ROBERT H. SCHOMBURGK AND THE BOUNDARIES OF GUYANA
Dr. D. Graham Burnett
Princeton University

It is a pleasure to have the opportunity to contribute to this celebratory volume on the life and work of the explorer Robert H. Schomburgk, whose name will long be linked to the boundaries of Guyana. Boundaries being what they are, this means his name cannot easily be separated from the lines that limit the modern states of Venezuela, Brazil, and Surinam as well—a fact that has caused grief both in the distant past and in modern memory. It is, I think, devoutly to be hoped that such griefs can be relegated to the realm of history, but history has a troubling way of forcing itself, again and again, into the present. Historians are supposed to celebrate this (indeed, they are charged to make it happen, and, in theory, derive their “relevance” from precisely such occasions), but most archival scholars are of surprisingly little use when historical facts, accidents, and happenings erupt into our midst, take up flags, and enter the fray with trumpets and a clatter of hooves. By that point the bookish types are usually in hiding.

With this in mind, then (being an historian myself), I do not intend to use this essay to discuss the merits or demerits of the lines that currently divide Guyana from her neighbors—an important problem to be sure, but one I am ill-suited to address. Instead, I will take this opportunity briefly to review several arguments I made about nineteenth-century colonial cartography in Masters of All They Surveyed: Exploration, Geography, and a British El Dorado (University of Chicago Press, 2000), a book that uses the Guianas (and Schomburgk himself) as a case study. If the conclusions are of limited value to foreign policy makers and international lawyers—those who lay maps on negotiating tables in handsome rooms and set to work with colored pens—it is nevertheless my hope that these observations will inform future thought about national boundaries in South America and elsewhere, diffusing unwelcome tensions, and reminding thinking people of the quirky means by which uneven paths across broken ground come to be weighted with such fearsome power. Along the way—and perhaps most significantly for the readers of this volume—we will have an opportunity to consider Schomburgk’s geographical work in British Guiana in the 1830s and 1840s in some detail.
Let me begin from the perspective of the history of cartography. For several decades a group of historical geographers, historians of science, and art historians have worked in an intensive way to understand the history of maps. On the one hand this means understanding the story of how maps have been made (the surveying practices, the measuring instruments, the printing techniques, etc.), and on the other it means understanding the effects that map making and map use have had on other aspects of historical change: nation building, warfare, globalization, etc. So, for instance, you might have a history of the Mercator projection that showed how it was devised as an approximation of certain quite complex geometrical properties that can be preserved when representing the surface of a sphere on a plane; at the same time, you might have a history of the ways that the Mercator projection was used by sea-going navigators in the early modern period, and what lasting effects it has had on how people see the world. (In fact, both such histories have been written, and they make very interesting reading).

These sorts of investigations have firmly reinforced something that cartographers and map users have long understood: that maps are not just simple, value-free transcriptions of the surface of the earth onto paper. Maps have makers and those makers have ideas; those ideas find their way into the maps. This can be very obvious (a certain cartographer might depict the Falkland Islands as part of Argentina), or much more less explicit: since each map is the product of choices about what to depict and how, many subtle decisions will shape the final product in profound, if not immediately evident, ways (for instance, will the map depict human geography at all? if so, whose? will it show how to get from place to place, or just the places themselves?). Not only is any given map the result of specific answers to a host of such questions, every map is also the product of some process of work in the field, collecting data about locations. These techniques have changed a great deal over the last two hundred years, and to make sense of a particular map it is necessary to pay close attention to who did this work and how.

Research on these questions has been done for maps of all kinds—Renaissance sea charts, medieval cadastral plots, early national cartographies. One of the most fruitful areas of study has involved colonial and imperial mapping. In these situations distance is a central problem, and geographical knowledge plays a salient role in organization and administration of geographically expansive domains. Imperial powers have long used maps both practically
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maps of all kinds— lots, early national study has involved ations distance is a plays a salient role empirically expansive ips both practically (to direct military activity and coordinate resource use) and symbolically (to manifest and celebrate their domains). By the early twentieth century, Europe and its weedy, truculent, and diasporic peoples claimed territorial sway over some 85% of the surface of the earth. These remarkable claims (still since shown to have been extravagant) were both made and authorized by means of maps, and the study of just how this happened has kept a considerable number of scholars busy for quite some time.

Such questions occupied me from 1994 to 2000, during which time I researched the geographical codification of colonial territory in northern South America. I had several things I wanted to understand: How did the explorers of this region actually make their maps? How did the regions they visited go from being thought of as terra incognita (“unknown land”) to being understood as a bounded colonial possession? What role did the maps made by geographical explorers working in the interior play in this transformation? In what ways did maps fit together with other texts and images—travel accounts, historical narrative, beaux-arts depictions—to create a sense of a coherent, unified place? For whom was this representational enterprise intended, and how were its products disseminated? I was particularly interested in understanding how maps worked in different ways in different communities: for an explorer like Schomburgh, a map emerged from a process of active engagement with the land and its people; it reflected his encounter, recorded his experience, and served as a tool for negotiating unfamiliar places. For colonial administrators in local capitols and distant metropoles, the same map could serve very different functions: for such users the blinkered and blurry view of an actual explorer walking the land had to be left behind (even erased), since the map needed to represent the place itself, not the story of a particular passage through the place. Finally, since the legacy of these processes was an array of modern nation states, which had inherited a hornet’s nest of boundary disputes and controversies, it seemed to me that rigorous attention to the history of what we might call “colonial spatial practices” might cast certain post-colonial conflicts in a new light.

These may seem like nebulous, or overly complicated notions. But I sensed at the time that the literature on mapping and colonialism needed to be pushed a little bit. That maps were a tool of empire seemed clear enough, but it was too easy simply to leave it at that. It was necessary, in my view, to show how these powerful graphical texts were bound up in the actual dynamics of colonialism, to show that they revealed multiple perspectives and served conflicting
agendas. Fine-grained historical analysis of some actual maps and their making promised to nuance truisms about the power of colonial cartography.

It was with these ideas in mind that I headed into archives and libraries in London, Oxford, Cambridge, and Georgetown, intent to recover the story of how British Guiana took shape on paper. Let me summarize some of the things I learned about this process.

In the first place, it is necessary to have a clear understanding of the surveying practice used by interior explorers like Schomburgk. This practice, traverse surveying, involved making an overland or riverine passage equipped to maintain a record of one’s position. This was done using instruments and techniques very much like those deployed by maritime navigators roaming the oceans: the explorer carried the tools necessary to determine his longitude and latitude (by means of celestial observations). As he pushed into unfamiliar regions he regularly stopped to perform these observations and calculations, and to record these “fixed points” that nailed his meandering path to the ground by means of the stars. Over the days, weeks, and months of the journey, the route of the explorer became a line on his emerging map. By sighting distant promontories and other geographical features along the way, he was able to sketch in topographic detail; by doubling back, closing the loops of his paths, and resighting the same objects from more than one place, he gave additional rigidity and authority to his survey.

This may seem relatively straightforward. And indeed the outlines of this procedure were more than a century old by 1835, when Schomburgk embarked on his first expedition into the interior, in the service of the Royal Geographical Society. At the same time, however, the techniques for fixing those coordinate points had changed a great deal as a result of late-eighteenth- and early-nineteenth-century developments in navigational technologies (for instance, the codification of accurate tables of lunar motion, the increasing precision of compact and affordable angle-measuring instruments like the sextant, and above all, the revolution in chronometry in this period, which made possible portable watches accurate enough to serve as astronomical regulators). Since my training was in the history of science, I spent a good deal of time in Masters of All They Surveyed reconstructing these technologies, and showing the disciplines that were involved in establishing good “fixed points” amidst the challenges of a difficult environment remote from any astronomical observatory.

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But we can pass over those issues here. Instead, let us turn to the question of how the coordinates of a “fixed point” become a significant cartographic feature. Unlike sea-going navigators, who merely needed to keep track of where their ship lay in the blank field of the ocean, geographical explorers needed to transform the blank spaces on the map into places. To put it another way, the globe-encompassing grid of longitude and latitude guaranteed the existence of any given coordinate point. The question for the cartographic surveyor was: “What stands on the ground at each of those points?” This question points to the significance of landmarks and landmarking in the process of interior exploration. The landmark was the link between the map and the ground, since it anchored the surveyor's fixed points both to the actual place in the world and to his cartographic representation of that world. Landmarks were thus testable propositions that bound sites in the interior to sites on the map, since they gave future explorers a place to stand when they re-did the observations of their predecessors in order to verify their accuracy.

In this context it is easier to understand the great attention paid to landmarks in the work of interior explorers. In the case of Schomburgk and the Guianas, this attention took material form in the elegant large-format illustrated volume *Twelve Views in the Interior of Guiana*, published in London in 1841, and now highly prized by collectors. In this book—an example of a significant genre in the period—Schomburgk composed a text about the landmarks of the interior, depicting them in lithograph illustrations, narrating their history and significance, describing his visit to these sites, and attaching them to their geographical coordinates. A key map positioned them in a cartographic field. Taken as a composite text, the *Twelve Views* powerfully deployed word, image, and a mathematical cosmography to present the Guianas to readers in Britain, Georgetown, and elsewhere.

There is more to say about this remarkable text, since it affords an interesting opportunity to consider some of the questions I raised earlier in this essay. For instance, I believe a close reading of the *Twelve Views* reveals some of the tensions that pulled at colonial maps: I argue in *Masters of All They Surveyed* that cartographic landmarks meant different things to different folk, and functioned in different ways in different worlds: for an explorer in the bush, they were a crucial way to negotiate the terrain; for those without mud on their boots, landmarks could more easily serve as symbols of a place, vignettes images that could hang on a wall. Reframed by familiar pictorial conventions, they could even make a very foreign place feel familiar.

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Making these and similar claims in more detail, I have tried to suggest that the process of exploratory surveying in the age of empire involved a set of subtle oversights and slippages: to make a map suitable for colonial administrators involved a process of gradual effacement of many traces of the explorer's peripatetic and piece-meal labors. The contingencies of a passage—lines of sight, chance meetings, the information of guides, the geographical deductions and hypotheses that actually shaped the bush-sense of a savvy traveler—were inked over, and the resulting cartography better suited those who tended to conceive of maps as chess-boards for geopolitics.

Which brings us back to the question of boundaries. When Robert Schomburgk returned to South America in 1841 he carried a formal commission authorizing him to undertake a survey of the boundaries of the colony of British Guiana. As a result of this authorization he was newly equipped with a set of surveying instruments of high quality, and he had the resources to arrange a sequence of looping, well-manned expeditions into the interior. While military support and reasonably strong official backing (at least at first) distinguished this second phase of his exploration from the earlier one (between 1835 and 1839), Schomburgk remained at heart a traverse surveyor, formed by the practices of such men, who sought out unknown lands and made their passages into the stuff of maps. It is a central contention of Masters of All They Surveyed that the techniques and sensibilities of this kind of exploratory surveyor were fundamentally in conflict with the duties of a boundary survey. A geographical explorer accustomed to traverse surveying in the world's cartographic white spaces conceived of his activity as essentially that of boundary-crossing: the tacit command was plus ultra ("further, beyond!"), and the task was to find the line that separated the known from the unknown (an enterprise involving its own interesting array of historical, geographical, and rhetorical exercises) and then to cross over, to transgress this limit.

Years of experience in this activity of boundary-defying made awkward preparation for life as a boundary-definer. Herein lies, I believe, no small part of the deep explanation for the contested boundaries, not only of Guyana, but also of a considerable number of other post-colonial nations.

Other factors, of course, were at play. Anyone familiar with the many volumes of the British Guiana boundary arbitrations assembled at the end of the nineteenth and the beginning of the
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twentieth centuries will be well aware of the numbing and intricate
arguments marshaled by the different parties as they sought to
justify their positions. And those who have dipped into the
diplomatic history of these international proceedings know that
backroom dealing and realpolitik considerations hedged the
process throughout. But the fact remains: these strategic maneuvers
unfolded on a base map that was the product of the surveying
practices I have described. Embedded in that map and its ancillary
documentation were traces of those practices—traces of multiple
boundaries defined and surpassed in accordance with the plus
\textit{ultra} of the interior explorer. Over these concentric and broken
lines diplomats and demagogues would wring both hands and

A real appreciation of all this demands a more exhaustive and
meticulous study of Schomburgk's surveys and their aftermath than
space here allows. But for those who are curious, it is this study
that I offer in the book's penultimate chapter, "Boundaries: The
Beginnings of the Ends." There I try to show how the techniques of
traverse surveying, position fixing, and landmarking were deployed
in the commissioned boundary survey, and how these practices—
in conjunction with Schomburgk's predilection for overstepping
limits—left significant ambiguities in the cartography of the colony.
At the same time, by focusing on the actual field work of the survey,
I reveal the degree to which those many contingencies of an actual
passage—interpretation of signs, cross cultural exchange and
mispription, idiosyncrasies of view and desire—gave inflections to
the boundary itself. The thread of the route was spun out of such
elements. By pulling here, and unwinding there, the line on the
map could begin to unravel: What was the actual name of this upper
reach of the river? It depended on which group of Amerindians
you asked. Where did the river end? It depended on the season
and the weather. Where did that mountain range run? It might
just depend on how high you could climb to look. While much ink
was spilled in the nineteenth century (including by Schomburgk
himself) on the idea of "natural" boundaries—boundaries that
conformed to nature and her contours—it took a great deal of
manual and discursive work to establish such a thing in the world.
Here, as elsewhere in the history of science, important features of
nature had to be made, not merely found.

Taking these aspects of field practice seriously, and lingering on
the "nature" of maps, permit us to look with new eyes at the bright
red boundary lines traced with such an even hand on an official-
looking map. Or at least this was my hope as I completed my study.
It has now been some years since I packed that study off to the press, and I am now at work on quite a different project. While the historical cartography of Guyana still takes up most of the wall space in my home, my thoughts have not been with the Schomburgks for some time. Returning to the subject here affords me one last opportunity to thank the many people who were so generous and welcoming to a young scholar embarking on his first real research. I single out only Sister Menezes by name, since she was such a powerful inspiration, but there were many others, in England, Guyana, and the United States too. My thanks to all of you.

And a thank you, too, to Robert Schomburgk, on this commemorative occasion. My wife and I lived with him in our midst for the first half of our life together, and I thought through with him, for better or worse, nearly every day of his travels in South America. Some readers of Masters of All They Surveyed have understood me to have offered a somewhat deflationary view of the man and his work. Nothing, however, could have been farther from my mind. While I can claim no deep or intimate knowledge of his inner life, I still sought throughout my research and writing to show how his experiences—his aspirations and disappointments, his technical skills and field sense, his sweat and voice—were inscribed on the maps he made. Cartography in the nineteenth century could be, among other things, a kind of biography.

As for cartography today, it has happened since the publication of the book that I have been asked by a government official whether some historical map, recently come to light, might represent a breakthrough on the question of the modern boundaries of Guyana. Thus far the answer has been no, as I suspect it always will be. After all, the upshot of work in the history of cartography, and much of the history of science more broadly, is really this: answers to political questions, questions about who gets what, are not “found” in nature, or, indeed on maps. Such answers must always be invented—made, crafted, cobbled, confected. They are the product of talk and shove, of persuasion and force, and always, finally, of some sort of acquiescence. As a result, no answer can ever simply “turn up”—emerging from a dusty roll hidden in the basement of the colonial office, or taking dark and solid shape out of the rising mist on a mountain morning. Robert Schomburgk, I suspect, no stranger to ministries and mountain tops alike, knew this as well as anyone.
REFERENCES


Burnett, D.G. 2000. Masters of all they surveyed: 
_Exploration, Geography, and a British Eldorado._ University of Chicago Press.


Jackson, Basil. _A Course of Military Surveying, Instructions for Sketching in the Field, Plan Drawing, Leveling, Military Reconnaissance, etc. and Embracing a Variety of Information on Other Subjects Equally Useful to the Traveller and the Soldier: and Surveying Instruments, etc._ London: W.H. Allen and Co., 1838.


