result of a cartographic tradition that went back many centuries. But this was certainly not the case in the Dutch East and West Indies; there the topographic surveying of land and water had barely begun. In a cartographic sense Surinam and the Dutch Antilles were still virgin territory, and the same applied to a great extent to the Dutch islands in Asia.

It is true that during the first half of the 19th century numerous measurements were taken and cartographic data collected as a consequence of the many wars in the Archipelago at that time and the many military expeditions, and various reconnaissance and exploratory journeys had also contributed to the accumulation of geographic knowledge. But the main problem was that there was little or no connection between all these varied bits of information. So everything remained more or less at outline level and most incomplete. A change appeared in sight for that situation when in 1861 under the leadership of Professor J.A.C. Oudemans a triangular network began to be outlined on Java. From that time on the systematic cartographic delineation of the area could commence in earnest. But despite a promising start, slowly but surely this work fell prey to a course of development that is all too familiar in the history of Dutch cartography. Due to financial red tape and a plethora of bureaucratic chaos, the consequence of constant reorganisation of the executing organisations, the progress of work was tremendously delayed and after a while simply came to a standstill.

So at the moment, around 1877, when the Society set foot in the Dutch East Indies as a research and expedition target, the overall cartographic picture was quite a diffuse one. Thus far reliable maps had been made only of Java, with triangulation and cartographic depiction having come no further than that. Current maps of the other islands of the Archipelago were few and far between, and then only in the form of outline maps, without the existence of any coherent and connected body of work. Indeed, all in all the large map of the Dutch East Indies displayed quite a few blank spots. The shape of Java, the rational administrative area, was indeed familiar, but the further one travelled toward the east the less clarity one encountered. For many islands, above all for New Guinea, even the course of the coastline was still largely uncharted. The hydrographic surveying of the Indian waterways still left much to be desired at that time as well; due to the diversity of the terrain, a very small-scale fleet and a great variety of administrative limitations the normal surveying of waterways, coastlines, bays and harbours had barely made any progress.

The Geographic Society was rather despairing of the situation, one which in its opinion was mainly attributable to a chronic shortage of action on the part of the
Dutch government. Add to this the fact that that same government was quite apprehensive about the publication of maps as well as the reports and charts being collected by military and government officials in the field. Such information was only released in dribs and drabs, with most of it being made public via the magazine of the India-based Bataviaasch Genootschap van Wetenschappen (Batavian Society of Science) and the German geographic publication Petermann’s Mittheilungen.

And so the Society, including on its own behalf, left no stone unturned when it came to challenging the cartographic policy of the Dutch government in the broadest possible sense. In petitions, open letters and solicited and unsolicited advice the government was asked to take a much more active position when it came to correcting the cartographic lost ground and thus no longer ignoring the need for scientific expeditions. Similar urgency was assigned a campaign to correct the greatest hindrances to the publication and distribution of cartographic and research material, and the government was asked to thus contribute constructively to the very important need for a transfer of knowledge. Necessary knowledge, for the world of science, for the Dutch commercial and industrial realm, and above all for the people of the Netherlands who had thus far been only meagrely informed when it came to the geography and cartography of the Dutch colonial empire.

During such pleas the role of the Society itself in this process never failed to be stressed. Above all the Society wished to be a forum for the exchange of maps and associated topographic descriptions as well as for the scientific evaluation of these, preferably within an international geographic context. To facilitate the transfer of knowledge series of readings were organised, along with lectures and public discussions that gave domestic and foreign researchers, officials and military personnel the opportunity to present the results of their own geographic and cartographic investigations to a broad public. A number of general texts were used for the publication of a guide for geographic research as well as an – alas never completed – handbook for explorers that had aimed to be a Dutch counterpart to two popular English guides: “The Admiralty Manual” and the popular “Hints for travellers” that was published by the Royal Geographical Society in London.

The remaining texts were published, often accompanied by maps, in the “Tijdschrift van het Aardrijkskundige Genootschap” (Geographic Society magazine). Where it appeared that maps were lacking in instances that the editors felt were necessary, these were prepared by the small cartographic staff that worked for the magazine. Incidentally all the other maps, too, that were published in the magazine, were first checked in terms of form and content. Where unclear points were encountered, for example because they were not explained in the accompanying text, these were also corrected.

That despite all the obstacles to the collection of information so much original map material was nonetheless published in the magazine was the direct result of a policy of active acquisition among Dutch diplomats and colonial officials. “Please provide us with accurate maps and topographical descriptions!” was the core of the message of the circulars that were distributed starting in 1875 among Dutch diplomats, colonial administrative officials and military personnel. Above all maps and texts were needed so as to collect the ingredients for a much more complete map of the Dutch colonial possessions, but an upgrade in the quality of the magazine itself was the actual impetus. According to the Society there was massive response to the questionnaire, though only a small part of these stories and maps were then actually published in the magazine. According to an editor of the magazine these stories were in general ‘incredibly boring and unenjoyable’, but they did indeed contain a valuable
supply of information for everyone interested in the topic. Many other articles were considered unsuitable for publication because they contained ‘old news’, were too fragmentary or indeed too factual, or else because the reports in question were without clear-cut issues. In addition the maps that came with the articles were often too sketchy or were drawn without geometrical foundations. This had to do above all with the fact that in the education of Dutch colonial administrative officials there was simply no attention up to the early 20th century for the principles of cartography and geodetics.

Because the Society felt that the maps and the associated descriptions could only be of general use if they were brought together and analysed in a more or less uniform manner, later versions of this questionnaire were always accompanied by some practical instructions: simple rules for making a reliable outline map and a guideline with concrete instructions concerning the topics that must in any case be contained in a geographic research report. According to such instructions in May 1881, a geographic study must contain a description of the area in a general geographical sense, the climate, the people and a description of the animal and plant world. These general points must be prefaced by a few paragraphs focusing on the cartographic and topographic foundation of the geographic description: what could one say about the precise location of the area, the borders, the layout and the political organisation. In a subsequent point contributors are asked to summarise all the maps that exist of the area in question, to critically assess these one by one, and where possible to improve them. Should no map at all exist of an area, or only a map of the coastline, then a more or less accurate map should be composed. In addition there was a request for photos or geometrically reliable panoramic drawings that painted a clear picture of the character and dimensions of the landscape. People were also asked to provide lists of terms in local dialects, including geographic names and species names of plants and animals and data on the climate, the sections of the population, as well as brief descriptions of the animal and plant world, all of these being areas that were viewed in the 19th and the first half of the 20th century as part of the realm of study of geography.

But the most important way in which to give form to its own cartographic agenda was of course to organise its own programme of expeditions: between 1875 and 1958 the Society equipped more than thirty such expeditions to the North Pole, Africa, North America and the foothills of the Himalayas, but above all to the Dutch colonial territories. It must above all be stressed that these expeditions never focused on merely obtaining maps. Maps, whether overviews or detailed, were not a goal unto themselves; they always had to be the illustrative result of a detailed geographic description of the area in which travel and investigation took place.

How much significance was given to the central assignment was made clear in the procedures that were followed during the recruitment of expedition personnel and in the instructions in which the goal of the journey and the collective and individual tasks of the participants were detailed. But above all this was demonstrated by the programmes of courses that the expedition members had to take before their departure. The nature and scope of these training programmes varied according to the goal of each expedition, the specific task or the envisaged duration of the field work, but a number of topics came up in each case: general orientation concerning the objectives of the expedition. Practice with geodetic, meteorological and anthropologic instruments and other tools that are used in the collection of geologic and geodetic collections. And, finally, thorough cartographic instructions. What mattered here was
not so much for members to acquire basic cartographic skills, because it was specifically in terms of these qualities that members were selected. There was much more focus on preparing the cartographer for the difficult circumstances under which he would have to do his work, the problems that he might encounter along the way, and the alternatives that he would have. In addition he was informed as to which points he must pay particular attention when depicting a specific area. Based on the premise that a map is the source of knowledge for everything and that it is a vital part of the geographic description of an area, the cartographer had to always bear this central objective in mind. He had to take optimal advantage of the benefits that the landscape offered him; often hills and mountaintops offered him a fantastic view and panoramic perspective and were vital when it came to determining distances. A fixed rule of thumb that he always had to follow was that he was only to place on a map that which he himself had seen, and certainly not what he suspected there might be; he must pay attention to the landscape – jungle, desert, steppe, swamp - through which he travelled, to the rise and fall of the land, and he must visualize this spatial dynamic in an unequivocal and uniform manner making the best possible use of elevation figures and relief presentations. The same applied to the network of roads, including forest paths, to the rivers and their branches, the precise locations of shoals, and the currents and waterfalls that were of crucial significance because they hindered the delivery and discharge of goods and persons. And a last but at least equally relevant aspect of perception was the correct location of settlements of all sizes and the specification of the names of these settlements. After all, they formed the most important intersections of the course that had been followed.

Thanks to its strong emphasis on consistent adherence to these basic principles, the constant link of the map to the description of the area and vice versa, the ‘expedition cartography’ of the KNAG has an unequivocal nature. That uniformity was furthered even more by conscientious monitoring of the content of maps, including in relation to travel reports, which always preceded their final publication. For an outsider these maps offer little that is spectacular, and of course this is even truer when one views the often ‘empty’ cartographic picture. When, however, the story behind these maps is told, the white places slowly fade away and only then does a much more spacious geographic perspective present itself.

But despite the wide variety of maps and geographic descriptions that were prepared as a consequence of expeditions or active acquisition among colonial administrative officials, diplomats and military personnel, the overall significance of cartography for the mapping of the Dutch East and West Indies must not be overestimated. The Dutch colonial realm, above that in Indonesia, was simply too large to allow the Society to be allocated a truly concrete contribution to its cartographic delineation. Add to this the fact that all the expeditions focused on only part of a much larger area. Only in Surinam did the KNAG’s efforts focus on the systematic opening up of an interconnected area, and it is only there that the Society was able to provide a more than substantial contribution to the cartographic depiction. Of course this does not imply that the maps of the other fields of expedition have now suddenly lost their value. Certainly against the background of the constant reticence of the colonial government to release new geographic and cartographic knowledge these maps, together with all the other maps and associated descriptions of countries and peoples that were published because of the KNAG, are of elementary significance in terms of the general acquisition and augmentation of knowledge with regard to the Dutch colonial realm abroad.