

CRITICAL PERSPECTIVES ON EMPIRE

The Imperial Security State

British Colonial Knowledge and
Empire-Building in Asia



JAMES HEVIA

CAMBRIDGE

The Imperial Security State

The Imperial Security State investigates an important but under-explored dimension of British imperialism – its information system and the close links between military knowledge and the maintenance of empire. James Hevia's innovative study focuses on route books and military reports produced by the British Indian Army military intelligence between 1880 and 1940. He shows that together these formed a renewable and authoritative archive that was used to train intelligence officers, to inform civilian policymakers, and to provide vital information to commanders as they approached the battlefield. The strategic, geographical, political and ethnographical knowledge that was gathered not only framed imperial strategies towards colonized areas to the east but also produced the very object of intervention: Asia itself. Finally, the book addresses the long-term impact of the security regime, revealing how elements of British colonial knowledge have continued to influence contemporary tactics of counterinsurgency in twenty-first-century Iraq and Afghanistan.

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*British Colonial Knowledge and
Empire-Building in Asia*

James Hevia

University of Chicago



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Contents

<i>List of figures</i>	<i>page</i> vi
<i>Acknowledgments</i>	vii
1 Introduction	1
2 The military revolution of the nineteenth century	17
3 Imperial state formation, the professionalization of the army and the making of experts	34
4 Forming intelligence, making an archive	53
5 Disciplining the space of Asia: triangulation and route books	73
6 Regulating the facts of Asia: military reports and handbooks	107
7 The uses of intelligence	152
8 The effects of the imperial security regime in Asia and Great Britain	193
9 Imperial security and the transformation of Asia	249
<i>Bibliography</i>	270
<i>Index</i>	294

Figures

5.1 Page from Bell's <i>Turkey in Asia</i> (1889)	page 77
5.2 Use of prismatic compass, from Mockler-Ferryman	81
5.3 Plane table and proper use, from Mockler-Ferryman	82
5.4a Example of a boundary pillar, from the Pamir Commission	98
5.4b Synopsis of boundary markers from House of Commons Sessional Papers	99
6.1 Sketch map showing gun emplacements of Tung-Liang-Shan Fort	141
6.2 Panoramic view of the country east of Chin-kiang City	142
6.3 Hsiang Shan from the summit of Yu Shan	143
6.4 Battery no. VI Kiang-yin	143
6.5 Field of fire of guns at Chen-kiang	144
6.6 Gun crew loading cannon at Battery No. III, Hsiang Shan	145
6.7 Chart showing kinds of guns at Hsiang Shan	146
8.1 Buddha, from the Pamir Commission	214
8.2 Mad Mullah – <i>The Graphic</i> September 18, 1897	234
8.3 Burning a fanatic – <i>The Graphic</i> February 8, 1879, p. 140	236
8.4 Fanatics in chains – <i>The Graphic</i> November 28, 1896, p. 678	237
8.5 Destruction of Shelan – <i>The Graphic</i> August 28, 1897, p. 280	238
8.6 Assault – <i>ILN</i> , December 18, 1897, p. 875	239
8.7 Sniper fire from above – <i>ILN</i> , December 18, 1897, p. 882	240
8.8 Massacre of cut-off soldier – <i>ILN</i> , December 18, 1897, p. 883	241
8.9 Burning villages – <i>The Graphic</i> February 5, 1898, p. 4	242

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1 Introduction

From Great Games to imperial security

Late one night in northwest India, as a newspaperman was about to call it a day, two men arrived at his office and asked if they could speak with him briefly. The tall, red-haired one introduced himself as Daniel Dravot and the other as Peachy Carnahan. In explaining their visit, Dravot said that he and Carnahan were fed up with the governing class in India and had decided to go to Kafiristan to become kings. Neither of them knew very much about Kafiristan, however, other than that it had “two and thirty idols.” Nor were they certain where it was or how to get there. They had come to the newspaper office in the hopes of gaining information on the nature of the place and its geographic location. Thereupon, the newspaperman “uncased the big thirty-two-miles-to-the-inch map, and two smaller Frontier maps, hauled down volume INF-KAN of the Encyclopaedia Britannica,” brought out a file containing an address by Henry W. Bellew¹ on Kafiristan, and laid before them Wood’s *Sources of the Oxus*.² Dravot and Carnahan began their studies and soon discovered that they were familiar with at least part of the route to Kafiristan – they had campaigned with “Roberts’ Army” in the region.³

¹ Henry Bellew was a surgeon in the Bengal Army who published extensively on the tribes and races of the Northwest Frontier of India and Afghanistan. He learned Pashtu, the language of the Pathan tribes of Afghanistan and present day Pakistan, and published a grammar and dictionary of the language. His linguistic expertise led to his inclusion on a political mission to Afghanistan in 1857 and to Kashgar in Chinese Turkestan in 1873–4. The lecture in question appeared under the title “Kafiristan and the Kafirs,” *Journal of the United Service Institution of India* v. 8, no. 41 (1879).

² Probably Captain James Wood, *A Journey to the Source of the River Oxus* published by John Murray in London 1872.

³ General Frederick Roberts, who commanded the Indian Army in the Second Afghan War.

This critical scene near the beginning of Rudyard Kipling's "The Man Who Would be King"⁴ suggests a very intimate relationship between imperialism and certain kinds of knowledge. In this case, the knowledge in question involved what could be culled from precision maps like those produced by the Trigonometric Survey of India, from military reconnaissance, and from summaries of authoritative knowledge to be found in works like the *Britannica*, whose individual country entries were organized through nineteenth-century Europe-wide categories of the statistics of states. The technical materials the newspaperman thought essential for the two adventurers were, moreover, precisely the sort of sources that, by the 1880s when the story was written, had become crucial for planning military campaigns in little-known places like Kafirstan. More to the point, these works or ones like them could be found in the secret archive of the Intelligence Branch located at Simla, the unit responsible for providing the information required to plan the military campaigns of the Indian Army.

The Indian Army Intelligence Branch, and the forms of knowledge it produced, is the focus of this study. The records of the Branch, its library, archives and correspondence, make quite clear the scope and depth of the epistemological project at the core of British imperialism. Scholars of British colonialism in South Asia such as Bernard Cohn (1996) and Christopher Bayly (1996) have noted the close connection in the British Empire between the production of knowledge about human and natural resources and the maintenance of imperial control.⁵ At the same time, however, the works of Cohn and Bayly have tended to focus attention on the political reports of colonial administrators; army intelligence has seldom been an object of investigation in colonial studies.⁶ As a result, there has been little critical study of the forms military knowledge took. This may in part be because materials generated by British intelligence units in India are somewhat scattered through archival depositories such as the India Office and War Office records. But the fact that Indian Army records are not centralized in Britain does not wholly account for the dearth of studies on military knowledge practices. Instead, scholars who address epistemological issues of empire have, like Cohn and Bayly, tended to focus attention on the civil administration of British colonialism or on imaginative literature such as the works of Kipling.⁷

⁴ I use the version of the story to be found in Irving Howe, ed., 1982: 38–39.

⁵ See the essays in Burton, ed., 2005, and Stoler, 2009.

⁶ The organization of the India Office Records located in the British Library, London, encourage such divisions. Political administrative records are catalogued in indexes labeled "Political and Secret" or "P&S," while military indexes are labeled "MIL."

⁷ Edward Said was extremely influential in directing attention to literature; see 1994. T. Richards's study of the imperial archive is essentially literary history (1993). For his

But perhaps of more interest is that even military historians seldom address intelligence, let alone its forms of knowledge. As Christopher Andrew has observed, if military intelligence is not completely ignored as a legitimate topic of historical investigation, it is relegated to a footnote (1992: 1). Andrew provides a number of explanations for this. First, he points out that even if intelligence was acknowledged as a “missing dimension” in diplomatic, military and institutional histories of the modern state, it is not always easy to gain access to the documentary record, partly because the declassification of sources remains a tricky business. The officials of former imperial states remain reluctant to give up secrets.⁸ A second difficulty has to do with the fact that intelligence is irreversibly linked to popular and sensational images of secret agents, spy-craft, espionage and counter-espionage and, of course, James Bond. As Andrew, in collaboration with David Dilks, put it on another occasion, “the treatment of intelligence by both mass media and publishers often seems ideally calculated to persuade the academic world that it is no subject for scholars” (1984: 3).

Nevertheless, some scholars do study intelligence. A substantial amount of attention has been given to code-breaking, signal intercepts, and the impact of the two on warfare. Much of this scholarship has focused on the twentieth century, its great wars and the Cold War.⁹ However, such research operates within a definition of intelligence that appears narrowly circumscribed. Andrew and Dilks, for example, define intelligence as information obtained by covert means. If this is the case, then the great mass of material collected in the late nineteenth century by British and continental armies would not qualify as intelligence because much of it was collected from published sources and collated into intelligence genres, some of which were printed openly as official government publications.

part, Bayly gives little attention to the military, except for the Survey of India (1996). In his work on the Trigonometric Survey of India, Edney separates mapping operations from practices involving the collection of data on populations and built environments (1997). However, as will be clarified below, officers from the Survey were often involved in intelligence operations.

⁸ Andrew makes this point in an article that begins with observations concerning how difficult it has been for scholars to convince the British government to release intelligence records; see 1987: 9. Sometimes materials that had been declassified are reclassified as state secrets. In 2006, the Bush administration ordered various sources on open shelves in the National Archives, Washington, DC, to be removed and reclassified as secret or top secret. Some of this material was already posted in the National Security Archive maintained at George Washington University. See “National Archives Pact Let C.I.A withdraw Public Documents,” *New York Times*, April 18, 2006, and related stories found through *Factiva* on the internet.

⁹ The literature is extensive. See, for example, the articles in Andrew and Noakes, 1987 and Robertson, 1987.

Moreover, often little attention is given in these studies to how novel it was for military intelligence units to be set up as discrete parts of armies.¹⁰ Most such units were a product of military reform and army reorganization, much of which occurred under the impact of technological change and rationalizing scientific thought. In the case of Great Britain, the intelligence units of the British and Indian armies were created after the Franco-Prussian War of 1870–71. Their emergence resulted from what Corrigan and Sayers referred to as a “cultural revolution” (1985) in Britain, one that through the collection of statistical data and the creation of new institutions by Parliamentary commissions radically altered the structure of the British state over the second half of the nineteenth century.¹¹

Two developments in particular are important for understanding what came to be called intelligence. One was the inauguration of a merit-oriented civil service system, the effect of which was to produce a cadre of professional, educated officers in the British Army by the end of the nineteenth century. These “new men” made British military intelligence. The second development had to do with the impact of empiricism and the natural sciences on modes of governance in Britain. The direct effect of the growth of the nineteenth-century applied sciences on military intelligence was to form it into a discipline believed to be governed by rational principles. Intelligence became an ordered set of practices for acquiring, classifying, managing, filing, storing and recovering military statistics. And while some of the material gathered as intelligence was acquired through military reconnaissance, vast amounts were “legible”¹² at a distance. That is, intelligence officers could draw on the great wealth of statistical information published on a regular basis by European states undergoing their own cultural revolutions.

Military statistics, a category shared by armies across the continent, made it possible for intelligence officers to compile (to use their terminology) and compare intelligence on foreign armies; to gauge as it were the relation of forces between armies. In the British and Indian armies, military statistics came to be “packaged” in standardized forms. These forms were route books, precision maps, handbooks and military reports, the central genres of intelligence well into the twentieth century.

¹⁰ One significant exception is Thomas Fergusson (1984), although his work is more of an institutional history than an inquiry into the nature of intelligence.

¹¹ As will be clear in what follows, “statistics” is here used in its nineteenth-century sense as both numerical and descriptive data.

¹² I take the term from James Scott, whose work on the forms in which the state was made legible to its administrators informs much of this study; see 1998.

Works such as these made up a renewable and authoritative archive that was used to train intelligence officers, to inform civilian policymakers on military matters, and to provide vital information to commanders as they approached the battlefield. And when the battles were over, it was the intelligence officers, the commanders and controllers of military information, who wrote the official histories of campaigns.

Military intelligence involved something more as well. The information that accumulated in intelligence archives was employed both to evaluate the capacities of rivals, and to imagine what would happen if conflict arose. Intelligence became the site where planning for future wars was situated, where officers could practice for war and gain the necessary skills for going to war. In Great Britain, but also in European armies – at least from 1871 forward – there emerged permanent war-planning and training regimes. Intelligence provided the basic information, the raw material for such undertakings.

Thus, before code-breaking, spying and electronic surveillance came to dominate what was understood as military intelligence, these other forms of military knowledge informed the workings of imperial states. It is a central argument of this study that military intelligence was a product of the new mechanisms of state formation, the disciplinary and regulatory regimes, to use Michel Foucault's terms, that transformed European states in the second half of the nineteenth century into militarized polities.¹³ It makes little sense, I believe, to separate intelligence, to say nothing of armies and militarization in Europe, from these processes. Foucault, it will be recalled, found more than a metaphor in the practices of eighteenth-century armies. Army discipline, particularly those aspects that involved making soldiers, was one site of the emergence of a disciplinary regime that re-formed "docile" bodies, whether in schools, prisons or on the parade ground (1979: 135–69).

While Foucault's notion of the role of discipline in the transformation of European states in the nineteenth century is well known by way of *Discipline and Punish*, his theorization of regulatory regimes is less known, perhaps because he wrote no book on the subject. In lectures delivered in 1978 at the Collège de France, however, Foucault explored the notion that privileged the survival of the state (*raison d'état*) over law and conventional notions of sovereignty. *Raison d'état* emerged as a principle of political theorization with the collapse of the Holy Roman

¹³ On the militarization of Europe in the nineteenth century, see McNeill, 1982, and the articles in Gillis, ed., 1989, especially the essays by Best and Geyer. Also see Pick (1993), who argues that fears of a cross-channel invasion fueled militarization in Great Britain.

Empire and the realization that all states were now in fierce competition with one another. The state was to be preserved, Foucault observed, by means of a “regulatory idea of governmental reason” that posited the state as a “principle for reading reality” (a principle of “intelligibility”). The application of governmental reason, a set of applied techniques, produced statistics and put various forces and resources at the disposal of the state at any given moment. From this statistical knowledge of the state, officials could then formulate “tactics” that disposed or arranged “things so that this or that end may be achieved through a certain number of means.” Foucault called the application of tactics to arrange and achieve a desirable end the “arts of governance” or “governmentality,” whose significant historical effect was the governmentalization of the state (2007: 98–109).¹⁴

In the new European order of states, the objective was to arrest or modify any internal processes that might disrupt the smooth running of an individual state and externally to strengthen it against competitors. Rather than being based on classic notions of sovereignty such as divine right, the arts of governance focused attention on the preservation of the state as a sovereign entity, as opposed to the continuation of a monarchical line (2007: 262–89). It is this notion of preservation – the idea of sustaining the integrity of the state, especially against external threats, as an end in itself – that is of concern here.

With respect to other states, the officials of any one state had to be in a position to gauge the potential threat that a rival might pose. They did this by analyzing the statistics of other states. Then, rather than drawing on a “combination of legacies through dynastic alliances,” they sought to arrange a “composition of state forces” in “provisional alliances” (through diplomacy) to offset the power of one large state or the threat of a combination of smaller states. Such alliances were expected to preserve a relation of forces, a dynamic “rationalization of forces,” producing a provisional and contingent “balance of power” (2007: 293–96).

Those responsible for evaluating the strength of others and fashioning strategic alliances made up what Foucault referred to as an assemblage

¹⁴ The term “governmentality” is well known. Less known perhaps is the cluster of expressions of which it was a part. Foucault introduced the term in a lecture on February 1, 1978, which was the fourth in a series of thirteen lectures that actually began with the one on March 17, 1976, wherein the notion of “bio-power” was introduced, and extends into at least the first three lectures of 1979. My sense is that governmentality is only sketched out in the February 1 lecture and that a full understanding of his use of the term, which would include the military-diplomatic apparatus, only comes with a reading of the sequence of lectures between 1978 and 1979; see 1997: 239–63; 2007; and 2008: 1–73.

or a “mechanism of security” responsible for governing external relations.¹⁵ He called this assemblage the military-diplomatic apparatus. The key strategic term in this array, according to Giorgio Agamben, is apparatus, and it is worth briefly considering Agamben’s argument for its centrality in Foucault’s thought. Apparatus is the English translation of the French word *dispositif*. It is a network established between a heterogeneous set of elements such as discourses, laws, police measures, philosophical propositions, buildings and institutions. Second, an apparatus always has a clear strategic purpose and is always part of a power relationship. Lastly, the apparatus appears at the “intersection of power relations and relations of knowledge” (2009: 2–3).¹⁶

Thus, the military-diplomatic apparatus was made up of a set of heterogeneous elements. This particular assemblage included theories of human behavior, rules of diplomacy, technical knowledge of ballistics and logistics, specialized forms of writing, army barracks and drill fields, protocols of behavior, maps and diagrams, and so on, all of which could be commanded to be disposed in provisional and contingent arrays. This security mechanism came to be situated at the intersection of the state’s capacity to defend itself in alliance with others and the knowledge possessed by state officials of their own strength and that of their “enemies” and “friends.”

Henceforth, warfare was no longer thought of as righting a wrong or as an expression of dynastic ambitions, but rather as interstate politics pursued by other means. War erupted, it was thought, at the point where the persuasive and rhetorical powers of the diplomat became insufficient to maintain a balance in the relations between European states. War persuaded others to alter their ways and perhaps even taught the lesson that there were consequences to disrupting an international equilibrium. But before warfare could become rhetorical or pedagogical, armies had to be prepared to go to war.

Foucault argues that preparation for war required the development of a “permanent, costly, large, scientific military apparatus within the system of peace.” What did this element of the apparatus look like? First, it was made up of professional soldiers who saw the army as their career. Second, it was made up of a permanently armed structure that in time of war could also operate to recruit more participants. Third, it comprised an infrastructure of depots, strongholds and transport networks; in other words, a supply and logistical capability. And lastly, it

¹⁵ The internal element of security was the police.

¹⁶ The source Agamben draws on is an interview to be found in Gordon, ed. 1980: 194–96.

was made up of a form of knowledge concerning the strategy and tactics of warfare and “autonomous reflections on military matters and possible wars” (2007: 300–305). This formation produced a host of effects, the primary one of which was the condition, novel in the nineteenth century, of permanent preparation for war. The security mechanism produced, if not garrison states, then militarized states, states where there was (is) an unquestioned acceptance of the necessity for nourishing the apparatus, because only then could a balance of power be realized and the security of the state insured.

This study is about the military part of the security mechanism, especially the fourth part identified by Foucault, the part made up of the specifics of military matters and the forms of knowledge related to intelligence. As will be discussed in Chapter 3, this part of the apparatus took on new dimensions from around the middle of the nineteenth century in Europe by way of techno-scientific reflections on logistics – the calculus for mobilizing, concentrating, and preserving men and materiel in motion. To dispose armies and their supplies required planning. But to plan, to organize logistics rationally, required specialized kinds of information and methods for classifying, processing, storing and retrieving such knowledge. In European armies, these functions were initially organized in the Quartermaster General’s Department. Over the course of the nineteenth century they became increasingly located under centralized command structures (general staffs). In many cases, the agency within the apparatus deputed to organize the information necessary for planning was termed the intelligence department. In units of this sort, two kinds of information were centralized – the physical geography and the “military statistics” of states. These two forms of information, one about the terrain over which a potential adversary operated, the other about the war-making potential of other states, were the things that constituted peacetime military intelligence and supported the permanent establishment for the preparation and planning for war.

Reconceptualizing military intelligence in this way has several important consequences. First, and perhaps most obviously, it provides a new set of criteria for understanding what intelligence might have meant to intelligence officers at any moment in time, and it helps avoid the teleological trap of seeing nineteenth-century military intelligence as the inferior predecessor to the fully formed twentieth-century version. Second, it directs attention to the diverse techniques and technologies available at a particular moment and explores how their presence interacted with the broad task of intelligence. In the nineteenth century, for example, armies moved on their feet (as well as on their stomachs)

and they relied on pack animals to transport their food and equipment. While telegraph was available in some instances, most communication was line of sight (heliography and signal flags) or by messengers who, if they were fortunate, might be mounted. More than anything else, terrain, often undeveloped,¹⁷ dictated the speed of armies on the march. This set of heterogeneous elements constitutes a grouping that intelligence units would have to account for if they were going to produce a rationally ordered plan of action.¹⁸

Third, exploring intelligence as part of a security mechanism essentially de-romanticizes it, and by so doing calls into question some of the most sacred tropes for discussing European activities in Asia (e.g., savage warfare, civilizing missions, development). The chief trope of concern here is the characterization of the Anglo-Russian rivalry in Central Asia as a “Great Game.” Just why the game metaphor is questionable will become clearer in subsequent chapters, when the content of intelligence is discussed. Here it might be useful to rehearse this tale of adventure and competition, and note what it might obscure.

Recall the image of Daniel Dravot and Peachy Carnahan in the office of a reporter much like the author of the piece, Rudyard Kipling. I began with this scene in order to make a point about the intersections of knowledge and imperial power. But another element is also at play, one involving fantasies of empire. In this case, the fantasy lies in the notion of white men going where none had gone before, commanding the natives by sheer charismatic presence, and becoming kings. Kipling’s stories are significant precisely because they formed Asia around such fantasies. Tales like this one fixed the continent as a space for unconventional men, where romantic adventure for the bold lay just around every corner or, as in this case, over the next range of mountains. In this emergent Asia, white men could fulfill themselves, assert their masculinity, and do so for noble purposes.

The Great Game to be found in *Kim* (1901) is perhaps one of the most enduring examples of fantasy and romantic adventure in empire. As Kipling presents it there, the game was made up of intrigue, clandestine operations, disguises, double-dealing, and a good deal of fun and pleasure. Although not discussed in quite these terms, in *English Lessons* I found the Great Game a useful shorthand for dealing with the

¹⁷ By this I mean the presence and quality of roads.

¹⁸ It may well be the case that those who find nineteenth-century intelligence amateurish do so from the perspective of the expansion of railroads and paved roads, radio, telephone and mechanical transport vehicles. Taken together, this set of heterogeneous elements altered the nature of warfare, and hence, the planning regime. What constituted intelligence had to alter accordingly.

Pan-Asian threat that the British, especially those in India, thought Russia posed to their empire. There are, however, a number of reasons to question Kipling's and my versions of the game. First, although the British were known to use game metaphors to talk about international politics, the term is notably missing from the works of prominent public figures who wrote about the Russian threat to British imperial interests in Asia. These analysts include, for example, Henry Rawlinson (1875), Armin Vambery (1885) and Archibald Colquhoun (1901). Nor was the term, as far as I have been able to ascertain, evident in the War Office or India Office records that deal with the Russian advance across Asia.

Second, as Gerald Morgan has argued, the game metaphor gives the impression that the Anglo-Russian rivalry was a "light-hearted affair," when nothing could be further from the truth (1981: 16). To this might be added that it is unclear what sort of game the Great Game was supposed to be. Certainly, given Kipling's characterization, chess comes to mind, but the one time George Curzon, the Viceroy of India from 1898 to 1905 and author of *Russia in Central Asia* (1889a), seems to have used the term, he was clearly referring to a card game with a series of hands (1889a: 297). In any case, Morgan may be right to insist that it is a misplaced metaphor masking the enormous amount of violence that actually transpired, including three British invasions of Afghanistan and repeated clashes on the Northwest Frontier of India that Charles Callwell euphemistically referred to as "small wars" (1906).

A third issue has to do with the origin of the term. Kipling, as many point out, did not invent the phrase, but he is usually given credit for popularizing it. Most who write on the Great Game ascribe the origin to Arthur Conolly, an adventurous young officer in the service of the East India Company, who died in captivity in Bokhara after a failed mission to the Amir of Kokand in the early 1840s. Conolly had previously come to popular notice when he traveled overland to India through Persia and Afghanistan in 1829–30. According to his biographer, John Kaye, upon arriving in India Conolly wrote reports on his travels and they were eventually published in Britain in 1834 under the title *Journey to the North of India* (Kaye, 1867: 74). Four years later, a second edition included a long section in which Conolly speculated on how the Russians might launch an invasion across Afghanistan, but he did not use the term there. In fact, it only appears once in the two-volume book, and that is when Conolly observes the "children of nature" in a small Central Asia town whose "great game" was to throw dirt at each other (1838, v. 1: 173). Conolly did use the term in another context,

however. It appears in a letter to his friend Henry Rawlinson, a portion of which is quoted by John Kaye in his biography of Conolly.

If I ever cool my parched brow in the Jaxartes [Syr Darya], I'll drink a goblet of its waters to the extension of your shadow in every direction. You've a great game, a *noble* game before you, and I have strong hope that you will be able to steer through all jealousy, and caprice, and sluggishness, till the Afghans unite with your countrymen in appreciating your labours for a fine nation's regeneration and advancement. These are not big words, strung for the sound or period. I didn't know that I could well express it more simply, certainly not when writing at a long canter to reach the post-bag ere it closes for the night. (Kaye, 1867: 101)

This ought to give pause. Conolly was not, it would seem, imagining some geo-political/geo-strategic machinations across Central Asia when he used the term (which also includes the italicized *noble*), but something specific to Rawlinson's labors. It was his way of expressing praise "simply" so as to make the mail pouch. What was this great and noble labor that occupied Rawlinson?

Rawlinson, an experienced political agent in Persia, had just been appointed to a similar position in the Afghan government under Shah Shujah, the "puppet" king the British had installed in Kabul after deposing Dost Muhammed in 1838. Rawlinson's "great" and "noble" game was to govern everything from Kandahar in the southeast to Herat in the northwest. The details of the strife Rawlinson found himself caught in as he attempted to carry out his labors, especially the collection of taxes, and the disastrous end to the British efforts to remake Afghanistan as submissive protectorate, need not detain us here (see G. Rawlinson, 1898: 74–79). The important point is that Conolly's reference was to the particular task Rawlinson had undertaken at that moment. How the Great Game got elevated from this instance to a battle of wits and clandestine operations across all of Central Asia remains, therefore, an open question.

One possible explanation has to do with how Kaye used the phrase in his biography of Conolly. Although he only quoted the single instance of Conolly's use of the term, Kaye suggested more than once that Conolly thought of British and Russian rivalry in Central Asia as a great game (1867: 70, 90, 113). It would seem, therefore, reasonable to suggest that Kaye not only transmitted the notion, but framed it in such a way as to give the impression that there was meaning beyond what Conolly had actually said in his message to Rawlinson. I believe it is Kaye's interpretation that Kipling picked up on, extending and expanding it even further in *Kim*, and thereby transforming Conolly's locally specific great and noble game into a contest across all of Central Asia and

India. Later writers, such as Peter Hopkirk (1994), have then taken the notion from Kipling, and in their popular histories, have read the Great Game back into the six decades prior to the publication of *Kim* and forward into the Soviet and post-Soviet era.¹⁹

If in fact the Great Game is a projection onto a host of events that were thought of in other terms by the historical actors involved, how does one approach British and Russian activities in Central Asia without producing either a romanticized or a distorted account? Would such an approach occlude the epistemological aspects of empire just for the sake of sustaining the metaphor? One way of proceeding is to recognize that the British Indian Empire of the 1830s, when the Great Game supposedly began, was not the same entity it became after 1857. Among other things, the army was reorganized, and it began to recruit newly invented categories of people, the “martial races” of India, to its ranks. Moreover, army intelligence as a coherent military discipline did not appear in British India until the late 1870s.

Nor did perceptions of imperial security remain static. The 1857 rebellion in India was a pivot point, one that resulted in the transformation of the security regime of the East India Company once the crown and parliament had assumed sovereignty over India. Perceptions of security also changed as a result of technological innovations that became available after 1860, including new forms of communication (e.g., telegraph and print technologies), transportation, information management and scientific measuring instruments. As they were extended spatially and temporally, these technical apparatuses and the forms of knowledge they produced altered imperial relations of power and fashioned new perceptions of strategic and political realities. Not everyone, however, welcomed such innovation. Kipling, in fact, provided one excellent example of ambivalence toward technological change in *Kim* when he had his youthful “spy” throw away the theodolite and prismatic compass, the tools of precision map-making stolen from the French and Russian agents. But he retained their notebooks. Thus, the novel could be read as nostalgia for a simpler time, when a less complicated relation existed between knowledge and power, one that required little or no scientific expertise; a time when Kipling might have imagined the Anglo-Russian rivalry as a game (1901: 402–3).

¹⁹ R. Johnson, for example, suggests that the Great Game continued to the end of British India (2006). Johnson’s work is significant in other ways. He is aware of the issues raised by Morgan, makes persuasive arguments for distinguishing espionage from intelligence, and sees the latter as very much involved in the production of what I have termed military statistics. But his book is focused on spying and the Great Game, with the result that the nature of military intelligence is only marginally explored.

In addition to obscuring the relation between science and empire, the game metaphor also simplifies two quite different perceptions of empire in Asia that operated at least from around the middle of the nineteenth century forward. One of these saw the “East” in geo-political terms, that is, as a problematic involving a balance of power. The rubric under which the geo-political was organized and conceptualized was referred to as the “Eastern Question,” or more properly as a series of eastern questions, all ultimately referencing the balance of power in Europe! What would be the effect in Europe of the decay of the Ottoman Empire? How would a decline of Persia and the Central Asian khanates affect the Ottoman Empire and, hence, the balance of power in Europe? What were the ramifications for British and French commerce of the decline of the Qing Empire in the Far East? In what ways would the acquisition or expansion of European colonial possessions in Asia alter relations between European imperial states? For many, these were *the* questions of the day, and all of them concerned the foreign offices and diplomats of the military-diplomatic apparatus.

The other perception of empire in Asia conceived its challenges in geo-strategic terms. In the military arm of the apparatus, the geo-strategic question involved lines of communication within and to colonies. This was a security issue concerned first and foremost with the unencumbered flow of men and materiel along the routes connecting the imperial metropole to its peripheries, and maintaining the integrity of communications within the peripheries themselves. Second, the geo-strategic question also involved knowing possible paths of invasion that might be outside the immediate control of the imperial state. What was needed, especially in Asia, as Arthur Conolly recognized as early as 1838 (2: 324), was geographical and statistical knowledge of continental Asia. Without such information and the means for maintaining it, strategically important parts of Asia would remain outside the information system comprising maps, route reports and the statistical archives.

In South Asia, the local expression of these geo-strategic concerns was organized under the rubric “The Defense of India,” which also served as the title of journal articles and official memoranda that evaluated the threat posed by Russian expansion.²⁰ After 1878, the Intelligence Branch of the Indian Army was the unit responsible for producing the positive knowledge necessary for the protection of lines of communication to and from India and for planning the defense of India. The bulk

²⁰ Two members of the Indian Army Intelligence Branch entitled their works “The Defence of India”; see MacGregor, 1884 and Bell, 1890. In the early twentieth century, war games and critiques of them carried this title; see, for example, General Staff, War Office, 1904, and the discussion in Chapter 7.

of the officers who made up the unit were educated as engineers and artillery officers, and they came to define the security of India in broad geographic terms. They perceived lines of communication and, hence, a security belt stretching from Manchuria in northeast Asia all the way to Mesopotamia. From Egypt to the west, the Intelligence Department in London took responsibility for planning imperial defense. Across the grand span of Asia, intelligence officers imagined the continent as a site filled with factual information that could be recovered through scientifically informed “knowledge practices” (Poovey, 1998: 19). These practices included reconnaissance that would collect military statistics and information about land routes across Asia, the gathering of data from a network of correspondents located at legations, consulates and strategic outposts in various parts of Asia, trigonometric mapping, and the systematic organization and differentiation of relevant materials into libraries and archives.²¹ The information system the intelligence officers created was designed to command and control the space of Asia. Their efforts produced what Timothy Mitchell has termed a “rule of experts” (2002), a form of power/knowledge that has been either obscured or misunderstood by the Great Game emphasis to be found in most historical studies of Anglo-Russian relations in Central Asia.

To some extent, this imperial information system had its origins in and remained fraught with individual fantasies of romantic adventure. But it was also caught up in particular obsessions with imperial power. These desires for dominance also distorted or disturbed the smooth application of military and administrative reason. In previous work, I have noted that the compulsion to produce comprehensive knowledge in the domain of empire generated irrational fears and specters, elements that undermined the very certainties that the systematic production of instrumental knowledge was supposed to create (Hevia, 1998). As will be evident in the discussion presented in Chapters 7 and 8, such disruptions appear in sources from the intelligence project as well. But they do so in novel ways, sometimes dissolving the hard facts of terrain and logistics in rhetorical phantasmagoria, other times conjuring opponents whose very “primitiveness” gives them powers beyond reason.

To contextualize these dimensions of British colonialism, its forms of military knowledge and its fantasies of power, I begin with the observation

²¹ See Poovey, 1998, on the importance of the forms in which knowledge was differentiated, codified and institutionalized. In addition to its vast collection of publications and reports produced by its officers, the Intelligence Department’s library at the War Office in London held over 40,000 books and numerous professional journals in 1886, and was adding 5,500 volumes a year. The Treasury believed it to be the best military library in the world; see Andrew, 1985: 23.

that the changes that occurred in Britain in the nineteenth century were part of a European-wide phenomenon. In Germany, France, Russian and Austria, reform and professionalization of the army, with attendant reconceptualizations of military intelligence, were common (see Chapter 2). Some British military leaders incorporated elements from the continental armies into their reform programs, and ultimately reconceived intelligence as linked to knowledge production for the implementation of a training and planning regime. Chapter 3 explores how such men were fashioned through new institutional structures for recruiting and training army officers in the second half of the nineteenth century. The changes in question produced a new form of imperial masculinity, a professional elite with scientific and mathematical training. It was from this cadre of officers that the intelligence corps in Britain and India were formed. Chapter 4 addresses the creation of the intelligence units in Britain and India, explores their structure, and introduces the forms of knowledge they produced. These forms were made up of route books and military maps that disciplined the space of Asia, and of handbooks and military reports that regulated the facts of Asia.

The exploration of these intelligence genres is situated within specific historical events in order to better explain the relevant features of each. In the case of epistemological projects to discipline or command the space of Asia, the joint Anglo-Russian commission that demarcated the northern border of Afghanistan is addressed (Chapter 5). Military reports and handbooks, by contrast, can be understood as aspects of the “regulatory idea of governmental reason” in terms of which the facts of Asia were compiled (Chapter 6). To explore these genres, I focus on British Indian Army Intelligence operations in Afghanistan, the Northwest Frontier of India, and north China from 1901 to 1910. Having established how intelligence was made, I then direct attention to its uses. Chapter 7 takes up three instances: the debate between the Intelligence Department in London and the branch in India over the defense of India; the formation of the martial races of India as tribes with essential characteristics unique to each of them; and a planning and training regime in which the products of intelligence were used as the raw material for exercises and assessment. Chapter 8 addresses the effects of the intelligence-based security regime in Asia and Great Britain. I begin with military transformations in China and Japan and then consider the nature of warfare on the Northwest Frontier of India, debates in Britain over the form of the security regime, and popular images of empire as they appeared in media and were recirculated in romantic and sentimental tropes that serve to domesticate empire and normalize conflict.

There are certain elements that, although relevant, are not included in this study. Although I deal with the development of a general staff in Tsarist Russia, I do not address the activities of Russian “scientific” missions across Asia or the forms of knowledge production involved with them except insofar as they were appropriated by British intelligence.²² To deal with this aspect of Russian expansion would have also required an exploration of Russian activities on the borders of the Qing Empire, a topic I have dealt with to a degree in *English Lessons*. Qing leaders were, in fact, very concerned with Russian encroachment in Xinjiang, the vast area in the western part of the Qing Empire populated by Turkic-speaking Muslims. When these areas fell into the hands of Yakub Beg in the 1860s, the Qing launched a series of military campaigns, financed in part by loans from European banks and including the use of German-made field guns, to reconquer the region for fear that ultimately it might fall into Russian hands.²³ There were, in other words, those in the Qing leadership as concerned about Russian expansion across Asia as were their British counterparts.

Thus, there are connections between this book and *English Lessons*. One of the main arguments made in the earlier study concerned the necessity of understanding British activities in China in relation to strategic concerns about India. I would like to think that what appears in this book adds weight to that argument and extends it more deeply into the realm of the British Army than the previous work did. One thing that I hope will be clear in this study is the importance of the British Army, and especially its intelligence units, in the shaping of twentieth-century Asia as we know it. In both Great Britain and the United States, we tend to assume that the military is merely the instrument of civilian governors, all of whom are either elected democratically or appointed by elected officials. As a result, we are inclined to ignore the role of the military in initiating, influencing and implementing policy. I hope that this study will, at the very least, raise doubts about so simple an assumption. Further, however, it is the argument of this book that military intelligence not only framed imperial strategies vis-à-vis colonized areas to the east, but produced the very object of intervention: Asia itself.

²² See, for example, Schimmelpenninck van der Oye, 2001.

²³ See Hevia, 2003: 170–74, and the sources cited therein.

2 The military revolution of the nineteenth century

In the nineteenth century, armies in Europe underwent fundamental and irreversible changes. These changes were driven partly by technological developments and partly by the emergence of a professional elite that restructured organizations and institutions to make them more rational and responsive to the latest scientific thinking. Professional managers organized the work of bureaucracies as processes akin to industrial manufacturing, where the management of time and motion created efficiencies that translated into profits. The organization of armies was transformed along similar lines, operating now on a principle of an ideal of leadership that placed a premium on mental capacities and technical training. Changes in the continental military, like those in other institutions of governance, did not occur overnight. They were spread across the century, emerging in European countries at different times and with differing levels of intensity. It is the purpose of this chapter to flesh out the kinds of changes that happened in European military organization from roughly the middle of the nineteenth century forward. The objective is to provide a broader context in which to understand changes in the British military and, by extension, in the British Army in India.

Reordering of the military-diplomatic apparatus

By the eighteenth century, the diplomatic corps and the military were becoming the two acknowledged branches of the external security regimes of emergent European nation states. Since the Peace of Westphalia (1648), the diplomatic part of the contribution to security had become a set of routinized practices buttressed by a codified body of rules recognized in common by most European regimes, including that of Great Britain. Sovereignty was understood to be coterminous with the territorial state, and mutual recognition of sovereignty was supposed to be required for inaugurating newly regularized diplomatic relations between states. The borders of states were – not without

contention – fixed and a set of rules and protocols termed the Laws of Nations (later, International Law) were drafted under the leadership of diplomats in various countries to facilitate peaceful interactions across borders. From the eighteenth century forward, diplomatic missions were established in the capitals of European countries; with these embassies, it became possible to make interstate diplomacy a continuous process. The interactions between ambassadors and foreign ministers facilitated and required by these new sovereignty practices came to be governed by a Europe-wide set of protocols that were supposed to place diplomatic exchange on a firm and unambiguous footing.¹

The ultimate object of these endeavors, the self-conscious purpose of diplomacy, was to prevent or ameliorate conflict between the states of Europe. And the ideal way of doing this, it was believed, was to create and maintain an equilibrium, a balance of power between nation states. This balance was thought to insure that one state would not attempt to compromise the sovereignty of another. If, however, a state became so powerful that it threatened to destabilize the balance of power, others were encouraged to form mutual aid alliances in an effort to maintain the ideal equilibrium. Occasionally, everyone agreed, diplomacy failed, activating the other arm of the state security regime, the military, and war or threats of war ensued.

There was, however, an asymmetry in the relationship between the diplomatic and military parts of security apparatuses that emerged after Westphalia. Unlike the diplomatic establishment, European armies lacked a set of common international institutions and mutually agreed-upon rules of behavior. War ministries and training institutions existed, of course, but there were few similarities between one country's military establishment and that of any other. Moreover, armies were normally raised and trained only when they were felt to be needed, and when wars ended, forces were unsystematically demobilized. Unlike the eighteenth-century diplomatic establishment in which protocols and laws were passed on to future generations as precedent, there were limited ways in which lessons of warfare could be organized into readily accessible and transmissible source materials. In other words, the kinds of "memory practices" that would encourage military leaders to learn from the past and integrate lessons learned into plans for the future were ill-formed at best.² The situation began to change by the middle of the nineteenth century with the deliberate creation of new military

¹ See the discussion in my 1995: 74–82 and the sources cited therein.

² I take the term "memory practices" from Bowker (2005), where he demonstrates how memory practices have over the last two hundred years transformed the sciences, creating wholly new archives and new objects of scientific investigation.

institutions and the reform of existing ones. Important changes included the reworking of the curricula of military academies, the inauguration of technical journals on military affairs, the introduction of military attachés into foreign embassies, and the creation of “capital” or general staffs throughout much of Europe.³

The process of rationalization on the continent was slow, but by the end of the nineteenth century there was a military structure with its own rules and protocols of behavior parallel to and complementing the diplomatic corps. This professionalization of the military can be accounted for in large part by the general realization that warfare had been transformed by the Industrial Revolution.⁴ Technology-driven change was clearly evident, if not before the American Civil War, then certainly during it. Most of the European armies sent observers to the United States in the 1860s, where they were able to record the impact of new transportation, communication and weapons technologies on the strategy and tactics of land warfare (Luvaas, 1959). At roughly the same time, the Prussian government sent the first military attachés to be resident in embassies in London, St. Petersburg, Vienna and Paris, where they were to gather information on troop strengths, military posts, terrain and local thinking on warfare. By 1872 the role of attaché was further clarified as one of gathering “military statistics,” by which was meant not just numbers, but both numeric and qualitative data that could specify the condition of foreign armies and their warlike capabilities (Vagts, 1967: 11–13, 31–32). Between 1870 and 1914, military attachés became ubiquitous throughout the embassies of Europe, and began to appear in China and Japan and in other parts of the world. During the same period, attachés and members of intelligence departments took on the additional task of observing, and sometimes participating in, the annual maneuvers of other European armies.⁵

As observers of the military establishments of other countries, attachés confronted questions not only about the structure and disposition of foreign armies, but about the military applications of new technologies such as smokeless powder, breach-loading cannons, the

³ On military attachés see Vagts, 1967, and Witter, 2005. For an overview of the emergence of general staffs in Europe see Irvine, 1938b.

⁴ Headrick’s work on technological change and the transformation of warfare in the nineteenth century remains one of the best introductions to the subject (1981); also see McNeill, 1982.

⁵ Edward Gleichen, who served a number of tours in the Intelligence Department at the War Office, London, recounts being attached to a German regiment during one such maneuver. He also recalled in his memoir using the occasion of maneuvers to visit foreign staff colleges, witness field trials of new artillery, and visit arms manufacturing plants such as those of Krupp; see 1932: 87–90, 268.

railroad and telegraph, and map-making instruments. But consideration of the practical effects on warfare of technological innovation required a trained observer, an officer reasonably knowledgeable in the sciences and mathematics upon which new technologies were based. One way such men were made and supported was through the inclusion and expansion of scientific and mathematical training in military schools. Another way was through the production and circulation of technical information in military and geographic journals. The former kind of publication frequently contained articles on the military application of new technologies, including ballistics reports on weapons and their use in combat. The latter kind of journal carried the latest reports on explorations into territories relatively unknown to Europeans, and analysis of the geographic uses of the latest scientific instruments for mapping.⁶

But the evaluation of new technologies and their possible tactical impact on warfare were only part of the rationale for the creation of a techno-managerial elite in the military. Equally important was the fact that because technological change did not stand still, a permanent entity was needed to monitor, process, transmit and apply the latest scientific advances in technology and information management. The form this permanent entity took was a centralized data-processing and planning device, a general staff, whose function became one of integrating the new technologies into the military apparatus and planning for future wars. The war-planning regime, with an attendant set of tools for re-evaluating and re-engineering plans, became a permanent part of governance and hence a significant *raison d'état* from roughly 1871 forward throughout much of Europe. The content and organization of the planning establishment, its degree of sophistication and its scale of operations varied from country to country – Prussia had well-established mechanisms in place by 1870, the British only after the Esher-inspired reforms in 1904.

But regardless of when the planning regime was put into place, there were clear similarities in the form these new establishments took. Most of them emerged out of or were located in the various national equivalents of the Quartermaster General's Corps (QMG), the part of the

⁶ The Intelligence Branch of the Indian Army had in its library the journal of the Royal United Services Institute in London, as well as that of the Indian Army. The library also held the *Journal des Sciences Militaires*, *Revue Militaire de L'Etranger* and *Journal of the Military Service Institution of the United States*. In addition to Royal Geographic Society publications and the other geography societies in the United Kingdom, the unit's library also had geographic journals produced in Germany, Russia, Italy and France.

army that in many countries had long been responsible for logistics. Over the course of the nineteenth century, European QMGs became weighted down with an ever-wider array of tasks, and institutional reorganizations occurred as a result. Reforms focused on what came to be understood as the three rational functions of any army – administration of personnel, collection of information about potential adversaries (intelligence) and operations. Ideally, these three functions were centralized in a general staff that had the authority to command and control the various parts of the army and its training program.

Where they existed, the intelligence units under the new general staffs involved themselves in the production and management of information for application to problems involving the mobilization and movement of troops and materiel, the testing and procuring of new weapons for offensive and defensive warfare, the analyzing of the effects of technology on lines of communication, and the assessing of the military capabilities of other states. Built into the intelligence units of the staffs were methods for the production, collection and classification of data, archives for storing and recovering the data, libraries made up of reference materials for the use of technically trained military personnel, and printing presses for reproducing in cheap and useful forms the output of the intelligence apparatus, some of which was publically circulated.⁷

Conceived as instrumental knowledge, the war-planning information produced by intelligence was made up of two distinct forms of representation, military geography and “statistics.” Both were firmly grounded within a positivist epistemology. They shared a conviction that language and scientifically produced visual imagery (e.g., maps, tables, graphs and diagrams), when properly organized, could be made unambiguously transparent. Geographical and statistical data were produced partly through the collation of published source materials (the statistics of states) and partly through peacetime reconnaissance – systematic and orderly observations by trained eyes to make legible the human and natural military environment of potentially rival states. Not just the information collected, but also the procedures involved in successful reconnaissance, were systematically evaluated, written up, made part of advanced military training, and applied to one’s own state

⁷ I base this summary of intelligence functions on the report of a British fact-finding mission to the continent in 1874. C. B. Brackenbury, a member of the mission, observed that the Austrian military authorities felt that keeping “facts” secret only made their own army ignorant. Brackenbury recommended that the readily available Austrian publications be translated and assimilated into the British intelligence archive; see NA WO33/28, p. 15.

as well as to those of rival sovereignties.⁸ This point is worth emphasizing – war-planning always involved a comparative understanding of the military capacities of states. Hence, the same categories for organizing information operated domestically and internationally, making the two domains optically consistent, and facilitating a common framework for calculations and estimates.

How did this regime of war-planning come into being and what were its implications for the militarization of Europe in the latter half of the nineteenth century? In order to address these questions, I begin with Prussia, in large part because it was Prussian success at forming a new kind of military apparatus that stimulated change in military thinking in much of Europe, and eventually in other countries such as Japan and China. Military developments in Prussia are also a good place to begin because this helps to clarify the challenges faced by the leaders of other European armies.

The Prussian war machine

As early as the 1820s, the foundations had been laid in Prussia to transform an aristocratic military into salaried professionals.⁹ The key agent in orchestrating this change was the General Staff. Given its independence from the War Ministry in 1821, and answering directly to the Prussian throne, the General Staff assumed full responsibility for the system of training officers, took command of all units within the Prussian Army, and developed complex procedures for systematically processing information. The personnel of the staff were drawn from the war college or *Kriegsacademie*, which had been founded in Berlin in 1810. Admission to the academy was through competitive examinations. Once accepted, cadets were given a general education, including courses in mathematics, physics, chemistry, German literature and general history; and a professional education through courses in military history, gunnery, siege warfare, applied tactics and staff duties. Cadets were also trained in foreign languages. Graduates were assigned to one of the functionally distinct departments of the staff, where they were expected to serve for three or four years. They were then assigned to regimental staffs in the field, but they periodically returned to serve in a different section of the General Staff. This rotational system kept

⁸ In English, see, Bell, 1899; Henderson, 1916; and Mockler-Ferryman, 1903.

⁹ The following sections on the development of the Prussian/German Army draw primarily from Bucholz; see his 1991 and 2001 studies on the subject. Also see Dupuy 1984 and Irvine 1938a and 1938b.

the central staff filled with new blood and the regiments staffed with highly trained officers. Moreover, there were incentives built into the system in the form of accelerated promotions for the best performers and for those who voluntarily continued their education in the contemporary military sciences.

The staff itself was organized into three essential parts, the intelligence section, the land survey section and the military history section. The intelligence section was responsible for gathering military statistics about potential enemies and was subdivided into sections responsible for different countries, with officers trained in the appropriate languages. The category of statistics as it was understood in the German states at the time requires some explanation. The notion can be traced to the eighteenth-century idea of *staatenkunde* and might be understood as a kind of calculus of force or of the strength of a state based on a scientific assessment of its attributes and capacities.¹⁰ As a variant of this basic form, military statistics could include the documentation of a state's ability to make war and the description of its particular physical features that might aid in either attack or defense. Prussian intelligence officers gathered military statistics from the published sources of foreign states, from reconnaissance tours of European countries, and from service as military attachés in foreign capitals.

The land survey section trained officers in techniques for making land knowable for military purposes. Officers normally began their careers in this section of the General Staff, where they learned primary technologies of vision such as trigonometric surveys, topographical analysis and cartographic drawing. Bucholz argues that the purpose of the unit was to create "spatial precision" as preparation for the mobilization and movement of army units (1991: 28). The third section, the history unit, was premised on the notion that learning from the past would enable sounder planning for the future. From roughly 1820 to the outbreak of World War II, historian-officers published enormous quantities of detailed studies in the staff's monthly journal, the *Militär-Wochenblatt*. Officers from the history section also became educators, participating in regularly scheduled lectures and discussions for staff members.

Further innovation in the Prussian General Staff occurred when Helmuth von Moltke was named its head in 1857. At the time of his appointment, Moltke had served on the staff for some twenty years, carried out reconnaissance in the Ottoman Empire, and completed rotations to various regimental posts. His singular contribution was to

¹⁰ There are numerous sources on *staatenkunde*. Here I draw on Patriarca, 2003: 14–16, and her useful references; also see Rich, 1998: 43.

transform a pre-existing training tool, the war game, into the core of staff training and planning. The German war game was developed by two Prussian officers sometime between 1810 and 1824. As originally played, it was a historical reconstruction of a famous battle organized on a tabletop map with pieces for each side. Movement of troops was geared to actual rates of travel overland, and an umpire interpreted and enforced a set of rules governing the play. Moltke's innovation was to move the game from the tabletop to the field in the form of "staff rides" and maneuvers, and to set it in the present or potential futures. The rides were carried out biannually in the spring and autumn and involved two dozen officers divided into two teams. Officers were given problems to solve, asked to write orders, and received verbal and written evaluations from superiors (Bucholz, 1991: 89). Smaller-scale exercises with identical procedures were undertaken at the regimental and divisional levels in the summer. In the fall, large-scale maneuvers involving whole army units were held and judged in the presence of the Prussian monarch (Bucholz, 2001: 33–34).

In his refashioning of the war game, Moltke added, according to Bucholz, a concept of risk management. Risk involved estimates of the time horizon when troops would be exposed in battle, the construction of scenarios stimulated by "what if" questions, and the assessment of exercises on the basis of pre-set benchmarks. Time horizon estimates oriented planning towards temporal constraints – that is, the time necessary to mobilize and concentrate forces, and the time required for movement through space by the Prussian Army as well as by their opponents. The time horizon understanding of risks also considered when and if previously non-belligerent powers might choose to enter the fray and alter the distribution of forces.

War game scenarios were premised on evaluations of the future military capabilities of the Prussian Army and its potential opponents. Estimates were drawn from trends discernible in intelligence reports on foreign armies and previously collected assessments of their transport and communications systems. The results were then put into motion by posing "what if" questions. By focusing attention on the near and deep future, war-gaming was reoriented away from the exclusive study of the past and toward rational planning for future conflicts. Thus, while battlefield tactics as historical event remained important, they were repositioned within a broad future-oriented kind of strategical thinking.

Benchmarks were essentially a form of memory practice that provided a means for measuring current performance against previous standards. Such measurements might be framed against historical situations

or they could develop out of the games and maneuvers themselves. For example, the mobilization of the German active duty and reserve armies took thirty-two days in 1867. It was then reduced to twenty-four in 1868 and to twenty days in 1870, creating new benchmarks, new comparative reference points, each year (Buchholz, 1991: 51). Other comparative frames might consider the data regarding mobilization as a product of the quality of communications. Refining rail communication could, for example, lead to a greater degree of command and control of warfare. Command and control could, in turn, be evaluated in terms of performance from one staff ride or maneuver to the next. Thus, benchmarks as evolving standards for use in war games provided a means for determining, at various points in time, the virtual capacities of military forces, while indicating where improvements might be made.

Moltke also extended the notion of communications beyond the integration of new techniques and technologies into the military machine. Communication came to involve the creation and diffusion of standardized military terminologies and rationalized formats in which orders were written. In the Prussian Army, orders achieved uniformity by grouping information under rubrics like the current state of friendly and enemy forces, the mission and the commander's intent, the objectives of the order and the inclusion of any special instructions (Buchholz, 2001: 58). The regularization implied in the formal structure of the order was only the tip of an iceberg; rational systematization was taking place throughout the army, as was evident in the standardized educational experiences of officers and men and in the restructuring of the army from top to bottom. Such consistency of form was designed to create redundancy in order to reduce risks and to supply replaceable parts in order to achieve predictability of performance, while maintaining sufficient flexibility. A well-designed military should also be ready to exploit unplanned opportunities (Buchholz, 2001: 57). The overall objective of the planning system seems to have been to reduce, if not eradicate, the uncertainties of warfare.¹¹

Perhaps the single most significant element in Moltke's planning regime was the notion of mechanizing the mobilization and disposition of the army through the use of the railroad. The significance of rail as a tool of warfare was brought home to the Prussian observers during the American Civil War. They were impressed with the Union's use of the railway for both the movement of troops – 80,000 Union

¹¹ For a detailed presentation of war planning based upon maneuvers and war games, see Zuber 2004. There are few sources available that take up the issue of the relation between war games and war planning in greater detail than this one.

troops were transported 1200 miles from Virginia to Tennessee in the unheard-of time of one week (Bucholz, 2001: 73) – and the transport of supplies. The observer's reports to the General Staff in Berlin made it clear that the Union won not only because of superior industrial might, but also because of the strategic use of rail, first in securing Vicksburg on the Mississippi River and then in cutting the south in half. In 1864, a railroad department was added to the Prussian General Staff, and two years later a Field Railway Section, modeled on the Construction Corps of the Union Army, was introduced (Luvaas, 1959: 120–22).

Rail became an important element in the Prussian victories over Denmark (1864), Austria (1866) and France (1870–71). By 1880, war games were built around rail lines, providing the primary mode of conveyance for mobilization, advances, and the concentration of troops and supplies. Lines were expanded over time, which after German unification allowed the army to increase the number of reserves. At the end of the century, war mobilization strength was at 2.7 million men, all of whom had performed three years' active service under a universal conscription system and received regular reserve training (Bucholz, 1991: 125–37).

The new rail-centered system had a number of other effects as well. Rail timetables became as important as topographical mapping, and new maps appeared with notations of time between places as opposed to distances. This temporal orientation reduced the play between the parts of the system as “close tolerance of time, space and size” began to be assumed by planners. Planners also subsumed the natural irregularities of terrain into the mechanical regularity of the rail system and, as Bucholz has argued, transformed war into one great “technical discipline.” Rail also changed strategic thinking – what became critical was mastery over rail networks, and the ability to command and control rail junctions. The war plans that emerged in Prussia in the last quarter of the nineteenth century were like “industrial flow charts,” transforming the “what ifs” of scenarios into geometric problems by which movement and concentration of forces could be measured and represented mathematically (Bucholz, 2001: 249, 319–20).

The Prussian innovations, their industrial mechanization of war-planning and execution, had far-reaching effects, ones that influenced military thinking across the entire European continent, and from the Ottoman Empire to Japan. The Prussian successes at producing a highly integrated war machine grounded on education and mass mobilization of the male population reworked the very definition of peace; peacetime became the time for planning and practicing for war. The planning regime sought to make warfare predictable, to reduce the

effects of contingency and change, and, perhaps most importantly, to replace the individual great man, the Napoleon of warfare, with a corporate entity. This entity, embodied in the General Staff, was, like all corporations, the keeper of a collective memory and refined practices that transcended both the individual human subject and discrete generations.¹² Strategic thinking could, through the agency of the General Staff, be projected far into the future and adjusted over time. There was now no time outside the time of the planning and preparation for war. The efficacy of this mode of structuring the military came to fruition in the stunning defeat of France by the Prussians in 1871. From that point forward, it was the Prussian war-making apparatus and not the campaigns of Napoleon to which the leaders of Europe's armies oriented themselves.¹³

Reform in the Russian Army

Like its Prussian counterpart, the Russian military set about transforming itself in the wake of the Napoleonic Wars. In a number of respects, at least at the staff level, developments in Russia were coterminous with those in Prussia, with one major exception. The Russians never achieved the top to bottom integration of the army, that uniformity of language, procedures and skills in practice that were the hallmarks of the Prussian system. On the other hand, there were a number of elements in Russian army reform that look much like what was occurring in Prussia.

Well before the creation of the intelligence units in Britain and India, the Russian Army adopted qualitative statistical categories as a means for organizing military information. As in Prussia, the categories themselves were employed to restructure courses and curricula in Russian military schools. A substantive amount of recent research on the Russian military has helped to clarify these processes.¹⁴ The key figure in military school reform in the Russian army was Dimitrii A. Miliutin, an instructor at the Imperial War Academy in St. Petersburg. Following

¹² It is worth comparing the innovations introduced into the management and planning of the army to industrial development in Germany at the same time; see Kocha, 1980.

¹³ In the 1880s, a very similar structure was adopted in Austria. According to Lackey, the Prussian model was introduced by the Chief of Staff, Friedrich von Beck-Rzikowsky, which reformed the General Staff and inaugurated a planning regime; see 1995: 88–97.

¹⁴ See, for example, Van Dyke, 1990; Rich, 1998; and the essays in Schimmelpenninck van der Oye and Menning, eds, 2004. Also see Marshall, 2006, which discusses Russian intelligence operations in Central and Eastern Asia. See chapter 8 for further discussion of this work.

a tour of Central and Western Europe in the mid 1840s, Miliutin concluded that geographic knowledge of a region was only one element in the kind of information needed for military planning. Miliutin argued that the same careful scientific analysis of the political development of a state, including its resources, demographics, governmental structure and finances, needed to be applied to knowledge about a state's military capabilities.

Miliutin dubbed such capabilities "military statistics." Like the Prussian version, statistics comprised the composition of the state's military forces, the quality and nature of its lines of communication, and its ability to mobilize and concentrate forces for offensive or defensive warfare. Information collected on the military strength of any individual state was compiled into a set of standardized categories for analysis. The results were then combined with precision mapping and the history of warfare, including the strategy and tactics of historically significant campaigns. This combination of elements, as Miliutin seemed to have envisioned them, unified theory and practice to produce comprehensive war plans (Rich, 2004: 173; Van Dyke, 1990: 20–22).

In the context of war-planning, military statistics had a dual utility. First, statistics functioned as an element for fashioning officer training programs. At the Russian Imperial War Academy in St. Petersburg, Miliutin and like-minded colleagues transformed military statistics into a curriculum that provided officer training candidates with the tools necessary for war-planning. In addition to strategy, tactics and mathematics (algebra, geometry, trigonometry), cadets were trained in map-making, military history, elements of military administration, and the organization of armies in European countries. They also learned European and Asian languages, including Arabic, Farsi, Turkish and Turkic. A graduation examination involved a thesis on a military campaign using primary sources, an oral examination of the thesis, and a strategic and tactical applied problem. The applied examination included a statistical evaluation of the theater of war, the manipulation of strategic and tactical operations at the corps level, and the development of strategy and tactics from an administrative and logistical point of view.

The second significant point about Russian military statistics was that they served to develop the requisite skills in officers for participation in staff war games (Van Dyke, 1990: 4, 65–66; Rich, 1996: 629). After the Franco-Prussian War, staff rides and annual maneuvers were also adopted in Russia from the Prussian model (Rich, 1998: 105, 108–12). Equally important, by the 1870s, historical study had shifted from the campaigns of the Napoleonic Wars to the American Civil War

and the Prussian campaigns. David Rich has argued that the Academy and the General Staff, with their heavy emphasis on positivist science, produced a new kind of staff officer, a professional elite who was a master builder, an *architekton* “not of space or structure but of information and knowledge” (1998: 38).

It should be clear from this summary that the reorientation of Russian officer training and its connection to staff planning looks much like what was happening in Prussia. And like their counterparts there, Russian staff officers trained in military statistics looked at the world around them in a wholly new way. What did they see when they contemplated the military challenges facing Russia? Perhaps the most significant thing that was made legible to the *architekton* was the overall weakness, especially in the wake of the Crimean War, of the Russian military in comparison to those of the other great powers of Europe.

The shortcomings of the Russian army were recognized by staff officers as what might be called a “mobilization gap” existing between Russia and its powerful neighbors to the west, a gap that was amply demonstrated in the wars of German unification. Neither the Russian rail system nor its industrial plant was in any measure equivalent to that to be found in Germany; moreover, the Germans were rapidly, and ominously, developing rail lines towards Russia. As a result, planning was oriented not towards the offensive – the hallmark of German planning – but rather to methods for blunting and delaying a German invasion and, after the alliance of 1879, a German-Austrian one (Rich, 1998: 163–65).

Also evident to Russian staff officers was the distinctly different environment in which the army existed in Germany. Because of universal conscription, coupled with the strong emphasis in the army since mid century on merit and rewards through education, the German Army enjoyed broad public support and respect (Persson, 2004: 164). In Russia, by contrast, the bulk of the population was made up of an uneducated rural class that had only been freed from serfdom in 1861. Commanded by the Tsarist aristocracy, the army was oriented differently than those of most other European countries; the military commanded by the Tsar had been and remained the major line of defense against the agrarian masses within Russia. And if the population as a whole was – to say the least – not supportive of the Russian army, the new officers also faced antagonism from the aristocracy and from officers not trained in the imperial academy. In the latter case, the new staff officers were often considered little more than glorified clerks, while aristocrats, animated by their own rivalries and jealousies, were known to block staff recommendations of appointments to important posts (Rich, 1998: 113).

As will be noted below, similar attitudes on the part of aristocrats and ordinary officers towards a technically trained officer corps surfaced in Great Britain, contributing to the delay in the creation of a General Staff until shortly after the end of the Boer War. In Russia, the net effect of these counter-forces was to make it impossible to integrate the staff into field operations, thwarting both broad strategic thinking and planning for the deep future. Thus, while the Russian General Staff was able to develop plans for possible wars against the German-Austrian coalition in Central Europe and against Great Britain in Central Asia (augmented by field reconnaissance missions to Ashkhabad and Meshad in Persia), as well as possible wars with Turkey, Persia, Afghanistan and Bukhara (Rich, 1998: 177), the staff's efforts remained little more than plans on paper, rather than practices drummed into the army through the repetition in the field of problem-solving staff rides and maneuvers. Put simply, in Tsarist Russia there were no enduring institutionalized connections between the sophisticated techniques developed by staff officers for the manipulation of military statistics and Russian army units in the field.

Reform and reorganization in France

Similar kinds of issues were evident in the French army, whose General Staff – the *Dépôt de la Guerre* – dated back to the *ancien regime*. After the passage of a conservative new staff law in 1833, the graduates of the French staff college were permanently appointed to the General Staff. Moreover, most promotions in the army were based on seniority and no provisions were made for continuing education. The staff became a tightly closed club, one that in essence forgot the legacy of practical staff knowledge from the Napoleonic era (Hittle, 1961: 117–18).

In addition, the education received by the cadets in the staff college seems to have involved little of the innovative thinking related to military statistics to be found in Germany and Russia. Instead, cadets were trained in the “semi-mechanical duties” of the staff officer and in drawing maps and fortifications. There were no war games, staff rides, or large-scale maneuvers, and the Ministry of War maintained tight control over publications by officers. Thus, rather than seeing leadership in the army as something acquired through training and education, the French officer corps continued to model generalship after the example of Napoleon; that is, leadership was conceived as an individual gift of genius, while success in warfare was understood to be a matter of *élan* (Irvine, 1938a: 199–201). Moreover, fears of “Prussian-style” militarism produced substantial resistance in the French parliament to

universal military service and to a regular training regime involving reserves (Kovacs, 1946: 229–30).

After Prussia had defeated Denmark and Austria, however, some French officers warned of the threat Prussia now posed to France, and Marshal Niel attempted to revive the *Dépôt de la Guerre* (Irvine, 1938a: 202–203). The effects of these efforts were limited, however, and France was little prepared for the kind of warfare that unfolded in 1870–71 (Kovacs, 1946: 231–33). The crushing defeat of the Franco-Prussian War brought an internal assessment of the army, one of the outcomes of which was a more thorough revival of the general staff.

The critique began with an outpouring of publications, some of which dealt with staff thought and military organization. Soon afterwards, reforms were legislated that opened the staff corps to all officers on the basis of talent, and created a rotational system between the staff and regiments. Education reform followed. By 1878, the staff, adopting the Prussian model, had control over the newly created staff college, *École Supérieure de Guerre*, entrance to which was based on competitive examinations. At around the turn of the century, the General Staff was reorganized into three bureaus. The first dealt with personnel and logistics, the second with military intelligence on foreign countries and their armies, as well as topographical mapping, and the third was responsible for generating orders and instructions for the operations of the army. By the early twentieth century, reforms in French staff theory had developed to the point where the functional division between administration, intelligence and operations was achieved through the institutional structure of the staff.¹⁵

From an organizational point of view, staff restructuring may well have been a success, but France still had difficulty matching the size and training of the German reserves.¹⁶ Moreover, the French general staff functioned more as an adjunct to the Ministry of War than as an independent war-planning entity like the German general staff. Still, there was a general consensus across the political spectrum in France

¹⁵ On legislation affecting the army see Kovacs, 1949. For the bulk of this paragraph, I draw from work of US Marine Corps Gen. J. D. Hittle (1961) who, during the Second World War, wrote a history of the evolution of the military staff. Hittle noted that two additional functional bureaus were added to the staff. The fourth was a logistics unit, and during the first Vietnam War and the Algerian rebellion a psychological warfare section was added. This last is of significance for comparing contemporary counter-insurgency warfare with the sort of imperial warfare that occurred prior to World War II. I will have more to say on this difference in the final chapter.

¹⁶ Allan Mitchell has argued that much of the reform was cosmetic. He has found evidence of “indecision, blundering, deliberate falsification, and colossal waste of resources” (1981: 50)

that an effort must be made to match the numbers of trained soldiers Germany could field. But the difference between Republican France and Imperial Germany still remained – in Germany the army answered only to the Kaiser and enjoyed a prestige born of military victory, not least being that over France (Mitchell, 1984: 107).

The French Army leadership also found itself at the mercy of rapid technological change in weapons systems. The Germans had developed new long-range artillery powerful enough to neutralize defensive fortifications as they were then constructed. Only a massive investment in reinforced concrete structures could defend adequately against these new guns. Facing both a manpower and a technology gap, the civilian leadership of France sought to offset the German advantage in other ways. In 1892, French and Russian diplomats negotiated an alliance that resolved the question of a sufficient manpower reserve should war break out with Germany. The Franco-Russian alliance also meant that Germany would now have to plan for the possibility of a two-front war. French diplomats then turned to forging a second set of agreements with Great Britain, known as the *Entente Cordiale*. The French and British governments resolved several outstanding issues concerning their colonial possessions and access to the Suez Canal. And although the *Entente* was not a military alliance, it did open the possibility of British forces supporting the French on the European continent.

The revolution in military thinking among the major powers in Europe had distinctive effects in Great Britain and in India. Officers such as Charles Brackenbury, who had visited the intelligence units of several European General Staffs in 1874, and his brother Henry were fully aware of the changes in the organization of staffs and intelligence units on the continent, and urged reforms in Britain. Other intelligence officers, such as James Grierson, mimicked continental practices and compiled handbooks filled with military statistics on the armed strength of European states.¹⁷ What these British Army officers and a few civilians (Wilkinson, 1891) recognized on the continent was the emergence of new security apparatuses in the hands of a technically trained officer corps.

Officers like the Brackenburys and Grierson were able, in the last two decades of the nineteenth century, to introduce a degree of structural change into the Intelligence Branch of the War Office, making it look something like similar units on the continent and introducing into it

¹⁷ See, for example, Grierson, 1888 and 1894. These are but two examples of an expanding body of such reports.

some of the functions of a General Staff. One of them may also have been involved in the decision of the Intelligence Division to translate the German General Staff manual into English in 1893.¹⁸ They were unable, however, to affect further reforms until the Boer War exposed the shortcomings of the British Army. In 1905, a centralized General Staff was created. Its primary function, like that of the general staff in Germany, was to plan for war. In addition, the basic army functions of administration, intelligence and operations were structurally differentiated. The various departments of the General Staff then set about introducing staff and field manuals modeled along the lines of those to be found in Germany. Meanwhile, the newly created Directorate of Military Operations formalized the practices of war games and staff rides in preparation for an anticipated war on the European continent.

I will address why change came so slowly to the British Army in subsequent chapters. First, however, it is necessary to clarify how the British officers mentioned above were able to perceive developments on the continent in the way they did. How, in other words, were men like James Grierson inclined to understand the implications of the Prussian initiatives for future warfare? In addressing that question, Chapter 3 follows a succession of reforms in Great Britain from the middle of the nineteenth century forward that altered recruitment and training in the British Army and established new criteria for officer competency. Chapter 4 will then explore the important role played by these new officers in transforming the security regimes in Britain and in India. Critical at both administrative center and colonial periphery was the establishment of intelligence branches, first at the War Office and later at Indian Army headquarters in Simla. These were set up to function as the site where military geography and statistics could be organized into the military apparatus, producing, as on continental Europe, wholly new forms of knowledge and practice.

¹⁸ The work in question was *The Duties of the General Staff* by Paul Bronsart von Shellendorff. The version translated was the third edition, a revision executed by Klemens Meckel, a member of the staff college and an instructor to the Imperial Japanese Army in the 1880s (see Chapter 8). The English edition was an official publication, having been printed by Harrison and Sons.

3 Imperial state formation, the professionalization of the army and the making of experts

The changes that occurred in Great Britain in the second half of the nineteenth century that produced intelligence as a military discipline and as a specific form of knowledge were directly connected to the development of a new imperial state formation. This imperium was supposed by reformers to be formed around principles of reason, principles that sought to rationalize government and administration against a “traditional” patronage system that indulged entrenched privilege. This chapter addresses the connection between these rationalizing processes of state formation and the selection and training of officers for the army. One significant area of change was in the schools of the “Scientific Corps,” where engineering and artillery officers were educated. Armed with the basic skills learned at the technical schools, these officers were considered to be specially suited to serve in the emerging field of military intelligence. But regardless of the positions they occupied, British officers trained in the reformed military schools inaugurated what Timothy Mitchell has termed a “rule of experts” (2002), a new form of military masculinity based on technological expertise and rational material practices.

As Corrigan and Sayer (1985) have pointed out, the most obvious mechanism driving these changes was the Royal and Parliamentary commissions of investigation. The commissions, examining everything from royal manuscripts to mining, produced positive knowledge (facts expressed as statistics) that was then adopted as the basis upon which reform legislation was enacted. To monitor the effects of legislation, a second mechanism was created, that of inspection. Inspectors produced new facts from the scrutiny of administrative implementation, which fed back into the legislative process. From these critical political activities, and in concert with important changes in the form of British colonialism, a new state emerged in the mid nineteenth century, one that came to be represented as a centralized set of “neutral, natural, [and] obvious ... institutions” having a monopoly on the means of national administration. The effect of this form of governance, they

argued, was not simply a new bureaucratic order, but a “cultural revolution” that produced new identities and subjectivities (1985: 123–41). In this chapter, I will trace some elements of this relatively unnoticed cultural revolution with specific reference to army reform. As a way of situating these changes in the British Army, I begin with the state of public administration in the early part of the nineteenth century and the conditions that stimulated administrative and civil service reform.

Public administration and civil service reform

At the turn of the nineteenth century, governance in Great Britain was marked by two chief characteristics. Recruitment to office was exclusively through a system of patronage or sale, while administrative structure was idiosyncratic to individual units, which operated like independent fiefdoms. As Brewer notes, departments had become “enclosed,” opposing any sort of innovation in their procedures or public disclosure of their operations (1988: 84). In addition to government units operating according to their own rules and traditions, no uniform standards existed for hiring, reporting, promotion, salary, rank or pensions. Oversight and evaluation by outside authorities was non-existent, which made it difficult, if not impossible, for the Treasury to calculate the cost of administration. Fees collected by administrative units were often used to supplement salaries, so in some cases public monies were readily converted to private profit. In sum, government departments operated on the basis of custom and personal relations, rather than through “rational,” disinterested procedures (Cohen, 1965: 24–34).

Several Parliamentary commissions critically highlighted these issues and, by the 1830s, a series of reforms had been gradually introduced. The overall effect was to make government agencies more accountable to Parliament and more accepting of state oversight. The Treasury was centralized and a uniform set of accounting procedures introduced. Audits became standard and, in theory at least, sinecures eliminated. Offices were beginning to be staffed by salaried, pensionable officials, who were forbidden to profit from government contracts or fees. The Exchequer adopted up-to-date book-keeping methods. Collectively, these changes appear to have reduced both the number of offices in government and overall costs.¹

While effective in eliminating some of the major areas of corruption, the initial phase of reform left a number of traditional recruiting

¹ Cohen estimates that the reforms reduced the number of officials by 5758, with a net savings of £965,240; see 1965: 69–70.

procedures in place and did little to alter the existing idiosyncratic structures of departments. Inspired by Benthamite utilitarianism, a group of radical reformers, including Stafford Northcote and Sir Charles Trevelyan, with the support of William Gladstone, began in the 1850s to address issues that would result in far-reaching changes, ones that would professionalize the civil service and establish a uniform set of rules and procedures governing the practices of many government offices. Reformers found inspiration in the India Bill of 1853, one of the major features of which was to introduce the notion of competitive examinations as a means of recruiting civil servants in India. The following year, a number of Parliamentary committees investigated the organization of over a dozen offices and boards with an eye to introducing similar reforms in England. Trevelyan sat on all of these committees, and Northcote joined him on eight of them. Their findings were drawn together in the *Reports of the Committees of Inquiry in Public Offices* and in a separate report authored by Trevelyan and Northcote entitled *Report on the Organization of the Permanent Civil Service*, both of which were published by Parliament in 1854 (Reader, 1966: 85–87).

These two reports pointed to a set of common problems across the civil service, which included questionable recruiting practices, compensation schemes, and inefficient allocation of work within departments. Both reports drew attention to the often peculiar division of labor in which senior staff did the same work as the most inexperienced clerks. In addition to recommending that work be reorganized in terms of a hierarchy of graded skills/experience, the reports called for a uniform examination system for recruitment and a common set of rules for the civil service, both of which would be overseen by a single governing board for the entire service. Such a board would remove the responsibility of appointments from department heads, thus eliminating the abuses resulting from personal patronage. The board's duties would include not only overseeing the examination system, but establishing uniform pay grades, setting standards for promotion, insuring that candidates were within an acceptable age range for employment, and setting and maintaining high moral and ethical standards for the civil service. With respect to the methods suggested for the evaluation of talent, the recommendations were in keeping with reforms then under way in the education system, particularly the key universities of Oxford and Cambridge, from which the reformers also drew inspiration. And while class privilege certainly did not disappear from the scene, the call for uniform standards eventually had the effect of opening public service to a broader range of the British population (Montgomery, 1965: 20–24; Cohen, 1965: 93–97).

In 1855, Lord Palmerston moved on the centerpiece of the recommendations, creating through an Order in Council the Civil Service Commission. One of the Commission's first acts was to establish an examination required of many candidates. Although the initial effect was limited, eventually the Commission took more and more of the appointments out of the hands of department heads and opened them to competition (Montgomery, 1965: 24–25). There were, however, a number of departments that resisted examinations, including the Home Office and Foreign Office. Nevertheless, over the next fifteen years replacement by examination became a norm, and in 1870 William Gladstone's ministry issued an Order in Council that all vacancies, with the exception of those in the Home and Foreign offices, were to be filled by examinations (Reader, 1966: 93–96; Cohen, 1965: 119–22). The same kinds of reform processes that fundamentally altered civilian governance in the United Kingdom affected the military as well.

The British Army and the Cardwell reforms

Following the debacle of the Crimean War, which included enormous logistical problems and poor care for wounded and ill soldiers, efforts were made to reform the British Army. Reformers faced challenges and obstacles similar to those presented to the civilian government establishment: entrenched privilege and convoluted structures of administrative authority. Like the Home and Foreign offices, where an aristocratic elite resisted change, the Victorian army had its own deeply entrenched sites of inherited privilege, and it was rife with titled officers who promoted the special relationship purported to exist between the army and the crown. Such a claim was sustained by the fact that the commander of the army was the Duke of Cambridge, a member of the royal family. Professionalization, with its new ways for evaluating talent, character and competency, called into question the gentlemanly ethos that the duke and other high-ranking officers argued was the sole criterion upon which to evaluate an officer.

Parallel to the problems posed by privilege in recruitment and advancement was the peculiar command structure of the army, a structure that divided authority between civilians and the military command, making it difficult to sustain a reform effort. On the civilian side, army funding was dependent on Parliamentary appropriations, which were then overseen by a cabinet minister from outside the ranks of the army, the Secretary of State for War. This civilian control over military budgets at the top was, however, somewhat offset by the fact that the Commander-in-Chief of the army was appointed by the

crown, and also sat in the House of Lords. The division between funding and command authority was further complicated by the fact that the Duke of Cambridge, a staunch defender of army traditions, held the post of Commander-in-Chief for a very long time, from 1856 to 1895. If the Duke did not support a particular reform proposal, he simply provided minimal cooperation and waited for a change in ministers or in ministries; such changes happened frequently over the period of his tenure.²

Had the Duke been keen on reform, matters might have worked out differently; but he was not. His basic goals were to retain royal prerogatives when it came to appointing officers, to resist civilian control of the army beyond Parliament's power of the purse, and to maintain, as far as was practical, the diverse traditions of army regiments. He translated these objectives into a policy of keeping the army out of politics, which had the effect of further politicizing the question of army reform in at least two ways. First, the Duke insisted that patronage and purchase were in fact the ideal way of appointing officers. This stance pitted the Commander-in-Chief against advocates of rationalization and of a merit system. Second, the Duke could rally members of the established officer corps, many of whom had links to the aristocracy and deep roots in the House of Lords, against civilian and often less aristocratic reformers. Yet, in spite of the formidable obstacles presented by the Duke and his supporters, change did occur, partly as a result of outside pressure and partly due to pressure from within the army itself.

The first major breakthrough came with the appointment of Edward Cardwell, Secretary of State for War from 1868 to 1874. Cardwell centered his initial reforms on three key pieces of legislation. The first was the War Office Bill of February 1870, which attempted to solve the problem of divided authority. The bill reorganized the War Office into three divisions, military, supply and finance, under the general authority of the Secretary of State for War. The military division was headed by the Commander-in-Chief, which essentially moved the Duke of Cambridge from his Horse Guards headquarters into the War Office. The military division was given oversight over discipline, training, reserves, recruiting, education, promotion, appointments, the Chaplain-General, the medical department and the newly created Topographical Department. The supply department was headed by the Surveyor-General of Ordnance and given overall responsibility

² Spiers provides a detailed overview of the problem; see 1992: 30–36. Also see Tucker, 1963: 112 and Andrew, 1985: 13, 21.

for procurement. And the finance department had responsibility for preparing budgets, keeping accounts and undertaking audits (Spiers, 1992: 6–7). While these changes were significant, they did not go as far as creating the tripartite army structure common on the continent of administration, intelligence and operations.

The second significant piece of legislation was the Army Enlistment Act, passed later the same year. It replaced the previously required twelve years of service for new recruits with six on regular duty and six in the reserves. The object of the bill was to create an army reserve similar to those found in continental armies and to increase incentives for enlistment. A third bill, the Localization Act of 1873, established brigade areas in various parts of the United Kingdom, sites where recruiting and training would occur, and organized infantry battalions into complementary pairs. The intent was to create a rotating scheme in which one battalion would serve in the colonies while the other trained new recruits and refitted for duty abroad.³

In addition to these new laws, Cardwell initiated a number of other important changes. In a Royal Warrant of 1871, the sale and exchange of officer's commissions was formally ended. He also introduced a limited system of examinations for entry into the army's military academies, and abolished the Council of Military Education, replacing it with a Director-General of Education. At the same time, however, the Commander-in-Chief – still the Duke of Cambridge – retained the right to determine the fitness of a "gentleman" to serve the Queen. The effect of this last provision, as Tucker has pointed out, was to lessen the impact of the Cardwell reforms. It appears that well into the 1890s, merit, education and formal field training were an exception rather than the rule for the majority of British officers (Tucker, 1963: 125–28). The only areas where the reforms seem to have aggressively taken hold were in the artillery and engineering corps, and among the limited number of officers who attended the advanced training school or staff college at Camberley.⁴ In these cases, the process of reform had begun with another Parliamentary commission, one that looked specifically at the training of officers for the Scientific Corps.

³ This idealized system never seems to have worked quite as intended. Brian Bond has pointed out that there were several inherent flaws in it. First, the main depots from which recruitment was launched were in the south of England, while the ideal target population for recruitment was in the industrial north. Second, the battalions had difficulty reaching full strength with the result that they often had to borrow soldiers from other units when ordered abroad. Third, there was a perpetual shortage of money, which meant that training resources were insufficient and soldiers' pay remained low; Bond, 1960: 515–24.

⁴ For an account of the two-year program at Camberley, see Gleichen, 1932: 110–15.

The Commission on the Training of Officers for the Scientific Corps

The investigations that followed the poor performance of various elements of the Crimean expeditionary force included one that scrutinized the Scientific Corps at the Royal Military Academy in Woolwich, where engineers and artillery officers were trained. At the beginning of 1856, the Secretary of State for War, Lord Panmure, a vocal advocate of officer education, appointed a commission with broad powers to carry out a thorough investigation of the Academy. Small by the standards of the time, the commission was made up of three members, two military officers, Lt. Col. W. Yolland and Lt. Col. W. J. Smythe, and the Rev. W. C. Lake from Oxford. The commissioners made an initial visit to Woolwich and then toured military technical schools on the continent. Upon the completion of their European fact-finding mission, the commission returned to the Academy to make comparisons. The result was a 797-page report submitted to the Secretary of State and printed by Parliament in 1857.

Probably the most significant element of the report was the comparative framework in which scientific training was placed. From visits to military schools in France, Prussia, Austria and Sardinia, which included not only evaluation of the schools and their curricula, but their relationship with other technical training systems in each country, the commissioners drew the following conclusion:

We should not indeed adequately convey our own impressions which are founded on a careful study of the schools described in this report if we did not at once state our belief that in all the countries we visited a far greater value is attached to the possession of a highly scientific training by at least a considerable portion of the officers of the Army than is the case amongst ourselves. Not only are the schools made of more importance, the teaching of every school higher, the discipline apparently more strict, the number of teachers generally greater, but the whole of the education is conducted in a more complete system. The sums expended for the purpose are far larger, and what is perhaps most important of all, advantages to be derived from an intelligent study of their profession are made more certain and more apparent to the pupils or the officers themselves.⁵

These few sentences emphasize the key point of the report. If the British government thought that having a trained cadre of technical

⁵ *Report of the Commissioners appointed to consider the Best Mode of Re-organizing the System for Training Officers for the Scientific Corps; together with an Account of Foreign and Other Military Education*, House of Commons Sessional Papers, 1857: xix–xx. Cited hereafter as TOSC.

experts was essential in the contemporary world – and the continental armies had clearly been acting on such a belief – then Britain was well behind its European rivals in creating the conditions for producing such men.

The Commission made the following recommendations. First and foremost, monies must be allocated so that instructors with the requisite skills could be hired to teach at Woolwich. Second, there needed to be a general agreement that all officers ought to have achieved a certain level of education when they began their careers and, equally important, that their education should not stop there. Third, a good “staff college” that officers could rotate through at various points in their careers to learn the latest military science was essential for the maintenance of a first-rate officer corps. Fourth, the age of admission to the Academy should be raised and the French model adopted – general education to age seventeen, followed by two years of study for the general service and an additional four years for technical training. Fifth, the public school system ought not to be relied on to prepare candidates in anything other than general skills. Even in France, where the general level of education in mathematics was higher than in Britain, the curriculum was only preparation for training at a polytechnic and not a substitute for the latter. Sixth, a system of competitive examinations should be initiated for acceptance into the Academy and review examinations carried out in the army periodically to test those in the “scientific” branches. Lastly, in order to guarantee the professionalization of military training, the report recommended that a unit to oversee military education be created under the supervision of the Secretary of State for War.⁶

In making their case for these and many other changes, the Commissioners argued – thinking perhaps of the reformed civil service – that the military ought to be treated like other professions. Higher education was a norm in all professions, they argued; only through ongoing advanced education could the expert knowledge of a particular field, whether medicine or law, be imparted to a student. But education did more than this. The forms that training took instilled in the student the principle that “merit shall be rewarded,” and it was this principle, the commissioners argued, that guaranteed that the best would be attracted to any of the professions. Quality education and a merit system were also the only known ways to produce skilled engineers and artillerymen.

⁶ TOSC, xxvi–xxxi, xxxiv–xxxv, xxxviii–xxxix.

The problem in Britain, however, was not so much that this principle was not understood in law and the other professions, but that it had yet to be applied to the army. "If military education is a subject of importance," the commissioners concluded:

it is surely worth supporting with the same care with which other great nations direct it. If on the other hand it is unimportant, it would be best, as some propose, to throw it aside entirely and trust only to the education of public schools. In England, we have hitherto acted upon neither plan; we have had an education for our officers costing the country practically nothing, and it has been carried out upon *no uniform system or principle*. We submit that such a course is indefensible upon any theory [emphasis added].⁷

Although somewhat buried in the report, the reference to institutions operating by no "uniform system or principle" is consistent with similar observations to be found in the findings of other commissions. When reformers applied notions of principle, system and rationality to existing structures in Britain, institutions were not simply found wanting, but appeared to operate on no educational or rational theory whatsoever.⁸ As a result, it was impossible to find coherence in a program like that of the Royal Military Academy. There were, in short, no ways or means to evaluate the quality of programs or to measure results.

The institutional incoherence identified by the Scientific Training Commission was quite possibly the result of the involution of governmental departments noted by Brewer. But the commissioners' observations suggest something else as well. In the case of the army, it was only within a comparative framework of developments on the continent that agents of the British state came to identify a disturbing difference in the quality of the "arts of governance" between the United Kingdom and rival powers. Yet even with the critical recognition brought by comparison, change did not happen readily. Recruitment through entrance examinations did not become a norm at the Royal Military Academy until after 1863, and it was another decade before curriculum reform really took hold.

Nevertheless, the report of the commission on officer's training for the Scientific Corps provided a template for change. It also highlighted the fundamental gap that had opened up between Britain and continental rivals concerning the way in which to prepare armies for future warfare – warfare that, if the Germans were right, had been

⁷ TOSC, xxvi.

⁸ With respect to the army, Bond presents a litany of such complaints, many of which were made even before the debacle of the Crimea War; see Bond, 1972: 53–64.

altered by new science, technologies and techniques of military management. Officers were needed who understood the mechanics of contemporary weapons, communications and transport technologies, as well as how to deploy and monitor the activities of complex, large-scale organizations. On the continent, these challenges, as we saw in the last chapter, were addressed in Germany, Russia and, eventually, France in two fundamental ways: by transforming entry-level training programs in order to create a techno-military elite, and by creating incentives for learning through a merit system. This latter condition was instituted in part by systems of rewards and promotions for those who excelled and through the creation of training institutes, with accompanying publication venues, so that officers could stay abreast of change.

The emergence of a military techno-elite

Like the continental powers, Britain had long had schools for training officers in technical subjects. As the report of the 1857 Commission on the Training of Officers for the Scientific Corps indicated, however, there was little similarity between the forms that selection and training took on the continent and in England. When the commission's report was published, candidates for officer's schools were still primarily selected through personal recommendations. By the 1870s, this began to change; the path to admission to army schools gradually shifted to public examinations supervised by the Civil Service Commission.

The 1873 report of the newly created Director-General of Military Education outlined the content of the examinations for admission to the Royal Military Academy at Woolwich. Given twice a year, in January and July, the examinations were preceded by a qualifying test in the following subjects: mathematics, including a thorough knowledge of arithmetic and the use of logarithms, algebra, and geometry; the written translation of a passage in French, German or another modern language; writing in clear, legible English from dictation; geometrical drawing; and geography. Those who passed were then tested in advanced algebra, plane trigonometry, mechanics, and differential and integral calculus; English composition; Latin and Greek; advanced French or German; experimental sciences; physical geography and geology; and freehand and geometrical drawing. Candidates were required to take the mathematics and drawing portions of the examination, and could choose to be examined in four other areas. They were ranked on the basis of the total accumulation of marks received, but the

marks themselves were weighted in a graded hierarchy that gave the most points to mathematics and the fewest to drawing.⁹

There are at least two points to be made about the format of the admissions examinations. First, participation was predicated on candidates being wealthy enough to acquire the necessary education to sit for the examinations in the first place. Second, the examinations were designed to identify those who would thrive on both mental and physical discipline. The former was insured by the greater weight given to mathematics, Latin and Greek, subjects that were supposed to produce a disciplined and focused mind. The latter was tested through the quality of penmanship and drawing. As we shall see, these were desirable skills because officers were expected to write clear and legible reports and to be able to make maps and sketch the details of topography.

At Woolwich, cadets began a thirty-month program, with a heavy emphasis on mathematics. In addition to courses in plane geometry, cadets learned to apply mathematics to the machinery available at the Woolwich Arsenal. They also took classes in fortifications, artillery, drawing, field sketching and reconnaissance, military history and geography, French or German, elementary chemistry and physics, and drill. This general education was supplemented by, for those who chose to take them, courses in higher mathematics and fortifications, a second modern language, free-hand drawing and higher chemistry (FRDME, 53–54). Reports, including those of the Director of Military Education and the Board of Visitors to Woolwich, indicate that the program outlined above, with only minor changes, remained about the same through the end of the 1880s. At that point a decision was made to separate the training of engineering and artillery cadets, on the grounds that each group learned much information unnecessary to their specialty. The result was that engineers were given additional courses in advanced mathematics, while artillery cadets concentrated on the practical uses of artillery (Smyth, 1961: 118).

After the newly commissioned officers had passed out of the Royal Military Academy, they might be sent on to advanced training. Engineers were required to complete a two-year intensive course in military and

⁹ *First Report on the Education of Officers by the Director-General of Military Education*, 1873, 56–57 (cited hereafter as FRDME). The marks were as follows:

Mathematics	4,500	French	2,000
English	3,000	German	2,000
Latin	3,000	Experimental Sciences	2,000
Greek	3,000	Physical Geography	2,000
		Drawing	1,500

civil engineering at the Royal Engineer Establishment in Chatham, while artillery officers were sent to the School of Gunnery at Shoeburyness. For present purposes, the main concern is with the advanced training received at the Royal Engineers Establishment. The minutes of evidence of the first Royal Commission to inquire into the present state of military education provide one of the more detailed overviews of the curriculum at Chatham. Published in 1870, the report indicated that the mandatory course of instruction was divided into three parts, the survey course, the course of construction and estimating, and the fieldwork course. There were also a number of miscellaneous courses.¹⁰

In Chapters 5 and 6, I take up in greater detail the practices of forms of knowledge production in the field. Here the concern is with what engineers knew before they arrived there. The first of these courses, the surveying course, taught students how to look at, evaluate and record terrain from a tactical and logistical perspective. The training included the use of astronomical instruments for finding “the time, latitude and longitude, the direction of the meridian, and the variation of the compass.” Once they had established their point of observation, officers were instructed in general surveying, including the establishment and measurement of a baseline, trigonometric triangulation, traversing ground and sketching results, with contour lines, onto paper. This sort of instruction was associated with the skills of precision map-making to be found in the Ordnance Survey, and in order to excel at these tasks, prior knowledge of geometry, trigonometry and calculus was required (MMEV, ciii).

Once they learned the basic principles of surveying, cadets were taught to adapt these skills to military reconnaissance, to the construction of fortifications for defense, and to the laying out of lines of communication by rail, road or waterway. Each of these tasks was accompanied by written reports. In the case of reconnaissance exercises, trainees were required to provide a topographical map of the ground traversed, including a “detailed report on its general character, its resources, and military capabilities,” as well as a comprehensive description of the country passed through and the conditions of roads (MMEC, ciii).

In contrast to the descriptive elements of the reconnaissance reports, officers were also asked to explain the character of their fortification designs and elaborate on their plans for near and distant defenses of the fortifications. The plans were to be accompanied by charts indicating the

¹⁰ *Minutes of Evidence taken from the Royal Commission appointed to Inquire into the State of Military Education and into the Training of Candidates for Commissions in the Army, 1870*, ci–cvi (cited hereafter as MMEC). The report on Chatham can be found in Appendix VII.

“economical” use of earth moved to make the defenses. The third kind of report, on communications lines, required officers to describe the gradients, curves, and so forth, of the country surveyed and to provide the calculations that could lead to their decisions about creating unobstructed lines of communication. In these calculations, the officers were to “estimate the cost of necessary construction on each of the trial lines, the cost of conveyance of heavy goods on an assumed basis of daily traffic, and the time occupied in each case for quick transit” (MMEC, ciii–iv). In other words, through this kind of reporting, officers were being trained not only to plan lines of communication, but to learn the rudimentary skills required for logistical operations of military campaigns.

If we focus for a moment on the advanced training program for engineers, it should be clear that officers were prepared to do more than simply build and destroy fortifications and create defensive positions. As W. L. Burn has pointed out, graduates of army training programs provided numerous services as civil engineers, taking advantage of the half-pay policy of the government during periods of military cutback (1964: 224). Most significant for purposes here, however, is the fact that some of the engineers and artillery officers entered a wholly new unit within the army created as part of the reform process, the Intelligence Branch of the War Office.

Given the training outlined above, it might be obvious why graduates of Woolwich were sought after in the civilian sector and for public works. But their presence in the intelligence corps requires some explanation. What was there about the training engineers received that made them attractive as intelligence officers? To put this another way, what was there about intelligence collection in Britain that made engineering and, to a certain extent, artillery training fruitful areas for recruiting intelligence officers?

One answer may have to do with the very rigor of the curriculum in both training programs, especially in mathematics.¹¹ The focus on mathematics reinforced a generally held belief that such study developed the higher faculties of the mind and taught one to think in a systematic, orderly and logical way. But if mathematics trained the mind, its many practical applications also had appeal, whether it was the mathematics of engineering, of surveying or of artillery. And while intelligence was

¹¹ *First Report of the Royal Commission appointed to inquire into the Present State of Military Education and into the Training of Candidates for Commissions in the Army*, 1869 (cited hereafter as RMEC). Also see the first through fifth *Report on the Education of Officers by the Director-General of Military Education* dated 1873, 1876, 1883, 1889, and 1893, as well as *Report of the Board of Visitors to Inspect the Royal Military Academy Woolwich*, annually 1872–79.

not organized in such a way as to exploit the construction capabilities of the engineers, the particular way that engineers were trained to look at structures and terrain, be they man-made or natural, was taken to be a desirable skill in reconnaissance work. So too was the training in surveying, map-making and drawing. But perhaps most important was the instruction students received in compiling, organizing and presenting reports in legible and systematic ways. Such skills were important not only for the production of information defined as intelligence, but for the carrying out of a host of related duties, including the organization of militarily relevant information into a filing system, the mobilization of forces and logistical planning.

Woolwich did not, however, have a monopoly on producing officers with skills that might be desirable to intelligence departments. A second important institution for providing advanced military training was the Staff College at Camberley. Originally created in 1857, the Staff College was supposed to address the need for better organization of expeditions abroad, a British military shortcoming that the Crimean War had made glaringly visible. But it also was to function as a site where officers who had not gone to one of the schools in the Scientific Corps could receive advanced training relevant to the duties of a member of a staff (e.g., logistics, proper forms of written orders, intelligence collection and evaluation, mobilization and concentration of forces). The initial curriculum did not actually go very far beyond what was then being taught at Woolwich; and as at Woolwich, there was a heavy emphasis on mathematics.

The 1868 Royal Commission on military education made a number of recommendations for improvement of the Staff College, the bulk of which were put into effect by General Order 41 in April 1870 (Bond, 1972: 109). The recommendations included the following. After passing an entrance examination and receiving a recommendation from a senior officer, candidates were to enroll in a two-year program that included courses on fortifications, field engineering, artillery, reconnaissance, and language training in either French, German or Hindustani. In addition, courses on military art, administration, history, geography, law – all of which had additional time devoted to them – and field telegraphy were to be added to the curriculum. The emphasis of all these courses was practical application in the field.¹² And because the commissioners felt that the

¹² Officers were also to learn how to lay out encampments, transport troops, arms and materiel by rail and by sea, transport the sick and wounded, and embark and disembark an expeditionary force with all of its equipment. They were also to be taught how to write concise and clear military reports. All of these skills address the fundamental shortcomings of the expedition to the Crimea.

training at Woolwich and Chatham was insufficient for staff duties, they recommended that special places be made for the Scientific Corps at the Staff College (RMEC, 49–54). The Commission did not, however, make training at Camberley obligatory for membership on a staff, in large part because a number of senior generals and the Commander-in-Chief of the army, the Duke of Cambridge, objected to such a requirement (Bond, 1972: 104–6). Nevertheless, from the point of view of the Intelligence Branch at the War Office, the Staff College became another important site of advanced training and preparation for intelligence duties.¹³

The United Services Institute and professionalization

While the new training regime prepared officers for a technical profession, technologies of warfare changed rapidly from the 1860s forward as new machine-tooling equipment and higher grades of steel became available. As in other professional fields, specialized journals began to appear to keep officers up to date on the latest developments. These ranged from publications like the *Royal Engineers Journal*, begun in 1870, to ones that cut across the armed services, the most important being the *Journal of the Royal United Services Institute*.¹⁴ The Institute was not new; it had been created in 1844 to foster dialogue among the branches of the British military, and its journal first appeared in the wake of the report of the commission that investigated the scientific services. The first issue, published in 1858, proclaimed its purpose:

All other professions have establishments for imparting professional knowledge and general information. In the learned and scientific societies of the country, naval and military science has been hitherto unrepresented and unrecognized; it is the province of this institution to fill that vacancy and become to the services what the museum in Jermyn Street is to geology, and that of Kew to botany. We have among our members officers of the highest talent and ability, eminently capable of imparting the knowledge they have acquired, and of giving the service the benefit of their experience. The professional papers of the Royal Engineers are of the highest order. (1858: 4–5)

There followed a series of articles that included reports on such topics as military surveying, regimental schools in France, and the strategic

¹³ Bond points out that, in spite of these changes, it was not until the 1890s that Camberley began effectively to function as a site for preparing officers to deal with the complexities of contemporary warfare, which included the defense of the British Isles and the launching of expeditions overseas; see 1972: 82–152.

¹⁴ The journal also carried a list of foreign military periodicals with translations of the titles of articles. An 1898 edition lists periodicals from Austria, France, Germany, Italy, Russia, Spain and Switzerland; see 42.1 (January/June 1898): 103–105.

relation between the Euphrates River and India. Signaling that the journal was not exclusively concerned with technical and strategic matters, but also ethnological ones, the editors included articles on Persia and the Persians, by Sir Henry Rawlinson, and another on China and the Chinese. In subsequent years, contributions frequently appeared on new technologies, such as the camera and telegraphy, and their “application to military purposes.” Surveys of new weapons and weapons systems, such as rail-mounted cannons, often with field test results, were published along with speculations about the impact of these new technologies on battlefield tactics. There were also numerous articles on military sketching and mapping, and during the American Civil War substantial coverage of recent campaigns and battles. Officer training was another favorite topic, as were discussions of the defense of the United Kingdom and the recent military campaigns of British forces in Africa and Asia. Russian expansion across Asia was carefully monitored, along with the particular challenges it posed to British India. Other pieces speculated about the use of petroleum as a fuel to produce steam, and some made suggestions for improving the communications systems of the empire. Many of these articles were written by first-hand observers, including former military officers like Henry Rawlinson and civilians such as Armin Vambery and Archibald Colquhoun, prominent writers on “Eastern Questions.” But most of the contributions were from Royal Engineers and Artillery officers.

It should be clear from this review that the Institute’s journal was both a professional venue and something more. In a number of instances, it provided a forum, not unlike the journal of the Royal Geographic Society, for the presentation of points of view by military experts on pressing strategic issues of the day related to the defense of the British Empire, and most especially the defense of India. The journal also spawned a version of itself in India, the *Proceedings of the United Services Institution of India*.

Founded in 1871, the Indian journal explored similar themes – technological innovations and their military applications, mapping and surveying – but with a decided focus on India and the regions around the subcontinent, particularly the Northwest Frontier and its “tribal” inhabitants. Like its counterpart in London, it was also filled with articles about training and professionalization. The journal in India became a voice for the reorganization and restructuring of the Indian Army as it prepared to deal not only with internal threats to British rule, but external ones as well. In India, professionalization meant improving the army’s logistical and intelligence capabilities, and the introduction of new professional standards. Such changes, as we shall see below,

were ultimately worked out by officers who, unlike their counterparts in Britain, were often actively engaged in military campaigning, the reports of which were circulated through the proceedings of the United Services institutes in both India and London. In these ways, military journals served both to establish new standards of performance for army officers and to keep officers informed of the effects of such changes.

Refashioning imperial masculinity

The recruitment, training, and assignment of engineers and artillery officers to intelligence duties as outlined above are of interest not only as social rationalization but also at more subtle levels of change. In the first place, such assignments foreground a wholly new set of criteria for officers, the fundamental one of which was that they were expected to be educated. This does not mean that earlier criteria of evaluation disappeared, however. Men trained as engineers were also expected to perform on the drill field, be expert on horseback, and demonstrate bravery and exemplary leadership on the battlefield. And they were also expected to be gentlemen as well as officers.

At the same time, however, they embodied a new kind of imperial masculinity, one associated with intense study and the capacity to manipulate complex technologies skillfully. If the older masculinity organized its values around daring and selfless acts of bravery on the battlefield, and the privileges and responsibilities of class, the new masculinity was grounded on mental dexterity and predictable, regulated, self-disciplined performance. Therefore commission-inspired reforms marked a distinctive cultural shift. In his 1889 history of the Corps of Royal Engineers, Whitworth Porter, a general and an engineer, noted that hitherto it had been believed that “much scientific study, or indeed any absorbing intellectual application” led to physical weakness. This notion, he argued, had been thoroughly refuted by no less a personage than George Trevelyan, who argued that the Engineers were the “select of the select.” Porter cites Trevelyan further to the effect that in becoming officers in the Corps, the engineer had “run the gauntlet of an almost endless series of intellectual contests” and showed no signs of “physical weakness,” no “dearth of courage,” nor any diminution in “animal spirits” (1889, 1: 6). The arguments of Porter and Trevelyan speak to the new form of masculinity I allude to, one that combined mental and physical superiority as complementary parts of a whole.

A second aspect of this new masculinity placed graduates of Woolwich into a new class of professionals. Recall the earlier reference to other tasks taken up by some trained Army engineers beyond strictly military

duties. Porter listed the important role engineers played in the expansion and development of telegraphy throughout Britain and other countries. Engineers also held key positions in the Colonial, Foreign and India offices, served in the prison system and police departments, helped design the Crystal Palace for the 1851 International Exposition, and worked on important archeological projects.¹⁵ Others, such as Francis Piggott, learned foreign languages and became military attachés in British embassies.¹⁶ In these various ways, engineers not only had a major impact on state formation in Victorian and Edwardian Britain, but played a similarly critical role in India and other colonies where they were involved in road, railroad, harbor, bridge and telegraph construction projects, as well as being the key figures in the Trigonometric Survey of India and administrators for the Government of India.¹⁷ The men involved in these activities made their way in the world not on the basis of inherited privilege, but on the strength of their skills and knowledge in highly technical fields – on their merit, as it were. Most importantly, these professional officers were formed by a disciplinary apparatus that continually trained and tested them, an apparatus that provided a clear, measurable and verifiable set of criteria by which they could be evaluated at each stage of a career.

Lastly, the new masculinity was also fashioned in relation to contemporary technologies of knowledge. The curricula at the Royal Military Academy (Woolwich) and the advanced training school at Chatham provided students with an ensemble of skills for collecting, organizing and managing information. They were also taught to use a variety of instruments for measuring and plotting the topography of land and fixing terrain to a universal grid of longitude and latitude. These and other techniques involved basic mechanics, as well as the mathematics

¹⁵ Porter provides an extensive discussion of the impact engineers had in both the military and the civil realm in the nineteenth century; see 1889, 2, part III: 209–378, for numerous examples, all of which support the general observations of Burn (1986) in far greater detail than the latter provides. Also see Buchanan (1986), who deals with the global “diaspora” of British engineers, both military and civil, in the nineteenth century.

¹⁶ In Piggott’s case, he learned Japanese and spent a number of years in Tokyo. In his autobiography, he also comments on the diverse careers of engineers, noting, for example, that in the Royal Engineers’ monthly lists of 1900 were to be found five colonial governors and numerous active and retired officers serving in government departments. Piggott also spent time in the Far East section of the Intelligence Department in the War Office where he exchanged information, including material on the German fortifications at Qingdao during the First World War, with Japanese attachés in London; see 1950: 18–19, 90.

¹⁷ See Sandes, 1935, the second volume of which provides a very detailed account of engineering activities in India.

necessary for building bridges, roads and fortifications and for siting artillery. The use of measuring and calculating devices was accompanied by techniques for systematically organizing the results of observations. The organization of such expert knowledge, in turn, involved learning specialized inscriptional forms, be they logs and field books, memos and reports, or charts and diagrams, through which information could be stored, transmitted and shared. They learned, in other words, how to produce consistently legible information and how to organize such information into a memory bank, a permanent archive.

As technological change produced more effective communication, transportation and weapons systems after 1850 – after, that is, the effects of industrial production fundamentally altered warfare and the military sciences – the sorts of skills associated with information systems became a critical focal point in debates over military modernization in Britain. That information could take on such importance was in large measure due to the fact that data management had applications well beyond the military. But even within the military, such skills were useful for more than simply producing useful empirical knowledge about British military capabilities and needs; they could also be used for understanding and evaluating the military strength of other states. Sometime in the 1860s or 1870s, the information collected by the new techno-military elite in Britain and the colonies became known as military intelligence, and with this came the notion of creating a site where systematic information of strategic usefulness could be concentrated. The new institutions that resulted, the intelligence units, were a site where re-formed imperial masculine subjects could find a venue for the expression of technical expertise, a form of instrumental knowledge that defined the structure and content of intelligence into the twentieth century.

4 Forming intelligence, making an archive

Intelligence emerged as a visible discipline in the British Army in the 1870s. This chapter will approach the process of that emergence in two ways. The first explores how the Intelligence Department of the War Office and its counterpart in India came to be formed. The focus will be primarily on institutional change and the development of new administrative structures.¹ The comparative projects which were noted in Chapters 2 and 3, revealed shortcomings in the Army's readiness for war. In the late nineteenth century British understanding of military intelligence arose in part from investigations into the organization of military information management systems among European armies. Those investigations produced a sense that a critical institutional gap had opened between the continental armies and those of Great Britain, a gap that created for many army officers an obvious logistics and security problem for both the British Isles and British India.

The second approach considers the meanings that came to be ascribed to the notion of intelligence. In part, these meanings resulted from locating intelligence branches within the Quartermaster General's Department of the British and Indian armies, the units responsible for military logistics. But the meaning of intelligence also had to do with the application of principles of information management, technologies of knowledge designed to sort, index and store various forms of data. "Intelligence," in other words, began to be treated as one mechanism of state formation and tool of empire.

From topography to intelligence

In a 1924 address to the United Services Institute in London, Major-General Sir George McMunn noted retrospectively that the

¹ In addition to the archival sources cited in this chapter, I have benefitted from the research of others on British military intelligence; see Fergusson, 1984; Andrew, 1985: 11–33; and Gudgin, 1999: 19–37.

Quartermaster General's Department (QMG) in the mid nineteenth century was more like a general staff than the "universal house-keeper" it appeared to be in the present day (1924: 102). The staff functions referred to by McMunn were primarily located within the Intelligence Branch of the QMG. Initially known as the Topographical and Statistical Department, the unit had been formed soon after the Crimean War. The first head was Major Thomas Jervis of the Bombay Engineers. After he died in 1857, he was succeeded by Capt. Aylmer Cameron, a Royal Engineer then posted to the Ordnance Survey of Great Britain. A succession of Royal Engineers and Royal Artillery officers and non-commissioned officers rotated through the unit for the next several years, and it was not uncommon for the first posting of many engineering officers to be to this department.²

As the unit took shape in the early 1860s, information was organized through three regional sections, with a focus exclusively on Europe. The sections collected militarily relevant statistics and produced maps of the countries assigned to each of them. Further organizational changes continued into the early 1870s, when a library was added, the duties of which included the organization of a catalogue of the War Office's holdings and the creation of a military archive. Intelligence would come to function as the site of institutional memory for the army.

In the wake of the Franco-Prussian War, the Topographical and Statistical Department became a target of the Cardwell reforms discussed in the previous chapter. The Secretary of War and his advisors determined that the structure of the intelligence service(s) was inadequate for contemporary military needs. In particular, they were concerned that Britain was the only major power in Europe without a scheme of national defense or any plan for mobilizing its forces. On April 1, 1873, the Intelligence Branch was created, with expanded duties, and the following year it was placed under the QMG. In addition to collecting topographical and statistical information, the Branch was to apply "such information ... to the measures considered and determined on during peace which should be adopted in war, so that no delay might arise from uncertainty or hesitation" (CR, 6). In order to identify what kind of information was needed to achieve such certainty, Gen. P. J. MacDougall, the first commander of the Branch, charged his assistant Maj. Charles Wilson with defining the

² I draw for much of what follows on Edwin Collen's report of 1878; see NA/WO33/32, cited hereafter as CR. Collen was sent by the Indian Army to visit the unit in 1877. At that time, half of the sixteen officers and eight out of the nine non-commissioned officers working in the Branch were either Royal Engineers or Royal Artillery.

responsibilities and objectives of the unit. Wilson's scheme included the following:

1. Compile for publication a complete and accurate account of the strength, organization, equipment, tactics, etc. of each foreign army
2. Collect all possible information from newspapers, etc., and arrange it in a classified order
3. Prepare and periodically revise an "Ordre de Bataille" for each country
4. Prepare a statement of the strength of Army-Corps accompanied by a sketch map
5. Prepare short biographies of foreign generals
6. Collect information on fortresses, especially on coasts
7. Prepare geographical and statistical accounts of coastal districts
8. Update notes on maps of foreign countries
9. Prepare answers to special questions, such as the best way to render assistance to Belgium, Holland, etc. should their independence be threatened; the best course to pursue in the event of war with Russia under various conditions. (CR, 8)

The last of these duties essentially authorized intelligence to contemplate "what if" scenarios, and to develop "contingency plans" to deal with them. Eventually, as we shall see below, such preparation went beyond defense and mobilization planning and came to include war games and staff rides, partly on the model of the Prussian example discussed in Chapter 2.

In addition to directing Wilson to set goals for the Branch, MacDougall deputed Maj. Charles B. Brackenbury to visit Prussia, France and Austria where he was to determine the organizational structure of intelligence used by the armies in these countries; to ascertain the duties each assigned to military attachés; and to advise on methods that might be adopted to improve cooperation between the Intelligence Branch and British military attachés. In the report produced from this fact-finding mission, Brackenbury concluded that the intelligence capabilities of European armies were far superior to those of Britain. He singled out three key areas where improvement was crucial (1874).

The first of these was the collection of militarily relevant information on potential adversaries and their organization into formal reports. Brackenbury singled out road or route reports he saw in Austria as useful formats adaptable in Britain.³ Second, like the continental armies,

³ Brackenbury provided a detailed discussion, with examples, of the form that military knowledge took in Austria in an appendix; see 1874: 38–50. His fuller account of Austrian intelligence may have been because the officers he met were more

Britain had to put such data to use in devising mobilization and defense plans. Third, British leaders needed to recognize that what made it possible for the European armies to collect and plan in this manner was that each had a centralized general staff. The staff had responsibility for collection, assessment, planning, logistics and mobilization, including close working relations with railroads in each country, and had sufficient personnel to accomplish these tasks. All of this activity required a high level of individual and collective talent and training. Addressing critics of a new military emphasis on intelligence, Brackenbury concluded with the prickly comment that there was “nothing new or un-English in the idea of studying.”⁴

In 1876 Brackenbury further elaborated on the role of an intelligence unit as an arm of a general staff. In an address before the United Services Institute, he argued that the duties of intelligence officers were to collect, sift and arrange information to facilitate “the rapid commencement and vigorous prosecution of any war whether at home or abroad” (1876: 242). He then outlined the operations of the general staffs in Prussia, Austria and France and concluded that

this kind of preparation for war is considered quite as necessary as the provision of arms or the drilling of men. It ensures the absence of delay and confusion ... A military power neglecting these Staff duties in peace may as well put its neck under the feet of its enemies. (1876: 261)

Evidently at least some of Brackenbury’s recommendations were addressed, because when Edwin Collen of the Indian Army arrived in London in 1877 to investigate and observe the Intelligence Branch at the War Office, organizational changes had begun to be implemented. The unit that Collen found in place had an officer with the rank of general and the title Deputy Quartermaster General for Intelligence at its head. Under him was an assistant quartermaster general who was in charge of a central unit that supervised six other sections. In its supervisory capacities, this unit maintained a registry of incoming

forthcoming than the Germans or the French. The Austrian route reports were organized in the form of tabular charts; the report was formatted as spatial and temporal stages of a march with topographical details included. Such reports had a long history in Europe dating back to the Roman Empire; see Talbert, 2010. The difference between the earlier and later form of these reports, as will be discussed in the next chapter, was the inclusion of data generated through the use of new measuring instruments. Brackenbury does not mention having seen route books in Germany or France, but there is no reason to believe that something like the Austrian form was not also present at least in the former.

⁴ Brackenbury, 1874; see pp. 30–31 for his conclusions and the quotation.

and outgoing communications. Information not only flowed toward the center, but “returned to it in a form worked up into shape, after having passed through it to the other sections” (CR, 39). The central unit had to know, in other words, where to direct the “extensive and varied” kinds of material that it took in so that the raw data might be processed into useful military intelligence.

The center’s registry was the nodal point for such direction. It logged incoming correspondence in its “transit book” and delivered messages to the appropriate sections. It also kept track of the flow of information between the intelligence unit and specific government agencies, such as the Foreign, Colonial and India offices, and maintained a register of papers produced by the Branch. In addition, much like any of the other subsections, the center also processed raw material into usable information (CR, 35). Its main tasks were defined as “special subjects” and included evaluating army organization, planning for army mobilization, and overseeing the military use of rail and telegraph communications, all functions that Brackenbury had identified as key responsibilities of continental staffs. The various duties undertaken by the center essentially constituted it as the primary logistical and planning unit within intelligence; as such, it interfaced with units outside the intelligence section proper – the director of the center sat on a number of army and governmental committees (CR, 18).

Five of the six sections under the central unit were what might be called area studies centers. Each was responsible for giving form to the vast quantities of information on the military capabilities and resources of the various nation states assigned to it and of the territories of the British Empire. Section A dealt with France, French colonies and Belgium. This unit was also charged with institutional memory; it compiled military history and records of campaigns. Section B collected relevant military information about Britain’s colonies. Section C was responsible for Germany, Holland and the Dutch colonies, Denmark, Switzerland, the United States, Mexico and Central America, Brazil and South America, and autumn maneuvers. Section D was charged with Russia, Spain and Spanish colonies, Portugal and Portuguese colonies, Asia, India, Japan and the Pacific Islands, while Section E compiled data on Austria, Italy, Turkey and Greece, Sweden and Norway, and Africa. The sixth unit, section F, included the topographical part of the old Branch, as well as a library and a lithography and printing office for publication of the Branch’s reports.

While Collen was particularly sensitive to how the Branch was managed, he was also concerned with the structural order of information. Critical to the process was the actual act of putting things onto paper.

Tabulation and charting allowed one to see what was at hand and what additional information might be needed. Moreover, ordering things on paper produced effects, the most important of which was a logical progression to the creation of “an organization in reality.” To critics who scoffed at armies on paper, he observed that there was no fundamental difference between an army organization chart and a railroad company’s timetables and rules for regulating traffic, an observation that might have been made by a member of the Prussian General Staff. Given Collen’s concern with structure, flows and interconnected parts, this reference to the railroad was probably more than analogical. One can discern within his minute description of the Branch’s structure a desire to imagine the army as a vast machine, the ordering of which was to be managed quite literally by intelligence.

What did this ordering look like? In one respect, it involved a disciplinary set of practices that connected sub-units with higher formations, while fashioning horizontal linkages between units at each level. In another respect, it was concerned with the regulation of descriptive data and statistics in a recoverable form; that is, the system of collection, classification and filing created an interactive archive. Intelligence accomplished its disciplinary ordering function through the creation of plans on paper, plans which were organized through a progressive logic of regular sequences. These sequences transformed the “isolated” unit or “fact” into a portion of a whole, and then ordered the totality temporally as the summation of knowledge at any given moment.

The key artifact of this process, according to Collen, was the *précis*, a form of summation which was also a work in progress. *Précis* moved from manuscript to print at moments of concern or crisis – they were a logically ordered summation of what was known at that moment. Normally, however, *précis* remained in manuscript form because “a constant revision must always be going on” so that they were kept up to date. Here the disciplined monitoring of the state of the summary was crucial. Deficiencies, Collen tells us, were noted on the first page of the *précis*, enabling the chief of a section “to review what is required to complete the information, and to take steps to supply the defects” (CR, 53).

There are, perhaps, two things to draw attention to in Collen’s rendition of the steps involved with information management and the generation of intelligence. The first is the central role of print technology in fixing in time the state of current knowledge. The printing press, a key technology of information storage in the nineteenth century, was a mode of production incorporated into the intelligence process from its inception. No doubt things were written down by hand, but what was

saved, circulated and stored was that which was produced by mechanical reproduction. This significant situation also helps to account for one of the distinguishing characteristics of the intelligence archive – it is clearly legible. Even hand-written notes on an “original” might be typeset in margins on later reprints! What came to constitute intelligence operated as heterogeneous elements of a network linking the arts of governance with new information technologies to create a security mechanism. Equally significant, it was through practices of collection, compilation and notation that intelligence gained its authority.

The second point to be made about Collen’s discussion of *précis*-making is that it is perhaps here, more than anywhere else, that Latour’s notion of a “center of calculation” comes into sharp focus (1990). In his discussion of the mundane activities of paper work, Latour has noted that collecting, ordering, summarizing and updating are the activities by which data from far-flung regions is organized to enable fewer and fewer hands to command and control a vast store of information and allow for planning vast projects from great distances. In this case, the plans in question involved the making of a script for the mobilization of a British Army, the deployment of an expeditionary force outside the British Isles, and the defense of the British Empire. In the process, the calculations themselves produced hard facts, facts that simultaneously functioned as integral elements of plans and as the specialized content of this specific nodal point in the vast archive of empire. The raw material made into fact in the Intelligence Branch was part of the more general process of developing comprehensive knowledge in the domain of empire, knowledge that could then be deployed to reproduce the very disciplinary apparatus of its creation.

If the routine practices of the disciplinary regime described above can be understood as a diachronic phenomenon, the information itself was regulated synchronically through classification schemes. The simplest of these was the scheme discussed above concerning the structure of the Intelligence Branch itself. But within each of the units that made up the Branch there were more and less complex forms of classificatory regulation, the effects of which produced both filing systems and editors/updaters. The classification schemes regulating the Branch were devised so that they would be easily understandable or legible to a properly trained viewing subject. A uniform set of headings and sub-headings were distributed across the intelligence sections, linking one to another horizontally and providing a redundant structure for indexing, filing, cross-referencing and recovering information.

Collen provides the most complete form of the classificatory order in his description of the colonial section. Information was distributed

into the following categories: geography; harbors and landing places; roads and rail tracks; towns; forts, arsenals, barracks; dockyards and naval establishments; climate as it affects production and health; trade, agriculture and transport; inhabitants, including character, pursuits and languages; history; administration; finance, money, weights and measures; military; and the reference materials used to fill the categories. Under each of the major headings were minor ones that further differentiated and refined the particular class (CR, 47–50).⁵

The categories listed here are the stuff of nineteenth-century military statistics. Consider the order in which they are presented. Little, if anything, is said of this order in the intelligence documents themselves, where the sequence of rubrics for filing information is made to appear quite natural. However, if we read this classification scheme as reflecting a properly ordered serial sequence, it moves from the physical terrain of the place in question to transport and communications and on to local forms of governance. Within this order, the humanly constructed world, physical modes of communication and potential obstacles to such communication (i.e., forts, defenses) take precedence over other human practices and their forms of social, economic and political organization. What we see then is not simply the ordering of information on the basis of its military relevance, but military relevance being defined as what was significant from a logistical point of view – that is, the efficient movement and supply of armies into and through a field of operations. This format, with an extremely limited number of variations, was broadly circulated through the British Empire and became the basis, as we shall see below, of a genre unique to intelligence, the military report, itself a logistical gem.

The second thing to note is that the classificatory order of the regulatory regime did more than simply distribute information into pre-set categories. It was also a map for the storage and recovery of data.

⁵ In some respects, these intelligence practices harkened back to earlier nineteenth-century efforts in Britain and the systematic study of social and geographic spaces pioneered by the Royal Statistical Society. Centering on a group of Cambridge luminaries who took inspiration from critiques of the anti-historical nature of Ricardian political economy and from what they understood to be a natural science of society inspired by the work of Alexander von Humboldt and Adolphe Quetelet, the society had, by the mid 1830s, formulated an “atomization of social life” that became the working categories into which data was ordered. According to Lawrence Goldman, the original categories included economical, political, financial, medical and moral/intellectual statistics, and were subdivided into “numerous constituent parts” (1983: 604). The general idea of the ordering of information in this way was to make it possible to identify similar phenomena everywhere in order to draw, as Richard Jones put it, “safe and useful conclusions” (cited in Goldman, 1983: 603). As will be discussed below, this was precisely the logic of the military report.

That is, we can read the structural chart of categories as a filing cabinet (storage) and as an index (recovery). Indeed, as Collen observes, more than one index was possible. One of them might be organized within the file itself; another might be external to the file, providing direction to specific elements in the storage folder or box. The external index might also operate to bring together a number of files on a specific subject or it might function as an index of indexes. A third kind of index might provide a plan for locating the material within the archive (CR, 47–53). This last form could also be used to organize and provide ready access to the Branch's library. In the case of library holdings, a classification system was devised based on a three-digit scheme. The first digit indicated a subject heading, the second, a geographical region, and the third, a country. So, for example, books on civil administration in China would have carried a number 648; 6 being civil administration; 4, Asia; and 8, China. Books and intelligence reports were then stored not alphabetically, but in numerical sequence.

More important than amassing and classifying military information, however, was what could be done with it. Commenting on the productive capacities of the Branch, Charles Brackenbury had also observed in his address before the Royal United Services Institute in 1876 that when it was apparent that Sir Garnet Wolseley was to lead a military expedition into Natal, the Branch prepared a *précis* on the colony. The manuscript had been placed in the hands of the printer that very day, and, as Brackenbury explained:

When Sir Garnet starts on Monday next, he and each of the Officers of his staff will have in their hands an octavo volume of some 90 or 100 pages, containing systematized information on all the subjects likely to be valuable to him, from history, geography, and statistics of the colony, down to such small details as the money, weights and measures in use, not forgetting the nature of the native races with whom he may possibly have to deal. (1876: 262)

Here Brackenbury draws attention not simply to the collecting and inventory capacities of the Branch, but its mobilization capabilities. It could essentially print and disseminate field intelligence within a fortnight to meet a particular strategic need.

If the portions of Collen's report discussed above provide a sense of the emergence of the disciplinary and regulatory structure of the Branch, Brackenbury's comments draw attention to the scope of the field of operations of the Branch. As the depository of "all information essential to the military preparedness of the country," as Collen put it, the Branch sought, for the first time in any comprehensive and coordinated manner, to gather information relevant for the defense of the British Isles and on

potential theaters of operation outside Britain. For defensive warfare, data was collected on possible landing places, numbers and composition of forces available to oppose such landings and prevent a march on London, and favorable positions for defense, especially of London. In addition, inventories were created indicating “resources in grain, cattle, horses, carts wagons, mills, bakeries, and billeting capacities of towns and villages.” Similar inventories were kept on communication lines, including railroad rolling stock and infrastructure facilities of stations for the purpose of troop transport. Military resource inventories were also collected and maintained on British colonies. In addition, the Branch was charged with planning for the preparation of defensive positions, working with the Inspector General of Fortifications to implement such plans, and overseeing a mobilization plan for moving forces to defensive positions in the British Isles (CR, 20–28).

For areas outside Great Britain, the Branch was to develop contingency plans for possible overseas theaters of operation, catalogue the composition of an expeditionary force, plan for its embarkation, including a detailed list of vessels needed and availability of such vessels, gather “minute information as to the different possible points where an expeditionary force might be required to land” and about the topography of the neighboring country, and plan for disembarkation of the force. Lastly, the unit was responsible for maintaining current information on the “military strength, resources, and systems of foreign powers,” and acted as an archive for reports of military attachés. In times of crises, intelligence officers were to compile relevant information in *précis* form and make it available to military command.

In order to drive the point home about the Branch’s capacity to command information, Collen included a catalogue of activities undertaken by intelligence officers in 1877. It is worth reviewing his findings because they provide some sense of the range and level of activities undertaken at this point in the unit’s history. A War Office library and map catalogue was finalized; a detailed reconnaissance was completed on the eastern coast of Scotland; regulations were drafted for the organization of communications for an army in the field; and the mobilization scheme was further refined. Maps of parts of Bulgaria and Romania, Turkish Armenia, the Trans-Caucasus region and Egypt were completed. A comprehensive account of the French Army, which, Collen added, did not exist in any language, was published. Reports on the Dutch and French coasts were made by officers visiting the areas; and a report on Belgian defenses was completed in a similar fashion. With the Russo-Turkish War (1877–78) then under way, a Russian-Turkish-English lexicon of military terminology was compiled and printed, a journal on the

war was brought up to date and printed, a report on the military forces of the Ottoman Empire prepared and published, information on the theater of war and adjacent areas assembled, and an updated account of Russian advances in Asia compiled. Intelligence officers visited Turkey and Russia, while others attended summer maneuvers in Germany and France.⁶ Translations of the German account of the Franco-Prussian War were printed almost as soon as the original was published in Berlin. New reports were issued on South Africa and numerous translation projects were also completed. According to Collen's accounting, this mass of work was carried out by twenty to thirty officers, along with clerks and draftsmen, under the heads of the five sections (CR, 11–12). More to the point, the scale of activity that Collen records provides a fairly good index of the impressive information processing capacities of the Intelligence Branch. Needless to say, intelligence had, by the 1870s, moved well beyond the undertakings of the Topographical and Statistical Department from which it had grown.

Yet, in spite of the many positive developments that Collen's report lingers on, it is also clear that some issues remained unresolved. While army reform under Cardwell and his successors had addressed a number of the problems that had become evident during the Crimean War, resistance to further reform remained in the army and the Treasury, the latter of which refused to allocate funds for a centralized army command that could plan and coordinate all of the land warfare capabilities of the imperial state.⁷ The tensions between reformers and various pockets of resistance are evident in the frequent restructuring of army command, each instance of which affected the Intelligence Branch.⁸ The first occurred in 1896, soon after the Duke of Cambridge retired. Others followed in 1901, 1904 and 1907 that were related partly to difficulties the army encountered during the Boer War and partly to ongoing pressure for professionalization and for the reform of army institutional structures.

The key change occurred in 1904 with the creation of a General Staff in the British Army. The Intelligence Division was reorganized under

⁶ Gleichen notes that in the case of the annual Kaisermanöver in Germany, the large-scale operations were spectacles; the really important activities occurred at the brigade and regimental levels in out-of-the-way places and were "strictly taboo to the Military Attachés" (1932: 266). It is also clear from Gleichen's memoir that the range of activities of members of the Branch were extraordinary given the shortage of funds (officers often paid their own travel expenses when they performed reconnaissance tours in Europe); see 1932: 145–46.

⁷ For an overview of the struggle between the head of Intelligence and the Treasury, see Gooch, 1974: 8–9 and 22–24.

⁸ Fergusson provides organization charts for successive iterations of the Branch and the restructuring of military command; see 1984: 243–52.

the Directorate of Military Operations, with Gen. James M. Grierson in command. Grierson brought a wide range of experience to the position. In addition to several years at the Intelligence Department of the War Office, he had served in the Intelligence Branch at Simla, attended the Staff College at Camberley, was military attaché in Berlin from 1896 to 1900, had acted as the British Army representative on Count Waldersee's combined staff during the occupation of north China in 1901, and was part of campaigns in Egypt, the Sudan and South Africa. Under Grierson, the Directorate was made up of four units, three of which look familiar from earlier iterations. The Strategical Section (MO1) planned imperial defense and compiled military information on the empire. The Foreign Intelligence Section (MO2) collected military information on the rest of the world. It was organized into regional subsections as in the past and later divided between Europe and the "Asiatic Section" (which oddly enough included North and South America) in 1907. MO4 comprised the Topographical Section.⁹ MO3 (later MO5), however, was a wholly new entity. Dubbed administration and special services, the section was responsible for land and wireless communication, as well as censorship and cipher. In MO3 we see the embryonic form of what would become the premier brand of intelligence for much of the twentieth century, the making and breaking of codes and the deployment and protection of ever more sophisticated electronic communications and surveillance systems. As noted in the introduction, much subsequent academic research has focused its attention on this aspect of intelligence.

For those at the time and for at least one later observer, however, the import of the creation of a General Staff and structural reorganization meant that there was no longer any question that intellectual labor was a key component of military operations. According to Lt. Col. William Isaac, who was commissioned to write a history of the intelligence unit by the War Department in 1957, there now began a period of intense "collection, collation, and dissemination" of intelligence under the energetic leadership of the Assistant Director of Military Operations, Col. William R. Robertson, who like Grierson had served in the Intelligence Branch at Simla and was a graduate of the Staff College. Isaac notes that from this point forward

[h]andbooks were compiled for every important army in the world. A military report was compiled for any country or territory in Southeastern Europe, Asia or Africa in which it was considered likely that British troops would be employed ... A strategical study of the principal countries and their powers for waging war was undertaken, printed and issued as "Military Resources of ...".

⁹ Mobilization responsibilities had been placed under the Adjutant General in 1888.

The translation fund was increased ... and translations of important articles in foreign military journals were made and circulated in a manner calculated to keep army circles abreast of military thought in foreign countries ... officers of the Directorate gave lectures ... on foreign armies and affairs ... Each year the reports of officers attending foreign maneuvers were printed and circulated ... “Recent Publications of Military Interest” was published quarterly and reviews of books sent to “The Army Quarterly.” A close liaison was maintained with the Intelligence Branch, A(rmy) H(ead) Q(uarters), India and with the I(ntelligence) B(ranch) Cairo.¹⁰

Although many of the practices to which Isaac referred had precursors in earlier iterations of intelligence operations,¹¹ the collective density of them to be found in the first decade of the twentieth century was unprecedented. Not only were more officers and enlisted men involved in the activities associated with intelligence¹² and systematic processes put in place for updating and upgrading information of many kinds, but the organizational structure that emerged looked very much like those to be found on the continent, especially in Germany. Part of what made such “improvement” possible was not only that a General Staff had been created but that the London operation was connected to a broader imperial structure, to units like itself in Cairo and in India. It is the last of these that is of interest here – the Intelligence Branch of the Indian Army based at Simla.

The Intelligence Branch at Simla

The document produced by Collen had certain similarities with Parliamentary and Royal Commission reports on reform of the British Army. Indeed, the War Office Intelligence Branch was a product of those reform efforts and the general trends of professionalization in the military. As we have seen, concerns over the quality of the British Army were also stimulated by the sense that Britain was falling behind continental armies, particularly in areas of administrative organization and technologies of knowledge. Because officers in the Indian Army often went through training programs in Britain before going to India, by the late 1860s similar concerns over questions of professional training

¹⁰ A copy of Isaac’s report is in NA/WO106/6083; see p. 15.

¹¹ Gleichen, for example, describes similar activities during his time at the Branch in the mid 1880s; see 1932: 143–44.

¹² Isaac provides data on the number of officers and enlisted men associated with the various versions of the unit; see Isaac, 1957: 6–15. Under Grierson’s command, there were thirty-eight officers, fifteen military clerks, two civilian clerks, two librarians, fifteen civilian draftsmen, six printers, one photographer and a map curator (1957: 14–15).

and organization were being voiced there. Collen's trip to London was one such manifestation of these concerns. He had been sent by the Quartermaster General of the Indian Army, Frederick Roberts, to investigate the War Office Intelligence Branch and provide a recommendation for organizing a similar unit in India.

Discussions in the Indian Army Quartermaster General's Department about the creation of an intelligence entity had been going on for a number of years. As early as 1871, Charles MacGregor, first head of the Intelligence Branch in India (1878) and Quartermaster General from 1880 to 1885, observed in the *Proceedings of the United Services Institution of India* that the skills required by an intelligence officer went beyond those then being taught in the Staff College in England. In addition to passing examinations in military law and administration, tactics of infantry, cavalry and artillery, and field fortifications, the intelligence officer, he argued, should have extended knowledge of "surveying and drawing reconnaissance, fortifications, languages, telegraphy, photography, Military history and geography, strategy and tactics." (1871c: 64–65). MacGregor was calling, in other words, for officers with skills that were precisely those being taught at the Royal Military Academy and the advanced training programs for artillery and engineering officers discussed in the previous chapter.

Although no intelligence unit yet existed in India, MacGregor, with the support of Roberts, had already undertaken tasks associated with intelligence and started to form a shadow intelligence unit. In 1868, MacGregor and a small group of hand-picked officers began to compile a gazetteer of Central Asia. Five years later, the unofficial intelligence staff published a seven-volume production under the rubric "contributions towards the better knowledge of the topography, ethnology, resources and history" of the Northwest Frontier, Afghanistan, Persia, Asiatic Turkey and Caucasia, the Khanates of Khiva and Bokhara, and Ladak.¹³ The volumes drew together a disparate body of published and unpublished materials in English, Russian, German and French, and summarized contemporary knowledge on these regions. The gazetteer volumes were followed by a six-volume compilation of *Routes in Asia*, published in 1877–78.

The gazetteer project highlighted some fundamental differences between military concerns in India and Britain. In the London War Office, intelligence activities focused primarily on continental armies whose capabilities were knowable because it was possible for British officers to interact in a variety of ways with their continental counterparts.

¹³ There is a complete set in the India Office records, British Library, London.

One could have direct contact through information-gathering expeditions like the one carried out by Brackenbury in 1874 or through the daily give and take of military attachés with officers in foreign armies. Moreover, as Brackenbury noted, military statistics could be gathered from official publications and, it might be added, through the publications of international professional organizations, newspapers and other information media. It was also possible to visit arms manufacturing plants in Germany, France and other countries, and observe the annual maneuvers of continental armies. Equally important, the languages of Europe were seen as known and readily translatable. The continent was, in other words, clearly legible with much of it in public view. The challenge for the Intelligence Branch in London was, therefore, not a want of data, but rather sufficient resources to process the enormous amount of information that came readily to hand.

In India, by contrast, although MacGregor and his colleagues clearly had a library and archive upon which to draw, primary source materials and first-hand observations on the territories bordering India were limited. Nothing like state statistics existed in Persia, China, or Central Asian kingdoms, and even if they did, trained linguists in the written languages of these countries were rare in the army. The gazetteer project had relied mostly on official records of British India, encyclopedias, travel accounts and the writings of non-British observers, but none of the material included contemporary primary sources from places like Afghanistan, Persia and Turkestan. Moreover, there was very little in the way of direct observation by Indian Army officers of the current conditions in any of the areas of interest, and even less field study by officers with the skills MacGregor had enumerated.¹⁴

Second, large areas of the regions addressed by the gazetteer volumes were virtually unmapped in any manner comparable to the trigonometric survey mapping common in British India and in parts of Europe. In addition to these shortcomings, there were obstacles to entering some territories along India's borders. In the case of Tibet, for instance, Europeans were forbidden entry. Others, such as the mountainous regions that made up India's Northwest Frontier or the China-Burma border region, presented daunting physical obstacles and hostile indigenous populations. Moreover, at various times, the Government of India had forbidden British officials, be they civilian or military, from

¹⁴ Information was limited in part by shifting attitudes on the part of a succession of viceroys concerning frontier policy; see Morgan, 1981: 108–17 and 170–77. On the other hand, the British also had a network of informants and indigenous clandestine agents that provided political intelligence on events in Central and Western Asia; see Johnson, 2006.

entering the mountains on the Punjab frontier or carrying out reconnaissance operations beyond the frontier.

A third problem was related to the different kinds of warfare in which the Indian Army was expected to engage. The army had to defend the north and the Northwest Frontier against mountain "tribes" who practiced guerilla warfare, the knowledge basis of which was intimate familiarity with the mountains themselves. The Army was also expected to maintain stability in India and, when required, launch expeditions into places such as Abyssinia, southern Africa, and northern and central China. If, as many predicted, Russia were to invade India, the Indian Army also had to be ready to fight a conventional European-style war in India. These varieties of warfare presented different strategic, tactical and logistical challenges, all of which required information on potential areas of conflict and the military strengths and weaknesses of adversaries. The demands on the Indian Army also produced a need for linguistic capabilities that went well beyond the demands of warfare on the European continent.

At the same time, however, information to carry out these quite different missions was limited. Moreover, the intelligence materials on hand were diffused across several governmental departments. By the 1870s, Roberts, MacGregor and others believed that what was needed was a unit whose sole purpose was to generate knowledge that could be used to plan the disposition of forces under the diverse forms of warfare enumerated above. But in order to commission such a unit, they had to convince the Government of India of its necessity.

Soon after the volumes of MacGregor's gazetteer project were published, two articles appeared in successive numbers of the *Proceedings of the United Services Institution of India* calling for the creation of an Indian intelligence unit. The first of these, written by Capt. J. A. S. Colquhoun, essentially presented the views of Roberts and MacGregor, and mirrored the arguments of those who justified an intelligence unit at the War Office. In addition to rehearsing the intelligence duties discussed above, Colquhoun made the novel observation that there was a close and productive working relation between the Russian Geographical Society and the Tsar's General Staff (1874: 64). In pointing this out, Colquhoun not only raised the specter of the threat of Russian expansion toward India, but suggested that geographical knowledge and cooperation between the Russian army and civilian agencies was part of the expansion process. In the following number of the *Proceedings*, additional support came from Capt. G. T. Puckett, who argued that there was a tremendous amount of material useful to the Indian Army scattered through books, journals and newspapers. What was needed,

Puckett insisted, was “an organization for collecting, digesting and systematically recording, in a readily accessible form, whatever has been observed by political officers, missionaries, sportsman, or soldiers” (1874: 124). For both Colquhoun and Puckett, the appropriate place to locate the unit they were calling for was in the Quartermaster General’s Department.

Prior to his trip to London, Collen had also weighed in on the issue. In a memo citing C. B. Brackenbury’s argument about the importance of the intelligence department, he emphasized that a comparable unit in India should collect, sift and arrange “information required ... for the rapid commencement and vigorous prosecution of war in any direction” and disseminate useful military information to the army of India (CR, 115). Like Colquhoun and Puckett, Collen asserted that these two functions, the regulatory and the pedagogical, ought to be located within the Quartermaster General’s Department at army headquarters in Simla, where it would be at hand to advise the Commander-in-Chief of the army and the Government of India. In order to accomplish its mission, Collen suggested that the Branch be made up of at least three officers, two draftsmen and two clerks, and native guides. The last of these could to be drawn from the native guide units who had been trained in the Bengal Presidency as surveyors, translators and collectors of information. Once in place, the unit should focus its initial work in two areas, the collection and production of maps, especially of border areas, and the collection of military statistical data of the areas bordering India (CR, 116–21).

Having established the purpose and priorities of the unit, Collen then made a set of recommendations on how it should interact with other departments, including the Quartermaster General, the Surveyor General, the Military and Foreign departments of the Government of India, and the Intelligence Branch in London. The details of these recommendations essentially focused on coordination and communication, but two suggestions he made concerning the surveying department are of importance because of their long-term effects. The first of these involved the creation of uniform mapping practices within the surveying department and between it and the Intelligence Branch. Second, he recommended that surveyors be trained to do intelligence work. This objective could be accomplished, he suggested, if the intelligence unit developed a handbook to instruct others on the kinds of information to collect while on surveying expeditions. If the results of Indian Army surveying operations in Afghanistan in the late 1870s, mid 1880s and 1890s are any indication, such a cooperative relationship between intelligence and map-making materialized quite quickly and produced an

enormous amount of empirical data in the intelligence archive for parts of Afghanistan that had been blank spaces on British maps.¹⁵

Collen's memo was directed to Lord Napier, the commander of the Indian Army, who forwarded it to General Roberts for comment. Roberts enthusiastically supported Collen's recommendations, adding that intelligence collection had in fact been part of the duties of the Quartermaster General's Department in India at its inception earlier in the century. Since then, such work had fallen into abeyance. However, given Russian expansion into Central Asia and the necessity for maintaining the security of communications lines between India and Great Britain, it was imperative that the Department revive its intelligence duties. Roberts noted that he had begun to take steps in that direction, but larger resources needed to be committed and a formal structure created and located within the Quartermaster General's Department, as Collen had suggested. Once the unit was in place, Roberts advised that it begin systematic reconnaissances to gather new material on Persia, Turkey, Egypt and Central Asia (CR, 126–28).

The following year, Collen went on leave from India to Great Britain, and it was during that trip, and probably on the basis of his memo and Roberts's response to it, that he was instructed to visit the Intelligence Branch in London. His temporary duty there resulted in the report discussed above. Upon his return to India, in 1878, Collen's report was published and circulated. By the end of the year, the Intelligence Branch of the Quartermaster General's Department in India had been created. The effect was to centralize all intelligence operations at army headquarters in Simla. Col. Charles MacGregor was appointed commander. Once the unit was established, MacGregor ushered through publication of the final volumes of *Routes in Asia*. For all practical purposes, the gazetteers and route books that had been published in the previous seven years established the state of knowledge of the Intelligence Branch at the moment of its inauguration and provided a baseline for all future intelligence operations.

As a result of the creation of the Branch, Simla came to play an important role in strategic thinking about Asia. This was in part because of the unit's reconnaissance operations and military interventions in the region, and in part through the Branch's vast network of correspondents that included the British legations in Beijing, Tokyo, Tehran and Bangkok, consuls general in China, Persia, Aden, the Persian Gulf and

¹⁵ CR, 122–24; also see "Report of the Committee on the Formation of an Intelligence Department," in CR, 29–30, which also recommends a working relationship between the Survey Department and the Intelligence Branch.

Kashgar in Chinese Turkestan (Xinjiang), and military commands in Singapore and Hong Kong. From these sources, the Indian branch collected information that it worked up into regional “diaries” – catalogues of significant current events from Tokyo to Istanbul – which were then circulated through the correspondence network.¹⁶

The development of this network is of interest. When Collen contemplated the interaction between London and Simla in 1877, he envisioned a somewhat more limited field of operations on the India side. London would continue its monopoly over information collection on the European continent, but, Collen argued, given the structures then in place, London should also deal with the Russian and Turkish dominions in Asia, Central Asia, East Asia and Southeast Asia. Had this scheme been strictly implemented, it would have left the Indian branch with only responsibilities for the border regions around India, Persia, Beluchistan and Afghanistan (CR, 109–11). By the middle of the 1880s, however, Simla had extended its field of operations well beyond Collen’s geography, running reconnaissance operations into north and coastal China, Chinese Central Asia (Chinese Turkestan, Kashgaria, or Xinjiang) and Yunnan, Mesopotamia, and into the border regions between Russian Central Asia and the northeastern parts of Persia and Afghanistan.

This expanding field of operations resulted in a complementary growth in the number of personnel assigned to the Branch and, eventually, a rethinking of its place within the broader organization of the Indian Army. The big change occurred in 1906, when the Intelligence Branch was separated from the Quartermaster General’s Department and relocated under the Military Operations Section of the Division of the Chief of Staff. At that point, the unit was renamed the Intelligence, Mobilization and Strategic Branch, with five deputies under the head of the unit.¹⁷

At roughly the same time as this reorganization occurred, the Branch established, in cooperation with the War Office in London, an intelligence unit in north China. Operating between 1903 and 1910 under the authority of the North China Field Command and based at Tianjin, the unit was made up of a small group of officers, who seem to have

¹⁶ For a list of the Branch’s correspondents see NA/FO228/1587. For an example of a regional diary see NA/FO228/1149, “The Eastern Section Summary for August 1894.” The diaries seem to have been published monthly in the 1880s and 1890s, but there are only a few examples of them in the National Archives in London. The one cited here is in the Beijing Legation records of the Foreign Office Archive.

¹⁷ See the *Quarterly Indian Army List* for various years. The Intelligence Branch is discernable until 1910, when it disappears from the organizational chart. The personnel are still there, but are listed under the Adjutant General.

studied some Chinese in the Beijing legation's language training program, and a surveying team. As we shall see in Chapter 6, through the unit's efforts, China was made legible by means identical to those of the intelligence operations that collected military statistics and mapped the countries of Europe and the regions adjacent to British India. The growth and expansion of the Intelligence Branch's field of vision well beyond anything contemplated by Collen suggest the means and mechanisms through which Asia was being constituted as geo-strategic space, a space that was increasingly dominated by the Central Asian and Far Eastern questions. From the 1870s forward, primary responsibility for defense of India, and hence the lines of communication that linked Britain to Asia, were firmly situated within the Intelligence Branch. From this site, the two main products of the Intelligence Branch, route books and military reports, were generated. They will be taken up in Chapters 5 and 6 respectively.

5 Disciplining the space of Asia: triangulation and route books

In his discussion of later eighteenth-century military science, Foucault noted that the improvement of the range and accuracy of the rifle made massed bodies of troops easy targets. In order to solve this problem strategists proposed distributing units and men over extended, flexible and mobile lines. The distribution of bodies in this manner required in turn

a whole calculated practice of individual and collective dispositions, movements of groups or isolated elements, changes of position, of movement from one disposition to another; in short, the need to invent a machinery whose principle would no longer be the mobile or immobile mass, but a geometry of divisible segments whose basic unit was the mobile soldier and his rifle; and, no doubt, below the soldier himself, the minimal gestures, the elementary stages of action, the fragments of spaces occupied and traversed. (1979: 163)

The kind of movement Foucault draws attention to here required, if it was to be effective, knowledge of terrain. Like the units of the army, space was also calculated as a geometry of divisible segments, each of which could be further divided into fragments of distance and the segments of time it would take to traverse each stage. However, rather than a hierarchical relation “below the soldier himself,” the disposition of bodies in space and the disposition of space itself were correlated and aligned with each other through the knowledge practices that were emerging in Europe in the nineteenth century.

The mechanism for achieving the correlation and alignment of bodies and terrains involved the production of two kinds of technical knowledge, one of which was produced by geographic survey and the other by peacetime reconnaissance. The former included various methods of measuring and representing terrain and topography. The latter, as one practitioner put it, was a matter of direct observation by a trained officer, producing “military geography.”¹ Both surveying and

¹ See Bell, 1899: 608. Reconnaissance, as Bell noted, also produced “military statistics,” which is taken up in the next chapter.

reconnaissance involved sets of technical practices that disciplined terrain into information in a way that could facilitate the movement of men and materiel in efficient and timely fashions. These two forms of practice did so, however, in quite different ways. The segments of the geographical survey were made with surveying instruments that enabled the triangulation of space. With the use of geometry, distances could be calculated without actually requiring a traverse of all terrain on foot. Reconnaissance, by contrast, resulted in route reports, which divided movement along a track, usually between inhabited settlements, into segments of time and distance, the technical term for which was the stage of a march. The stage was further elaborated through detailed topographical description.

The first part of this chapter considers how space was disciplined by military intelligence. The focus is on the techniques and mechanisms of military surveyors and intelligence officers, the personnel responsible for performing geographic surveys and reconnaissances. Although the functions of the two are often clearly distinguished in the literature, it is not unusual to find officers who performed both survey and reconnaissance tasks. As Collen's report indicated, individuals attached to the Trigonometric Survey of India were asked to perform reconnaissance functions, and intelligence officers, because of their training, also might incorporate surveying techniques into a reconnaissance. In the second half of the chapter, the relation between surveying and intelligence is explored through an analysis of a significant event that brought surveying and reconnaissance into close alignment, the demarcation of the northern border of Afghanistan, the implementation of which began in 1885 in a project that extended over a decade.

Route books, reconnaissance and survey mapping

The geometry of calculating divisible segments of terrain was a required technique for producing, representing and storing information about territory. These are the tasks that route books and survey mapping accomplished. The various aspects of these tasks were undertaken by highly trained personnel. In the case of route books, this required the careful and systematic traverse of terrain, its recording in field books, and the transposition of these findings into a tabular format. In the case of mapping, it involved the command of sophisticated instruments, not the least of which was a well-disciplined human body. In the first part of this section, I deal with reconnaissance and one of its products, the route book. In the second part, I explore mapping and the instruments that made precision mapping into military intelligence.

Route Books and Reconnaissance

By the 1890s, route books that spanned Asia were a staple output of the Intelligence Branch of the Indian Army based at Simla. In most cases, these books resulted from reconnaissance missions performed by the Branch's own intelligence officers. It might be useful, therefore, to begin by considering how reconnaissance was understood at the time. Col. Mark Bell, an officer of the Indian Army Intelligence Branch, wrote that peacetime or general reconnaissance had special features of a strategic nature; reconnaissance would facilitate planning and preparation for operating within a likely theater of war (1899).² Carried out in the territory of a potential adversary and involving, in some cases, a degree of stealth, general reconnaissance, according to Bell, produced a military form of knowledge that determined

the dispositions for the march, its precision, the extent to which its *frictions can be lessened* on the road by suitable camps, bivouacs, requisitioning (food, transport, etc.), cantoning, depots to be formed, bases to be used, lines of communication to be adopted, season of the year chosen for operations [emphasis in the original]. (1899: 605)

All of these elements taken together were, he concluded, essential to the "conservation of power and therefore to success." The thermodynamic nature of movement proposed here by Bell was especially pertinent to securing adequate lines of communication, which were a major reason why it was important to have adequate information about the qualities of routes of march. Lines of communication were so sensitive, he argued, "that a wrong choice cannot be rectified and may cripple a campaign or render it wholly abortive; whilst a strong, well-selected line will cause the enemy's movements to conform to your initiative" (1899: 605–6).

There are several things that draw attention in Bell's discussion of the importance of reconnaissance. First, route reports were not simply neutral descriptions of terrain. Rather, they were assumed to select and

² The article that I draw from here may have had its beginnings in one of Bell's manuscripts listed in the *Catalogue of Books in the Library of the Intelligence Branch of the Quarter Master General's Department in India* (1901; IOR L/MIL/17/11/49). Entered in the section headed "Surveys and Surveying," is a piece by Bell entitled "Notes on Reconnaissance and Reconnaissance data" (1883). Also on this list is an anonymous manuscript entitled "Intelligence in the Field and suggestions relative to the formation of a Field Intelligence Service suited to Oriental warfare" (1882). Neither of these pieces is in the India Office Records. In addition to these works, which may no longer be extant, "Catalogue of Secret and Confidential Works" of the India Intelligence Branch (1899; IOR L/MIL/17/11/48) lists an item enticingly entitled "Intelligence and Survey" (1893).

systematically present the kinds of information relevant to the lessening of the “frictions” that might in any way impede the disposition of forces. Where were the good campsites? Where was the terrain adequate for establishing temporary fortifications for protecting the campsite? Where were the supplies and transport along the route for replenishing the army when in the field? Were the lines of communication to a base area secure: could they be made safe from being cut by opposing forces? Route books generated from these questions provided a density of information that helped identify the keys to a successful, rather than an abortive, campaign. The books were, in other words, critical for military planning.³

The fundamental principle of organization in the books was an ordered sequence, the stages of a daily march. The book itself was composed in the form of a columnar chart, above which were the names of the points of origin and the final destination (Fig. 5.1). The first column contained numbered stages beginning at the start of a day. Subsequent columns might include time of day, names of towns, villages and rivers traversed, distance traveled from the last entry, and cumulative distance from the starting point of the expedition. A remarks column could include information on the availability of water, food supplies, fodder and pack animals. These elements are common to all British route books, and were very similar to those found in the Austrian road reports discussed by Charles Brackenbury.

In the case of route books produced by Bell, however, there was additional information beyond the basic elements enumerated above. In his reconnaissance of the eastern Ottoman territories (1889), for example, Bell provided compass measurements, time/pace of the stages of the journey, the correlations with known longitude, barometric readings and elevations above sea level. He also made sextant and chronometer readings that aligned the route in a global positioning system, one that ultimately oriented routes linked from South Asia through Persia to the Greenwich meridian. And unlike any of the other route books I have seen, Bell's also indicated the nature of the instruments he used for calculations. In a prefatory note he explained that

traverses of the routes followed were made by pocket compass direction and time and pace for distance. These, checked by astronomical observations taken with the 6" sextant and artificial horizon, have enabled routes to be laid down

³ According to Edney, the route survey dates back to the late eighteenth century in India (1997: 91–96), although the links made here by Bell to military statistics and military geography was a more recent development.

SECTION II.

Route No. 1.

SAKANDARÚN, *viâ* AINTÁB AND SEVEREK, TO DIARBEK.*Authority.*—LIEUTENANT-COLONEL BELL.

No. of Stations.	Time.	Names of towns, villages, rivers, &c., &c.	DISTANCE, IN MILES.		Remarks.
			Inter-mediate.	Total.	
		Bar. 30" (<i>taken for comparison as far as Kharput</i>).	...	...	Carriage road to Aleppo.
	P.M.	29th October 1885.			Pace, $3\frac{1}{2}$ miles an hour.
	2-45	SAKANDARÚN. Traverse the slippery roads of the town, 10' wide, paved with small boulders, and gain the carriage road, 18' to 20' wide, metalled, with side paths 5' wide, and side ditches 5' wide and 2' deep. Beyond the town the hills to the left are $\frac{1}{2}$ mile to 1 mile distant; the coast plain is cultivated; soil, a sandy clay. For a few hundred yards the plain is swampy. The telegraph posts (12') along the road carry two wires. The buffaloes of the vicinity are more powerful than the oxen, do the heaviest ploughing, and draw the greatest loads.			
	3-30	The road ascends very gradually. Pass a plantation of vines and mulberry trees; cross a wooden bridge, about 20' span, over a watercourse (trickle only) running in a bed 15' to 20' deep.			
	3-40	Scrub, fit for charcoal, covers the slopes of the Gaur-dágh. Soil now stony.			
	3-45	Bar. 29'65"; elev. 425'	$3\frac{1}{2}$	$3\frac{1}{2}$	Cross a choppy country by long zigzags; gradient, 1 in 20 to 1 in 30; soil, chalky or white clay.
	4-10	Bar. 29'15". Descend slightly, then level over low uncultivated undulations, fronting the Gaur-dágh.			
	4-25	Bar. 29'05" (830'). Skirting the left side of the ravine, crossed lower down.			
	4-40	The road keeps along the right slope of the ravine leading up to the Bailán neck; its slopes average 5°. Vineyards plentiful on slopes to either hand; soil, a white clay.			
	4-45	Bar. 28'85"	...	$3\frac{1}{2}$	7
	5-5	Bar. 28'6". Road cut out of the hillside; more rocky here, but still nothing solid.			
	5-10	Passing through a short cutting through rock, descend into the town of Bailán, crossing a narrow masonry arched bridge.			
	5-20	Bar. 28'3"; temp. 75°; elev. 1,500'.			
1	5-30	BAILÁN	...	2	9
		contains about 700 houses. The inhabitants were said to number 3,000 Turks and 300 Armenians.			
		The village is built on both sides of the ravine in the form of an amphitheatre, and			

with very fair accuracy, the watch error (half-chronometers) being determined at points along the route with well known longitudes. (1889: i)

To this set of measured and cross-checked instrument readings Bell added a map that brought his personal observation into conjunction with “all available sources.” This sort of precision seems to have been the ideal form of the genre.

The effect of this form was to organize space as a divisible series of highly textured time/distance segments, resulting in a sequence of “elementary stages of action” designed to make it possible for field commanders to strategically reduce friction all along the lines of communication. From the point of view of campaign planning and logistics, the route book was imagined as making it possible, with refined exactness, to manage the movements of men and materiel from one disposition to another, thus allowing for the calculation of the time and effort necessary to concentrate forces and supplies at any desirable point. Through the efforts of trained operatives like Bell, the route book became a primary source in a military security apparatus being fashioned across the space of Asia in defense of British interests.

By the end of the nineteenth century, the Intelligence Branch at Simla had translated the actual movements of imperial agents across vast stretches of Asia – from Beijing to the Punjab, from Afghanistan to the frontiers of the Ottoman Empire, and through Burma into south-western China – into the disciplinary mechanism of the route report with its structured information. Those who compiled and edited route books also updated them periodically, attempting to insure that the information contained therein remained reliable and current. Thus the prefaces of the books often invited “communications ... from officers and others in a position to point out mistakes or supply additional information” (Fenton, 1894).

Mapping

The disciplining of space in the structured format of the printed route books was accompanied by maps, the most sophisticated form of which mimicked those produced by the Trigonometric Survey Department, a unit that was originally located in the Quartermaster General’s Department of the East India Company Army. In his study of the survey of India, Matthew Edney notes that the mapping project carried out in the first half of the nineteenth century by British engineers involved more than transferring to paper the topography of colonial India (1997). The techniques used had originally been developed

in England in the late eighteenth century, ultimately producing the Ordnance Survey of the United Kingdom.⁴ These practices were then transferred to India and eventually to other colonies, where they were used to produce the same kind of intimate understanding of terrain, settlements and the location of man-made structures that the Ordnance Survey accomplished in such thorough detail. In the colonies, mapping on this order was partly designed to produce information useful for taxation purposes and for supporting political economy projects related to the development of an efficient state and colonial order. Timothy Mitchell has similarly discussed the British survey done in Egypt following the occupation of the country in the 1880s (2002). As both Edney and Mitchell demonstrate, precision map-making sat beside, both figuratively and literally, other inscriptional techniques that, taken together, sought to produce a comprehensive knowledge of both physical geography and population distribution within the domain of empire.

Although military intelligence could include the kind of mapping associated with the Trigonometric Survey, and while intelligence officers and surveyors often worked closely together, the precision mapping undertaken for intelligence purposes was at times somewhat less exhaustive in representing a territory than the national and colonial trigonometric surveys. The reason for this difference had to do with the military's strategic focus on the route itself. In addition, route reporters were constrained by the time available for surveying and by the sometimes very difficult nature of the country in which the surveying was done. In some cases, populations were hostile to the surveyor's presence. In others, as Mark Bell pointed out, it might be desirable to survey clandestinely even where there was no overt hostility. Nevertheless, Bell also made it quite clear that even under difficult conditions it was useful to have – at least in part of the route report – the results of practices associated with trigonometric mapping. In his 1899 article, he advised that the proper instruments for trigonometric surveying be made a standard part of the reconnaissance kit.⁵ The techniques connecting survey mapping to general reconnaissance deserve attention, therefore.

⁴ On the origins of the Ordnance Survey, see Skelton, 1962, and Arden-Close, 1969.

⁵ The list of instruments and equipment he recommended for reconnaissance operations included a prismatic compass, plane table, sextant, theodolite and level, each of which travelers should be extremely adept at using. In addition to these devices, Bell advised the inclusion of an artificial horizon, two half-chronometer watches and a chronometer, a two-foot ivory folding ruler, a nautical almanac, a star chart, a range finder, binoculars or a telescope, a 100-foot tape, an eight- or six-inch photographic camera, a lead-line for measuring depths up to thirty feet, various items of clothing

The basic unit of the trigonometric survey was the triangle; hence, the reference to this kind of map-making as triangulation.⁶ The surveyor began either by working from or establishing a fixed point (A) or station that was made up of longitude, latitude, altitude and azimuth calculations. From this fixed point a second observable point was selected (B). A line drawn between points (A) and (B) became the baseline of a triangle and was then measured, usually with the use of a perambulator. A third point (C) was then established to complete the triangle. Angles and distances were then established and the longitudes and latitudes of points B and C fixed if possible. Regardless, a surveyor could then use any side of the triangle as a baseline and select a point D to make another triangle. These points were then plotted on paper to a desired scale (so much distance to a given measure) and topographical features drawn in with the triangles as a guide. One could then, with the use of various instruments and devices, plot a series of triangles based on the points of the original one, and thus extend a succession of fixed points across a broad expanse of territory. The various instruments used to do this were often operated in tandem, serving to check and cross-check calculations made by the other instruments.

The most sophisticated tool in use was the theodolite, a device made up of a tripod, a telescope and graduated circles for calculating the horizontal and vertical angles from sightings of a prominent topographic feature visible at a distance. The theodolite was also used for sightings of assistants who would hold up flags or rods to mark a point at a short distance, measured by chains of exact length or with a perambulator. The surveyor could combine sightings at a measured short distance with telescopic fixes on prominent topographic features. Once the relative angles of the resulting triangles were shown by the theodolite, a trigonometric formula could determine the distance from the surveyor's instrument to the mountaintop or waterfall.

In addition to the theodolite, prismatic compasses (Fig. 5.2) were used to establish the angles between two lines of sight, while chronometers and sextants were employed – as they had long been – to determine

and equipment for camping outdoors, and “presents to suit the country traveled in, and estimated to meet requirements.” Lastly, he recommended provisions suitable for three to four months; see Bell, 1899: 614–21.

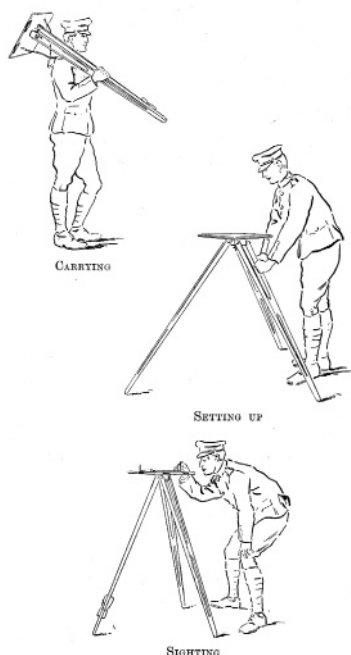
⁶ Triangulation as a basic map-making technique did not begin in England, but in France; see Headrick, 2000: 95–106. In what follows I draw from two main sources, the “Surveying” entry in the eleventh edition of the *Encyclopedia Britannica* and H. D. Hutchinson’s book on military sketching and mapping, the original edition of which was published in 1886. Hutchinson also describes all of the devices mentioned here and their uses; see Hutchinson and Pearson, 1916: 72–128. Earlier versions of instructions for triangulation are in Skelton, 1962: 424–25.



5.2 Use of prismatic compass, from Mockler-Ferryman

longitude and latitude. At night, astronomical sightings were made to check and double-check calculations made each day. Over the course of the second half of the nineteenth century, these devices were fine-tuned to make them both more mobile and more accurate.

The triangles were often produced on a device called a plane table (Fig. 5.3). The table consisted of a smooth board 16–20 inches square that could be mounted on the top of a tripod stand with folding, adjustable legs. The table could be pivoted in a circle, aligned with a distant point, and screwed down. A sight-ruler or alidade and a compass were used with it. The ruler had rear and front sights made of metal that were attached to and extended about 6 inches above the ruler. The rear sight had a fine slit to look through, while the front site held a horsehair that was used to align on an object. A piece of paper and a compass were placed on the board, and an arrow drawn indicating magnetic north. A mark was then placed at the bottom center of the paper representing the point on which the tripod sat, which was a known distance from previously mapped sites. A pin was stuck into the table at this point (A). The ruler was then placed against the pin and pointed toward a distant object (B). The surveyor then looked through the sights at the fixed point, verified the proper alignment, and traced a line along the ruler. The distance was then calculated to point B, establishing the baseline of a triangle. A third object was selected, point C, angles and distances calculated, and trigonometric formulas worked out to establish B and C as fixed points that could then be used to make further triangles. Other triangles could be built off of the original point A in other directions, establishing a series of triangles around it.



5.3 Plane table and proper use, from Mockler-Ferryman

Thomas Holdich, the head of the Survey party of the Afghan Boundary Commission, described the workings of the surveyor and plane table as follows:

Usually [the surveyor] has to commence by making for himself a groundwork of triangulation (that is to say he has to fix the position of a large number of prominent points by means of theodolite observations and computations) for the assistants who follow with the plane table to base their mapping upon. This involves climbing to the highest peaks that circumstances will admit of his climbing. (1901a: 352–53)

In addition to providing a practical sense of procedure, Holdich draws attention to the fact that there was a division of labor in mapping, one that seems to have been marked by the distinction between those who operated the theodolite and those who handled the plane table. I will have more to say on this below. Here it is sufficient to note that in Holdich's account the division is essentially "racial." Englishmen operated the theodolite, Indian assistants the plane table.⁷ Once the

⁷ The division of labor by race originated in the survey of India; see the discussion in Edney, 1990: 308–309.

theodolite had established the distances between a set of fixed points, the operators of the plane tables could set up on any of those points and generate further triangles with legs of calculable length on a sheet of paper atop the table. With the triangles in place (there might be several overlapping and intersecting on any sheet), the plane table technician then sketched in topographical features to the desired scale, with elevations, contours, roads, rivers and compass directions.

Holdich's description of surveying, and those to be found in instruction books, indicate that the same method could be used to deal with a large expanse of terrain or a narrow strip, like a road. The consistency and regularity of this disciplinary regime allowed for other work to be done with the raw material of the sketches produced by plane-tableing. The results could subsequently be placed in the hands of a draftsman who aligned and scaled the segments and then lithographed them onto other sheets for storage and circulation to collection sites. The end product, as Holdich once described at a meeting of the Royal Geographical Society, was a double record made up of the map itself and all the precision calculations that went into making it. The combination of the two produced a universal, immutable object that not only converted the uncertainties of transliterated names into the pure numbers of longitude and latitude, but allowed the trigonometric map to mean the same thing everywhere, to be an unmediated, mobile image of actual physical space. And this was the point. The technology of mapping provided one critical resource for planning at a distance in a "center of calculation." Or, as Holdich put it:

Every point on a boundary-line, every peak in a mountain system, every landmark of any importance in the countryside, has a value whose correctness can be proved just as easily in a London office as in the open field. (1899: 472–73)

Not anyone, however, could participate in the fabrication of these double records. Special training like that to be found in the schools of the British Army's Scientific Corps was required to produce the sort of mapping and authority discussed by Holdich. Knowledge of algebra, geometry and trigonometry were essential for fixing points and setting values in triangulation. Training was also required in the use of measuring devices and the plane table. By the 1870s, not only did the curricula of the Royal engineering and artillery schools teach the necessary mathematical skills, but the newly created staff colleges trained officers in basic techniques of mapping and reconnaissance. Such skills were also reiterated in publications like *The Royal Engineers Field Service Pocket Book*. For those in the field who might need to refresh their skills, the pocket book provided references for the use of the 5" Micrometer

Transit Theodolite and how to traverse territory with a theodolite, use the plane table for triangulation, and make astronomical calculations with sextants and other devices.⁸ Equally significant, by the 1880s, low-cost “how-to” guides on military reconnaissance and mapping became commonplace, and in some instances went through numerous editions, the content of which indicated frequent updating as technologies of measurement and calculation changed.⁹ In addition, articles on reconnaissance and mapping appeared in military publications such as the *Journal of the Royal United Services Institute*.

Precision instruments were, however, no guarantee for successfully completing surveys and reconnaissance work in the field. Equally important, the body of the surveyor had to be disciplined to the rigors of producing technically correct information. Perhaps the most intriguing case of disciplining human bodies as specialized devices of measurement and calculation was the one carried out by Indian pundits in British employ in the Himalayan Mountains and Eastern Turkestan. In his study of these mapping operations, Kapil Raj has observed that, like other such operations on the Indian frontiers, the mapping of the Himalayan region foregrounded the fact that disciplined bodies produced authentic, reliable knowledge that could be used for military strategic purposes (2006).

In the wake of the Indian “mutiny” of 1857, the British were not only interested in stabilizing the borders of India, but as noted above (and see below) they feared Russian incursions into these regions. The problem the British faced was the difficulty for white men to travel in places like the Himalayas and Eastern Turkestan. If not excluded from entry into the mountain kingdoms by local rulers, they were often targets of violence from bandits or villagers suspicious of strangers. Thomas Montgomerie, a Royal Engineer and member of the Trigonometric Survey of India, hit on the idea of using Indian natives disguised as holy men and pilgrims to carry out the surveys. But since the instruments

⁸ See Scott-Moncrieff, 1916: 317–34; 343–45. I draw here on the third edition; the first was published in 1894 and the second in 1902, but I have been unable to locate copies of either.

⁹ One of the earliest of these works was by Francis Roberts (1878), who in his chapter on reconnaissance laid the basic techniques for information collection in peacetime. The first edition of H. D. Hutchinson’s *Military Sketching made easy, Military Maps explained* appeared in 1886; by 1916 it was in its seventh edition. See also Vander Byl, 1901, which provides an extremely accessible “how-to” on triangulation. The rear pocket contained a list of “conventional signs and terms” used in military topography. Mockler-Ferryman, 1903 contained a detailed discussion of the use of the plane table. These and other works on military mapping include explanations of the use of various instruments.

of surveying would themselves belie local expectations about the humble and simple lifeways of pilgrims, Montgomerie and his collaborators had to devise various means for disguising the instruments as well as training the bodily demeanor of the pundits. One method was to condition the surveyors to proceed at a measured pace and to discipline their pace to a regular and more or less standard motion. As they moved at this pace, the surveyors could time their stages of movement with watches hidden among their robes. They could also calculate distance by learning to walk a uniform distance with regular steps, counting their steps using Buddhist prayer beads. They then verified this accumulated raw data with other instruments that were hidden in clothing, walking staffs and specially designed baggage. Choosing moments of being unobserved, the surveyor would take astronomical, compass, sextant and thermometer readings and use them to confirm distances traveled as well as latitude and longitude, committing much of this to memory. The results of these forays were then translated onto paper by Survey of India draftsmen. Over time the expeditions of individual pundits were combined in a comprehensive map, the authenticity of which was then established by a second order of assembly, comparison and orderly presentation.

Montgomerie worked up the results of the pundits' findings into reports that then appeared in the publications of the Royal Geographic Society (e.g., 1867–68 and 1869). As Raj suggests, the effect of this kind of publication was threefold. First, it indicated an acceptance by the collective body of a professional society that the measurements of the pundits conformed to the standards of surveying. Such standards were, in turn, established, as Raj explains, by “the cultivation of extreme patience and a perfect mastery over the use, care, and daily recalibration of their specially designed instruments” (2006: 211). The acceptance of the findings of the pundits as translated into the language of the geographical report by Montgomerie meant that all aspects of the survey had been officially calibrated and thus fixed. Second, publication established the proper order of verification and official calibration. The movement was from raw data, through multiple checks of the data with other instruments, themselves under the regulated surveillance of timely calibration, through competent and acceptable authorities (e.g., the eyes of the Royal Engineer, Montgomerie) into the hands of the Royal Geographic Society. The effect of this process of verification and acceptance established the pundit as a “reliable witness” and the findings as universally valid (2006: 215–16). Lastly, with the legitimacy of the method and findings established as scientific, Montgomerie and those who came after him could contemplate extending the disciplined

bodies of the Indian surveyor into other territories. As we will see shortly, this is precisely what happened in areas whose terrain was as difficult to traverse as the Himalayas – the Hindu Kush and Pamir ranges in Afghanistan. The difference was that under the protection of Indian Army soldiers, the surveyors – Indian and British – performed their tasks openly.

While Montgomerie's regime for the pundits may seem like an extreme disciplining of the body, it is not at all unique. Many sources, especially training manuals, specified the disposition of bodies in relation to the qualities of calculating instruments and described the best physical orientations and postures for the most reliable use of compasses, plane tables, and so forth. For example, H. D. Hutchinson, in his field guide to military surveying, explained the physical procedure for the proper use of the prismatic compass. The operator should

stand facing the object whose bearing is required, hold the compass up in front of the body ... then raise it steadily to the eye, and look through the slit in the prism at the object, taking care to keep the compass quite level all the time ... In rough weather ... by sitting down and resting the elbows on the knees, or leaning against a tree ... something may be done to facilitate an observation. (1916: 74–75)

Similar instruction can be found in this and other manuals for properly disciplining the body for the correct use of other instruments.

In the cases discussed above concerning the operation of the theodolite, plane table, prismatic compass or some other device, what appears important was that the body had to adjust itself to the device. This adjustment produced a compound agent capable of generating a series of authentic calculations that formed a whole new order of knowledge. Unlike previous kinds of mapping, this regimen needed to specify the precise location of the observer at each stage of the survey. The maps that resulted, as Thomas Holdich noted, were based on the surveyor knowing to the precise minute, second and degree where he was on the surface of the earth (1901a: 164, 291).

Precision knowledge of this order, be it large-scale trigonometric mapping or small-scale mapping and sketching along a route, disciplined the space of Asia. As Mark Bell's activities in China and western Asia made clear, the products of this order of reconnaissance were powerful. In their command of routes and topography, Bell and surveyors like Holdich claimed to make effective military operations possible in territories that had previously resisted both domination and European knowledge practices. By the end of the century the geographic archive produced by disciplined bodies and specialized

instruments had become, for Mark Bell, “the sole means by which a mass of troops can be electrified into harmonious and concerted action” (1897: 1512).

Making an archive of space

Mark Bell’s pronouncements on military geography point to the close tie, suggested by Said, Cohn and others, between the production of colonial knowledge and the preservation of imperial order. Maintaining empire required a wide range of knowledge-producing practices. Reconnaissance operations carried out by trained intelligence officers participated in these processes by gathering the information that – it was felt – would make the logistical functions of the Quartermaster General’s Department possible and more “frictionless.”

But in order for military operations to be effectively planned and managed, the detailed results of many discrete reconnaissance operations had to be organized, stored for ready retrieval and preserved for future use. The rich products of Bell’s forays across the Chinese and Ottoman empires, for example, had to be combined with the similar activities of other officers to develop a highly textured picture of the space of Asia. This was the task that the Intelligence Branch in Simla set itself. To accomplish this, the members of the Branch had to find the ways and means for best organizing the material collected.

The process of sorting out formats began, as noted earlier, even before the actual creation of the Branch. Recall that between 1868 and 1873 Charles MacGregor and a group of officers had compiled a gazetteer of Central Asia. The group followed this effort with a six-volume compilation, *Routes in Asia*, published in 1877–78.¹⁰ In a preface printed in each of these efforts to rationalize the geography of Asia, Frederick Roberts, the Quartermaster General of the Indian Army, who himself had directed the compilation of a route book of Bengal (1865), explained the purpose of the project – it was to “render the records of the Quartermaster General’s Department more complete, and to obviate the inconvenience of having to refer to numerous works regarding routes in Asia.” The compilation was, therefore, an effort to discipline the sources – to congeal them, as it were, within a clearly delimited space and provide optical consistency among them. Why was this necessary?

¹⁰ To the best of my knowledge, only one complete set of this work is in the United States. It is located at Ames Library, University of Minnesota. I am very grateful to Donald Clay Johnson for allowing me access to these extremely rare books.

According to Roberts, the Intelligence Branch had to determine how to address the vast amount of information already at hand and to manage the ever-increasing amounts of information produced by reconnaissance and other sources concerning the vast expanse of territory on the borders of British India. The solution he offered, one that would carry forward into the next century, was the production of summary compilations of available information (i.e., Latourian cascades, 1990). Making records more complete while reducing the number of sources that would need to be consulted was an integral part of the orderly filing and retrieval of information. Such summaries did not, of course, solve all issues concerning optical consistency among diverse reports (and reporters). Given the number of hands at work in gathering information, foreign place names were often transliterated into many variants. Standardization of names had become, along with the uniform organization of route information, another disciplinary technique for assuring the proper ordering of the expanse of Asia. As Roberts added, such consistency was achieved by the adoption of usages to be found in "Keith Johnston's Atlas."¹¹ Through the compilation of many route reports into *Routes in Asia* and the standardization of spelling in these volumes, the Intelligence Branch had a master baseline against which they could hope to measure future traverses and reconnaissances. Compilations promised that the completeness Roberts sought might be realized at some later date.

The imaginary of a comprehensive archive was, of course, part of an imperial epistemological enterprise. The imperial present of the 1870s, for all its achievements, lacked such completeness and therefore required that reconnaissance missions would be expected to continue indefinitely into the future. Intelligence, in this sense, was always in the process of becoming, always a work in progress. In a litany that would reverberate through the Quartermaster General's publications in years to come, Roberts drew attention to the "errors and deficiencies" in the present work and noted an absence of detailed knowledge of some regions. He then invited the Branch's correspondents, officers in the field and others who might be part of the secret network through which Simla route books circulated to review the results of the compilation, make corrections and, if possible, provide additional information.

¹¹ This was probably Alexander Keith Johnston, author of *The royal atlas of modern geography, exhibiting in a series of entirely original and authentic maps, the present condition of geographical discovery and research in the several countries, empires, and states of the world*, which was first published by Blackwood's in 1861.

Thus, route books demanded more than simply storage and accessibility to strategists; they needed to be cared for, nourished and developed through correction and updating on the basis of new reconnaissance missions and with the input of a network of correspondents. From their initial formulation, any given route book anticipated its own demise and the means through which it would be reincarnated.¹² This, then, was the basic format and methodology for archiving the space of Asia and making it retrievable for planning military action.

New reconnaissance missions began almost as soon as the volumes of *Routes in Asia* were published. MacGregor himself took the lead in building upon the foundation he had helped to create. After conducting an “unofficial” survey of the Persian province of Khorassan and the northwest of Afghanistan in 1875, he published a two-volume account of his reconnaissance in 1879. MacGregor’s book was, however, in the public domain, and while it contained information on routes in north-east Persia, much of the book concerned itself with the threat to India of a Russian advance from Merv to Herat in northwest Afghanistan.

More consistent with the route genre proper were the secret results of reconnaissances performed, for example, by MacGregor’s subordinate Mark Bell. Beginning in the early 1880s, Bell carried out a series of expeditions into northern, central and southern coastal areas of China (1884), journeyed from Beijing across Chinese Turkestan to India (1888), and reconnoitered Mesopotamia, Armenia, Kurdistan and Azerbaijan in 1885–86 (1889). Bell’s reports are worth dwelling on briefly because they not only tie his later pronouncements on field intelligence to actual practices, but also help to clarify both the technologies of reconnaissance and the form field information took when it was published.

Bell’s two expeditions into China were not the first such intelligence-gathering operations there, but the preceding cases had usually been fact-finding expeditions limited to the north China plain and areas around Shanghai. Bell, however, broke new ground in terms of both the comprehensiveness of his reconnaissance, the almost compulsive collection of minutiae on roads and routes in eastern and southeastern China, and the ambition of his journey from Beijing to the border of India. By the end of Bell’s second expedition, Indian Army intelligence had, thanks to him, unprecedented material on Chinese Turkestan (Xinjiang) and an understanding of the relation between the various oases around the Taklamakan Desert and the routes through the Karakorum Pass, the Pamir Mountains and into India.

¹² This is the main reason why these sources are so rare. Superseded route books, like other forms of intelligence compilation, were destroyed.

Bell also contributed to the process of keeping information about previously compiled areas up to date. In 1885–86, for example, he completed an expedition to the eastern regions of the Ottoman domains and northern Persia. The results were the route reports referred to at the beginning of this chapter. That volume was situated, however, not as a stand-alone work, but as a supplement to the MacGregor route book compiled from sources in India and published under the rubric *Turkey in Asia* (Bell, 1889). At the same time, Bell's reconnaissance served to organize the Ottoman Empire and Persia in terms of the regularities of the route report, while reinforcing the principle that all reports were provisional and thus open to correction.

The original route books produced by MacGregor and his team, and later by Bell, had one big drawback, however. The volumes themselves were large and cumbersome, making it unlikely that they could actually be carried on the road in some future reconnaissance, military action, or in the way Roberts imagined. Eventually, smaller versions were printed. The first of these had hard cardboard covers, but by the early twentieth century they were replaced with flexible, water-resistant ones that could easily be carried in the pocket, and had blank pages at the rear of the volume for note-taking. Helped by intelligence in this form, critical areas were re-traversed, conditions of routes updated, and older versions made redundant and destroyed. From the late 1880s on, the genre was extended across the terrain explored and surveyed by the Intelligence Branch. New route books came to include ones on Waziristan (1906); northern Burma (1894, 1904); Arabia (1915); the Tarim Desert and Mongolia (1907), Yunnan (1913 and 1919) and Xinjiang province (1913, 1926, corrected in 1927 and 1928) in China. There was also a *North China Route Book* compiled by the Intelligence Branch, North China Command at Tianjin, between 1901 and 1904 (see Chapter 6). The most impressive, however, was a sixteen-volume compilation of routes in Afghanistan, the first edition of which was published in 1907. Its extensive list of authorities included members of the Afghan Boundary Commission (see next section), several Indian members of the Survey of India, Indians who were part of the Queen's Own Corp of Guides, and officers from various Indian Army units who carried out reconnaissance during military campaigns in the mountains on the Northwest Frontier. The net effect of this range of participants spread over time demonstrates that route books were the outcome of a series of reports that were then pieced together by those sitting in a center of calculation like the Simla Intelligence Branch (see Chief of Staff's Division, Army Headquarters, India, 1907).

In addition to these publications, special books were compiled that focused on routes from Russian territory in Central Asia to India,¹³ elements of which were collected in reconnaissances carried out by the Afghan Boundary Commission. These and similar works were further summarized in a 1912 volume entitled *Strategical Epitome of Routes on and beyond the North-West Frontier of India*.¹⁴

All of the route books and summaries were classified secret or confidential and, as such, were only sent to the confidential correspondents of the Branch mentioned earlier. To keep track of the material, another kind of disciplinary regime was inaugurated, one of accountability. Correspondents who held secret route books or other publications of the Intelligence Branch were required to report annually on their holdings. If they failed to do so, they received notice from Simla.¹⁵

For immediate purposes, however, what is perhaps most significant is the way in which route books and trigonometric mapping served to produce Asia as a series of known segmented spaces, locations that acted as either hindrances or facilitators to the flow of men and materiel. From great distances, whether in Simla or London, military strategists with maps and route books in hand could calculate the most effective disposition of resources and plan interventions of many kinds. In some cases, those interventions involved the extension of the regime for disciplining space into areas identified by Sir Alfred Lyall as protectorates or buffer zones on India's frontiers (1891a, see Chapter 8). In these regions, borders were often ill defined and terrain difficult to negotiate, either for topographical reasons or because of hostile inhabitants. The

¹³ See *Routes from Russian Central Asia towards Afghanistan and India, 1893 and 1894*, in IOR L/P&S/20/145. The report was in three volumes organized as follows.

Section I. Pamir line of advance: Part I. Contains a short military report on the Ferghana Province, Kashgar, the Pamirs, the Upper Oxus Afghan Provinces, being the country traversed by the routes in Part II.

Part II. The Pamir line of advance, which includes all routes leading from the Chimken-Kulja postal road to the Hindu Kush between the Dorah and the Karakorum passes.

Section II. Kabul line of advance will include all routes from the line Kazalinsk-Chimkend on to the Oxus from Charjui to Kalai-Khumb, with a description of the country.

Section III. Herat line of advance will include all routes from the Caspian and Khiva on to the Afghan frontier from Zulfikar to Bosaga, with a description of the Trans-Caspian Province.

¹⁴ General Staff, India, 1912, in IOR L/P&S/20/B252.

¹⁵ See, for example, NA/FO228/1081, p. 108. The guidelines are under the signature of Maj. Gen. James Brown, Quartermaster General in India, and dated January 10, 1891.

long-standing absence of information about the interior of Asia, the blank spaces on the imperial map, generated geo-strategic uncertainties that fueled debates and fostered uneasiness over the security of British India (see Chapter 8). All of Afghanistan was in this anxious category throughout much of the nineteenth century.

The Afghan Boundary Commission: demarcating space

In the wake of the Crimean War, the imperial Russian military shifted its attention to Central Asia. The Bokhara khanate fell in 1866 and Samarkand followed two years later. In 1873 Khiva was taken, and after the bloody battle of Geok Tepe, the Tekke Turcomans were subdued. With each advance of the Tsar's armies, the Trans-Caspian railway proceeded apace, raising the specter of well-supplied Russian forces on the borders of Persia and Afghanistan, where they would presumably threaten the western frontier of British India. These "Russian Advances" were carefully monitored by political and military intelligence officers in London and India, bringing into focus a new Eastern Question.¹⁶ What were the strategic implications of the Russian presence in Central Asia for defense of the British Empire in Asia, and India in particular? This question had, in fact, sent Charles MacGregor into the Khorassan area of northeast Persia to evaluate the regional impact of the Russian advance. In his book on this reconnaissance, MacGregor concluded that the Russian conquest of Central Asia posed a clear threat to Persia and Afghanistan, and by extension to India (1879).

But such conclusions, many pointed out, were based on little solid information about Russian intentions or the geography of the new Russian dominions. Moreover, the Afghan terrain between Russian Turkestan and the Indian frontier was virtually a blank space on the map. Who was to say what insurmountable obstacles – material or human – might intervene between India and the Afghan northern frontier? At the same time, however, geographical ignorance did not prevent the forging of agreements between Great Britain and Russia over the frontiers of Central Asia. When in 1873 the Russians approached Khiva, the two governments exchanged a series of notes between the British Foreign Secretary, Lord Granville, and Prince Gorchacov, the Russian Foreign Minister, which laid down, on paper and through agreed-upon maps, a rough idea of Afghanistan's northern border.¹⁷

¹⁶ See for example, the reports in the National Archives, WO 33/38, parts III and IV, which cover the years 1876 to 1881. In the India Office archives, there are collections of documents on the same period; see IOR /L/P&S/20/Memos 12, 16, 21 and 22.

¹⁷ For this exchange, see *Correspondence with Russia respecting Central Asia*, 1873, in House of Commons sessional papers.

I say rough, because there was a substantial amount of vagueness in the final agreement. The northeastern portion of the border was made up of regions identified as Badakshan and Wakhan, which neither the British nor the Russians knew much about. However, from the information they had at hand – mainly reports of traders on the Turkestan roads – the Russians expressed doubts about whether the Amir of Afghanistan, Shere Ali, actually controlled these territories. They argued that these were independent khanates. If the Amir was given sovereignty over them, his ambitions might turn to Kokand, Bokhara and Kashgar. After British assurances that the Amir had no such thoughts, the Russians conceded the point, and the Badakshan-Wakhan region became nominally part of Afghanistan.

The border took on more substance from Badakshan westward because it was “clearly” demarcated by a natural formation, the Amu Darya or Oxus River. By mutual agreement, a point on the river called Khoja Saleh was selected as the spot from which the boundary would move overland westward. A line was drawn from Khoja Saleh to the Kokcha River above the Afghan city of Balkh, forming the north central border of Afghanistan. From there westward to the Heri-Rud River, which made up part of Afghanistan’s border with Persia, no actual boundary line was decided upon. Instead the remainder was defined as “the internal districts of Aksha, Seripool, Maimenat, Shibberjan, and Andikoi, the latter of which would be the extreme Afghan frontier possession to the northwest, the desert beyond belonging to the independent tribes of the Turcomans.”¹⁸

There are a few points to be made about this agreement. First, the decisions concerning the borders of Afghanistan and Turkestan were all made in written correspondence between London and St. Petersburg. The closest an agent of either Power seems to have got to the actual territories stipulated in the agreement was the posting of General Kaufmann to the military government of Russian Turkestan. But he seems to have simply gathered as much material as was available on the places stipulated in the agreement, without having actually visited them. Second, the territory in question was not strictly speaking a border. Rather, as the Russian correspondence makes clear, it was understood to be an “intermediary zone,” a buffer designed to insure that Russian and British possessions did not come into contact.¹⁹ Third, British support of Afghan claims on Badakshan and Wakhan seem to have been based on little more

¹⁸ See *ibid.*, 2, 5–9, 15.

¹⁹ *Ibid.*, 5.

than conversations between one Major Montgomery and Shere Ali sometime in the past.²⁰

Yet, at the same time that the uncertainties over territorial sovereignty held the potential for disputes in the future, the very inconclusiveness of geographic knowledge in various sections of the Afghan–Turkestan frontier, especially between the Amu Darya and the Heri-Rud, made agreement easier to achieve. In other words, the Afghan–Turkestan frontier was not a razor’s-edge boundary. But the situation changed abruptly some ten years later when the Russians occupied Merv in 1884. The ill-defined intermediary zone that had resulted from the 1873 agreement was no longer palatable to the British government. Suddenly, Russian arms were some 130 miles from the Afghan border town of Herat, while the independent Turcoman tribes occupying the intermediate zone seemed to have evaporated.

But it wasn’t simply the Russian advance that made the agreement of 1873 obsolete. Since then, British India’s relations with Afghanistan had been substantially altered. In 1878, fearing Russian influence in Kabul, the British had invaded Afghanistan and installed a new Amir, Abdul Rahman, who proved to be more amenable to allowing British India to conduct his foreign relations for him. This new arrangement with Afghanistan was coupled with an unprecedented projection of British civil administration and military power into the mountains that separated Afghanistan from the Indus River valley. Under the orders of Lord Lytton, the Viceroy of India from 1876 to 1880, a number of fortified posts were established deep in the mountains on the Afghan frontier, Quetta being the most prominent of these. The militarization of the Afghan–Indian frontier, combined with this British intervention into Afghan politics, essentially transformed Afghanistan into a British protectorate. Thus when Russian forces occupied Merv, Britain’s guarantee of Afghanistan’s strategic security was suddenly threatened.

In Britain, the fall of Merv rekindled debates over Russian intentions in Central Asia. Those who believed that the primary aim of Russian military adventures against Central Asian khanates had as its sole purpose the establishment of a base for the invasion of India saw the Russian presence so close to Herat as a last straw of provocation: the seizure of Merv posed a clear danger to India and required a forceful response. Others saw the Russians as motivated by understandable security concerns. As the Duke of Argyll rose in the House of Lords to ridicule the alarmists over their “Mervousness,”²¹ Russophiles and others argued

²⁰ Ibid., 6.

²¹ See the entry on George Douglas Campbell in the *Dictionary of National Biography*.

that the advance was a civilizing mission, one designed to eliminate the lawless and tyrannical khanates of the region. With public opinion torn over the issue, the government of William Gladstone sought a means both for insuring the security of the Afghan frontier and for calming fears at home about Russian intentions.

In February 1884 Lord Granville, the Foreign Secretary, cabled the British ambassador in St. Petersburg, Sir Edward Thornton, to determine the extent of the territorial claim the Russians were making now that Merv had been annexed. Thornton reported that the Russian Foreign Minister, Nikolai Giers, said that he “supposed it reached eastward to the Oxus, and to the south to the northern frontier of Afghanistan from Khoja Saleh [on the Oxus] to the Tedjend.”²² Giers suggested that the two governments ought to come to a new agreement on the border of Afghanistan. At about the same time, the Viceroy of India, Lord Ripon, requested that a joint commission made up of Russian, British, Afghan and possibly Persian representation be appointed to demarcate the border between Russian Turkestan and Afghanistan (Moran, 2005: 4).

These proposals, along with a suggestion that the commission convene at Sarakhs in October 1884, were put to the Russian government. The Russians countered that the commission ought to meet at a site agreed upon in the 1873 exchange of notes, namely Khoja Saleh, and that no Afghans should be part of the commission because it was clear that the Amir had notions of his territory quite different from those of local people in greater Turkestan. The Russians also wanted an understanding prior to the convening of the commission that established a set of protocols for proceeding, including one that defined the north-south limits of areas the commission could enter. The British strenuously objected to limiting the range of the commission's inquiries and insisted that matters begin in the region of greatest dispute, the area north of Herat. Disagreement over the starting point extended into July, with the Russians arguing that it made greater sense to begin at a “known” and agreed-upon point, and the British countering that the greater political issue was the Herat corridor.

Finally, on July 30, Giers notified Thornton that the Tsar had agreed to Sarakhs as the starting point of the joint commission, but wanted a clear set of principles based upon “ethnographical, geographical and

²² *Memorandum. Negotiations with the Russian Government for the Demarcation of the Boundary of Afghanistan since the Annexation of Merv*, March 27, 1885 (NA/FO 881/5086). This section is drawn from the memorandum, which includes the correspondence from the Russian Foreign Office.

topographical” considerations governing the activities of the commissioners. The British accepted the proposal, adding that because the sole purpose of the commission was to establish “the true limits” of the Amir’s territory, the commissioners also needed to be guided by “the political relations of the tribes which inhabit the country” so that no agreement would be made that the Amir could not fulfill. The Russians seemed to think this reasonable and wanted immediate agreement that the Sarik Turcomans, whose pasturage and cultivation extended to the south of Panjdeh, a site roughly midway between Merv and Herat, be included in the Russia sphere. The British countered that they thought Panjdeh within the Amir’s territory, but suggested that questions concerning jurisdiction should not be decided from afar, but through the careful deliberations of the commission. With a general understanding in place, the British and Russian governments agreed on June 17, 1884, to a joint boundary commission. Major-General Sir Peter Lumsden was appointed as head of the British contingent, and near the end of August it was agreed that he would meet his opposite number, General Zelenoi, in the neighborhood of Sarakhs in November 1884.

Meanwhile, in India, a team was put together to cross Afghanistan and join Lumsden at Sarakhs. The unit included a military escort under the command of Lt. Col. Joseph West Ridgeway, who also acted as head of the Political Branch. Maj. Thomas Holdich of the Royal Engineers headed the Survey Branch and Capt. Pelham Maitland the Intelligence Branch. Under Maitland was Capt. William Peacocke, who worked closely with members of the survey team, which included the Royal Engineers Capt. St. George Gore, Capt. Milo Talbot, and five Indian assistants. In addition, a group of scientific experts were dispatched with the expedition to collect archeological, medical, geological and ethnographic material on western Afghanistan and the border areas.

This combination of expertise was significant. It indicated that the Indian Army intelligence and survey departments saw the boundary commission as an opportunity to do a great deal more than simply demarcate a border between Afghanistan and Russian Turkestan. Under the cover of the commission, and with the blessing and protection of the Amir of Afghanistan, they intended to gather as much information as they could in order to fill in the *terra incognita* between the Afghan–Indian and the Afghan–Persian borders (Yate 1887: 77), thereby resolving uncertainties in the Simla archive.²³

²³ As Holdich put it, “we did know something of the Kuram route, and of the Khaibar; but of the intervening Afridi Tirah, and of all the border space north of the Khaibar – a space which included Mohmands and Mahmunds, Bajaoris and Swatis – we knew less than did the officers of whatever department in Alexander’s army answered to that of the modern Q[uarter] M[aster] G[eneral]” (1901a: 4).

The new knowledge produced by intelligence collection and geographic surveys was organized into several kinds of records. One form was the official, “declassified” reports on the boundary commission that were published under the heading “Correspondence Respecting Central Asia” in the House of Commons Sessional Papers in 1887 and 1888. The published record includes telegrams, memos and reports on the interactions between the British and Russian members of the commission, telegrams to London and, most importantly, the set of official protocols in English and French that demarcated the boundary. A second kind of public record was made up of technical articles that appeared in the proceedings of the Royal Geographic Society, confirming the authority of the surveyors and their findings. Holdich, for example, wasted little time in getting articles containing new geographic knowledge into the *Proceedings* of the Society (see 1885a, 1885b, 1885c and 1885d). Lastly, there was at least one account by a participant, a Lt. Arthur Yate (1887), that appeared before the ink was even dry on the final settlement that was signed in St. Petersburg. The swiftness with which material got into public circulation was not unusual, but it may have also been a result of the intense political pressures placed on the British cabinet, pressures which necessitated a form of disclosure that would silence those who argued that too much was being given away to the Russians. Criticism of the commission by Russophobes may have also been a factor in the case of an article published by West Ridgeway, Lumsden’s successor, that extolled the virtues of the new Afghan border (1887).

Yet, even with the level of disclosure evident in the Parliamentary papers and other published pieces, there was still a substantial amount of material that remained secret. Chief among these materials was a series of route books for Afghanistan assembled by the Intelligence Branch at Simla. They were made up of individual volumes entitled the Deolat, Herat, Kabul and Helmand series. Each of these was constructed in the familiar route book format and they were complemented by a set of volumes comprising the military statistics gathered by the intelligence party attached to the commission (see Chapter 6).

Finally, there was the survey documentary record itself. Made up of annotated schematic drawings, these records spell out the measured relationships between a series of fixed points established by theodolite and plane table calculations. These drawings and annotations effectively established the demarcation points that could then be translated into boundary markers on land and in charts, and be connected as boundary lines on maps. As such, they could function as a kind of technical manifesto of the process by which space was interpolated through a set of visual technologies and instrument calculations that



5.4a Example of a boundary pillar, from the Pamir Commission

resulted in the “first systematic attempt at reducing the geography of Afghanistan to a scientifically constructed map” (Holdich, 1901a: 47). The diagrams were supported by tabular logs, the content of which described and provided the locations in latitude and longitude of the boundary pillars (Fig. 5.4a) that were set up to create the Afghan-Russian border. So, for example, Pillar 1, in a chart of the Afghan Boundary Commission, is recorded as shown in Figure 5.4b. This scientific reduction of actual terrain and real spaces to log, route and map entries was the fundamental way in which the space of Asia was recoded as imperial knowledge.

Pacing the void

At the beginning of October 1884, the Indian Army section of the boundary commission began the first stage of the operation. This involved a traverse from Nushki, inside the Baluchestan border, to Khwaja Ali on the Helmand River. The route was relatively

The term ‘pacing the void’ is from the title of a book by Edward Schafer (1977), which refers to quite another imaginary than the one discussed here. It involved Tang dynasty philosophers and poets in medieval China projecting their minds into the heavens.

No. of pillar	Description	Latitude	Longitude east from Greenwich	Azimuth	Distances (Miles)	Remarks
1	Masonry pillar on right bank of river Hari Rud about 90 feet from the river bank and almost exactly 1.5 miles from the tower in the Lulfikar mound at the mouth of the pass From pillar 1 to pillar 2 the line runs straight	35 36 24	61 16 0	Istoi H.S 64 20 0 Projection of cliff to the southeast 335 30 0 Pillar 2 238 30 0	Istoi H.S. 21.35 Projection of cliff 2.62 Pillar 2 0.30	Istoi H.S. is a sharp pointed peak near the pass of the same name and highest point of the range Lat. 35 28 18.2 Lon. 60 55 28.1 Measured values from Capt. Gore's chart

5.4b Synopsis of boundary markers from House of Commons Sessional Papers, Central Asia No. 1 (1887).

flat desert and scrub land, only a meager portion of which was fit for grazing camels or sheep. A supply column and a work party were sent ahead of the main body. The latter was deputed to open wells all along the route of march. According to Lt. Yate, the water holes they built were spaced from seven to fifteen miles apart between Nushki and Galachan (twelve water stations, 158 miles; 1887: 37). The complete march from Nushki to Khwaja Ali took fifteen days (October 1–15, 1884) and covered 224 miles. This constituted the primary route to the Helmand, but as the parts of the column moved, Peacocke, with the occasional help of Gore and Talbot, reconnoitered alternatives routes and sources of water, a pattern that would continue until the mission reached the vicinity of Herat.

Gore and Talbot also supervised a team of native surveyors, all competent with the plane table, that included Hira Sing (a Gurkha), Iman Sharif (a Muslim Punjabi) and Ata Mahomed (a Yusufzai). As the column moved, the British officers established new fixed points with light-weight 6" theodolites. Behind them the native surveyors plane-tabled a continuous series of triangles from Quetta forward, producing "a clean record of triangulation ... across the desert" (Holdich, 1901a: 97–98, 106). They were constructing, in other words, a triangulated map of the route from Quetta to Herat that would be complemented by the tabular route report being produced by the intelligence unit. The result, if we follow Holdich's logic concerning surveying, was a triple record of the reconnaissance, or an account in depth produced from multiple techno-perspectives.

Once at Khwaja Ali, Peacocke took advantage of an exceptionally clear day to trigonometrically fix several prominent mountain peaks in the vicinity, which allowed for the establishment of the longitude and latitude of Khwaja Ali and other oases nearby (Yate, 1887: 70–71, 79). West of Khwaja Ali the mission turned in a northerly direction. After resting for three days, they set off for Herat on October 19. The route, according to Holdich, was "made up of strange sights ... cities of the dead spreading out like gigantic cemeteries for miles on either side of the river, gaunt relics of palaces and mosques and houses, upright and bleached, scattered over acres of debris, masses of broken pottery, mounds of mud ruins" (1901: 107). With only five day-long halts along the way, the mission arrived at Kuhsan, northeast of Herat, on November 17, having traversed a distance of 762 miles in all, covering an average of 15 miles a day including halts (Yate, 1887: 154–55).

At this juncture, the commission had accumulated a solid record of route reports that included the availability of water, food and fodder

supplies; conditions of roads; information on various “tribes” collected by Maitland; and an unbroken series of triangles originating at Quetta. They also had a reasonable idea of how long it would take to move 500 fighting men, 700 camp followers and a baggage train comprising 1,800 camels between Quetta and Herat (Holdich, 1901a: 110). The results of this data collection gave the Intelligence Branch crucial information for calculating the logistics of the route across southern Afghanistan, as well as a means for gauging the likelihood of a Russian advance across the same territory.

Equally important, approximately 15,000 square miles of *terra incognita* had been mapped.²⁴ By “dint of daily labour,” as Holdich put it:

the labour of measuring a fresh base at the end of each day’s march and triangulating therefrom, added to the labour of nightly observations of the stars and of computing and projecting fresh positions to guide the daily topography along the route, we had arrived at Kuhsan *knowing our whereabouts exactly* [emphasis added].²⁵

Asserting knowledge of the exact whereabouts of the commission was, in fact, of crucial importance to the entire operation of the survey and reconnaissance in three critical ways. First, knowing precisely where the commission was located meant that the raw technical data made up of sketches and calculations on Afghanistan were aligned with Greenwich and had thus been incorporated into a global network of longitude and latitude. Second, the calculable and confirmable results of daily labor constituted the authority of the survey team and instantiated the hierarchical relation between the engineer as surveyor/theodolite operator and the native as the maker of plane table triangles and sketcher of topographical details. Third, the obsession with fixing topographical points and the precise spot on which the surveyor stood accounts in part for the repeated checks and cross-checks evident in each segment of the survey and in the nightly stellar readings. It also accounts for the continual process of calibration of individual instruments and the verification of the readings of one instrument by those of another. Knowing the precise locations of the findings established their legitimacy.

Here, for example, is the kind of verification and cross-checking entered upon one of the Afghan Boundary survey sheets. Prepared by Capt. Peacocke, it is dated January 10, 1885, and headed “Traced from the original P.[lane] T.[able] surveyed by Capt. Gore R.E. The original was executed by plane table traverse, the distances being

²⁴ The area figure is an estimate by Moran; see 2005: 25.

²⁵ Holdich, 1901a: 111, but the issue of exact location is raised more than once in the text; also see p. 58.

measured by perambulator.” The survey sheet demonstrates precisely how the “Khwaja Ali base,” itself connected by a series of triangles to the Baluchestan base at Quetta, and hence all of India, was extended deeper into Afghanistan. Peacocke explained that

the starting point of Imam Sharif’s traverse is the N. end of the Khwaja Ali base which has been fixed trigonometrically from the Baluchestan triangulation. Iman Sharif ran a plane table traverse and Ata Mahomed a prismatic compass traverse recorded in a field book with taking their distances from the same perambulator. Iman Sharif corrected his distances by estimation and by the help of occasional intersected points where the ground was bad for the perambulator. Ata Mahomed rendered his distances just as they were measured. I have plotted on the sheet 14 Ata Mahomed’s traverse using the valuation of the compass determined astronomically at Khwaja Ali. The distances are as a rule slightly longer than Iman Sharif plotted ones [*sic*]. Taking Khwaja Ali camp as a starting point, I have compared Ata Mahomed’s position of Camp Rudbar with the position fixed by plane table from Malik Dokand and Koh Kahrishna which position is shewn on my 1/8’ sheet of Baluchestan topography. From this a linear correction for Ata Mahomed’s work was evolved. Then taking Camp Rudbar as a starting point and applying the necessary linear correction Ata Mahomed’s plot was so laid down *as to cause his position* of Camp Chaharburjak to fall on the astronomically fixed latitude of that place. The position of Chaharburjak thus determined in longitude was accepted. From Chaharburjak to Kala Fath the azimuth of the traverse was accepted and the distance was *caused to fix* as between the observed latitudes of the two places. This determined the longitude of Kala Fath. The method of bringing up the longitude from Kala Fath to Ibrahimabad is shewn on this sheet. The traverse azimuths were accepted & the distances fitted between the observed latitudes. Astronomical determinations of the compass error being made at intervals [*emphasis added*].²⁶

Note that the “I” that enters here possesses the eye involved with the astronomical correction of the compass and the linear correction of the traverse, the effect of which is simultaneously to allow points to be fixed, calculations accepted, and the work of the disciplined bodies of the Indian surveyors legitimated. The calculations were then reduced to a scaled drawing so that the “I” knows its *whereabouts exactly*. Yet, even this level of precision is not taken for granted. Once the commission reached Herat, its exact whereabouts were fixed at an even higher level of precision, one made possible by the introduction of yet another technological device.

A triangulation series was run from Kuhsan to Mashad, inside the Persian border. There a longitude reading was set by means of

²⁶ The sheet is in the map collection of the Afghan Boundary Commission in the British Library, London; see shelf mark 51800.(36.), sheet 16.

telegraph, chronometer and theodolite by Capt. Gore, the results of which confirmed the work of the survey team's trigonometric calculations to this point (Holdich, 1885d: 736). The telegraphic method in question involved passing signals between two stations, in this case Mashad and Tehran, and timing them with a chronometer. Several signals would be passed between the two stations and corrections made for the chronometers at either end. Gore corrected the time values between signals by sighting with a 6" theodolite on two stars. Since Tehran's position was known by telegraph in relation to Greenwich, the precise longitude of Mashad could be established by comparison. By extension, all of the points on the triangulation to Mashad were thus, to use Peacocke's felicitous phrasing, caused to be fixed. In subsequent months, the triangulation series was extended from Kuhsan across northern Afghanistan to the Amu Darya (Oxus River) and then tied to the Kabul-Kandahar surveys done during the Second Afghan War. In his memoir, Holdich summarized the moment:

It was the final link in a chain of technical expedients. It was a test of the *value of method and instrument* rather than testimony to the skill of the surveyor. It proved once for all what may be done with the smaller class of theodolites aided by the plane table ... there was joy in the camp of surveyors when they met again in the general gathering of the Commission at Kabul, and found that all the great mass of patchwork fitted together with satisfactory exactness, and the work of two years was closed with no displacement, and *no corrections necessary* in our geographical maps. (1901a: 164; emphasis added)

Here again, as we saw earlier, method and instruments are placed in the foreground. It is the discipline of tools and technique that produces the desired exactness, that unifies the great patchwork of survey sheets without displacement or correction, and turns collective fieldwork into universal truth. Yet, as impressive as these results were, they did not completely satisfy the epistemophilia (i.e., the fetishization of the acquisition of knowledge) underlying the comprehensive trigonometric-based mapping that Holdich valued so highly. In spite of the impressive work he chronicles, there were problems evident in fixing Afghanistan's northern border that were not resolvable by instruments, calculations, and disciplined bodies suggesting that there were other agents at work that defied the progressive reduction of space and time to paper.

Recall that Khoja Saleh was the point on the Amu Darya that the British and Russians had agreed in 1873 would be the spot from which the Afghan border would depart from the river and proceed westward. One of the reasons that this site was selected was because it was supposed to have an active ferry plying the river. The commission, now led

on the British side by Col. West Ridgeway, arrived in the area in August of 1886, and a number of problems immediately presented themselves. For one thing, the British decided that the actual name of the place was not accurate, the local Uzbeks calling it Khwaja Saleh and the Turcomans Khwaja Salar. But the far bigger issue was that there was no ferry at Khoja Saleh and may not have been one even at the time of the 1873 agreement. The few inhabitants and ample ruins also testified to the general insignificance of the site. There were, however, ferry crossings both above and below Khoja Saleh. But choosing one of them would either add or subtract territory from Afghanistan. Ridgeway laid out the problem in a memo to the Earl of Iddesleigh, Stafford Northcote, the new Foreign Secretary, dated August 17, 1885.²⁷

In his memo, Ridgeway explained that when it became clear that there was no operating ferry at Khoja Saleh, he and his Russian counterpart, Col. Kuhlberg, appointed Captains Peacocke and Kontradenko to investigate matters. After taking depositions from a dozen local people, including ferrymen, merchants and village leaders, some of whom were Ersari Turcoman, others Uzbeks,²⁸ Kontradenko thought the information contradictory and broke off the investigation. Peacocke, however, continued the inquiry and drew a number of sketches accompanying his report.²⁹ West Ridgeway summarized his findings as follows.

1. The Khoja Saleh ferry had been instituted around the turn of the nineteenth century to facilitate the Bokhara-Maimena traffic, superseding the Kilif ferry.
2. When it flourished, Khoja Saleh had a caravanserai, nearby to which was a ziarat, the tomb of a Muslim holy man or saint. [Ridgeway fails to mention, perhaps because he did not know, that the presence of the ziarat also meant that Khoja Saleh must also have been a pilgrimage site.]
3. In 1872, Naib Alam Khan renewed the Kilif ferry and the one at Khoja Salah fell into disuse.
4. By 1866, the river had begun to encroach on the area around Khoja Saleh, sweeping away the nearby Islam Bazaar, and creating a large bay on the left side of the river.

Frequent shifts of the ferry site and the river itself effectively placed the 1873 agreement in doubt, and at that point the Russian delegation refused to decide how to settle the issue.³⁰ The commission disbanded,

²⁷ House of Parliament, 1887: 252–53.

²⁸ *Ibid.*, 260–70. ²⁹ *Ibid.*, 253–60

³⁰ Holdich used this event to demonstrate that under certain conditions there were “impossibilities in demarcation”; see 1899: 471.

and the entire matter was referred back to the ministries in St. Petersburg and London, precisely what the British government had hoped to avoid by placing decision-making in the hands of a techno-elite.

As the summary report of the Russian government later added, all that had been found at Khoja Saleh was the ziarat and the nearby ruins of a settlement referred to by locals as Serai Khoja Saleh. The 1873 correspondence was no help in clarifying matters, and further investigations around Khoja Saleh produced only contradictory and confusing results. For example, according to the Russian report, which was probably based on Kontradenko findings, the proper name Khoja Saleh was also applied to the Karkin district, "the principle of four Afghan districts between Bosaga and Kilif."³¹

In the fall of 1886, Ridgeway was dispatched to St. Petersburg to continue the negotiations, in this case with Aleksei Zinoviev, head of the Asiatic Department in the Russian Foreign Office. Their final agreement, signed at St. Petersburg on July 10, 1887, selected a point on the Amu Darya a bit downriver from the ruins of Khoja Saleh, giving more territory to the Amir.³² Inexplicably, one of the maps in the final Parliamentary report identified a large area on the left bank of the Amu Darya as Khwaja Salar, the name identified by Peacocke as the Turcoman corruption of the Uzbek pronunciation of Khoja Saleh. But perhaps more importantly, the investigations had identified substantive terrain change over time in this region of the Amu Darya. The shifts of the riverbanks were not measured over eons of geological time, but resulted rather from recent changes, many within lived memory as reported by local people. Thus, the river itself was an agent that confounded the sort of celebratory scientific certainty expressed by techno-military elites such as Holdich and the intelligence and surveying team of the Afghan Boundary Commission.³³

A decade later, Holdich found himself with another joint team of Russian, Indian and British surveyors demarcating the northeast border of Afghanistan.³⁴ This Pamir Boundary Commission left an equally impressive collection of documents and equally exhilarating epistemological victories. While much of the survey team found itself

³¹ House of Parliament, 1888: No. 1: 14–15.

³² House of Parliament, 1888: No. 2.

³³ The recalcitrance of locals to colonial "rationality" has been summarized by Cooper and Stoler; see their references in 1997: 5. I have simply added rivers to the list.

³⁴ For an overview of the commission, see the *Geographical Journal* 13.1 (January 1899), 50–56. The piece notes that, on the British side, points in the Pamirs were established through direct triangulation from India (itself fixed by telegraphic determination with Greenwich) which were "carried from Gilgit across the Hindu Kush into the Pamirs" (51).

in the deep canyons of the Pamir Range, Maj. Robert Wahab³⁵ was able to scale an 18,000-foot peak near Benderski Pass, which allowed him to see back across the Hindu Kush range to Indian landmarks: “thus our anxiety ended and we knew the exact spot on which we stood on the earth’s surface within a margin of error which might possibly be represented by figures, but which was far too minute for maps” (Holdich, 1901a: 291).³⁶

Such moments of clarity seem to have occluded the uncertainties caused by shifting river beds and the various uses locals put to land (pilgrimage and caravan routes, grazing areas). Far more important from the point of view of the imperial security regime was that Afghanistan was now fixed to the global grid and its peculiar topography exposed to the light of reason. Vast stretches of the Afghan terrain entered into the regularities of the military geographic archive at Simla and the universal archive of the Royal Geographic Society. In the process, with strategic areas of Asia now organized through the “geometry of divisible segments” catalogued in route books and trigonometric maps, Englishmen could contemplate and plan incursions into any space so ordered in their archive. But the new geography created by route reports and precision mapping was, as noted earlier, only one kind of information needed for military planning. Also crucial for the planning regime was information about the war-making capacities of a potential adversary. Thus it is to military statistics that I now turn.

³⁵ Trained as a Royal Engineer, Wahab joined the Indian Army and served in the Second Afghan War and the Mahsud Waziri expedition of 1881. He was the first to survey and map the Zhob Valley; was a member of the Afghan–Persian border commission; mapped the interior of Aden; and led the survey team in the 1897–98 Tirah campaign. See Wauchope, 1929: 111.

³⁶ See Black 1898: 58–61, who noted that Wahab’s accomplishments would serve to link up with the Russian system.

6 Regulating the facts of Asia: military reports and handbooks

In the eighteenth century, European governments formulated and deployed a variety of tactics to enhance control over their populations and lands, and heightened efforts to identify weaknesses within the state. Foucault termed these tactical moves “arts of governance.” Among the most important of these arts was the collection and cataloging of empirical material for calculating the physical assets of a state. States or subsections of them were reconceptualized as made up of observable conditions (e.g., mortality rates, trade returns), information about which could be assembled, summarized, analyzed, retained and used for tactical interventions. Functionally distinct subsections of this regulatory regime designed methods for managing statistical information, and in many cases invented unique filing systems and storage facilities, one of the chief of which was the printed report or book organized on a specific topic. These genres of state formation, each a summary and distillation of known facts, were among the chief ways the agents of the state made the state legible to themselves and others.

Within the imperial security apparatus, the military report was the essential form of summary for storing the military statistics of other states or well-developed territories. Adjacent to the military report were two other genres – the handbook, which was usually a detailed collection of factual information on a foreign army, and the *Who’s Who*, which provided biographical information on foreign personages. We have seen earlier that another genre, the gazetteer, also contained statistical material.¹ But there was a significant difference between the gazetteers and the military report. The former was organized alphabetically by place name and contained virtually everything that was factually known about the particular local. In contrast, the military report organized factual information into the categories of military statistics. If the route book directed military forces to a particular geographic site, the military report listed, in a systematic and consistent way, detailed

¹ On the relation between statistics and gazetteers, see Emmett, 1976.

information that might be of importance for planning, mobilizing and executing a campaign. Such information was, in a very practical sense, the source material for the construction of the *précis* discussed earlier.

In Indian Army intelligence, the 1906 *Military Report on Afghanistan* is typical of the form (Chief of Staff's Division, 1906b). The volume begins with the main geographical features of Afghanistan and moves on to communications, fortresses and defenses, climate, resources, history (in this case, primarily British military adventures in Afghanistan), ethnology, administration, and the current military and political situation. By the 1890s, the structural order of the military report that can be seen in this one on Afghanistan, with only slight variations such as references to harbors and navel capabilities, was firmly in place. Each book was of a uniform size, shape, paper quality and typeface, and the small format made them easily portable.

Some of the information that filled the categories in these volumes was, like that in the route book, a result of reconnaissance missions carried out by members of the Intelligence Branch. In other cases, new material was gathered in the course of actual military campaigns (e.g., those in Afghanistan and north China) and new reports were created or older ones updated as a result. But direct observation by Intelligence Branch officers was not the only means used for filling in the categories of the standard military report. Equally important were the publications that included a great deal of regional expertise being generated in other parts of the imperial network of British Asia as well as by rival powers. These included travel accounts through Central Asia by British civilians, officially sanctioned missions like those launched by the Russian Geographic Society, British consular reports from across the continent, the publications of various Asiatic Societies and, of course, information to be found in gazetteers, which could easily be incorporated into the military report.

The Intelligence Branch collected, organized and stored these kinds of sources in an extensive library. By 1901, the library at Simla was made up of over 5000 volumes and over 100 dictionaries and grammars of at least two dozen Asian and African languages.² It was organized by region, country and topic, with extensive cross-referencing by author and subject. Some of the volumes were in French, German, Spanish and Russian, and a number, especially the Russian ones, had been translated

² As far as I have been able to ascertain, there is only one extant catalogue of the Branch's library. See *Catalogue of Books in the Library of the Intelligence Branch of the Quarter Master General's Department in India. Classified Order*. This volume was published in Calcutta at the Office of the Superintendent of Government Printing in 1901 and was numbered 10, presumably superseding nine other versions; see IOR L/MIL/17/11/49.

into English. For example, the Russian-language copy of Col. L. F. Kostenko's three-volume work *The Turkestan Region: Being a Military Statistical Review of the Turkestan Military District of Russia or Russian Turkestan Gazetteer* published in 1880 was in the library, along with a translation executed by four different officers between 1882 and 1884.³ In addition to sources like this that dealt with the Russian advance into Central Asia, the library also contained materials on eastern Siberia and the Amur River region on the Manchurian border. There was also a large selection of works on Afghanistan, which totaled over eighty volumes and included a dozen dictionaries and grammars.

The China portion of the library comprised 325 volumes, almost all of which were published after 1860, the date from which Europeans and Americans had, by right of the Tianjin Treaty (1858) and Beijing Convention (1860), gained their greatest access to China. The collection included works on history and literature being produced in China by first-hand observers, the contents of which I have discussed in detail in *English Lessons* (2003: 135–42). This body of literature was partly devoted to decoding the inner workings of the Qing Empire, but at the same time, through the application of standardization techniques for transliterating Chinese ideograms and the adoption of uniform classification schemes for organizing information, it was possible to easily incorporate China into the intelligence format used by the Branch at Simla.

The largest number of volumes in the China section were classified as “travels and geography.” Among its seventy-four works were accounts of the journeys of British consuls in China, and reports of German and Russian scientific and exploration missions. There were also numerous scholarly journals such as those of the Royal Geographic Society along with several other geographical journals, French military reviews, journals of the Asiatic Society of Bengal and of the North China, Straits and Bombay Branches of the Royal Asiatic Society, as well as the *Asiatic Quarterly Review* and *Journal Asiatique*. Sources like these allowed officers at Simla to fill in and update military reports periodically. And because the military reports themselves were rendered in standard categories yielding optically consistent patterns, it was relatively easy to cross-reference the contents of reports in the indexes that the Branch also generated and held in the library.

The information system made up of route books, military reports and the library itself was complemented by the collection of professional

³ Sources like this one could then be combined with others to produce library-generated military reports; see, for example, the one on Russian Turkestan published by the General Staff, India, 1914b.

journals pertinent to the broad mission of the Branch and useful to the Quartermaster General's Department. In addition to those mentioned above, there were complete runs of the publications of the United Services Institutes in Great Britain and in India and a variety of technical journals, including ones on photography, telegraphy and engineering. The library provided, in other words, an interface with the developments in technical expertise and first-hand observation that were beyond the immediate purview of the Intelligence Branch. Moreover, given its scope and range, the library also extended the "vigilant and scrutinizing" vision of the Intelligence Branch well beyond the India–Central Asia frontiers.⁴ It therefore allowed the Branch's analysts to compare and calculate their own observations against those being produced at other nodes in the communications network of empire, while aligning elements from these sources with their own first-hand observations in a way that facilitated the accumulation and standardization of military knowledge and linked it to the identical practices of the Intelligence Branch in the War Office. Equally important, the combination of reconnaissance missions, the library, and source materials generated by agents operating between Mesopotamia and North China was, by the 1890s, making legible an Asia constituted as a geo-strategic space; that is, as a space knowable in the service of potential defensive and offensive military operations.

Thus the vast collection of material that the Branch had at hand could be used for general reference and citation, for keeping the army leadership abreast of developments across Asia and with emerging technologies that might be relevant to the logistical work of the Quartermaster General's Department, and for adding verisimilitude to military reports. Route books and military reports carry signs of these various kinds of usage of the library – marginal notes and lists of references at the ends of volumes cite sources in the library.

In the case of military reports, because of restrictions the Government of India placed on the travel of intelligence officers in Central Asia, the Branch often had to rely on published and unpublished sources produced by others in order to update military statistics.⁵ Nevertheless, even though they may have been based on limited first-hand observation, the

⁴ I take the phrase in quotations from Henry Rawlinson, the political agent in Kandahar, to whom Arthur Conolly wrote about his "great" and "noble" game. Rawlinson was referring to the necessity of scrupulously monitoring Russian activity in Central Asia; see 1875: 203.

⁵ The sources might be those produced by the Russian administrators or scientific expeditions or by civilian travelers through the region. The latter would have included Marvin's various works published in 1884, Vambery, 1864, and Colquhoun, 1901.

military reports remained important for the way in which they managed and regulated in compact and mobile handbooks the facts of Asia (or, at least, made an authoritative claim to having done so). Within their formal structure, military reports also produced a legible and optically consistent "Asia," an Asia that could be generated and regenerated on the basis of a fixed set of "schematic categories," giving the illusion that, from a strategic and logistical point of view, the military statistics of Asia – even in the absence of states like those to be found in Europe – were knowable, and in many cases known. At the same time, the military report and its companion piece, the route book, constituted the Intelligence Branch as the "privileged vantage point" from which the facts and the space of Asia might be controlled and commanded.⁶

These generalizations about the capacity of military reports to regulate the facts of Asia can be made more concrete by considering specific examples. Like the route books, the most consistently updated reports of the Intelligence Branch were those that dealt with Central Asia, especially Afghanistan and the Northwest Frontier of India. Because of the regular updating of these materials from the 1880s onward, they create the impression that they are the model from which all others were derived. But they were certainly not the only large body of material put together by the Branch. In what follows, I will explore and compare two versions of the Branch's collection of military statistics, one set dealing with Afghanistan and the Northwest Frontier of India and the other with China. While the selection of the former might be obvious (in light of both imperial priorities and contemporary events), the inclusion of China requires some explanation.

First of all, as the reconnaissance missions carried out by Bell made clear, China was part of the military geography of the Indian Army. Thus the China of the Intelligence Branch offers an opportunity to address questions about the extent to which the collection of strategic information was unique to the India scene. How consistent, in other words, was the regulation of the facts of China with what was being done on the Indian frontier, in Persia, and on the borders of the Ottoman Empire? Second, because almost all of the material gathered by reconnaissance missions into China by the Branch remained secret or was ignored until the latter part of the twentieth century, attention to the activities of intelligence agents in various parts of China can add a new dimension to understanding British military activities in East Asia. More importantly, China activities yield a sense of the strategic links forged by intelligence between the eastern end of Asia and the central

⁶ Here I draw on Scott, 1998: 77–79.

and western parts. Third, the China material that will be discussed here provides an unusually rich entry point into an understanding of the structural re-ordering of information collection over time. The tasks faced by intelligence in this respect at the time were twofold – how to make the alien space of China optically consistent in form with other parts of geo-strategic Asia, and how to make information about China easily recoverable for future use. In order to explore these issues, I begin with the seemingly paradigmatic case of Afghanistan and the Indian frontier.

Afghanistan and the Northwest Frontier of India

For British civilian and military leaders in India, the Northwest Frontier and Afghanistan posed two distinct but closely related problems. The first involved managing relations with the hill peoples of the frontier, usually referred to by the British as tribes. These were groups living in the mountainous territory of the Pamir, Suleiman and Hindu Kush ranges, the vast majority of whom were believed to belong to a distinctive linguistic group called Pashtun or Pushtun. Often lumped together by the British as Pathans, these peoples were also differentiated by a variety of distinctive names – Afridis, Bunerwals, Mahsuds and Yusafzais, for example. Historically, these mountain groups had made part of their living by raiding settlements on the fertile plain of the Indus valley. Once the British gained control of the Punjab in 1849, officials attempted to limit such raids and alter the behavior of these groups. Policy oscillated, however, between three strategic approaches. The first of these, dubbed by J. W. S. Wylie “masterly inactivity” (1875: 70–119), was developed by John Lawrence, the first chief commissioner of the Punjab and Viceroy from 1864 to 1869. Lawrence advocated stabilizing Afghanistan through friendly relations with its rulers, denying the mountain tribes access to the Indus valley (a “Close Border” system), and staying out of the mountains unless there was a clear and ominous threat (Miller, 1977: 121, 152–53). While he was Viceroy, Lawrence strongly opposed the creation of a base in Baluchestan at Quetta, a strategic point on the road to Kandahar. The other approach, dubbed the “forward policy,” was more activist. Its advocates sought to push outposts into the mountains and, when the tribes resisted such incursions, to launch punitive military expeditions designed to “hammer” them into submission (Thornton, 1895: 303).

A third approach to frontier pacification was developed by Sir Robert Sandeman in the 1860s, who, when a deputy commissioner on the Sind border in 1866, came into contact with Baluch tribes.

From these encounters, Sandeman concluded that the frontier tribes could not be tamed through coercion or threats even if military force was used. Instead he opted for “conciliatory intervention” designed to win over their “hearts and minds” (Thornton, 1895: 253). In order to accomplish this ideological victory, Sandeman developed a scheme in which the tribes would be enrolled as partners in keeping the peace on the frontier. This “tribal service” system involved supporting hereditary chiefs and holding them responsible for good order among their own people. He encouraged his officers to make friends with headmen, and he relied on *jirgas* (assemblies of tribal leaders) to resolve disputes among groups (see Thornton, 1895: 316; Tucker, 1895). Through these means, Sandeman was able to create British “spheres of influence” in the mountains (Thornton, 1895: 330). But Sandeman’s approach was seen by many as only possible in Baluchistan, where tribal leaders were still able to function as authority figures who could control their own dependents. Eventually, these doubts notwithstanding, Sandeman extended the tribal service system into the Zhob Valley of southern Waziristan, thus securing the Gomal Pass, one of the gateways into India.⁷

The second problem confronting British leaders in India, in addition to that presented by sometimes hostile hill peoples, had to do with geography. The same mountains occupied by Pathans contained numerous passes that opened onto the Indus valley from the north, northwest and west, passes which had at one time or another been invasion routes from the west into India. In the past, the most common invaders had been Turkic-Mongol nomads from Central Asia. But in the late nineteenth century, Central Asian nomadic armies posed little threat to India. Instead, British officials thought that if India were to be invaded, it would be by a European imperial rival such as Tsarist Russia. While the British had been consolidating their control over northern India, as was noted in the last chapter, Russian forces had conquered a succession of Muslim khanates in Central Asia and were at the doorstep of northern Afghanistan.

If the Russians should decide to move on India, the question for British strategists and planners was the likely route of invasion and where best to meet it. Should it be the Indus River, or should forces be concentrated to defend the passes into India? Or should troops be

⁷ Objective proof of the effectiveness of his policy came during the Second Afghan War, when Sandeman was able to keep the lines of communication open between India and Kandahar and supply a British army holding the city; see Thornton, 1895: 122–61. On his efforts among the Waziri in the Zhob valley, see Thornton, 1895: 224–39.

moved forward into the Suleiman and Hindu Kush mountains? Might it be even wiser to cross the mountains and set up a defensive barrier between Kabul and Kandahar? Or should the Indian Army cross Afghanistan and meet the Russians at Herat or north of the Hindu Kush at Mazr-i-Sharif? The decision was highly consequential; the approach adopted would dictate the level at which resources would have to be mobilized and communication lines secured. The farther into Afghanistan the meeting point was set, the longer would be the lines of communication from India and the greater the investment required in transport, materiel and troops to defend the lines. It was in the necessity of securing the lines of communication between the Punjab and forward bases in the mountains to the west that the Afghans and mountain tribes became significant, because if an anti-British Amir was on the Afghan throne or groups in the mountains were hostile to the British, then communications and supply lines to bases in India would be threatened. If, however, the Afghans and the tribes remained neutral or pro-British, they might be assets in a war against Russia, functioning as either irregular forces or as suppliers of food and fodder for the British Army and its transport corps. Information about the mountain tribes and Afghanistan was thus broadly understood to be essential to planning for the defense of India.

Over the course of the last decades of the nineteenth and early twentieth century, the Intelligence Branch at Simla addressed the challenges posed by the Northwest Frontier by extending their primary forms of information compilation – route books and military reports – into the mountains and across them into Afghanistan proper.⁸ In addition to these well-established genres, intelligence officers also devised some new forms of representation, each of which expanded the organizational categories of military statistics. New forms of military statistics included tribal tables and charts, Who's Who guides, and short biographical reports on local religious leaders, or "mullahs," operating in the mountains. In each case, these stand-alone publications served to enhance and complement the ethnological sections of military reports, but they also indicated an increase in the quantity and kinds of information available, while building upon the foundation that had been established by earlier intelligence collection activities.

As noted in the previous chapter, the initial effort to upgrade the Branch's materials on Afghanistan and the mountains occurred during

⁸ In some areas, thanks to Sandeman's efforts, it was also possible to do precision mapping and gather military statistics. Both Wahab and Holdich were involved in these expeditions; see Thornton, 1895: 215.

the Second Afghan War.⁹ The information collected was, however, limited by the fact that the campaign was essentially confined to the Kabul-Kandahar corridor and the mountain passes from India. This relatively restricted space of field activity was why the Afghan Boundary Commission was so important from an intelligence point of view. Not only did the surveying activities provide unprecedented geographic information, but the activities of the intelligence party of the Boundary Commission produced a whole new human and material Afghanistan. The intelligence unit led by Capt. Pelham J. Maitland included Capt. Peacocke, as well as a Royal Engineer, Sgt. Galindo, six Indian Army Dafadars (equivalent to sergeants in the British cavalry) and a Turki-speaking translator. Over the course of the year or more that they were in the field, members of Maitland's unit gathered volumes of information on sources of supply and fodder for troops, availability of pack animals and water, and information about the various ethnic groups they came into contact with in different parts of Afghanistan. The results of their findings were gathered together in a five-volume report entitled *Records of the Intelligence Party, Afghan Boundary Commission*. Printed between 1888 and 1891, the first two volumes were Maitland's diaries and field books and the third was made up of Peacocke's diary. The other two volumes comprised reports on the tribes of Afghan Turkestan and miscellaneous papers by other members of the Commission, including additional route reports and reconnaissances on the routes to Herat in northwest Afghanistan and in Afghan Turkestan. Taken together, the five volumes probably exceeded 1500 printed pages.¹⁰

When combined with the other records of the Boundary Commission published in the British Parliamentary Papers and the personal reminiscences mentioned earlier, the intelligence report generated by Maitland's command provided the Simla Branch with an unprecedented amount of

⁹ The official history of the war noted that prior to the invasion there was little information on Afghanistan. The dearth of material meant that campaign planning could not be "seriously" or "methodically" considered; see Intelligence Branch, [Simla] 1907: 709–10.

¹⁰ I base this estimate on seeing three of the five volumes in the series. According to J. L. Lee, ten copies of the report were printed, but only two appear to be extant: one in the National Archives of India, the other in the Curzon Papers held by the British Library in London (1996: 446). I have, however, only found volumes 2, 4 and 5 in the Curzon papers; see MSS EUR F112/388/1–5. Missing are the first volume of Maitland's diary and Peacocke's diary. In addition to the second volume of Maitland's diary (1888, 2), the Curzon papers include volume 4, "Reports on tribes, namely Sarik Turcoman, Chahar Aimak Tribes and Hazaras," 1891, and volume 5, "Miscellaneous Reports," 1888. The India Office had a complete set in the early twentieth century, but it was inexplicably destroyed at that time. I was told by an archivist of the India Office collection in 2011 that the British Library had recently acquired a complete set, but that it had yet to be catalogued.

military statistical information on Afghanistan. This was particularly the case with data on the Afghan tribes. For example, at the back of the second volume of Maitland's diary in Appendix B, there are tabular charts organized by province and by districts within provinces. The columns on the charts are labeled village, race or tribe, number of families and headman. Reading across one of these tables for the Bamian district in Kabul Province, the village of Dasht-i-Tikar appears as made up of 500 families of the Faoladi Hazaras, whose headman was Ghulam Raza. Below this entry, Maitland notes that Mir Baba Beg was the chief of the Faoladi Hazaras in 1885, but when last heard of he had been in confinement at Kabul, where his situation was now unknown (1888, 2: 412). Following upon the village tables are charts listing the genealogies of tribal leaders. This kind of on-the-ground tribal intelligence was then combined with data in tables that listed grain production and estimates of surplus. From this qualitative data, calculations were provided of the number of Indian Army troops that might be supported in the field by this or that district. Reference was also made to the availability of pack animals, quantity and quality of local military forces, climate and revenue generated for taxation purposes. The entries continued over dozens of pages, providing particulars on population and resources of areas north and west of Kabul including Afghan Turkestan and Badakhshan.

By the 1880s, this way of presenting military statistics had become standard in military reports. Maitland's accomplishment was to extend the intelligence structure deep into Central Asia, while other Indian Army intelligence officers duplicated the form on the Northwest Frontier, in Burma and in India itself.¹¹ Like survey mapping, the military report colonized new parts of Asia in uniform and almost anonymous compilations. In published form, the books could then be stored and circulated, expanding the information archive of empire. When needed, even the driest compilations of statistics could be dusted off and drawn on by planners to calculate, for example, the means for supplying a British force, or countering a hostile one, in various parts of Afghanistan.

Other elements in the intelligence party's report provided strategists and planners with some sense of the characteristics of the groups who might supply Indian Army units and of their attitudes towards the British. That information can be found in volume 4, the reports on the tribes. The entries themselves are of unusual interest, not simply

¹¹ See, for example, Tod, 1899, for a report done with the southern party on the Burma-China boundary commission. (Tod was the intelligence officer with the British contingent.) It includes a short military report in the standard format, a gazetteer, route reports, sketch maps and the locations of boundary pillars.

because of what they have to say about each group, but because of the categories through which the data was organized. Maitland, for example, began with an overview of the physical and facial features characteristic of each group. The Sarik Turcoman were “a fine race” of tall, strong and bony men with high cheekbones and ruddy complexions. Some had blond hair and blue eyes, while their women had small hands and feet. Their character was like that of all Turcoman people, rapacious and deceitful, but they also did what they were paid for, and were hard-working and brave. Distinguishing them from other groups, however, was the fact that the Sariks were shrewd bargainers, hard-headed and fond of money. Given these traits, it should not be too surprising to see Maitland declare them the “Scotchmen of Asia.”

The physical and character traits of the Turcoman were followed by discussions of dress, religion, marriage and childbirth customs, crime, trade, weights and measures, and livelihood. In the last case, the Sariks were said to despise farming and to seem to make their living primarily by sheep-herding, rather than raiding others. Russian rule seemed to have domesticated the Turcoman. Maitland also thought that they would make good soldiers, but because, unlike the British, the Russians had an aversion to recruiting Asiatic military units, they had been little used in this capacity (Records of the Intelligence Party, 1891, 4: 31–42).

Whether or not Maitland imagined that the Turcoman could be recruited into a British-led force is unclear from the report. In other cases, however, he is quite specific about the desirability of recruiting from the Afghan tribes. After reviewing the qualities and resources of the Hazaras, for example, and indicating that they were enemies of Afghans, Maitland thought that they were the one group in Afghanistan that would welcome British rule. He added that, if led by British officers, the Hazaras would put up a good fight against a Russian advance from the north.¹²

There are a number of things to consider about these entries before moving on. First, in terms of first-hand reporting, the material assembled by the intelligence party on the peoples of Afghanistan seems to draw liberally for its structure from the ethnological literature of the era. Ethnological reporting included descriptions not only of the physical qualities and characteristics of the group in question, but their customs, beliefs, practices, kinship structures and genealogies. And like the military report, ethnology implied or asserted that all members of non-western groups shared a common mentality, and a uniform set of fundamental beliefs and behaviors.

¹² See the volume of 1891 for additional material on the tribes of Afghanistan.

At the same time, however, Maitland's reports introduced other elements that extend beyond ethnological taxonomies and typologies. Unlike ethnologists, Maitland's interest in other populations included an assessment of their military potential. Given the long reliance of the British on native forces in South Asia, this is perhaps not too surprising. Indeed, the overall thrust of the ethnological and evaluative material is virtually identical to that to be found in later recruiting manuals of the Indian Army, particularly ones that dealt with groups identified as Pathans, Dogras, Sikhs, Gurkhas and Jats. But Afghanistan was not India, and the Afghans that Maitland scrutinized were well outside any territory that could have been construed as in any way under British control, even indirectly.¹³ Overtly inscribed in the report was, in other words, a sensibility that can be contrasted with the ideal of disinterested, objective reporting aspired to by ethnologists. Instead, Maitland's interests in the people of Afghanistan unabashedly had to do with the security interests of empire. Just as the space of Afghanistan was being colonized through measurement, compilation and categorization, so too was its population.

Third, given the kind and quality of information intelligence officers like Maitland collected on geography, routes, resources and human populations, it seems reasonable to conclude that this fieldwork was in some sense transformative: direct experience not only filled in blank spaces on maps, but produced a kind of authenticity that altered fundamentally the Simla archive. Rather than the retrospective orientation provided by its gazetteers, the archive now had embedded in it a present that opened onto the near future. This is a significant shift: it points towards the notion that intelligence enabled the planning of future war. In Afghanistan, at least, the intelligence unit of the Boundary Commission had begun to assemble the raw material that the Prussian General Staff had a decade or so earlier identified as critical to war-planning.

Taken together, the military geography and statistics collected by the intelligence party and the surveyors of the Afghan Boundary Commission accomplished something unique: it gave the British Indian Army, in terms that were legible and uniformly ordered, a practical sense of both the natural and the human terrain of Afghanistan. Intelligence officers came to know something concrete about the time it took to travel through Afghanistan, the availability of water, the sources of fodder for pack animals and food supplies for troops, and the groups

¹³ The area covered by Maitland's ethnological reports is the same as that from which the United States found allies in the form of the Northern Alliance in 2001.

within Afghanistan that might prove useful to British interests in the future. As a result, intelligence officers could place into the hands of the Commander-in-Chief in India and his staff information that was not available in 1878 when the British invaded Afghanistan. Perhaps more importantly, they could provide the military geography and statistics for choosing and evaluating what might be the most advantageous points of engagement if war with Russia should come about.

Over the next two decades, the materials gathered by the Afghan Boundary Commission were summarized and incorporated as primary factual data into other reports. One of the first of these efforts was undertaken by Maj. E. G. Barrow under the title *The Military Geography of Afghanistan* (1893, 2 vols.). Compiled from reports, gazetteers, route books and the records of the intelligence party, the two volumes demonstrate how data could be re-configured and re-deployed to produce a clearer estimate of the effects of Afghanistan's topography on the movement of military forces. One of the chief characteristics of Afghanistan's physical terrain, according to Barrow, was that it offered considerable friction to bodies in motion. The terrain itself placed a premium on time rather than distance in travel. Thus, the physical obstacles to be found in the north and west would slow down a Russian advance and provide time "for the mobilization of Afghan and Anglo-Indian forces" (1893, 2: 9). Put in these terms, Afghanistan functioned in Barrow's strategic thinking as a natural apparatus that would, to use Bell's notion, create friction, dissipating the energy of the Russian advance. This would seem to be an important insight, particularly if one were trying to calculate the time needed to mobilize and concentrate forces on India's Northwest Frontier.¹⁴

After 1900, sufficient material had been gathered and digested to begin to produce more standard military reports on Afghanistan and the frontier. As in other regions, the Afghan–Central Asia Frontier publications mapped military statistics over the longitude-latitude grid produced by the surveyor, creating a structure of information in depth managed through a standardized filing system. The 1906 military report on Afghanistan mentioned earlier was organized into the standardized categories outlined at the beginning of this chapter. But the report also differed from others in that it focused attention on the possibility of both a war with Afghanistan and one with Russia. Thus,

¹⁴ At the same time that the Afghan estimates were being worked out, officers in India and London were preparing estimates on Russian military capabilities in Central Asia. See, for example, Capt. J. A. Douglas, *Memorandum on the Power of Russia to Operate against Northern Afghanistan* (1899), in Curzon Papers, MSS EU F111/695, British Library.

the sections on lines of communication include potential Russian lines of advance from Turkestan,¹⁵ as well as lines of communication that could be maintained from India to Kabul and Kandahar, and from the two Afghan cities to Herat, all of which had been assembled from other compilations.

Worth emphasizing here is the way in which Afghanistan was made increasingly visible and legible through the reworking and repackaging of elements from the now expanded Simla archive that had added the Boundary Commission reports. These repeated invocations of sources from its archive combined to situate Afghanistan as a visible object of military science. The distribution of archived facts into the formal categories and sequences of the report added a patina of authority like that of a professional association, asserting authenticity and vouching for the scientific truth of the material presented.

Much the same can be said about the supply and transport chapters of the report, as well as the one on ethnology. In these sections, Maitland's 1891 cataloging of northern Afghan tribes provided a kind of core reference around which other material was added. The entry on the Hazaras is of interest in this respect. Recall that Maitland had identified them as potential recruits for the British Indian Army. The 1906 military report adds to this observation that the Hazaras were originally Tartar invaders that settled in central Afghanistan, as well as in Western Persia, the Amu Darya region and the Punjab. The Indian group had been enlisted in the Indian Army and had "proved themselves the equals of the best troops in the Indian Army," confirming Maitland's earlier assessment (Chief of Staff's Division, 1906b: 105).¹⁶

The supply and transport chapter operates in a similar fashion, mobilizing Maitland's observations from eighteen years earlier and adding new material on sources of military supplies and pack animals throughout the country (1906b: 75–94). The military statistics on supply and population gain additional importance from their juxtaposition with the largest single chapter of the report, the history of Afghanistan, or, more precisely, the history of Anglo-Afghan relations (1906b: 112–85). The primary topic of the history section was the two British invasions, the effect of which fixed the fundamental meaning of Afghanistan as a security problem for British India.

¹⁵ In the case of a Russian advance, the report recapitulated the findings of *Routes from Russian Central Asia towards Afghanistan and India* (Intelligence Branch, [Simla] 1893–94), which was itself a compilation of other sources and various reports on Russian Turkestan; see Chief of Staff's Division, 1906b: 57–63.

¹⁶ MacMunn notes that a group of Hazaras from within Afghanistan migrated to British territory and were formed into the 106th Hazara Pioneers; 1911: 154.

Over the course of the next two decades, military reports on Afghanistan were updated, refined and circulated to other nodes in the communication system of the empire. One of these dealt with key strategic areas to the east of Peshawar. Entitled the *Military Report on the Country Between the Kaibar and the Kurram* (General Staff, India, 1914a), it added to the usual categories a section about arms trafficking on the frontier.¹⁷ The report noted that, in addition to the smuggling of weapons, Afridi craftsmen in the Tirah and Kohat districts manufactured reasonable copies of the Martini-Henry rifle, which used black-market ammunition circulating through the region (General Staff, India, 1914a: 251–55). A later report from 1925 argued that the availability of high-powered rifles like this one had led to a change in tactics among the tribes – they were now far more likely to stand their ground in engagements with British forces (General Staff, India, 1925: xvii).

Updating and revision also occurred in other genres. A fourth edition of the *Gazetteer of Afghanistan* was published in 1907–8 (Chief of Staff's Division, 1907–8) and was complemented in 1907 by a sixteen-volume first edition of *Routes in Afghanistan* (Chief of Staff's Division, 1907), as well as a third edition of *Routes in Waziristan* (Intelligence Branch, Simla, 1906), which drew its sources primarily from punitive expedition reconnaissance reports made into the area in the 1890s.¹⁸

Following the agreement in 1893 between the Amir of Afghanistan and the Government of India that established more formally the boundary between their territories, the so-called Durand Line,¹⁹ the collection of military statistics on the frontier region expanded. One of the first of the new works was the *Military Report on Southern Waziristan*, compiled by Capt. A. S. Hamilton (1901). Hamilton organized the report in two parts, beginning with the same sort of section organization that was evident in the Afghan military reports. Part two is made up of a gazetteer, tribal tables, memoranda on troop dispositions on the border and maps,

¹⁷ Keppel noted that there was a lively traffic in many kinds of rifles. The guns were smuggled from Europe through barren areas on the Baluchistan coast and then into the mountains (1911). Moreman cites a commission report on arms trafficking which notes that the hill tribes obtained substantial numbers of rifles and parts from the British, either through theft, as gifts or as condemned pieces (1998: 70). For a detailed study of the arms traffic that draws on official Indian Army reports from 1890 to 1914, see Moreman n.d.

¹⁸ The Afghanistan gazetteers are located in the War Office collection of the National Archives, London; see WO287/31–34, the Farah volume being the last of these. A copy of *Routes in Waziristan* is in W0106/151. The British Library India Office Records has a copy of *Routes in Afghanistan*; see L/P&S/20/B223/1.

¹⁹ The border agreement was signed on November 12, 1893, by Amir Abdur Rahman Khan and Sir Mortimer Durand. The documents related to the agreement have been reprinted in Yunas, ed., 2003.

one of which indicates points in the mountains that could be used for helio-telegraphy. The reference not only indicated the introduction of a new form of communication into the mountains, but identified novel ways for securing communications lines in difficult terrain.

The ethnology section of the report is of particular interest. Drawing on various sources over the previous decade or so, Hamilton was able to locate the southern Waziris or Mahsuds within the overall typology of the mountain tribes, while identifying special features unique to them. Like other Pathans, they were perceived to be fiercely independent and strongly “democratic,” so much so that their elders had difficulty controlling them. At the same time, because of their ignorance and superstition, Waziris were held to be particularly malleable in the hands of illiterate mullahs. Just how fierce independence and ready manipulability worked together in practice is not explained here or in any other similar sources that repeat the contradiction. On the other hand, unlike the tribes to the north and south of Waziristan, the Mahsuds seldom turned *ghazi*, that is, they rarely became fanatics who killed Europeans in “a paroxysm of religious mania.” As for their livelihood, they were “plunderers,” living off weaker neighbors. But Hamilton adds that “plunder is with the Waziri more than a propensity; it reaches the dignity of principal.” Some of these traits apparently were seen as desirable, because a small contingent were recruited into the 24th Baluchestan Regiment, where they distinguished themselves (1901: 21, 28–30).²⁰

There are a number of elements in this report to consider. First, the negative attributes of the Waziri people catalogued here, whether or not they originated with Hamilton’s colorful prose, became clichés repeated in the many later works on the Northwest Frontier right up to World War II.²¹ At the same time, however, Hamilton’s effort to distinguish the Waziri from other Pathans indicates a sensitivity to detail also to be found in the writings of political officers such as Robert Sandeman and Robert Warburton (1900). Some of Hamilton’s observations suggest, in other words, a more sophisticated approach to understanding the motivations of different groups in the mountains. Lastly, the kind of detail provided about Waziri characteristics was quite similar to that to be found in handbooks on the martial races of India. I will have more to say about these writings in the next chapter. For now it is sufficient

²⁰ MacMunn noted that those Pathans who served the crown as members of regular army regiments were admired for being high-spirited and jaunty, with a ramrod posture (1933: 239–46); also see his 1911:145–54. Trench (1985) notes that Pathans were part of the local militias recruited by British political agents along the Northwest Frontier.

²¹ See, for example, Davies, 1932: 57–70.

to note that the very fact that Waziris had been incorporated into an Indian Army regiment elevated them above other tribes in the eyes of intelligence scribes, and may well explain why additional facts were provided about their beliefs and behavior.

At any rate, Hamilton's inaugural efforts were followed by military reports on all of Waziristan, the first appearing in 1905, reaching a fifth edition by 1935.²² This last one informed readers that they should use it in conjunction with route books and tribal tables on Waziristan.²³ These tables sometimes came in the form of large-scale charts²⁴ or in books such as *A Dictionary of the Pathan Tribes of the North-West Frontier of India*, which was published in a portable handbook size organized alphabetically.²⁵ For each entry, identification of the group was presented in a nesting sequence, working from the smallest community up to the large tribe of which they were purported to be a part. So, for example, the Dado Khel were a minor faction of the Dreplara section, which belonged to the Khusrogi subdivision of the Nasruddin division of the Zakka Khel clan, which belonged to the Afridi tribe. As well as fixing groups in scales of affiliation, the geographical location where they resided was provided, along with the name of the headman and the estimated military strength of the group. In the case of the tribal tables and the tribal dictionary, British Army officers developed the kind of local knowledge that must have been critical for political officers interacting with tribes along the frontier. We see, in other words, a kind of overlapping of military and diplomatic duties on the frontiers of empire, a blending or crossing of boundaries that might be contrasted with the seemingly clear division of labor that operated within the military-diplomatic apparatuses in Europe.

This melding of military with political intelligence is also evident in that tribal tables might also identify local people of import, such as

²² I have only seen the last of these. The fifth edition lists publication history: the second edition appeared in 1908, the third in 1917, and the fourth in 1924.

²³ Hamilton had provided tribal tables in Appendix I of his 1901 study.

²⁴ Examples of tribal tables can be found in British Library, IOR L/MIL/17/13/105, which is a third edition on the Mahsuds, Wazirs (Darwesh Khel) and Dauris of Waziristan dated 1927; also see L/P&S/20/B160–163.

²⁵ The first edition of the dictionary was published in 1899(b) and contained the following introductory note: "This work has been compiled with a view to providing an index to the numerous ramifications of the Pathan tribes on the North-West Frontier, in such a form that any obscure subdivision may be easily referred to its proper tribal position; but all detailed particulars of the history and genealogy of the tribes, such as may be found in larger works of reference, have been excluded" (Intelligence Branch, [Simla] 1899). A second edition appeared in 1910, having been reorganized into four sub-regions of the frontier running from the Swat area in the north to Baluchistan in the south; see General Staff, India 1910.

descendents of the prophet Mohamed (Saiyids), transregional saintly figures (Mains), local saints (Akunzadas) and mullahs (Sahbzadas). These forms of local knowledge even extended to the publication of biographical dictionaries, or Who's Who lists. Although usually quite brief, the entries in such handbooks presented prominent local people especially in terms of their attitude toward British rule. Organized as friends and enemies, the entries are a testament to the ongoing struggle between the British and the indigenous populations of the frontier region and the mountains of Afghanistan. In the fourth edition of *Who's Who in Afghanistan*,²⁶ for example, the entries for friends are those who might be useful for British purposes and seem willing to cooperate, while enemies are those who are, regardless of profession or education, invariably denounced as fanatics. Here are some examples.

Abdul Ghani, doctor. Director of public instruction in Afghanistan, Principal of Habibia College, schoolmaster at Rawalpindi, Principal of Islamia College, Lahore. Studied medicine in England. "Said to be insincere, selfish, and a hypocrite; reserved and fanatical." Always intriguing against the Amir's doctors. Arrested in 1909 in a plot to kill the Amir. Tried and jailed 1913, released in 1919. (General Staff, India, 1914c: 3)

Abdul Hakim Khan. A refugee in Lahore. "Said to be well-informed and likely to be useful in the event of trouble in Afghanistan." (General Staff, India, 1914b: 4)

Abdur Razaq, Mulla-i-hazur, or chief court Mulla of the Amir. Induced Amir to execute a holy man simply because the latter said a jihad against the British was not permissible. Carries on correspondence with leading frontier Mullas. "Appears to be wire-puller of all trans-border priestly fanaticism." (General Staff, India, 1914b: 11)

As well as illustrating the sorts of descriptions that went into an entry, this last example, Abdur Razaq, is here for another reason. British mullahology, as I will call it, was a genre unto itself. It seems to have operated through a scale of forms, in this case from good to fanatical mullahs, examples of which can be found in dictionaries like this one, as well as in gazetteers and military reports. By the 1930s, the record-keeping on mullahs could also appear as a "List of Leading Mullahs on the Border of the North-West Frontier Province Corrected to 31 December 1930."²⁷ Thirty-three pages in length, its tabular charts are organized by administrative district. There are many fanatics here as well, but

²⁶ See General Staff, India, 1914c; it indicates a first edition, 1904; a second edition, 1906; and a third edition, 1908. Unfortunately, because new editions included instructions to destroy previous editions, it is difficult to determine whether change had occurred over time in the form and content of entries.

²⁷ See NA WO106/1594a.

perhaps of greater interest is a column headed "Attitude toward government *as far as known*" (emphasis added), within which is a fine-grained parsing of a range of "attitudes." While some mullahs are "not openly hostile," others are, and these range from the merely "hostile," to "most hostile," and on the outer extreme, those whose "hostility" is "unbounded." These mullahs presumably can be distinguished from those who are "doubtful" or simply "not friendly," and those who are "good" and "apparently good," as far as is known, that is.

But why, one might wonder, this kind of scrutiny of holy men; why tabular charts of mullahs when the tribe or headmen seemed the far more relevant categories for surveillance? Recall the earlier reference made by Hamilton to Waziris going *ghazi*. The results of such occurrences were referred to as "fanatical outrages" and statistics were kept of each incident in which a British military or civil official was attacked. Officials were aware, however, that such things did not happen without cause, and although one official did link such incidents to punitive expeditions into the mountains, the preferred explanation was that the perpetrator had been incited by a mullah to assassinate an Englishman.²⁸ The *Military Report on Waziristan* notes that the Mullah Powindah, referred to by Lord Kitchener as the "pestilential priest," was said to have been responsible for inciting the death of four or more British officials, and encouraging even more assassinations from beyond the grave (General Staff, India, 1935: 164). But mullahs also posed an even greater threat. They could, under certain circumstances, be persuasive enough to resolve the usual conflicts between tribes and unite them against the British.

As the 1930s reports on mullahs suggest, British Indian Army intelligence continued to collect, collate and refine its understanding of Afghanistan and the frontier. New threats were identified, ranging from gun-running on the frontier that armed tribesmen with more sophisticated weapons and altered the tactical situation, to the appearance of new leaders such as Dr. Abdul Ghani who had been educated in England and who operated on both sides of the Afghan frontier. The first of these threats, the newly armed tribes, were also chronicled in commercial publications on frontier warfare, more often than not produced by officers who were part of the frontier army and who wrote from personal experience (e.g., Younghusband, 1898; Nevill, 1912; Rawlinson, 1921;

²⁸ See Anon., 1905, "Statement of Fanatical Outrages in the North-West Frontier Province and Baluchistan." The report covers the period from 1877 to 1905 and indicates a substantial increase in incidents between 1895 and 1905, a time of a number of uprisings along the frontier that were brutally suppressed by the Indian Army. The normal form of execution for such acts was hanging, followed by the burning of the body; see Chapter 8 for further discussion.

Davies, 1932; and MacMunn, 1933). These popular works were, moreover, based upon a truly massive amount of empirical material on frontier campaigns, as well as on frequent military assessments of lessons learned. In addition to the official histories published by the Government of India printing units, articles on frontier warfare from participants and observers appeared in the United Services Institute journals in India and London and in special publications of the Civil and Military Gazette based at Lahore, as well as from commercial publishers.²⁹

The vast collection of material embodied in military reports, gazetteers, Who's Who listings and tribal charts and summarized in official reports and commercial publications filled up the empty areas in knowledge about the Northwest Frontier and Afghanistan that had been lamented in 1888 by Kipling's Daniel Dravot. These places came to be known at a depth provided by a range of technical means for producing positive knowledge, military methodologies that had just begun to appear in India when the Second Afghan War broke out in 1878. As a result of reconnaissances performed during the war and by members of the Afghan and Pamir boundary commissions, the Simla Intelligence Branch had the raw material it had long sought for planning incursions into Afghanistan, for securing lines of communications through the mountains on the Quetta–Kandahar and Peshawar–Kabul routes, and for monitoring the activities of mullahs and the Pathan tribes. In developing its understanding of the regions in the mountains and beyond, the Intelligence Branch had refined and distilled military statistics into highly mobile genres of information storage.

These forms were not only consistent with the kinds of material produced by officers in the Intelligence Department of the War Office in London, but in many ways went beyond what was being done with respect to European armies. This was in large part because the Indian Army intelligence officers were actively engaged for much of the last two decades of the nineteenth century in reconnaissance operations and military campaigns. These expeditions provided opportunities for planning, implementing, and refining intelligence practices. Yet it was also the case that nothing quite like the density of information produced with respect to the Northwest Frontier was achieved in other settings. While the technologies of knowledge deployed by British intelligence were identical across the space of Asia, the accumulated content of the various portions of the Simla archive looks like an example of uneven development.

²⁹ T. R. Moreman (1998) provides a comprehensive bibliography on Northwest Frontier warfare that goes beyond the sources used in this study. Moreman is primarily interested in the technical problems of mountain warfare and the various tactics developed by the British to deal with it.

Military intelligence operations, North China c. 1884–1910

China became known in an intelligence sense at the same moment as Afghanistan. But intelligence about China could only be gathered through the solitary efforts of the sort of reconnaissance mission outlined by Mark Bell. Nor was there an acutely perceived threat such as a Russian invasion of India to justify open-ended and continuous information collection and compilation. Also absent was a substantive public debate over China policy like the one that had emerged over the “forward policy” on the Northwest Frontier of India. Prior to 1900, reconnaissance in China was limited in scope and in temporal duration. The only efforts comparable to those in central and western Asia were the secret reconnaissances performed by Bell between 1882 and 1886. More common were brief forays focusing on the area around Beijing and Shanghai, and an occasional visit to one of the new arsenals the Qing government built after 1860.

The situation began to change as a result of the Sino-Japanese War of 1894–95. During the war, a British military attaché was stationed at Beijing. Although there are few extant reports generated by the attaché, what does exist suggests that in addition to reporting to the War Office he also may have worked with diplomats of the legation staff to monitor the military activities of the Qing government and seems also to have been in communication with the Intelligence Branch in Simla. It was, however, not until the Boxer Uprising in 1900 that intelligence-gathering became a regular fixture in China.

Following the relief of the Beijing legations from the Boxer “siege” in August 1900, the China Field Force Intelligence Branch and the British military attaché at Beijing undertook an ambitious reconnaissance and trigonometric survey of parts of China. Their objective was to produce the same kind of intelligence material then being compiled on Afghanistan and the Indian frontier. In order to better understand the China military reports, however, it is useful to review the state of intelligence knowledge prior to the Boxer Relief Expedition.

Pre-Boxer Uprising intelligence operations

As indicated above, the first serious Indian Army reconnaissance of China was undertaken by Mark Bell. The result of Bell’s initial efforts in the early 1880s was a massive three-volume compilation of information (1884) that was effectively the first military report generated by the Branch at Simla. However, the way in which Bell formatted the

material was not unlike that to be found in the encyclopedic gazetteers compiled under MacGregor's leadership on Central and west Asia. The difference was that whereas the MacGregor project relied almost exclusively on sources in the Simla library, Bell combined the military statistics and route reports from his own field reconnaissance with materials from the China portion of the intelligence library.

In 1886 Bell returned to China from India and teamed with Lt. Francis Younghusband to complete a reconnaissance from Beijing across Chinese Central Asia to northwest India. The results were the route books discussed in the previous chapter.³⁰ As Thomas Holdich might have put it, there was now a degree of certainty about the strategic relation between north and central China and the Indian frontier. Bell and Younghusband also collaborated on a pamphlet concerning the suitability of north China as a recruiting ground for "coolies." In addition, Younghusband authored reports on the Chinese army, the Shanghai arsenal and China's coastal defenses.³¹ These efforts constituted the primary source material on Qing China until the military attaché arrived in Beijing in the mid 1890s.

During the intervening decade, the Intelligence Branch at Simla kept track of developments in the Qing Empire through regular communication with the British legation at Beijing and British consular officers in treaty ports along China's coast and down the Yangzi River. Communications between Beijing and Simla were made up of periodic exchanges of factual information, the content of which helped to identify and monitor specific British military concerns about China and British imperial interests in Asia. The Intelligence Branch sent to the Beijing legation reports on events in Russian and Chinese Turkestan and in the Sino-Indian and Sino-Burmese border areas, as well as maps, some from Russian sources, of the China–Russia–Afghan border area. The Branch also translated materials from Russian sources on Central and Northeast Asia, made inquiries about opium production in China, forwarded requests for Chinese passports for Intelligence Branch operatives to travel in China (e.g., Bell and Younghusband), and asked for material to update Bell's 1884 reconnaissance report, a copy of which the legation held. By the 1890s the legation was also on the Intelligence Branch's mailing list to receive copies of its regional diaries covering various parts of Asia.

The correspondence from Beijing to India included notices on Chinese Central Asia derived from the Beijing legation's systematic and

³⁰ For Younghusband's account of the journey, see 1896: 21–184.

³¹ See Younghusband and Bell, 1886; and Younghusband, 1887a and 1887b.

extensive translation of Qing government sources, including the multiple versions of the semi-official Peking Gazette (*Jing bao*); reports on contacts with Qing officials; and copies of memorials and edicts that mysteriously made their way from Qing imperial circles into the hands of legation officers. The legation also responded to specific queries from India and provided translators for Intelligence Branch officers carrying out reconnaissance missions in China. In addition, British consuls in China's treaty ports provided various kinds of military information. For example, the report of an 1893 reconnaissance of north China undertaken by Capt. N. W. H. DuBoulay and Lt. M. Ray included materials by the British consul at Tianjin on the state of the Qing garrison and the local arsenals, and those of consuls at Chefoo and Newchwang (Manchuria) on local port defenses, as well as the number and caliber of Krupp guns the Qing had recently acquired (1894).³²

The legation's correspondence to India provided the Intelligence Branch with two kinds of material. First, the legation sources filled in some of the military statistics for what was essentially a spatial diagram of Chinese Turkestan provided by Bell and Younghusband. Second, the reports from consuls served to update or correct Bell's reconnaissance. There is, however, no evidence that actual upgrades or revisions of Bell's work were undertaken. With the exception of a few other minor reports, China remained peripheral to the more pressing interests of the Branch, whose primary efforts remained focused on western and central Asia. Preoccupied as it was with the situation along the Afghan-India frontier for much of the 1890s, China, with the exception of the Burma-Yunnan border region, seems to have receded from Simla's field of vision.

At about that time, a new form of information collection appeared on the Chinese scene. As noted above, the War Office assigned a military attaché to the Beijing legation when the Sino-Japanese War broke out. Col. G. J. Browne arrived in China sometime in 1895 and produced a series of reconnaissances, surveys and intelligence reports, including observations on concessions established in China by other European powers. One example of Browne's efforts was a reconnaissance of the new German base at Kiaochow Bay, or Qingdao, on the southeast coast of Shandong province. Browne's report on Qingdao is of interest not only for what it contained, but for how it was filed at the War Office. It was included with an analysis of the military budget of Germany prepared by Col. James Grierson, military attaché in Berlin, and with

³² This brief summary of communications between Simla and Beijing is based on legations records of incoming and outgoing correspondence; see NA FO288: 600, 840, 882, 1111, 1149, 1186, 1586, 1396, 1586 and 1665, which contains correspondence from 1877 to 1907.

a collection of observations assembled by the Intelligence Branch at Simla, chief among these being those of Capt. A. W. S. Wingate, who carried out a number of reconnaissances into the Yunnan area from Burma.³³ But perhaps more important than the actual contents of this file were the personnel and units collected together in it. In the first decade of the twentieth century, the combination of military attaché and a field reconnaissance force from Simla that included Wingate would fundamentally reshape China intelligence.

Preparation for the China incursion

The Simla Intelligence Branch (Intelligence Branch, 1900a) did not aimlessly gather masses of information. One of the unit's basic purposes, as has been argued, was to assemble tactical and strategic materials that could support possible military expeditions. For the Branch, the 1900 campaign to relieve the legations in Beijing was no different from Indian Army expeditions into and across the Northwest Frontier. In the case of the Boxer Relief Expedition, the Branch was able to assemble *précis* in the form of easy-to-carry booklets of information on the areas where the Indian Army was likely to be deployed in China. The booklets included a short military report on Zhili, the province in which Beijing was located. Similar reports were also compiled for the Canton region, and the lower Yangzi River, near Shanghai, where Indian Army forces were also intended to be deployed in case the Boxer movement spread south. The content of these reports, each a compact distilled summary, was compiled from previous intelligence reports and the China materials in the Branch's library, as well as from China's Imperial Maritime Customs Reports and Browne's report on his reconnaissances of Shanghai between 1895 and 1899.

The military report on Zhili is a brief nineteen-page guide put together by Capt. Evelyn Norie. It includes drawings of the Dagou forts at the entrance to the White River leading to Tianjin that were executed by Simla draftsman. It also had maps in a rear pocket and route reports covering the distance from Dagou to Beijing. Norie later observed that the sudden onset of hostilities had made it difficult to assemble a "very full" military report, and complained that the maps of north China in the Simla archive were not of the right scale for normal operations. However, his "very limited" results were, he claimed far superior to

³³ See NA WO 106/17. The file is tantalizing primarily because the reports are each written as if they were works in progress, suggesting that there may well have been other, now missing, pieces submitted by the same observers.

what the other armies, with the exception of the Japanese, had in hand on the eve of the invasion.³⁴

Part of the issue for Norie may have been that there was little recent intelligence about China available in Simla. Nevertheless, he still managed to produce a military report crammed with sound descriptions of the geography of the north China plain, landing sites, harbors, roads, bridges, climate, diseases, supplies, clothing requirements, coinage, weights and measures, and an analysis of enemy strength. The booklet also included discussions and diagrams of the forts at Dagū, Beitang and Shanhaiguan, with a list of guns, including several kinds of Krupp cannons, and recommendations for attacking each of the fortifications. Other visual material was made up of maps of the region from the coast to Beijing and the area around Shanhaiguan, and diagrams of Beijing and Tianjin. The maps themselves were later updated in the final report of the campaign. The military reports for Shanghai and Canton were similarly constructed, with a heavy emphasis on local defenses and attention to key areas to seize in the event that there were threats to British property.³⁵ Each of the handbooks was conceived as providing officers with fundamental information that could then be supplemented and refined in the field. As we shall see shortly, this is precisely what the intelligence and Special Service officers assigned to various treaty ports did once the British and allied forces had succeeded in relieving the legations in Beijing.

In addition to providing tactical and some strategic information to the China Field Force, the Intelligence Branch also prepared at least one contingency plan. In the event that Boxer activities flared in Yunnan, an invasion plan was drawn up. It included a potential attack on the Yunnan provincial capital (Yunnan fu, now called Kunming) and contemplated recruiting Chinese Muslims into the British expeditionary force (Intelligence Branch, [Simla] 1900d). Some of the material for the plan was probably derived from a reconnaissance carried out by Wingate through Guizhou and Yunnan in the late 1890s (1900). Routes to Yunnan were covered in a route book of upper Burma, which, much like MacGregor's Northwest Frontier project of the 1870s, had been assembled as British control spread northward toward the Sino-Burma

³⁴ Norie's short handbook might be compared to one made by the US Army at the same time. While the latter is much longer (90 pages) and crammed with a variety of information, Norie's has the virtue of providing concise tactical details. See US War Department, Adjutant General's Office, 1900. For a discussion of this source, see Hevia, 2003: 141–42.

³⁵ See Intelligence Branch [Simla], 1900b and 1900c.

frontier (Fenton, 1894). The contingency planners could also draw on an 1895 military report on western Yunnan compiled by Capt. H. R. Davies at Simla (Intelligence Branch, [Simla] 1895a), and a handbook of Yunnan compiled by Capt. H. Bower and Capt. F. C. Colomb in 1895 from sources available in Simla (Intelligence Branch, [Simla] 1895b). The contingency plan was thus overwhelmingly a product of the Intelligence Branch library and a very good example of the kind of planning that could be done at a distance.

Deployment and occupation, c. 1900–1903

Once in China for the Boxer emergency, British intelligence officers seized an unprecedented opportunity for producing first-hand military knowledge about China. The opportunity was not missed, in large part because the British forces included a number of officers with extensive experience in intelligence-gathering in Europe, India and, in some cases, China prior to 1900. Among the group was Col. James M. Grierson, who was the British member of the joint staff commanded by General von Waldersee of the Imperial German Army. With collaborators, Grierson compiled a series of reports on each of the foreign military contingents in north China (Grierson and Bell, 1901). The army intelligence unit was headed by the aforementioned Capt. Norie, who following the occupation wrote not only the report on the workings of the Intelligence Branch in the field, but also the *Official Account of Military Operations in China, 1900–1901* (1903). Under Norie as Field Intelligence Officer was Capt. M. R. E. Ray, who had reconnoitered the Beijing area with Capt. N. W. H. DuBoulay in 1894. DuBoulay himself, along with seven other officers, was assigned to one of the treaty ports as a Special Services officer. This group was primarily responsible for gathering intelligence outside the north China field of operations.

The intelligence officers had various support units at their disposal. These included at least two parties of surveyors, one of which was deputed from the Surveyor-General of India and was made up of one civilian British employee and two Indian surveyors. The other was an army unit composed of one officer and six non-commissioned officers and men, from which a clerk and draftsmen were specifically assigned to the intelligence staff. The intelligence and survey units, according to Norie, worked in close combination (Intelligence Branch, [Simla] c. 1901: 21) – a collaboration that seems to have extended well beyond the initial phase of the occupation of Beijing (see below). Lastly, the field force included the Printing and Photo-lithograph sections of the Madras and Bombay Sappers and Miners, who were able to print

reports and maps in the field (Norie, 1903: 351–52, 356–57, 361, 371, and 390). As Norie observed, once the Qing capital was taken, “the work of gathering information really began, and every opportunity was taken of sending out intelligence officers and surveyors into the surrounding country” (Intelligence Branch, [Simla] c. 1901: 21). In other words, much as in Afghanistan and the Northwest Frontier, intelligence collection flowed naturally from opportunities afforded by military operations in the field.

Intelligence products c. 1901–1903

The intelligence gathered by these units can roughly be divided into three kinds: observations made about the European and American contingents that made up the multinational expeditionary force, up-to-date reports on areas of particular importance to British interests in China, and surveying and mapping projects. Taken together, these kinds and genres of information disciplined and regulated the space of north China, using the same techniques and technologies of knowledge that had been used in Afghanistan and on the Indian frontiers.

Reports on foreign contingents The operations of the allied units in the field and at their encampments provided an unusual opportunity for evaluation and comparison of some of the seven other foreign military contingents that invaded China.³⁶ British intelligence officers produced reports on French, German and American cavalry in China, and also on their medical and veterinary units, and on the French, Italian and German infantry.³⁷ I do not intend to go into detail on these reports except to note that they reflect a more general pattern of military intelligence that had emerged by the late nineteenth century. James Grierson, as noted earlier, was one among other officers who had been trained to evaluate the capabilities of armies led by the new military-technocratic elite, the development of which was discussed in Chapters 2 and 3. He had made a career out of assessing the organization and equipment of

³⁶ These were Russia, the United States of America, Germany, Austria, Italy, France and Japan.

³⁷ See “Report on the Medical Services of the Allied Contingents in China,” 1901, in NA WO 33/185, which covers the French, German, American, Japanese and Italian units; and an untitled report on the Veterinary Departments of the Japanese, American, German, Italian and French units in 33/187. Also see “Notes on the Organization of the French Contingent, China Expeditionary Force,” 1901, WO33/182; “Report on the Organization of the Italian Contingent, China Expeditionary Force,” 1900, WO33/183; and “Report on the Organization of the German Contingent, China Expeditionary Force,” 1900, WO33/181.

other armies, reading their internal reports and manuals, learning the appropriate languages, and observing, when possible, the training and maneuvers carried out by national armies in Europe. Military reports on China produced in the wake of the invasion indicate a similar concern with reducing the Qing Empire to the regularities of the military statistical summary.

New military reports In spite of serious deficiencies in language competency – there were few if any Indian Army officers who spoke or read Chinese – the military reports on cities and regions of China look like many other such reports produced by the Simla Intelligence Branch. Most of them were compiled by the eight special services officers who had been sent to treaty ports in China while the Indian Army invaded Zhili province. Their duties were to assess threats to British interests and to create military reports that could be aligned with similar reports from other parts of Asia. The basic unit of organization of these reports was the province; four of them survive in the India Office archives at the British Library. Two were compiled by Capt. F. Rennick: one on Zhejiang province, whose treaty ports were Ningbo and Wenzhou, and the other on Jiangsi province, the treaty port being Jiujiang. In addition, Capt. E. H. Cole compiled a report on Fujian province, which included the treaty ports of Fuzhou and Amoy (Xiamen). The fourth was compiled by Capt. F. Tweddell on Jiangsu province, which had three treaty ports, Nanjing and Zhenjiang, as well as Shanghai.³⁸

Each of these follows the standard format for military reports. The volumes began with geography and, where appropriate, harbors. Subsequent sections, usually in identical order in each of the works, took up communications, fortresses or defenses, climate, resources, history, ethnology, administration, naval resources where applicable, and the military and political situations. In some cases, route reports and gazetteers were appended at the rear and maps were available in pockets. The volumes ranged from 120 to 160 pages in length. Prefaces indicated that the personal observations of each of the authors were combined with the resources of the Intelligence Branch's library in Simla or – as in the case of the Jiangsu report – with collections in Shanghai, where the North China Branch of the Royal Asiatic Society had a substantial library with sources similar to those to be found in the Simla library.

The redundancy of format was one among other ways in which the military reports achieved optical consistency. All were also printed with the same typeface, the same quality of draftsmanship in the maps and

³⁸ See Cole, 1905; Rennick, 1903 and 1905; and Tweddell, 1902.

diagrams, the same paper quality, the same hard covers and bindings, and the same convenient volume size. This formalism at the level of the volume was mirrored in reports on Yunnan province completed in Simla around the same time. One finds, in other words, a series of summaries and material forms that brought various parts of China into the overall pattern of the Branch's construction of a legible geo-strategic Asia, an Asia that was consistently presented through identical structures of representation, all of which were also highly mobile because of the size of the "packaging" in which reports were organized. These immutable mobiles, identically indexed, effectively transformed complex cultural, linguistic and political differences into sets of comparable categories, applicable across Asia, that could be filled with minimally variable content by any adequately trained intelligence officer and thus understood by any militarily literate field officer.

Yet, there are also oddities about the reports that belie the instrumental imperative that orders the structure of the genre. This is particularly evident when the reports deal with populations; the ethnographic sections do little more than reproduce well-known clichés about the Chinese. None of them provided the fine-grained "tribal" and genealogical details produced for the Northwest Frontier groups. For example, E. H. Cole's volume of observations on Fujian has little to say about the population of the province beyond the fact that they are a cheap source of labor, emigrate on a regular basis, and speak a different dialect than other parts of China. There is nothing particularly original in this entry; Cole relies on the publications of contemporary observers such as E. H. Parker for factual "accuracy," but remains terse and conventional in his presentation (1905: 10–13, 20–25, 28–29).

A similar pattern is evident in the report on Jiangsu. The people of this province, according to the compiler Capt. Tweddell, had long been distinguished for their "want of robustness and an effeminacy" not found in their neighbors to the north and south in Shandong and Zhejiang. According to Tweddell, the source of weakness of the Jiangsu male was related to their peculiar fixation on literary pursuits and love of the arts, things that apparently were anathema to the masculinity of the technomilitary elite. Moreover, unlike the guttural northern dialect, the spoken dialect of Jiangsu was "soft" and limited to the province, making it difficult to acquire competent interpreters (1902: 69–70).

The brief and conventional entries on the population of China might be accounted for by the division between military and political intelligence or by the absence of linguistic competency, but it might also be a function of the way in which military intelligence officers were receiving conventional wisdom about "the Chinese." As Bell and Younghusband

had demonstrated earlier, the population of China, from the point of view of intelligence officers, seemed of little importance beyond its ability to function as coolie labor. Fujianese might be useful in this sense, perhaps especially because they were not like the effete population of Jiangsu.

I will have more to say on the limited amount of “human” intelligence in these reports below. Here it is sufficient to contrast the ethnographic section of reports with those that dealt with military matters; that is, the defenses of each province. In the case of both the Fujian and the Jiangsu reports, the defense sections were published in a separate booklet, the circulation of which was controlled through the *secret* designation the volumes carried. The Fujian report contained detailed information on the forts, gun emplacements and magazines at Amoy. This data was complemented by maps of the Amoy harbor showing the position of each of the forts and silhouette drawings of the coastline with dotted lines pointing to the forts. Sketches, some of which appear to have been derived from photographs, provide multiple views of the coast as seen from different positions around the harbor.

Of particular interest is the fact that the materials on the forts were collected by naval officers from HMS *Isis*. In some cases, these officers were able to gain admission to the forts. If they could not gain entry, they were often able to identify the make and model of guns, estimate their circle of fire, and identify the location of their magazines, all from a distance. This kind of precise locating of sites and their attributes is, of course, similar to the fixing of locations through surveying techniques. And as with surveying, where an assessment was provided of the strategic significance of terrain, the Fujian report concludes with recommendations of tactics that might be used for successfully assaulting each of the forts (Cole, 1905).

Moreover, this practical application of military science did not end with the completion of the report. Like the route books, reports might be updated or, as in the case of the Jiangsu report, a new section added. The section in question is a contingency plan, drawn up in 1910, for deploying troops in and around Shanghai and on the lower Yangzi River. The timing is significant – the plan was made when opposition to the Qing dynasty was rapidly swelling in China. Entitled “Strategic and Tactical Notes of the Province of Chiang-su [Jiangsu] (Northern and Southern)” (General Staff, War Office, 1910), it is divided into three chapters: one each on strategic and tactical considerations, and one on landing places. The military calculations are, in turn, considered through a series of scenarios and contingencies, including the possibility of threats to British life and property in up-river treaty ports, the possibility of

foreign intervention into China beyond simply the protection of foreign nationals, and threats other powers might make to Beijing. More will be said on this kind of planning in the next chapter. Here it is worth noting the central role of military reports and route books in analyzing and planning for military dispositions in a place with a very different history of contact and set of agendas than those in British India.

Apparently in anticipation that a military intervention based upon the various scenarios outlined would be necessary, the General Staff of the War Office produced some small, pocket-size booklets for operations in China. One of these had tables of rank and insignia for Chinese military forces, Chinese terms in Wade-Giles transliteration, and the written characters for words such as bridge, camp, commandant, tent, rifle and so forth. The booklets were complemented by small guides to the Beijing area, as well as Jiangsu (Shanghai and its environs), Fujian and Canton. Like the military report on Zhili assembled by Norie, these books were compact distillations of new information produced between 1903 and 1910 by an intelligence team located within China.³⁹

North China Command and intelligence operations, 1903–1910

Norie's assessment of the state of China intelligence in 1900 points to difficulties arising from the gradual extension of an imaginary frontier required for the defense of India. Once China, like regions to the west of India, was understood to be connected to the maintenance of British predominance in South and Southeast Asia, geo-strategic Asia expanded accordingly. In China, the situation changed rather dramatically when it was clear after 1900 that a larger British military presence would be necessary for the foreseeable future. From around 1903 forward, two intelligence-gathering units operated out of north China, one of which was the pre-existing military attaché in Beijing. The other intelligence unit was attached to the China Field Force, re-designated the North China Command (NCC), headquartered at Tianjin. The reports generated by these two sources can be traced through the logs of incoming correspondence from the India Office and North China Command to the War Office.⁴⁰

³⁹ The fact that these small volumes can be cited here at all is the result of a fortuitous find. Uncatalogued, they are inexplicably mixed into the file including the contingency plan for a Yunnan invasion cited above; see NA WO 106/71.

⁴⁰ Hand-written logs of incoming correspondence from the attachés in Beijing are in NA WO106/25. The correspondents included Col. Browne, mid 1890s–1902; Col. Ducat, 1903–1904; Col. Bower, 1905; and Col Pereira 1904–1909. None of these reports is extant.

It is clear from these logs that there was a division of labor between the attaché and the NCC. The bulk of the attaché's work focused on the Chinese war office, the Chinese army, the army's arsenals and training schools, and on arms shipments into China. Attachés also reported these matters in their intelligence diaries, which seem to have been transmitted to London bi-weekly from 1904 on.⁴¹ In addition, they reported on contacts within the Chinese army; supplied Chinese officers with books on military matters; produced a handbook on the Chinese army; translated army regulations and created a list of Chinese military terms for units, personnel, and weapons; and built a photographic archive of maneuvers, weapons, military bases, training facilities, and the kit with which various ranks in the Chinese army were outfitted.⁴² The information collected by the attaché was forwarded to the War Office via the legation, but some was also exchanged with the NCC Intelligence Branch in Tianjin.

For its part, the intelligence unit compiled new military reports and route books of much of eastern China and route reports stretching as far west as Gansu; reported on arms imports, arsenals, and the development of Chinese railroads, including the quality and quantity of rolling stock; observed the maneuvers of Chinese regiments; made a variety of handbooks on Chinese provinces; and carried out several reconnaissances including tours of the Yangzi River and of Manchuria. These efforts were complemented by survey work that included triangulations in Jiangsu, Anhui, Zhejiang, a traverse from Kalgan to Urga in Mongolia, and the fixing of longitude and latitude for towns, cities and other prominent points.

As in other cases discussed earlier, these standard forms of disciplining space were seen as part of a systematic process; the logs indicated that there were plans worked out in 1902, 1906, 1908 and 1909 for surveying work to be done in the coming year. In addition, the intelligence officers reported on the dispositions of British and foreign troops in China, sending monthly reports at one point, monitored Chinese newspapers regularly from 1907 forward, and kept track of the expansion

⁴¹ The diaries are not in the War Office records, but some of them were forwarded to the Foreign Office and saved in incoming correspondence. See, for example, NA FO17/1654 (521–47, 559–80). The attachés also followed closely the numbers of Chinese sent to study in Japan (see NA FO17/1655: 35) and carried out reconnaissance missions into new areas. Col. Pereira, for example, visited Anhui and, accompanied by an Indian surveyor, mapped what he identified as Hung-tse lake (see NA FO374/434: 223–28).

⁴² One result of these efforts was a handbook on the Chinese army compiled at the War Office. It includes numerous photographs of the kind mentioned here. See General Staff, War Office, 1908.

of Chinese post offices and telegraph stations. They also built a local library and occasionally requested books from London, as well as House of Commons Sessional Papers and Foreign Office publications on China. Each of these undertakings indicates that some of the problems of information collection in 1901 were being addressed. Moreover, some intelligence officers, like military attachés, joined Chinese language classes at the Beijing legation.⁴³

The kinds and scope of the military attaché and NCC intelligence activities after 1900 produced a level of strategic and tactical knowledge about China that was not only unprecedented, but also effectively mimicked, and in some cases may even have surpassed, the kinds of intelligence collected on the Northwest Frontier of India. There are a few extant materials that suggest as much. These include a map of Tianjin prefecture, a reconnaissance of the Yangzi River carried out in 1905, and a report on Chinese arsenals and arms imports also from 1905.

The map of Tianjin covered the territory from the Dagou forts on the coast through the city of Tianjin proper and its near environs to the west. The survey that produced the map was done under the direction of Lt. Col. Wingate, the compiler of intelligence on Yunnan. The surveying team was led by Lt. F. G. Turner, RE, with the assistance of Natha Singh, Survey of India; Chubbee Singh, 38th Dogras; Madho Ram, Gurkha Rifles; Mihr Din, Bengal Sappers and Miners; Lachman Pershad, 1st Brahmans; Man Sing, 37th Dogras; and Gurmukh Sing, 33rd Burmah Infantry – all of whom are listed on the map. In addition to identifying the surveying team, the map also cited other sources of information. Some were attributed to officers of the China Field Force, but also cited were Chinese, German, French and Japanese sources. The map combined, in other words, both the disciplinary and the regulatory functions of intelligence. More importantly, it solved the problem identified by Norie; the British now had much better maps than before the invasion of north China.⁴⁴

⁴³ The language program at the legation was created in 1861 by Thomas Wade; see Hevia, 2003: 131.

⁴⁴ The map was heliozincographed at the Ordnance Survey Office, Southampton, in 1905 and is now in the British Library with the shelf mark 60885(34.). Also completed under Wingate's aegis was a large-format nine-sheet map of areas north of the Great Wall, including southern Manchuria. Parts of it were the results of traverses undertaken by the same group of Indian surveyors. Their findings were combined with reconnaissance surveys undertaken between 1901 and 1903 by officers of the China field force, mining surveyors, and Japanese, Chinese, Russian and French maps; see shelf mark MOD TSGS 1913. There are also parts of a 1902 survey of the Beijing area; see shelf mark 60885(32.).

The Yangzi reconnaissance was conducted by the same Col. Wingate, with the aid of Capt. F. C. Turner of the Royal Engineers (who was also involved in the north China map project), and Capt. W. H. Dent of the 1st Chinese Regiment⁴⁵ in the spring of 1905 (Wingate, 1906).⁴⁶ What is striking about this particular report is the level of technical expertise evident throughout. It included sketch maps of gun emplacements (Fig. 6.1); panoramic views of the river and settlements (Figs. 6.2 and 6.3); visual representations of gun emplacements (Fig. 6.4); diagrams of fields of fire for guns (Fig. 6.5); and photographs of gun emplacements. This multi-media presentation, including what looks to be a photograph of a Qing gun battery in action (Fig. 6.6),⁴⁷ was complemented by river-level views that created “silhouettes” of prominent islands or rock formations, each of which then became a fixed point or marker on corresponding printed or hand-drawn sketches. The effect of these markers was to make it possible to move readily from two-dimensional maps to panoramas and to scaled drawings and photographs.

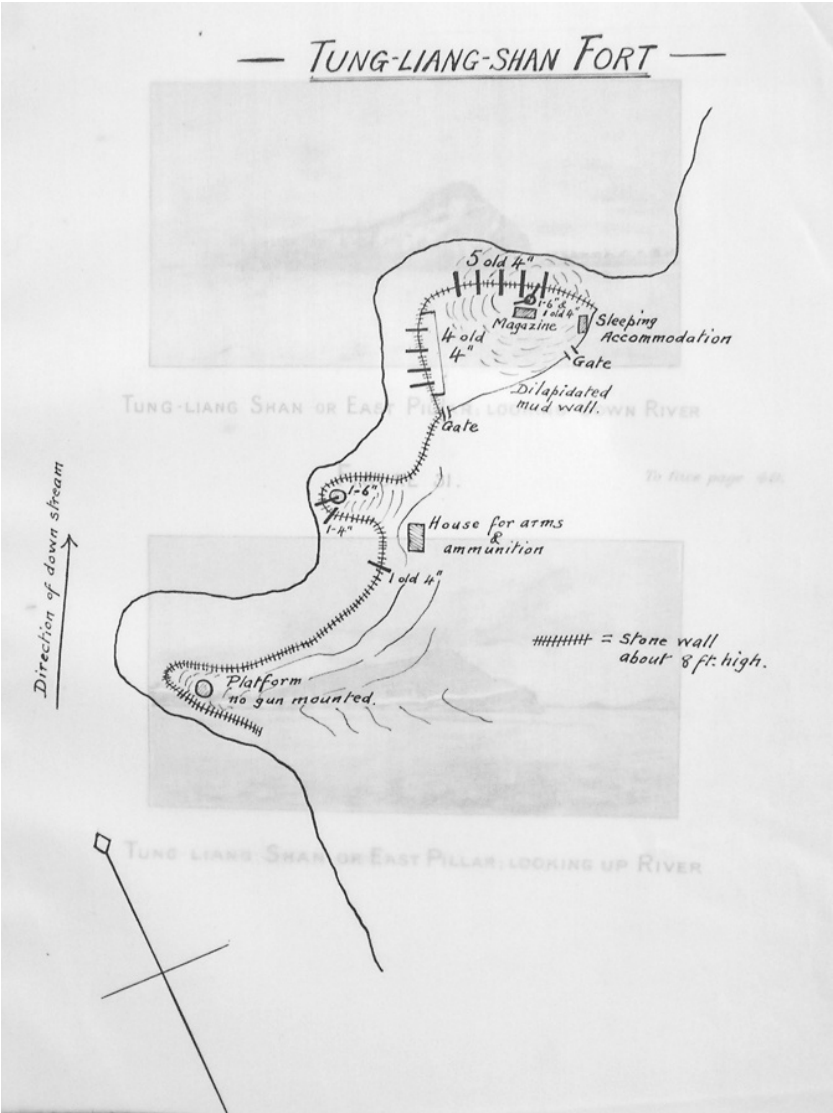
Through these various forms of representation and from their different angles and scales of presentation, the opaque, the distant and the camouflaged were made visible and calculable. The overall effect is the *virtual* encompassing of sites in a density of formal procedures so that all secrets are rendered up for the scrutiny of the trained eye. This trained eye, one presumes, would calculate the delivery, from the deck of a gunboat or in the field, of artillery fire against the Chinese positions.

So that the capacities of the Chinese batteries would be clear to the artillery officer, each of the Yangzi defensive positions was also rendered in tabular form (Fig. 6.7). The columns of the chart named the position and the battery number, designations that corresponded to labels on drawings and photographs; and the number, caliber and kind of gun (e.g., Breech-loading Armstrong, Breech-loading Krupp and so forth), and style of mounting. The last piece of information was important because it indicated whether the guns could be elevated or swung

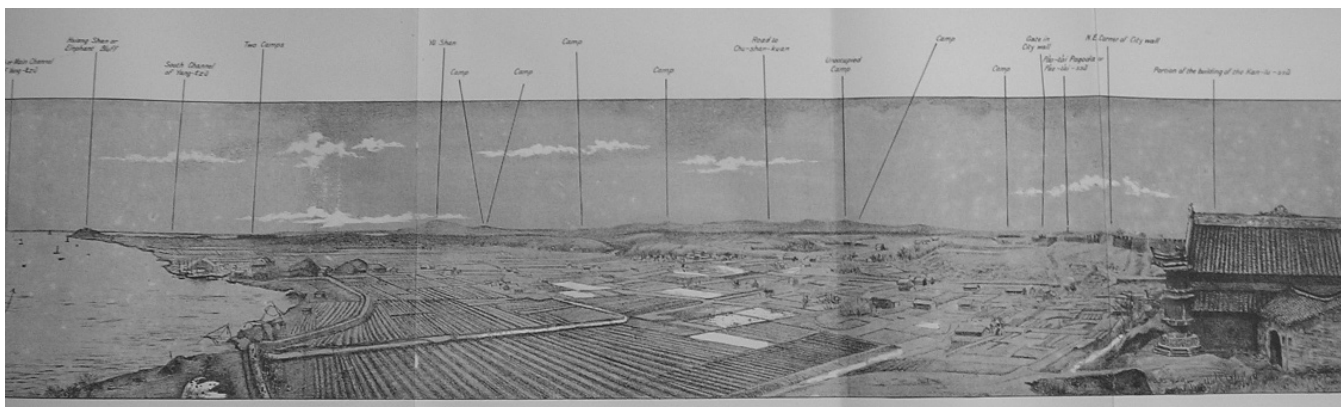
⁴⁵ On what appears to be the only such Chinese regiment raised by the British in China, see Barnes (1902).

⁴⁶ See NA WO106/25.2. Grierson, now a Major General, noted in the Preface to the volume that the piece should be read in conjunction with “A short military report on the Yang-tse, its defences, treaty ports and adjacent provinces,” which had been compiled in Simla by the Intelligence Branch in 1900 – the 1900 report is in IOR L/P&S/20/177–1. For a discussion of the defenses on the Yangzi developed from Chinese sources, see Halsey, 2007: 274–81. Whether or not Qing officials were aware of the British reconnaissance of the Yangzi fortifications is unclear in Halsey’s study, however.

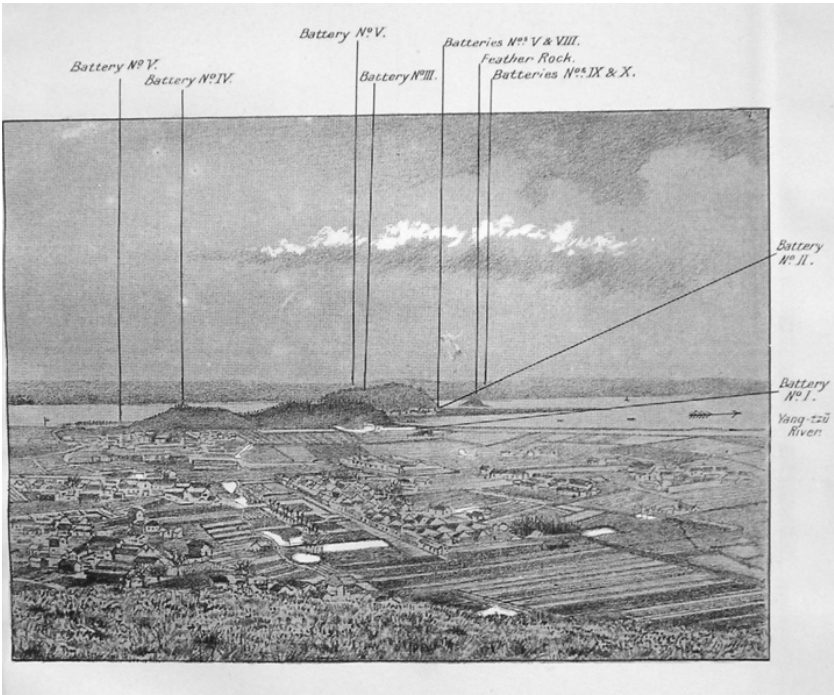
⁴⁷ The printed version is an etching, but it was not uncommon at the time to print etchings from photographic originals.



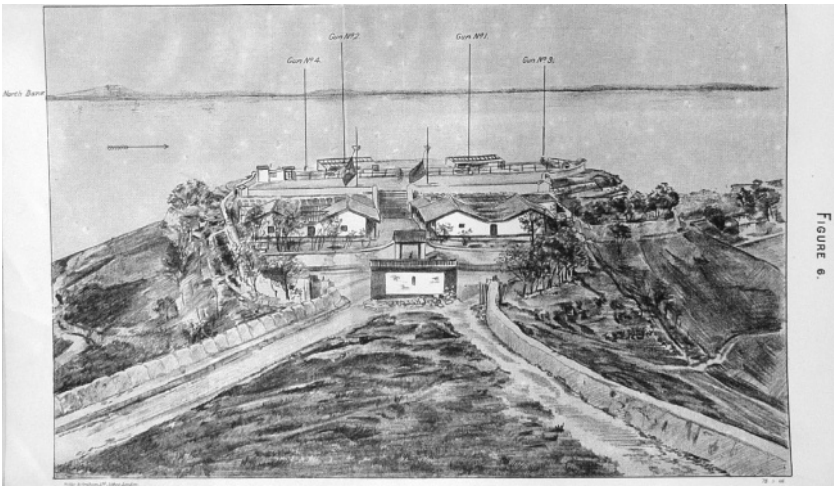
6.1 Sketch map showing gun emplacements of Tung-Liang-Shan Fort



6.2 Panoramic view of the country east of Chin-kiang City

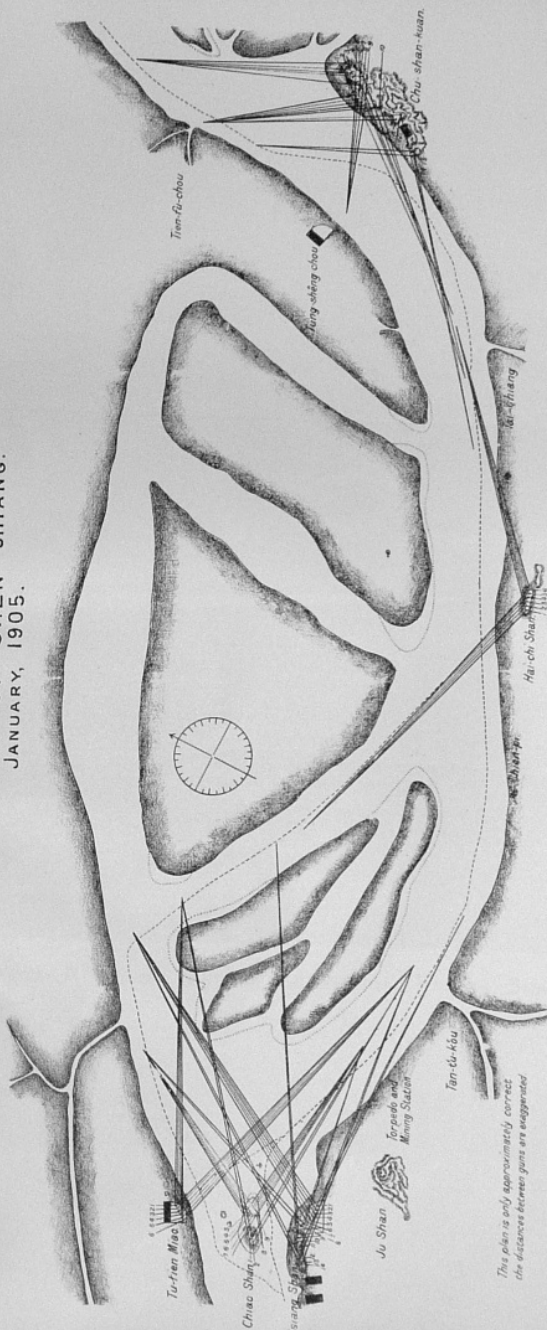


6.3 Hsiang Shan from the summit of Yu Shan



6.4 Battery no. VI Kiang-yin

FIGURE 18.
PROPOSED SCHEME FOR
DEFENCES OF CHEN-KIANG.
JANUARY, 1905.



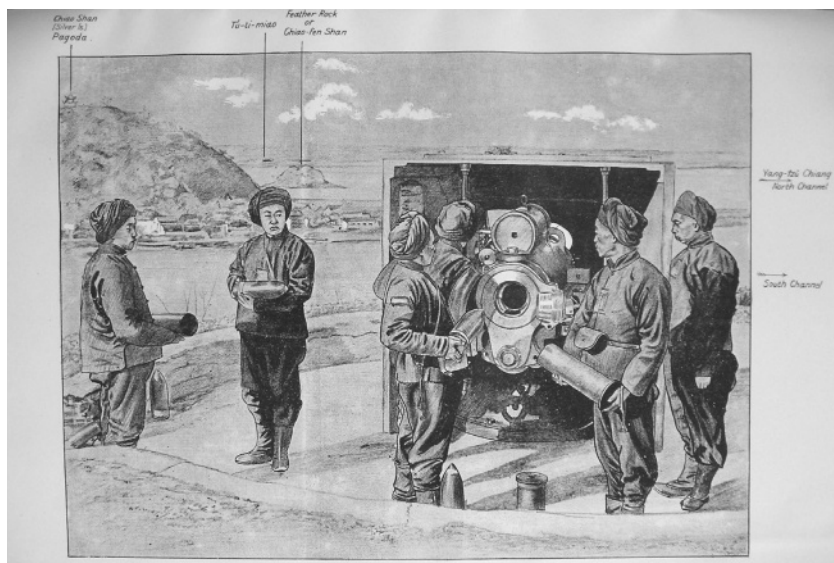
This plan is only approximately correct
the distances between guns are suggested

LIST OF GUNS.

1-4 9" B.L.	1-6 6" Q.F.	Chu-shan-kuan	1-4 9" B.L.
5-6 6" Q.F.	7-8 15 cm K.B.L.	Har-chi-shan	9-11 9" B.L.
Hsiang-shan	9-11 9" B.L.	12-14 4" T.Q.F.	12-14 4" T.Q.F.
Chiao-shan	1-4 9" B.L.	5-6 6" Q.F.	7-8 15 cm K.B.L.
2-3 4" T.Q.F.	3-9 17 cm K.B.L.		
Lu-tien-miao	1-4 9" B.L.	5-6 6" Q.F.	7-8 15 cm K.B.L.
2-3 4" T.Q.F.	3-9 17 cm K.B.L.		
Chu-shan-kuan	1-4 9" B.L.	5-6 6" Q.F.	7-8 15 cm K.B.L.
9-11 9" B.L.	12-14 4" T.Q.F.		

FIGURE 18.

6.5 Field of fire of guns at Chen-kiang



6.6 Gun crew loading cannon at Battery No. III, Hsiang Shan

in an arc. There was also information on ammunition storage facilities. The following entry is typical and deals with the battery at Xiangshan, near the treaty port of Jinjiang.

Nos. 1 and 2 are 22-calibre guns, Nos. 3 and 4 are 28-calibre. All are covered by sheds which run back on rails when guns are prepared for action. There is no traverse, and guns are exposed in front and flank. The guns have very good range down the south channel, which was formerly the deep one, but do not command the north channel. The latter now carries more water than the southern and is used by vessels of deep draught ... No shields. (Wingate, 1906: 23)

All five batteries at Xiangshan were rendered in detail in this way, and the capacities of each of the gun emplacements were scrutinized for their ability to command the approaches to Jinjiang and passage up the Yangzi. The copy of the printed report consulted here also contains hand-written updates indicating an ongoing surveillance of the sites. One penciled-in note referred to a visit of British officers to Xiangshan in 1912 that identified new guns in some of the emplacements. Other notes cited “native sources” on the upgrading of guns and other equipment in some of the batteries in 1908 (23–25). Needless to say, the Yangzi defenses held few surprises for the British.

YANG-TZÜ CHIANG DEFENCES.

Armament of Batteries protecting the Approaches to Wu-ch'ang (Han-k'ou).

ABBREVIATIONS:—A. = Armstrong; B. = Bauchemar; Bb. = Barbette; C. = Colt; Cm. = Casemate; C.P. = Central Pivot; D. = Disappearing; G. = Gardiner; H. = Hotchkiss; H.P. = Hydro-pneumatic; K. = Krupp; K.N. = Made in Kiang-nan Arsenal; Mg. = Magazine; M.P. = Muzzle Pivot; N. = Naval; Nf. = Nordenfeldt; Sh. = Protecting Shield; V. = Vavasseur; V.-M. = Vickers-Maxim.

For reference, see Plates 17 and 18.

Name or No. of Defensive Position.	No. of Battery.	No. of Gun.	Calibre.	Pattern.	Style of Mounting.	Command in Feet.	Ammunition.	Remarks.		
Ma-t'ang (Bluff).	I.	1	6 pr.	Q.F. H. K.N.	Pedestal Bb.	250	The magazine for these guns was not located. Probably it is in the covered way connecting No. 2 gun with the crew's quarters. Fixed ammunition, mostly common shell.	The 6-pr. guns have ½-in. shields; the 4 7-in. Q.F. have 1½-in. shields. Very good field of fire all round. All guns, except Battery No. III., are in sheds and are very conspicuous. Circular concrete emplacements of usual type. Guns and mountings of all Q.F. guns are of latest types, and maintained in good order. The range of this gun is much restricted (<i>see</i> Plate 18). These guns are mounted on very old-fashioned carriages and appear unsafe to fire; they fire through embrasures in the wall of the barracks on the "col." Two point north and two south, each pair having good range in its own direction. A covered way connects the emplacement of No. 1 with the camp on the "col." Range of No. 2 is much restricted up stream (<i>see</i> Plate 18). The garrison of the batteries is stated to be 60 artillery and 120 infantry; the men are slack and undisciplined, and the officers addicted to opium.		
		2	4 7-in.	Q.F. A. K.N.	C.P. Bb.	"				
	II.	1	6 pr.	Q.F. H. K.N.	Pedestal Bb.	180	Some 20 or 30 ft. below and a little to the east is an ordinary house used as a magazine; it is only exposed to fire from up stream.			
		2	"	" "	Old pattern and useless.	125				
		3	"	" "						
		4	"	" "						
	III.	1	10-em.	B.L. K.	Old pattern and useless.	125				
		2	"	" "						
	IV.	1	4 7-in.	Q.F. A. K.N.	C.P. Bb.	150	The magazine is situated at the lower end of the covered way connecting the camp on the "col." and gun No. 1. This is probably the main magazine for all the batteries, and contains a good store of ammunition.			
		2	6-pr.	Q.F. H. K.N.	Pedestal Bb.	110				

6.7 Chart showing kinds of guns at Hsiang Shan

The second publication addressed the issue of arms manufacturing and imports into China once the ban imposed by the Boxer Protocol elapsed in 1903.⁴⁸ Compiled by the intelligence unit of the North China Command and published by its printing unit in 1904 at Tianjin, the eighty-seven-page report, with three photographs and a map, provided confidential details on Chinese arsenals and arms production, Chinese weapons terminology and imports, including tabular accounts of foreign arms dealers and the types of weapons bought by the Qing government. The first part of the study began with a list of arsenals and their manufactures. Information on each of them was organized into the following categories: historical background, physical situation (location and cardinal orientation of the compound), communications, administration, buildings and workshops, magazines and powder stores, finances, and defensibility. The final entry details a history of inspections, many of which began with Bell's 1882 reconnaissance, of the sites by British officers, consuls and in one case *The Times* correspondent, Dr. Morrison.

Following the section on individual arsenals, a tabular chart lists arms importation into China for the period September 1903 to October 1904. Amounts and kinds of small arms and guns (field cannon) were arrayed beside ammunition and explosives, with the names of specific foreign firms preceding each entry. Among the arms dealers were the German firms Arhhold, Karberg & Co. and Carlowitz & Co., both of which had offices in Hong Kong and Hamburg and origins in the China trade dating from the First Opium War. They were important conduits for the importation of thousands of Mauser rifles into China. Another German firm, Seissman & Co., was the agent for Vickers Maxim, one of the most popular machine guns of the era, while Mandl & Co. seems to have been the primary supplier of Krupp field guns. These firms, along with Japanese companies such as Okura and Mitsui Bussan Kaisha, also imported vast quantities of ammunition. Reports like this one performed the diagnostic function of providing not only the necessary data on the state of Chinese military capabilities, but information for evaluating those capabilities.

Evaluation of Chinese military capacities

If the primary goal of military intelligence was to place in the hands of field commanders the information they needed to negotiate enemy

⁴⁸ Intelligence Branch [NCC], 1904, IOR L/P&S/20/185.

terrain and make rapid but fine-tuned assessments of enemy capabilities, one also finds in these hyper-realist presentations of empirical fact a desire to evaluate information and predict possible directions of development. Such speculation might appear in the reports themselves or in publication venues such as the regional or military journals. Mark Bell, the pioneer of Indian Army reconnaissance in China, commented on Chinese military capabilities in sections of his reports and published at least two articles prior to the Boxer Uprising estimating more comprehensively the capacities of the Chinese army and the effects of military reform. In these publications, Bell indicated that he did not think much of Qing reform efforts and remained highly doubtful that China would, in the near term, make a useful ally for Great Britain (Bell, 1890 and 1895).

Bell's assessments were not unique. Moreover, his initial evaluation seemed to have provided a comparative baseline for later observers. Wingate, for example, introduced the 1904 report on arsenals and arms imports with a long quotation from Bell and argued that "little had occurred to alter" matters. According to Wingate, Qing arsenals ran at a high level of inefficiency because there were few trained directors and master craftsmen. Compounding these difficulties in arms production, the Chinese military seemed to learn little from their defeats. They continued to build arsenals on strategically vulnerable sites, where in time of war they could either be easily destroyed, or, as happened in 1900, have their output carried off by foreign forces. Worse still, according to sources Wingate cites, both locally made and imported arms and munitions simply disappeared (Intelligence Branch [NCC], 1904: i–iii). Where they went, no one seemed to know.

The question of the general inefficiencies of the Qing military were taken up again by Wingate on the eve of the 1911 revolution. Writing in the Indian Army United Services journal, he noted that while reform of the military had achieved a level of proficiency in drill and military exercises, the army had not yet arrived at the point where it knew what it was fighting for. His conclusion was that Chinese fighting power was nil; it would be at least a quarter century before China could stand up to a power on the order of Russia, Japan, Germany, France or the British Empire (Wingate, 1911).

The assessments of Bell and Wingate are of interest in part because they come from seasoned observers and from men who made a career out of evaluating the military capacities of "uncivilized" countries or peoples. At the same time, such evaluation, drawn as it was from the application of a set of pre-given categories and technologies for

organizing information in easily recoverable format, also had broader geo-political implications. If, as MacGregor had suggested and British diplomats had fantasized (Hevia, 2003: 155), Britain should seek an alliance with the Qing against Russia, the observations of Bell and Wingate, coupled with China's military defeats in 1895 and the failure of the new army to defend Beijing in 1900, suggested that there would be little value in such an arrangement at present.

The evaluation of Qing military capabilities should be understood in the regionally comparative context that military intelligence provided to observers like Wingate. This was a trans-Asian project that produced assurance and certainty based upon a consistent, reliable and repeatable set of practices and shared points of reference. Those points stemmed from the unwavering empiricism embodied in the primary products of intelligence work – route books, military reports (of which the handbook of national armies was simply a variation on a theme) and survey maps. All of these forms of intelligence were produced by men who had been trained in military schools in Britain in uniform techniques for representing, organizing and filing militarily relevant information. While much of the material intelligence created seemed to be designed for immediate utility, the historical importance of these sources lies well beyond the simple rules of the road and systematic factuality that they provided. For what these forms of intelligence achieved was a legible geo-strategic “Asia”: an Asia accessible in multiple forms of representation to the trained eyes of a logistically and operationally oriented technocratic elite.

Each route book, military report and map superimposed a scale of uniformity on a complex and highly variegated physical and human terrain, be it Afghanistan or China. These intelligence products also incorporated into themselves both experiential knowledge (e.g., early traverses and reconnaissances), a history of intelligence operations, and elements from the imperial archive and library of the Intelligence Branch. Once formatted into a uniform set of intelligence categories, information of this consistent kind was able to align various portions of the archive to a common set of reference points, while cumulatively filling the spaces of Asia with military statistics for strategic analysis and planning. Distances became fixed in miles, temperatures in Fahrenheit, idiosyncratic topographical features were named and oriented to known “fixed points,” and oral place names took on a uniform transliteration. As had taken place in India, a China topography of multi-level, multi-angular spaces made up of physical elements like passes and mountain peaks, riverbeds and elevations above sea level, cities, towns and villages,

as well as descriptions of populations, history, resources and more, were transposed onto the flat surfaces of these books and their accompanying maps, diagrams and statistical charts. The reports, when combined with the broader vision provided by maps to scale and bird's-eye-view drawings, allowed the reader of these surfaces to calculate movement and evaluate risk in predictable ways – to not only repeat the traverse or the reconnaissance, but to develop a plan for the disposition of forces at varying scales of activity and intensity.

The military logic here seems inescapable, but what is also striking is how sharply the activities of the Quartermaster General's Intelligence Branch contrast with the political/economic logic of colonization. Unlike the approaches adopted by political officers, the technologies for managing and controlling space that the Branch deployed were not concerned with the long-term occupation of terrain, the creation of buffers or of spheres of influence. From the point of view of the engineer or artillery officer, the issue was how to move bodies of men and materiel over land at predictable rates and with the minimum loss of energy in order to deliver the force required to seize and hold an objective. The "occupation" of Central Asia and Western Asia by route book, military report, map, diagram and chart had apparently achieved this goal. Through its technical expertise and managerial capacities, the Intelligence Branch not only sought to command and control the space of Asia, but materialized it in a wholly new strategic form, one capable of generating a seemingly endless series of imperial projects.

Norie's frustration at not having enough tactical intelligence at hand in 1900 recognized the problem of China in these terms, and the military intelligence colonization of China followed "naturally" from this. Within ten years, China intelligence was on a par with the rest of geo-strategic Asia. If we consider for a moment the "China" produced through the efforts of the Intelligence Branch, it should be clear that it took a position beside other problematic geographic regions radiating out in all directions from the borders of the British Empire in India. In the relationships between these regions created by reconnaissance we see a field of action emerge, a geo-strategic zone where interventions of many kinds, but especially military ones, were encouraged and made feasible. In this formation, China does not appear as a great civilization now in decline, or as a vast market for British goods, or even as a place filled with people ripe for Christian conversion. Instead we have a "China" of the strategic and tactical planner and of technologies of vision which allowed reports like that of Bell and Wingate to be assembled through the command of fixed points of observation,

confidential expeditions, mechanical reproduction and the apparatus of a vast library. Intelligence transformed China and the rest of Asia into a terrain of calculation and surveillance, into a geography to be rationalized, organized, and made visible through the expertise of intelligence officers, surveyors and draftsmen. This China was then incorporated into a security regime that few, if any, Chinese people were aware of.

7 The uses of intelligence

The documentary products of the security regime – the intelligence genres of route books, military reports, handbooks and precision maps – organized East, Central and South Asia as legible space, making Asia visible to the eyes of military planners and strategists concerned with the protection of British interests in the region. But making Asia visible to intelligence officers was only part of the function of these sources. As we saw in the previous chapter, intelligence materials could be distilled into useful information for officers leading the incursion into north China in 1900. They could also be used as raw material in debates over policy, serve as sites of institutional memory for the army, and operate as primary sources for war games in which officers were trained to make war plans and construct war-time intelligence units.¹

Yet, the interface between intelligence genres and the venues in which they moved were not unproblematic. As route books and other intelligence sources traveled out of the apparently well-ordered and rationalized atmosphere of collection and compilation, they did not seem to produce the same sort of epistemological stability, the same kind of unambiguously transparent language that was the ideal of their formal structure. There were, in other words, elements of uncertainty and indeterminacy in the usages to which the intelligence genres were put. This chapter explores the various uses of intelligence and identifies disturbances within the imperial security regime, beginning with the role of new knowledge in debates over the defense of India.

¹ Intelligence might also be brought to bear in diplomatic negotiations over boundary issues, for example. Gleichen describes one such instance, although noting that even after the Foreign Office sought information from the Intelligence Branch, political officials did not necessarily read the intelligence reports; see 1932: 180–81.

Intelligence and the defense of India

When military officials in London and India spoke of the defense of India, they were usually referring to an invasion through Afghanistan into the Punjab by the forces of Tsarist Russia. Little, if any, consideration was given to invasion threats from any other direction, except insofar as Afghan and Pathan groups might figure in calculations related to a Russian invasion. This, then, was the Central Asia Question, and a substantial amount of ink was spilt in debates over how India was to be defended against “the Russian threat.” This section considers aspects of the debate, but especially deals with the ways in which intelligence was used to support or refute various positions taken in the War Office and the Indian Army. The parties most centrally involved in the dispute were the intelligence agencies themselves, the units located in London and at Simla. The defense of India debate of concern here began in the late 1860s and ran to the end of the first decade of the twentieth century.

In order to clarify what intelligence officers were arguing about, it might be helpful to begin with the basic premises around which the debate oscillated. If there was a foundational moment, it probably occurred in an 1868 memorandum to the Foreign and India offices written by Henry Rawlinson (1868).² In brief, Rawlinson argued that Russia had designs on India and was patiently preparing the ground for an invasion. While preparations were being made, he asserted, Russia would deny any ambitions beyond Turkestan, while nevertheless carrying out a number of measures that would serve to undermine British prestige in Asia. The Russians would also seek an alliance with Persia that would open an invasion corridor through western Afghanistan, and they would attempt to destabilize tribal areas along the Afghan–Punjab frontier. In order to prevent a catastrophe in India, the British first had to wake up to the actual threat Russia posed and then set a course of action. For Rawlinson, action meant the militarization of the Afghan frontier, the creation of a forward base of operations at Quetta, and

² Rawlinson had been an army officer in Persia and Afghanistan, fighting in the First Afghan War. This is the same officer to whom Arthur Conolly wrote concerning the latter’s “great and noble” game. By the 1860s, he had served in Parliament and was a member of the Council of India, a British Museum trustee, a prominent member of the Royal Geographic Society and the director of the Royal Asiatic Society. A copy of the memorandum in question can be found in IOR L/P&S/20/Memo 21, entitled “Memoranda on the Central Asian Question, 1868–1875.” Rawlinson made essentially the same arguments in a book published in 1875.

the propping up of the Afghan regime – that is, the “forward policy.” Anything less would be playing into Russia’s hands.

Whether or not influenced by Rawlinson’s warning, the War Office did begin to compile intelligence reports on the Russian advance annually, beginning around 1870. One of these came with a skeleton map in different colors vividly representing each year’s changes in the progress of Russian control in the direction of the Indian frontier. It also contained a translation from the German of a purported Russian plan for the invasion of India and a tabular chart showing the disposition of Russian forces elsewhere across Asia.³ Subsequent summaries tracked the consolidation of Russian control in Central Asia and evidence of Russian penetration of Afghanistan and Chinese Turkestan.⁴ Organized in optically consistent temporal and spatial terms, these reports lent credence to Rawlinson’s gloomy picture that Russia’s expansion was targeted directly at India.

From at least 1878, there seems to have been a general consensus in the War Office and the Indian Army that the Russian threat was real enough. This perception resulted in a discussion over determining the proper military frontier for India. Would it be along the Indus River, or would the military frontier be pushed forward into the Suleiman and Hindu Kush mountains? By the late 1870s, the Intelligence Branch at the War Office seems to have rejected the Indus River line, but members of the service could not agree on how far into the mountains the frontier ought to be. Some argued for the occupation and fortification of the Kurram Valley because they thought the Russians would invade through Kabul (East, 1878a, 1878b). Others expected the Russians to invade on more than one line and argued for strengthening the new base at Quetta that had been established when Lord Lytton was Viceroy (Alison, 1878) or advancing as far west as Herat (Lysons, 1878). All of these speculations about India’s military frontier were based, as was noted in Chapter 5, on very little knowledge or understanding of the terrain, resources and populations of Afghanistan and the Northwest Frontier. New intelligence had been gathered during the Second Afghan War (1878–80), but most of Afghanistan and the Northwest Frontier remained *terra incognita*, making it extremely difficult to address the question of where India’s military frontier ought to be.

³ See Topographical and Statistical Department, 1873. The work also provides a good example of the sort of compilations the predecessor of the Intelligence Branch at the War Office was capable of assembling. The translation was from the Augburg *Allgemeine Zeitung*.

⁴ For extant examples of this genre, see Intelligence Branch [War Office], 1882a and 1882b; and Intelligence Division, 1890.

In 1883 Merv fell, prompting the call by the Government of India for the full demarcation of Afghanistan's northern border. It was in this milieu of geo-strategic uncertainty that the Intelligence Branch at Simla, in the person of its head, Sir Charles MacGregor, entered the debate over the defense of India. In full agreement with Rawlinson that Britain had to wake up to the Russian threat, MacGregor decided to compile a report that, through the assembly of military statistics, geographical information and extensive correspondence with frontier officers and members of the Indian Army, would demonstrate how the Russian army could invade India from their present positions in Turkestan.

Drawing on military intelligence at hand, MacGregor organized *The Defence of India* (1884) as a series of questions that built rhetorically to confirm the danger to India and the steps that should be taken to protect the colony.⁵ The report opened by asking whether Russia had sufficient forces to invade India. Using Thilo von Trotha's study of the armed strength of the Russian army and Col. Grodekov's account of Skobelev's campaign in Turkestan (1884: 6, 21),⁶ MacGregor, with the assistance of two subordinates, one of whom was Lt. James M. Grierson, enumerated the numbers and dispositions of Russian forces from the European frontier through Central Asia. He then estimated how long it would take Russia to mobilize and concentrate forces to threaten Afghanistan and India. From his calculation of available forces and a study of route reports leading from Caspian ports to the Afghan frontier, MacGregor concluded that Russia could deploy a force of 95,000 men at Herat, Kabul and Chitral within 80 to 100 days of mobilization (1884: 104). Once the Russians had occupied these key strategic sites, they would be able to supply and reinforce them at levels that would make it impractical for the British to turn them out. The Russians could then use these strong points to prepare to invade India along multiple lines of advance. MacGregor added that the Russians could occupy the three cities virtually undetected by the British.

Subsequent sections of the report recommended the number of troops England and the colonies should be obliged to send to India to shore up defenses, the rail lines that needed to be constructed into the Northwest Frontier to support forward bases of operation, and the strategy and tactics that ought to be used to halt the Russian offensive

⁵ Preston (1969) provides one of the few studies of MacGregor's strategic thinking. He gives much more credit to the latter's analysis than the critics in the War Office discussed below.

⁶ Von Trotha's study was entitled *Die Mobilmachung der Russischen Armée vor und während des Krieges, 1877–78* (1878).

(1884: 183–210). On this last count, MacGregor insisted that it was necessary to establish a forward position that would allow for rapid occupation of Kandahar, Kabul and ideally Herat. The securing of these cities would prevent the Russians from consolidating their hold over Afghanistan as a whole. Throughout, MacGregor repeatedly warned of the seriousness of the Russian threat and the need to act immediately to address it. He was convinced, moreover, that only a military solution was possible, and that action should be triggered by Russia taking even one more step towards India. He then ended his report on this provocative note: “I solemnly assert my belief that there can never be a settlement of the Russo-Indian question *till Russia is driven out of the Caucasus and Turkistan*” (1884: 241; emphasis in the original). How this was to be accomplished, MacGregor did not make clear.

Once the manuscript was complete, MacGregor labeled it “strictly confidential” and circulated it to a select group of correspondents, one of whom was Col. Aylmer Cameron at the Intelligence Branch in London. Within a few months, by March of 1885, Cameron had developed a systematic critique of MacGregor’s argument, much of which not only refuted it, but strongly implied that military intelligence sources had been misused to make the argument. There were three kinds of criticism leveled by Cameron, ones that would recur in later exchanges between the two intelligence units. First, Cameron charged that MacGregor built all of his estimates on the dubious ground of a best-case situation for the Russians, and was over-optimistic with regard to logistics and timing. Where, for example, were the Russians to get sufficient pack animals to supply their forces across Afghanistan (1885: 4–5)? Drawing on authorities who had traveled through Russian Turkestan, such as Alexander Condie Stephen⁷ and Charles Marvin, the latter of whom had interviewed members of the Russian General Staff,⁸ Cameron noted the difficulties the Russians had encountered in finding sufficient pack animals to supply their armies in various campaigns in Turkestan (1885: 11–16, 34, 49). The transport question would become central to all future critical evaluations of Indian Army war-planning.

⁷ Stephen was a British diplomat, Russian linguist and member of the Afghan Boundary Commission.

⁸ At the headquarters of the Russian General Staff in St. Petersburg, Marvin spoke with Gen. Skobelev, the Russian commander of the campaign against the Akhal Teke, and Col. Gordekov, who had been on Skobelev’s staff. In the interviews, both Russian officers emphasized the difficulty of gathering sufficient numbers of pack animals in Turkestan; see Marvin, 1882: 103–4, 152.

In addition to unrealistic estimates concerning logistical questions, Cameron noted that MacGregor seemed to pay scant attention to the difficulties posed by the terrain of Central Asia for military operations.⁹ As he put it succinctly at one point, MacGregor appeared to have “refused to admit any considerations as to impassable rivers, impracticable deserts, want of food, bad water, &c., as arguments against the Russian troops arriving at the places named within the time stated” (1885: 10). Second, he pointed out that MacGregor had postulated almost total ignorance of Russian actions on the part of the Indian Army, and hence no efforts to mobilize and concentrate forces until the moment the Russians were at the gates of India. Given that British intelligence had substantial information about Russian troop dispositions across the Tsar’s empire, dispositions that were closely monitored and reported on by other European armies, was it not rather far-fetched to assume that no one would notice new troop concentrations on the Afghan border (1885: 6)? Third, MacGregor had given no consideration to the resources Russia would have to assemble in order to launch an offensive on the scale he had predicted. To back up his observations, Cameron cited sources indicating the financial burden of any campaign on the scale envisioned by MacGregor, including the cost of building rail lines into Turkestan (1885: 49, 54).

In sum, what Cameron was pointing to was MacGregor’s failure to deal realistically with what was factually known about Russian capabilities and about the military geography of Central Asia. Instead, MacGregor had conjured a sensational fantasy scenario, an apocalyptic vision that the intelligence materials, according to Cameron’s reading, could not support. But the key point was that Cameron found *The Defence of India* fatally flawed because the same exaggeration of source materials was common in every part of the report. Most disturbing, perhaps, was the way in which military geography and statistics had been distorted in order to make a case for a far more ambitious set of recommendations than seemed necessary or practical from the point of view of the Intelligence Branch in London.¹⁰

In this respect, Cameron’s critique of MacGregor was more than simply a refutation or disagreement over strategy. It marked a

⁹ In discussing terrain and routes, Cameron used sources such as the *Gazetteer of Western Turkestan* and the Indian Army’s *Routes in Central Asia*.

¹⁰ Cameron was also bothered by the fact that, although MacGregor claimed the report was confidential, he or one of his correspondents leaked it to the press. Cameron provided a detailed list of newspapers in Britain that either cited directly from *The Defence of India* or closely paraphrased portions of it (1885: 60).

fundamental shift in geo-strategic thinking – it would now be premised on the careful calculation of time-space-resource ratios to be found in intelligence genres. Thus, as Cameron's extensive analysis suggests, if the Intelligence Branch of the War Office in London was not of like mind with the Intelligence Branch in Simla, the difference in views was based on the forms of military knowledge now being produced by highly trained army officers, many of whom were in India. MacGregor's report did not, in other words, measure up to the new standards that had emerged for the collection, compilation and evaluation of military geography and statistics. Whether the fact that MacGregor was neither a Royal Engineer, artillery officer nor graduate of the Staff College figured in Cameron's calculations is unclear. What is clear is that there was a substantial amount of irony involved in the affair. As we saw earlier, MacGregor had been a major voice for professionalization of the army and the creation of an intelligence unit in the Indian Army. He also had more practical experience in field reconnaissance than his London counterparts. How, then, to account for these two quite different readings of the intelligence archive?

One answer may lie with MacGregor himself. When he died in Cairo on February 5, 1887, *The Times* of London obituary noted that many of MacGregor's views sounded like "Cassandra prophecies," but added that he considered the chief peril to the British Empire to be its own "apathy" and "overconfidence," not the Russians or Afghans (February 7, 1887: 9). On this reading, MacGregor's overstatement of the case for a Russian invasion of India would have been a concerted effort launched from an authoritative position to goad civilian leaders in India and Britain into action.

But the more significant point was that the MacGregor-Cameron divide was not an isolated incident. Indeed, conflicts between the War Office and Simla over how to evaluate the geographic and military statistics being produced by compilation and reconnaissance continued well after MacGregor's death. No amount of War Office prompting could get Simla to stop planning for a Russian invasion, even after the Afghan Boundary Commission had delivered intelligence that, if anything, made London's case stronger. Also ignored was a paper by Col. O. B. C. St. John, RE, who had been in charge of the commissariat for Gen. Burrows's column during the Second Afghan War. Because of the difficulty he had in supplying a force of only 2700 men, St. John thought it would be difficult to sustain a large force at Kandahar for more than a few months and doubted that at most a force of 5000 men could be

supplied on the Herat–Kandahar Line.¹¹ Nor did E. G. Barrow's somewhat later assessment (1893) from within the Simla Branch concerning the effects of Afghanistan's brutal terrain on a Russian advance alter views.

In 1887, Henry Brackenbury, now Director of Military Intelligence in London, made an effort to reopen the issue of a determination of India's military frontier. Brackenbury began his initiative by noting that although it was impossible to say with any certainty when or if Russia might advance against India, at present "there are known facts which enable us to form opinions on this subject." The facts were made up of, among other things, the records of the Afghan Boundary Commission. These sources indicated that the lines of a possible Russian advance could be "reduced with tolerable certainty to one or two alternatives" (i.e., Kandahar and Kabul) and the forces Russia could "dispose of" could "be calculated with reasonable accuracy" (1887: 1). Recent reconnaissance activities had, in other words, altered the situation from one of severe doubt over MacGregor's estimates to one of "tolerable certainty" and "reasonable accuracy," a situation that should have allowed for rational, informed planning.

One of the known facts was that there was a newly agreed upon, technically sound border between Afghanistan and Russia. From Brackenbury's perspective, the key issue now facing the British government was how to make it clear to the Russians that threatening Britain's "protectorate" by violating Afghanistan's northern border would lead directly to war. Having noted the geo-political significance of the new boundary, Brackenbury then observed that, should war come, the decisive wound to Russia would not be inflicted in Afghanistan, but rather through the Caucasus, and by the Turkish army. "We should not," he concluded, "be compelled to fight with all our strength at the end of this remote line in Afghanistan; but we should use there only the minimum of force consistent with the safety of India against actual invasion" (1887: 2). This, in a sense, was the crux of the matter. MacGregor and others had wanted to meet the Russians at Herat and on the Amu Darya. Few in London thought this made any sense. Garnet Wolseley, perhaps the best-known military figure of the era, wrote at roughly the same time as Brackenbury that it was nonsensical to consider squandering Britain's military strength in the deserts of Afghanistan. He called

¹¹ See St. John, 1885. Mark Bell inserted a comment on St. John's report. Although he did not dispute the latter's assessment, he argued that the intelligence party of the Afghan Boundary Commission had demonstrated that northern Afghanistan could supply a large army; see IOR ORB.30/5523.

those who advised such a course “madmen” whose heads were filled with military theory from the times of Xerxes and Alexander.¹²

Choosing his words more carefully than Wolseley, Brackenbury granted that although Turkish support for military encounters in the Caucasus was as yet uncertain, the point was to recognize that resources and men were not available for a campaign from India deep into Afghanistan. It followed from such an admission that a clear decision was required, based on the “evidence of experts,” about where to draw a line that would constitute a *casus belli*. Such a line was needed not simply for diplomatic purposes, but to introduce an element of geographic certainty about where the Indian Army was being asked to operate – a military frontier, in other words, needed to be constructed. The object of such an exercise, Brackenbury explained, was to arrive at a point where there was a “basis of a military policy” upon which plans for mobilization in India and reinforcements from Britain could be calculated and a military organization constructed to meet “known needs.” Such an outcome would be far preferable to the present effort of “trying to find a foundation in the quicksands of utter uncertainty,” and would be supported in London.

Establishing a factual foundation for planning was, however, no simple task, primarily because the intelligence units in London and Simla were far apart in their understanding and assessment of the Russian threat. Brackenbury charged that planners in Simla tended to view the defense of India as purely a “local” problem, which resulted in repeated overestimations of Russian capabilities. Whether it was Russian railroad construction, the mobility of her forces along the Kabul line of advance, or the level of Russian troop dispositions in Turkestan, Simla worked with far higher estimates of Russian strength and capabilities than was justified by the facts on hand in London (1887: 5).¹³ Those facts indicated that the Russians could place two forces of about 15,000 men each at Herat and in Afghan Turkestan. Practically, the British could not prevent such an action, and it would be foolish to expend resources to meet such a limited threat.

¹² Wolseley was cited in Brownlow, 1889: 2. A fuller presentation of Wolseley’s views on India’s defense is in his memorandum of 1889. That same year, George Curzon, future Viceroy of India, went a step further to argue that the Russian build-up in Central Asia was designed to tie down British forces in India. Citing Charles Marvin’s interview with General Skobelev, Curzon noted that the central Russian strategic concern was not India, but the Bosphorus; see Curzon, 1889a: 316–23.

¹³ These facts may have been drawn from an evaluation by James Grierson, now posted at the War Office, of a plan by Gen. Kuropatkin of the Russian Army for an invasion of India. Brackenbury’s name appears on the report; see Grierson, 1886.

At the same time, however, Brackenbury acknowledged that the challenge of the defense of India had come to include Afghanistan. The import of this statement would have been clear to any of Brackenbury's readers. It meant that from a strategic point of view the War Office accepted the logic of a forward policy: that is, of extending the defensive line of northwest India well beyond the Indus River and into the Suleiman and Hindu Kush mountains. Indeed, Brackenbury cites a general consensus in London over the necessity of not allowing the Russians to reach or occupy any point on the lines that joined Chitral, Kabul, Kandahar and Girshk. The information gathered by the Boundary Commission about the geography of these areas and about the Afghan tribes in the Hindu Kush and between Kandahar and Herat would help in determining how deep into Afghanistan the Indian Army should (and could) establish military outposts. Since it also seemed clear that the lines of advance leading to India could not be reliably held by the troops of the Amir of Afghanistan, the British must consider the possibility of a "permanent occupation of the southern provinces of Afghanistan" should the Russians advance.

Having established a framework for planning and highlighted a series of key questions that needed to be addressed now that there was more information of greater accuracy on the world beyond Kandahar and Kabul, Brackenbury suggested that a secret commission be established in India made up of the highest military and political authorities for the purpose of recommending the line of the future military frontier. The commission's proceedings should then be submitted to a similar committee in London, the effect of which would be to allow the military advisors of the Crown to constitute a system of organization suited to "Imperial," as opposed to local, needs. Such a committee could also, if successful, resolve the great divergence of interpretation over military intelligence now existing between the two units.

Brackenbury's memo did not, however, lead to a meeting of the minds in London and in India. Two years later, in 1889, the Indian Mobilization Committee submitted a report to London that indicated little change in thinking at Simla. Now, rather than garrisoning Herat, Simla recommended that should the Russians take Herat, the Indian Army, with reinforcements from Britain, should immediately move across Afghanistan to meet the Russians there. Once more, the reaction in London was negative. It was high time, as C. H. Brownlow of the War Office put it, for the Indian military establishment to start dealing with "*existing conditions*" (emphasis in the original). Simla should settle on a less ambitious policy and work out a plan to implement it (Brownlow, 1889).

A subsequent report from India entitled the “General strategical situation of England and Russia in Central Asia,” bearing the signatures of Gen. Frederick Roberts, commander of the Indian Army, several of his subordinates and Sir Henry Mortimer Durand, head of the Government of India Foreign Department, rehashed the same estimates and drew an equally negative reaction in London. In a memorandum in response, Brackenbury and Gen. O. R. Newmarch of the War Office expressed the same sort of frustration as Wolseley had over the planning and assessment being done at Simla. The two made it clear that the civil and military authorities in India continued to ignore criticism coming from London, particularly that dealing with perceptions of the geography of Afghanistan and problems attendant upon the deployment and supply of a Russian army. In their own calculations, Brackenbury and Newmarch estimated that the Russians could bring no more than 20,000–30,000 forward to the Kandahar line of advance, and in doing so would have to protect a supply line of 800 miles stretched over presumably hostile country. These were the numbers with which Indian intelligence ought to be planning, they insisted (1889: 3).

Instead, referring to the most recent report, Brackenbury and Newmarch noted that the summary of the strategical situation went off on another tangent altogether. If the Russians were to take Herat, Roberts and the others now proposed to rush an army there. Such a plan of action would simply reverse the issue of supply and extended lines of communication – making it a British rather than a Russian problem – while giving the Indian Army almost no strategic advantages. The only way such a scheme would even be feasible was if Britain could occupy large areas of southern Afghanistan and begin to build rail lines and establish supply bases between Kandahar and Herat. Brackenbury and Newmarch concluded:

We do not think it necessary to pursue this argument further. We are satisfied that were Russia to commit the folly of advancing from her present base to attack Kandahar, or were to commit the folly of advancing on Herat, vaulting ambition would o’erleap itself, and inevitable disaster would in either case attend the invading army; and we therefore dismiss the march to Herat, and the advance to sever the Russian communications between the Caspian and Turkestan, as an object which the army of India cannot reasonably and ought not to be called upon to undertake. (1889: 10)

Having dismissed the strategic assessment of the Indian Mobilization Committee as folly, Brackenbury and Newmarch concluded that there were two courses of action from which to choose. One of these, “masterly inactivity,” was built on the premise that the further Russia could be drawn into Afghanistan, the better it would be for the defense of

India. Brackenbury and Newmarch thought this option untenable for political reasons – it would throw the Afghans into Russian arms, while undermining British prestige in India. The other option was to project British lines of communication into Afghanistan in order to create a few sound and well-supplied defensive positions. Such an approach would allow the Indian Army to select advantageous battlefields and plan accordingly. Like others, Brackenbury and Newmarch acknowledged that the two key geographical points, for both military and political reasons, were Kandahar and Kabul. It followed from this recognition that should the Russians move against Herat and Afghan Turkestan, the British counter-move should be to occupy Kandahar in the south and take a position in proximity to Kabul, at Jellalabad and/or Ghazni, in the north.¹⁴

Given the consensus of views at the War Office and the preponderance of geographic and military statistics that supported this consensus, it will come as no surprise that the debate over the defense of India was resolved in London's favor. Although the Indian Army would not be allowed to fight the Russians north of the Hindu Kush or contemplate an advance to Herat, Brackenbury's idea that a partial military frontier in Afghanistan was needed as a security measure did allow the Indian Army to create fortified bases deep into Afghan territory. Under the direction of the Viceroy, Lord Dufferin, and Gen. Roberts, fortifications and communication lines were extended into the areas of the Khyber Pass, Quetta and the Bolan Pass (Roberts, 1900, vol 2: 510–14).

This version of the military forward policy was further institutionalized in 1893 with the boundary agreement made between the Amir of Afghanistan and the Government of India known as the Durand Line. The demarcation ceded to Britain the mountain territories of the Afridis, Orakzais, Mahsuds, Waziris, Buners and Swatis, as well as the territories to the north anchored by Chitral and Gilgit. With the development of rail lines in the late 1880s and 1890s to Quetta and to the west of Peshawar, the British gained a position that would allow them to project force along the imaginary lines linking Kabul and Kandahar. Although the establishment of these bases was in some cases fiercely

¹⁴ In 1891, Brackenbury began a five-year term as military member of the Viceroy's Council in India. According to Christopher Brice, there seems to be little evidence that he changed his views on Russia. Brice draws this conclusion from a study of the Brackenbury papers at the Royal Artillery Museum, Woolwich. According to his findings, Brackenbury urged the military Indian establishment to see the Russian threat in broader terms than simply the defense of India. But it would seem that Brackenbury's main contribution in India was to rationalize and reorganize the administration of the army; Brice, 2009: 224–36.

contested by local inhabitants (see next chapter), their presence further solidified the view in India that the main security threat was a Russian overland invasion through Afghanistan.

War games and staff rides

The growing strategic divide between the War Office and the Indian Army establishment is also evident in another form of practice, war games and staff rides. Recall from Chapter 2 that, along with maneuvers, Gen. Moltke of the Prussian Army had developed war games and staff rides as a means for training officers in techniques for mobilizing and concentrating forces, and engaging as nearly as possible with actual conditions of warfare. It is unclear from the extant documentary record in the National Archives and India Office in London precisely when the British and Indian Army adopted such devices, but they were clearly in place at the beginning of the twentieth century. In this section I deal with war games and staff rides less as planning instruments and more as objects of contention between the Indian military establishment and the War Office. Below, I will address war games as training aids, ones that incorporated intelligence genres as educational tools.

In 1903 a war game involving the defense from a Russian invasion of India was played at Simla.¹⁵ London's reaction to the game highlighted how far apart the two had become. Moreover, the evaluation of the India defense plan was made by officers at the War Office with substantial field experience in both India and in Europe: the new Director of Military Operations, Maj. Gen. James Grierson, and his staff. Grierson, it will be recalled, was one of the junior officers who had helped assemble material for MacGregor's rather inflammatory 1884 plan. That experience notwithstanding, like Cameron and Brackenbury before him, Grierson concluded that the Simla war game was based on a number of questionable assumptions, such as an extremely rapid completion of the Orenburg–Tashkent railway line and a surreptitious stockpiling of railroad construction equipment in proximity to the Afghan border. In addition, the 1903 war game assumed that the Russians would be able to concentrate men and supplies at the Afghan border undetected prior to the opening of hostilities. On its side, the Indian Army of the war game only began mobilization when the Russians crossed the northern Afghan frontier. The scenario in use by game planners at Simla was, of course, reminiscent of the one presented by MacGregor, and led

¹⁵ There is no copy of the game itself in the records, only the response of the Director of Military Operations; see General Staff, War Office, 1904.

to criticisms from Grierson similar to those that had been leveled by Cameron. Grierson also found it “inconceivable” that Russia would be able to move large numbers of troops into Turkestan without anyone noticing. Troop movements on the scale anticipated in the game would be reported all over Europe!¹⁶

Grierson also raised questions about the estimates made at Simla concerning the speed of Russian movement across Afghanistan. Citing available route reports, the director found a consistent pattern of over-estimation of Russian capabilities and of the rate at which rail lines could be constructed.¹⁷ He added that there seemed to be little consideration of the physical obstacles posed by Afghan terrain to the movement of men, equipment and supplies. The mountain passes to the east of Kandahar, for example, were particularly difficult for wheeled artillery to negotiate unless the roads were improved. The passes themselves could not be traversed until July because of runoff of melting winter snow. Neither factor, Grierson noted, had been taken into consideration in the Simla game.

Figures concerning the numbers of pack animals the Russians would require were also scrutinized. In what might be called the camel question, a flashpoint in this and other evaluations of Simla’s planning methods, Grierson and his staff cast doubt on the war game’s figures by citing sources on the previous military campaigns of the Russian army in Turkestan and of the British Army in eastern Afghanistan. The problem, Grierson found, involved a common error – the failure to consider wastage, that is, the loss of animals along supply routes. At a minimum, he calculated that the Russians would require 200,000 camels or other pack animals, a number that he asserted, based on past campaigns, would be difficult, if not impossible, to obtain.¹⁸ The report

¹⁶ The evaluation is ten pages in length, with an abridged narrative of the game in one column and commentary in the other. Expressions like “impossible” and “not deemed feasible” occur repeatedly in Grierson’s assessment. See General Staff, War Office, 1904. Also see Robertson’s account in 1921: 134–36.

¹⁷ A few years after Grierson’s critique of the India Army war game, a reconnaissance of the Russian rail system from the Caspian Sea into Turkestan concluded that it was incapable of supporting a large army on the Afghan frontier. According to the report, the stations were too far apart, rolling stock was insufficient to sustain a large force on the Afghan border, fodder for horses along the route was severely limited, telegraph lines were few, and the signaling system was inadequate for quick dispatch of trains. See D.A.O., 1907.

¹⁸ For a more detailed discussion than is provided here of the camel question, see Gooch, 1974: 219–23. The animal transport controversy is even more vexing to sort out because Indian Army logistics officers must have been well aware of the heavy demand for pack animals for operations along the frontier. Winston Churchill, reporting on the Malakand Field Force in 1897, noted that he viewed a pack train over a mile and a half long that was supposedly two days’ supplies for a brigade. He observed

concluded with sobering examples of pack-animal “wastage.” Recalling the 1879 Russian campaign against the Akhal Tekes, Grierson gave a figure of monthly wastage of 17% and an annual number of 204%. The British campaign in the Kuram valley (1878–79) had experienced a monthly wastage of 11.43%, and an annual rate of 137%, while Gen. Hill’s division, which left Kabul in 1880 for India with sufficient fodder, still showed a wastage rate of 17.85% per month. (See General Staff, War Office, 1904: 10.)

This scrutiny of the mathematical abilities of planners in India was, however, about more than the calculations themselves. Grierson spoke from an organizational position that had been created in February 1904 with the inauguration of newly minted British General Staff. The staff itself was the product of a series of Royal and Parliamentary investigations into the defeats suffered in 1899 at the hands of the Boers in South Africa.¹⁹ One of these, the Royal Commission on the War in South Africa (1902–3), determined, with specific reference to intelligence, that there were no provisions in the current organization of the British Army to allow those officers with intimate knowledge of the capacities of adversaries to advise on policy (RCWSA, 1903: 14).²⁰ The duties of the Intelligence Department were essentially to gather information and to make it available to higher-ups when requested, but not to take the initiative of bringing matters to the attention of superiors. However, with the exception of a dissenting appendix written by Lord Esher, the Commission made no specific recommendations for reform.

Soon after the publication of the report and the minutes of evidence taken by the commission, the prime minister, Arthur Balfour, appointed Esher to chair the War Office (Reconstitution) Committee, and it was through this agency that the General Staff came into being, with intelligence relocated in the Directorate of Military Operations and Grierson made its first head. In addition, Esher pushed through reforms that gave the Committee of Imperial Defense, already in existence, a permanent

that “very few understand that an army is a ponderous mass which drags painfully after it a long chain of advanced depots, stages, rest camps, and communications, by which it is securely fashioned to a stationary base.” The mountains only amplified the problem because roads were so poor that only mules could negotiate them; see 1990: 196–97. Shadwell gives a figure of approximately 43,000 pack animals for the Tirah expedition in 1897; and numbers in excess of 71,000 for all of the mountain campaigns against various Pathans in 1897–98; see 1898: 71.

¹⁹ The success of the Boers against the British Army in South Africa stimulated calls in Britain for reforms in education, physical training, the tariff and military organization, in order to improve “national efficiency.” See Searle, 1971: 54–106.

²⁰ The minutes of evidence taken by the commission appeared in three volumes totaling more than 1700 pages. See Royal Commission on the War in South Africa, vol. 1–2, and appendices, published by Parliament in 1903.

staff, abolished the position of Army Commander-in-Chief, established an army council to conduct the business of the War Office, and appointed new officers, the products of the reformed Staff College and Scientific Corps, to virtually all the high-ranking positions at the War Office.²¹ For the first time, Britain had a war-planning establishment along the lines of the Prussian model and functional divisions between administration, intelligence and operations.

Thus, Grierson's evaluation of the Indian Army War game of 1903 reflected a sea change in the organization and planning of warfare in Great Britain. From this point forward, a planning regime situated within the Directorate of Military Operations, involving war games, staff rides, maneuvers and intelligence-gathering, on the one hand, and upgraded staff manuals, field service manuals and army handbooks, on the other, became the focal point for war preparation. As Director of Military Operations, Grierson reconstituted intelligence genres as the raw material for rational and deliberate planning for future war. For India, this meant that the civilian and military leaders responsible for evaluating security threats had to deal with a wholly new centralized structure of military oversight in Britain, one fully in the hands of a professional elite.

At roughly the same time, the Indian establishment found itself the object of criticism from the reconstituted Committee of Imperial Defense (CID). Under the direction of its secretary, Sir George Clarke, efforts were made to introduce planning and evaluation processes into all matters that dealt with the security system of the empire. Once again, the pack-animal calculations of the Indian Army were an issue. In a CID paper dated June 28, 1905, the anonymous author addressed the transport question in terms of the actual rate at which a supply train of camels could be calculated to move in Afghanistan:

As a camel on the line of march occupies 5 yards of road, 350 camels will occupy a mile. A day's march on the roads in question will seldom exceed 10 miles, and will, as a rule, be somewhat less. Assuming a speed of 2 miles per hour, a 10-mile march will require five hours. If convoys can be kept moving for twelve hours out of the twenty-four, the last camel must start on its days march five hours before the route is closed for the evening. In other words, a continuous stream of camels will pass a given point on the road during a maximum period of seven hours daily. At a speed of 2 miles, 700 camels will

²¹ The Esher committee's report is in RWORC, 1904. One of its key changes was to divorce the administration of the army from war planning, the latter of which was now the exclusive responsibility of the General Staff. On the reforms, see Fergusson, 1884: 117–22, Bond, 1972, and Kochanski, Sweetman and Beckett: all in French and Reid, 2002. On the Committee of Imperial Defense, see Searle, 1971: 216–35.

pass any given point in an hour ... it will be possible to move 7×700 , or 4,900 camels only in one direction along a 10-mile stage in a day ... This limits the number of troops that can be supplied at seven days' march from the advance base ... to one Indian division [12,500 men].²²

Here then was another constraint on the supply of forces deployed in Afghanistan that Indian Army officials did not seem to have figured into their defense planning. Moreover, for those who might have had difficulty grasping the issue in these terms, the problem was also organized into a differential equation designed to calculate the number of camels required to supply a certain size force so many miles from a base of supply. The equation determined that in order to supply one Indian division in barren country seven days from its supply base (70 miles) for one year would require 109,056 camels.²³

The CID assessment and calculations were, of course, pertinent for any campaign in Central Asia or Afghanistan – whether it was a Russian army advancing on India or a British Army advancing from Kandahar toward Herat. Equally significant, the information used to construct what the War Office and the Committee of Imperial Defense considered realistic estimates of supply needs was readily available to the intelligence unit of the Indian Army. Hence, the implications of

²² Clarke, 1904–7, no. 28, p. 3. The document is entitled “Suggestions as to the Basis of Calculation of the Required Transport of an Army Operating in Afghanistan.” To these calculations might be added those of George Younghusband, who provided some sense of why camels might be preferred to mules over regular terrain. Given the paucity of fodder in Afghanistan, pack animals would have had to carry grain for themselves and the rest of the pack train. Assuming a line of communication 200 miles long, Younghusband noted that a mule, who could carry 160 lb of grain, would consume 128 lb of his load in a round trip. At that rate, it would require four grain-carrying mules to feed themselves and a fifth mule carrying 160 lb of other supplies. A camel, on the other hand, could carry 320 lb of grain, while consuming 64–96 lb over the same distance. Provided the terrain was reasonably regular, camels were much more economical. Mountain warfare, however, limited the usefulness of the camel (1898: 229).

²³ The equation is headed “Number of camels required to deliver n loaded camels at r stages from the advanced base” and appears in Clarke, cited in the previous note, on p. 5.

$$\begin{aligned} & 2\left(n + \frac{n}{10}\right)\left\{1 + \frac{6}{5} + \left(\frac{6}{5}\right)^2 + \dots + \left(\frac{6}{5}\right)^{r-1}\right\} \\ &= \frac{11n}{5}\left\{1 + \frac{6}{5} + \left(\frac{6}{5}\right)^2 + \left(\frac{6}{5}\right)^3 + \dots + \left(\frac{6}{5}\right)^{r-1}\right\} \\ &= \frac{11n}{5}\left\{\left(\frac{6}{5}\right)^r - 1\right\} = 11n\left\{\frac{\left(\frac{6}{5}\right)^r - 1}{\frac{6}{5} - 1}\right\} \end{aligned}$$

Fifteen days' march from the advanced base would require 611,212 camels.

these invocations of actual conditions, historical precedent and mathematical formula by Grierson and the CID pinpointed basic shortcomings in India. It seemed to officials in the new war establishment in London that Simla could only contemplate war with Russia provided the realistic assessment of the means of supplying an army were left out of the equation. Why, in other words, couldn't Simla do the math?

In a memo that dealt with demands by the Government of India for reinforcements, Sir George Clarke succinctly summed up the conclusion to be drawn from the CID critique. The "Kriegspiel," or war game, as it was played in India, he argued, comprehended "only the least possible contingency" (Clarke, 1904–7, no. 26, p. 70). The previous year, Grierson, writing for the General Staff, had put matters this way:

Although the [Simla] War Game furnishes an interesting study of the problem dealt with, it cannot be regarded as being based on conditions bearing a close resemblance to those which we are justified in supposing would obtain in actual war. It allowed Russia to begin the operations fully prepared in every respect and to cross the Afghan frontier with 100,000 men, supported by 300,000 in the rear, before the British side had made any preparations of any kind ... *it is inconceivable that Russia would in any circumstances be favoured to this extent.* (Grierson, 1904: 10–11; emphasis added)

And yet, rather than planning for a more likely use of the Indian Army – an invasion of Afghanistan, for example – Simla insisted on playing war games that gave "inconceivable" advantages to the Russians.²⁴ Not even the creation of a General Staff in India in 1909 and reorganization of the Indian Army seemed to have changed matters. A staff ride, the exercise in which officers moved into the field to work on strategic and tactical problems, undertaken in 1910, opened with the Russians having already successfully invaded India and seized Delhi! The exercise assumed that the Russians had been able to pacify the Afghans and mountain tribes and establish secure lines of communication stretching from Turkestan to the gates of Delhi. The officers involved then worked out a scenario in which the British forces rallied, retook Delhi, and pushed the Russians back to the Sutlej River.²⁵

²⁴ George MacMunn recalled that in 1907 Gen. Kitchener asked to see the army's plan for such an invasion of Afghanistan. There wasn't one; the only plans that existed were those involving Russia. MacMunn claims that after telling the General that the plan was at the printers, he and three other officers from Intelligence and the Strategic section cobbled something together over a three-day period. Of interest was the speed at which they were not only able to put the plan together and, as MacMunn noted, mesh it with War Office nomenclature. The plan was such a success that it was decided to redraft the Russia war plan on the same basis; 1930: 65–68.

²⁵ See Chief of the General Staff, India, 1911. Here the ride is referred to as a staff tour. The following year, a staff ride organized in the Punjab was based on a scenario in which Indian Army forces, with the help of reinforcements from other parts of the

There is no record in the War Office archives indicating London's response to these exercises. Nor does there appear to have been a response to an earlier Indian Army study of the strategic conditions on the Northwest Frontier. But perhaps none was needed. Put together by the Chief of Staff's Division of the Indian Army (Moreman, 2002: 58–63), the immediate predecessor to the General Staff, this 1909 report on strategical conditions admitted that “a factor that has not been taken into consideration is the difficulty of organization and control of efficient lines of supply based on animal transport” (Chief of Staff's Division, 1909b: 56).

Given what has been said about the rationalizing processes associated with intelligence, the creation of a professional elite, and eventually a staff system in Britain and India that finally matched those of the continental armies, it is not easy to understand why planners in India continued to refuse to deal with the objective evidence produced by intelligence practices in both Britain and India. This blind spot is all the more puzzling when it is clear that at least some intelligence officers in India knew that considerations of supply and terrain were being ignored in planning and assessments. Moreover, records indicated that between 1885 and 1912 Indian Army officers were appointed to one-year stints at the Intelligence Department of the War Office.²⁶ How to explain the contradiction? There are several possibilities. Some evidence suggests that while Simla was reasonably good at gathering intelligence, compiling reports and filing information, no one was quite sure what to do with the great mass of material on hand. This, at least, was William Robertson's assessment when he had been stationed at the Intelligence Branch in the early 1890s. Robertson, himself the compiler of a third edition of the *Gazetteer of Afghanistan* (1895) while at Simla, noted that it was alleged that staff officers in Simla were more likely to have been appointed for their ability to perform in “amateur theatricals” or because of their mastery of other colonial leisure skills (1921: 51).

A more serious possibility suggested by Robertson was that the army leadership in India, frequently backed by forward policy advocates in the Government of India, were determined to press London for any and all resources for the defense of India (1921: 135). The threat of a Russian invasion, if made persuasive enough, helped make their case. Moreover, at least until the beginning of the twentieth century, there seemed to be sufficient documentary evidence in Russian military sources that supported

empire, went on the offensive against the Russian invaders; see Chief of the General Staff, India, 1912.

²⁶ The numbers and names of the officers can be found in IOR L/MIL/7/11162–11172.

the Indian Army's views of the nature of the threat. Translations of these sources by members of the Foreign Office and the War Office indicated that in the 1880s and 1890s Russian planners drew not only on their own reconnaissance operations in Central Asia²⁷ but, in the case of a plan authored by a Capt. W. Lebedeff (1893), drew directly from public and confidential British sources, including MacGregor's *Defence of India* and Indian Army route surveys to refine plans for an invasion of India that included the Russians winning the support of the Afghans and mountain tribes.²⁸ Moreover, because the plan imagined military operations as a series of stages involving conquest and consolidation – first Herat and areas south of the Amu Darya, then Kabul and Kandahar, and finally through the Afghan mountains to the Indus – Indian Army leaders could find in the Russian sources evidence to support any version of a proper military frontier for India they might propose, thus justifying the need for additional resource.²⁹

A third possibility had to do with resistance in India to the reorientations of imperial defense priorities that were occurring in London coterminous with the Esher reforms. Under the aegis of Grierson, whose views on India had clearly changed since the 1880s, and his deputy, the above-mentioned Robertson, the Directorate of Military Operations had begun to plan for another kind of warfare altogether, one that did not place India at the center of imperial defense.³⁰ In 1905,

²⁷ On Russian reconnaissance in Central and East Asia, much of it under the guise of scientific exploration, see Brower, 1994. Also see Marshall on the increase in reconnaissance operations and the collection of Central Asian military statistics (2006: 132, 136, 139, 144).

²⁸ Lebedeff also used the reconnaissance operations that were part of Gen. William Lockhart's campaigns on the Northwest Frontier in the 1890s, Henry Hanna's ruminations on Russian capabilities (1895a, 1895b, 1896), and articles in journals such as that of the Royal United Services Institute by Gen. Roberts and others. His plan called for the conquest and occupation of Afghanistan in stages, the building of a rail line to Kandahar and the improvement of roads leading to Kabul, but gave little thought to Afghan opposition to Russian occupation.

²⁹ Extant translations of Russian invasion plans in British archives include that of Gen. Skobelev, translated by Robert Michell (1884) in the Foreign Office, and Gen. Kuropotkin's scheme, translated and analyzed by then Capt. James Grierson (1886).

³⁰ While it is not clear from the sources used in this study, it is quite possible that the Intelligence officers at the War Office were aware of strategic reevaluations that had occurred in Russia at the end of the nineteenth century. By then, the Russian General Staff had limited its interest in Afghanistan to what was defined as Russian Turkestan's natural frontier, the Hindu Kush mountains and the area around Herat. In 1900, Gen. Kuropotkin, Chief of the Staff, abandoned that notion, deciding that the main security threat to Russia was Germany. In addition, the Russian staff and military authorities in Turkestan seemed just as concerned as the British about Muslim "fanatics." An invasion of Afghanistan would simply add fuel to that anxiety. See Marshall, 2006: 140, 145–46, 149.

the Directorate organized a staff ride involving the mobilization and embarkation of a British expeditionary force for landing in Belgium. The enemy was presumed to be a German Army.³¹ When Douglas Haig was appointed as Chief of the newly created General Staff in India in 1909, he was determined to integrate the Indian Army into the British expeditionary force concept. Although at least one staff ride was organized around this scenario in 1911, Haig's initiative was quashed by opposition within the Army and the Government of India.³² The oddity in all of this was that the many kinds of intelligence genres that the Indian Army Intelligence Branch had helped to pioneer seemed to have been more useful for the critique of its practices than for formulating an authoritative techno-military plan for the defense of India and of the empire.

Intelligence genres and institutional memory

Military reports also functioned as sites of trans-generational collective memory: their history sections frequently documented previous campaigns into the regions in question.³³ These sorts of memory practices on the campaigns of the Indian Army were further collected together and summarized by the Intelligence Branch in a six-volume set entitled *Frontier and Overseas Expeditions from India* (1907–11), which was itself an updating of earlier works of the same sort.³⁴ Perhaps more importantly, as the instances of contact or conflict accumulated over time, histories were distilled into “lessons learned,” and ethnographic

³¹ See DMO, 1905. The reorientation to the continent inaugurated by Grierson was taken up by his successors after he was replaced as Director of Military Operations in August 1906. Grierson initiated conversations with the French General Staff that resulted in joint planning, with a particular focus on a German advance through Belgium. Gleichen recalls working on questions of German mobilization with the French staff in 1911 to determine where and when the first clash should occur if the Germans invaded France through Belgium and Holland (1932: 341–42). For an overview of the continental reorientation of the War Office, see Fergusson, 1984: 205–9. Gooch has termed the new focus on a continental expeditionary force a “strategic reorientation,” that included not only the de-centering of India in War Office military planning, but a more cooperative relationship with the Admiralty; see 1974: 165–94. Also see McDermott, 1979.

³² See Strachen, 2002: 85. When, in 1914, regiments of the Indian Army were ordered to France, they were thus quite ill-prepared for the expedition.

³³ Perhaps the first to include campaigns in the reports was Mark Bell (1884). The historical section drew on documents from the First and Second Opium Wars; see vol. 2: 353–440.

³⁴ The first such compilation seems to have been William Henry Paget's *A Record of Expeditions against the North-West Frontier Tribes* (1874), which was brought up to date by A. H. Mason in 1884 and reissued under the same title.

sections were expanded with often complex details on a variety of local customs and beliefs. Also over time these conflicts came to be distinguished from “civilized” warfare because campaigns involved fighting “irregular” or “savage” forces. Here I will focus attention on the military reports dealing with Afghanistan and the Northwest Frontier.

The first military report on Afghanistan, discussed earlier, contained histories of the First and Second Afghan Wars and of the Afghan boundary commissions. Its “ethnology” section enumerated the races of Afghanistan, beginning with the true Afghans, the Duranis and Ghilzais, and then turned to various non-Afghan tribes. The report then related the following lessons: the military power of Afghanistan was never based on the regular army, that is, the army of the Amir at Kabul, but instead on the “courage and fanaticism” of its major tribes, the Durani and Ghilzai. In both the first and second Afghan Wars, the British invading forces defeated the regular army handily, but found themselves, in the first war, nearly annihilated by the Ghilzais as they attempted to evacuate Afghanistan in 1841. In the second war (1878–80), the campaign was prolonged by the involvement of these two tribes. It was perhaps the experiences of easy victory that convinced some analysts that the Afghan army would never be able to stand up to the Russians. But many also saw that in the eastern mountains the tribes on either side of the Durand Line could present a formidable obstacle to any advance into India (Chief of Staff’s Division, 1906b: 92, 191).

Two decades later, an updated military report followed in the wake of the third Afghan War (1919). The volume is of particular interest for its summary of what had been learned about “the Afghan character.” In dealing with Afghans, it began, careful study had shown that they were “treacherous and generally inclined to double dealing” (1925: xvii). No terms should be made with them unless clearly enforceable. Surrender to Afghan fighters was out of the question because it only resulted in “disgrace and humiliation of a kind that no commander should expose his troops” to. Moreover, although the Afghans had over time become particularly effective with European-style rifles, had adapted their tactics to changing situations and were effective guerilla warriors, their “character” and “fanaticism” had not altered a whit from the 1840s. Thus, it remained important to meet them with vigorous and firm action. If their attacks were met “stoutly” and “coolly,” they would rapidly dissipate. If required, punishment should be “stern” and “drastic,” “ephemeral measures being worse than useless.” Lest anyone not understand what was meant by stern and drastic, the report explained that the best results were produced when actions “inflict upon them the heaviest losses in men,” and were followed up “by pursuit of the most relentless description, and by

the confiscation of livestock, grain, fodder, and fuel." "Hesitation, vacillation, inaction, or purely defensive measures" only served to encourage their aggression (General Staff, India, 1925: xviii).

As for their own tactics, the report asserted that the British had learned the importance of mobility, of maintaining close contact between cavalry and infantry units, and of employing light, mobile artillery (General Staff, India, 1925: xix). It then concluded with a caution: "The Afghan and tribesmen," it asserted, were "the best umpires in the world, because they seldom allow a tactical error to go unpunished." It was critical, therefore, for all officers, especially those new to hill warfare, not to neglect precautions that experience showed as necessary. Nothing would be quite as effective as adopting some of the Afghans own "slim methods of fighting" (General Staff, India, 1925: xx). This last was probably a reference to the absence of gear, baggage and camp followers that accounted for the Afghan's and hill tribesmen's mobility and adeptness at guerilla war.

This concise distillation of experience covering three quarters of a century of contact with Afghanistan is of interest for several reasons. First, there is every indication from the summary that the knowledge it contained was learned the hard way, through practical experience and many defeats. Second, the lessons were delivered in a manner that makes clear to the inexperienced that their survival depended on learning them by heart. Third, the experiential knowledge embodied in the report provided a clear and unvarnished characterization of "savage" warfare and an unequivocal justification for punitive expeditions. Lastly, while the courage of the Afghan and the tribesman was granted, there is little recognition beyond their fanaticism of any motivation that would account for their willingness to fight the British.

Similar characterizations are evident throughout military reports that deal with the hill tribes, especially those that seemed to give the British the most difficulty, the Waziris and Mahsuds of Waziristan. A 1935 military report on Waziristan, the fifth edition, indicated, in a section on essential characteristics, that "many of the Pathan traits are intensified in these tribes."³⁵ The standard list included cruelty, treacherousness, murder-lust, avarice, ungratefulness, double-dealing and propensity for blood feuds. Yet at the same time, the Pathans were also brave, ingenious, hospitable, and had a number of military virtues which made them desirable for recruitment into British frontier units. However, because of the prevalence of vendettas, they were less than reliable soldiers (1935: 163, 170–71).

³⁵ The first edition appeared in 1905, and was updated in 1908, 1917 and 1924. None of the earlier editions appear to be extant.

In addition to laying out the basic characteristics of these groups, many of which had appeared in the extensive accounts of military engagements with the British, the report also recommended various forms of collective punishment, a significant one of which was the destruction of fortified keeps or towers. Waziri and Mahsud clans apparently had long built such fortresses as a defense against other clans. The report indicated the size of artillery shells needed to destroy one of the towers and described where, if the tower was abandoned, to place high explosive charges inside to bring it down. Medium artillery was recommended as effective for destroying towers, and had the added benefit of causing “consternation” among the natives, particularly if villages were shelled at night, when the “moral effect” upon the inhabitants was “considerable” (General Staff, India, 1936: 12–100, 166–67). One is reminded of similar pronouncements in other colonial situations. The British had also learned, for example, that the people of north China did not like having their heads cut off, their temples blown up or their city walls demolished. Such punitive interventions were made in China for moral effect as well (Hevia, 2003: 195–96).

Punitive and symbolic measures like these seem to have been a normal part of frontier warfare. They became further institutionalized in pamphlets and field service manuals that appeared after World War I and seemed to operate on the principle, as one of these sources put it, that systematic, deliberate destruction impressed the tribesmen (General Staff, India, 1920: 21). Pamphlets and manuals were further distillations that operated at the level of general principles, rather than on the basis of a particular group or geographic region, providing highly mobile practical guides to officers on campaign.³⁶ What is perhaps one of the last of the field service manuals – *Frontier Warfare – India* (1939)³⁷ – not only repeated various forms of punishment found in earlier sources, but provided a systematic guide to the “demolition of villages” in an appendix, including instructions for the destruction of towers, houses, agricultural fields and orchards, grain supplies and

³⁶ Pamphlets and manuals were condensed how-to guides for officers; they explained how to deploy forces for attack and defense, how to conduct night operations, how to organize lines of communication and protect them, how to set up campsites and deploy piquets, how to train forces to be used in such engagements, and how to prepare for such campaigns. For further preparation, officers were directed to the route books, military reports and gazetteers of the relevant frontier tract. See General Staff, India, 1920, and Army Headquarters, India, 1925. Also see *Mountain Warfare Notes*, 1921.

³⁷ The standard template for this form of field service manual may have been the *Field Service Regulations: Part 1 – Operations*, one of the first of which (if not the first) was published in 1909 by the General Staff and updated in 1912.

retaining walls around fields.³⁸ Towers were to be destroyed by the above-mentioned methods and the roof beams in houses and any other wooden support structures were to be thoroughly burned so that they could not be re-used. Mosques, graveyards and cemeteries, in contrast, were not to be entered or in any way desecrated. There was, in other words, a general understanding of the boundaries to the effectiveness of punitive or retributive acts, a sensibility that in part came from another form of knowledge that had accumulated over time – ethnological data on the beliefs, practices and customs of Pathan tribes.

A chapter on the characteristics of the Waziris and Mahsuds to be found in the 1935 Waziristan military report contained a substantial amount of ethnological data. The two tribes, the report began, were essentially pastoralists who moved their flocks according to the season. They also lived in village settlements where some agriculture was practiced. These villages, like other Pathan communities in the mountains, contained defensive towers, and the usual directions on how to knock them down followed. The chapter also discussed tribal dress, food and drink, marriage and divorce practices, feuds and funerals, cemeteries and religious beliefs. The last of these contained a characterization of Waziri and Mahsud religious convictions that were repeated in most sources on the hills tribes from the second half of the nineteenth century forward. While ostensibly Muslims, the tribesmen's religious observances were not strict and they had "no intelligent knowledge of the Mohammedan law as conveyed by the Koran". Their religious leaders were, moreover, reported to be mostly ignorant and illiterate. These religious failures were coupled with other negative elements common to the type. Women were badly treated, and if they refused an arranged marriage contract, might be killed by the clan. No records were kept of marriages, births or deaths, all of which marked the hill tribes as existing at some primitive stage of evolution. Lastly, and perhaps most damning, if there was something like social life in these tribes, it was "honey-combed by the blood feud" (General Staff, India, 1936: 167–173).

But if tribesmen demonstrated a "primitive" way of life, individually and collectively they were impressive warriors. In a section labeled "Tactical" in the ethnological chapter, the report waxed eloquent, with

³⁸ *Frontier Warfare – India*, 1939: 169–72; a less detailed version appears in Army Headquarters, India, 1925: 48. *Frontier Warfare's* section on village destruction also appears to be a synopsis of Villiers-Stuart and Skeen, the latter of whom is one of the authorities mentioned in the manual's bibliography; see Skeen, 1932: 124–27. Villiers-Stuart laid out in detail the division of labor for village destruction and emphasized the need for organization and speed; see 1925: 71–75.

a certain degree of admiration, on the adaptability and military ingenuity of these groups. The Waziris and Mahsuds, we are told, were formidable in the mountains, where their intelligence system never failed to pick up the first signs of British incursions. Immediately, grain would be buried, women, children, cattle and sheep would be sent to safe havens, and the tribesmen would await the first opportunity to pounce on any error made by the British. They attacked rearguards and ambushed rescue teams; pinned down columns front and rear and sent "knifing parties" into the supply train to steal weapons and ammunition; and mounted rapid counterattacks, decoyed infantry units into traps, and disappeared into mountain defiles, only to reappear on high ground sniping at the British column.³⁹

Over the years, the Waziristan tribes had also developed a variety of ruses that targeted frontier outposts. A funeral cortège might conceal rifles under a white sheet where a body was supposed to be. Telegraph wires were cut to lure work parties out of fortified posts. Posts were sniped at from long range in the hope of tempting the garrison to send out a patrol. Tribesmen sometimes dressed as women to get close to Indian Army soldiers and then knifed them. Any separation between sections of British troops on the march to or from an outpost was swiftly exploited. Stones were thrown at sentries to distract them. Tribesmen tunneled under or dug through the walls of arsenals to steal guns and ammunition. And if an armed man was tunneling, his rifle was attached to a string so that if he were caught, an accomplice could pull the gun out to safety. Waziris and Mahsuds had even acquired khaki cloth so they could disguise themselves as Indian Army soldiers. And perhaps most disturbing, they had also joined the Indian Army to learn British tactics and walk off with British rifles! (1935: 173–81).

It should be clear that this accumulation of a certain kind of information, much of it acquired through bitter practical experience from the point of view of the British, was invaluable to the imperial security regime. These various genres of reports and field service handbooks functioned as a critical means for "passing it on," to use a phrase employed by a veteran frontier officer,⁴⁰ conveying to rookie officers

³⁹ This tactical ingenuity was perhaps a reason that the following lesson appeared in capital letters in *Frontier Warfare*.

PATROLS MUST BE THOROUGHLY AGGRESSIVE AND INQUISITIVE AND, AT ALL COSTS, AVOID ROUTINE HABITS AND STEREOTYPED METHODS. IT SHOULD BE THEIR IDEAL NEVER TO DO THE SAME THING TWICE IN THE SAME WAY. (1939: 165)

⁴⁰ This is the title of a work by Gen. Sir Andrew Skeen cited above.

fundamental colonial knowledge not simply for keeping the “peace,” but for surviving any length of time in an extremely hostile environment. Yet, it was also the case, as we have seen, that the very same encounters that were fraught with danger were also ones in which the hill tribes demonstrated martial qualities that the British both admired and sought to incorporate into the Indian Army.

Indeed, after the quelling of the Sepoy Rebellion of 1857, the British had come to rely on what they referred to as the “martial races” of India to staff the army.⁴¹ Handbooks from the first quarter of the twentieth century for Indian Army recruiters identified these races and enumerated their essential qualities.⁴² These books contain material on characteristics similar to that found in the military reports and field service handbooks. There were recruiting manuals, for example, for Garwalis (Evatt, 1924), Sikhs (Barstow, 1928), various Muslim “races” and Gurkhas (Morris, 1933, 4th edn.). The one on the Dogras is of particular interest because of the detail it provides on life-cycle ceremonies such as births, initiations, betrothals, marriage and funerals. Why would this sort of detail be important for officers to know? Apparently because they were expected to allow Dogra soldiers to take leave of absence for a specified period of time for one or another of these ritual events. Substantial information was also provided on Dogra cooking, eating habits and cooking utensils, as well as on village life, housing and furnishings, laws of inheritance and adoption, and the position of women in Dogra society (Cunningham, 1932: 75–83). This sensitivity to and willingness to adjust to the beliefs of the martial races are significant, especially in contrast to British behavior towards the hill tribes.

First, the concern with Dogra culture demonstrates the capacity of the British to understand or at least accommodate the practices of others, provided, of course, that there were good reasons to do so. Second, the kinds of material compiled in the recruiting handbooks fitted nicely within the overall structure of the information system embedded in

⁴¹ The “martial races” were, in order of importance, descendents of the Aryans, the Rajputs, who were subdivided into Hindustani and Punjabi branches; Sikhs, Jats and Gugars; and the Pathans and Moguls within India. On India’s frontiers, mountain fighters such as Pathans, Afghans and Gurkhas were also recruited. Each of these populations was organized into single race units commanded by British officers. For a study of the British notion of martial races see Streets-Salter, 2004.

⁴² The handbooks were, of course, not the only sources compiling racial characteristics of the “tribal” peoples on the Northwest Frontier and in Central Asia. There were various reports done in and outside of the Intelligence Branch, as well as translations of Russian works on the peoples of Turkestan. For a report on Muslims in the Punjab, see Harris, 1901; on the Waziri tribe, see Mason, 1893; and for an example of a translation from the Russian, see Chief of Staff’s Division, Army Headquarters, Simla, 1909a: 22–42.

the security regime. The military apparatus required a reliable indigenous source of manpower to perform its various functions. But it also needed to be able to rely on that manpower to be loyal and dependable on the battlefield. One way of doing that appears to have been through insuring that no British officer would violate the “belief system” of his soldiers. Third, a willingness to engage in a less hostile manner with the beliefs of recruits from the martial races seems to have been widely shared. Although tempered by all sorts of negative stereotypes about their “character,” this flexibility even extended to Pathan recruits.

A 1910 handbook compiled by Maj. R. T. I. Ridgeway demonstrates how a discourse on martial races could allow other forms of knowledge about Pathan characteristics to enter into consideration. After repeating the usual litany of Pathan shortcomings – weak grasp of the tenets of Islam, susceptibility to fanatical calls for jihad by mullahs, treacherousness, absorption in endless blood feuds, and so forth – Ridgeway went beyond the usual ethnological accounts to be found in military reports, particularly with respect to religious beliefs. He was aware, for example, of the Pashtun term for holy personages. *Pirs*, he noted, “are credited with supernatural powers to cure diseases, avert evils, and grant the desires of their clients” (1910: 33). Even more intriguing was his identification of burial shrines of holy men or *ziarats*, which he believed were associated with fertility, healing and special requests of supplicants who left offerings at the shrines (Ridgeway, 1910: 1, 14, 28–42). There is no mention of superstition, nor did Ridgeway denigrate these beliefs. Instead, he presented them matter-of-factly, as if they were important for recruits and officers who might have Waziri or Mahsud troops in their units. The absence of any such accommodation to the beliefs in military reports and field service manuals, except with regard to cemeteries and mosques, therefore seems all the more striking.

As has been shown, military reports, field service manuals and recruiting handbooks all carried practical information to guide one or another sort of action. The material available in them, moreover, concentrated information acquired over time by successive generations of staff and intelligence officers. These genres of army publications thus served as an official archive of collective memory on the particular topic they covered. Through periodic updating, these genres of information management could be understood as authorities on the subject of the Northwest Frontier. Yet they were also an odd kind of authority. Recipients of these publications were told, for example, that the latest edition superseded the previous edition, which should now be destroyed. These works were not, in other words, involved in a comparative historical or ethnological project in which detailed records of past situations other than warfare

held any value. The collective memory in question was one that passed on distilled essences, as if the populations and territories they described were stable, changeless and manipulable by means of the ever more perfect and current knowledge contained in the manuals.

The vast effort by intelligence agencies to control terrain and populations through texts had consequences and effects. All Dogras were essentially the same, as were all Pathans. The two groups were also essentially different from each other, a difference that was marked by insisting that they were dissimilar races. At the same time, however, there were clear contradictions in these distinctions, for not all Pathans were treated exactly the same. Some of them, those who might serve in the Army, had beliefs and practices worthy of consideration; others – as military reports, campaign accounts and, as we will see in the next chapter, popular media emphasized – had beliefs that were clearly those of a superstitious and savage people. This bifurcation of the Pathan via recruiting handbook and military report pointed, moreover, to a fundamental and irresolvable tension within the security regime. It became crucial to understand the extent to which the martial races could be relied upon to support the British Raj. Were the Pathans hopelessly backward outliers or simply more open in their expression of hostility to the British than the other martial races? Neither military statistics nor field manuals for savage warfare provided answers to these questions. However useful military reports might have been for planning operations, however much field service manuals might guide the inexperienced, and however useful handbooks might have been for recruiting Dogras, they also carried a set of disturbing characterizations and stereotypes that provided the ideological ground to justify ruthless treatment of those who resisted British rule and cast suspicion on some of those who appeared to be loyal.

Planning and training regime

War games and staff rides were made up of an ensemble of directed exercises designed to train officers in the complexities of modern warfare. At the heart of these exercises, at least ideally, was the practical application of military knowledge. Officers were supposed to learn how to deploy the materials from their intelligence sources under actual field conditions. Games and rides allowed them to accomplish this objective in a linear temporal sequence that moved from the planning room (map exercises and tabletop war games) to the terrain of the hypothetical battlefield. In the process, the overseers of the training regime

advanced by war games were able to establish a set of standards against which success or failure could be measured.

As the German model indicated, officers or teams of officers, along with the textual and representational resources they had available, could be assessed at any stage of the procedure and critically evaluated, while deficiencies that emerged in the course of the exercises could be pinpointed. The three aspects of military exercises – application of military knowledge to planning, performance of a set of field tasks and evaluation of results – made it possible, in theory at least, continually to refine and upgrade war plans, to bring them in line with the latest technological innovations, and to utilize the most recent enhancements to communication lines.

An intelligence exercise that took place in India in 1913, though unique in comparison to those discussed earlier, demonstrates both the adoption of a training exercise model similar to that of the German Army, and the relation between genres of intelligence discussed in this study and war-planning.⁴³ The preface to the exercise report claimed that it was designed to be “practical and instructive,” as well as “purely experimental,” which gave it a distinctly different cast from previous war games and staff rides in India. The differences were fourfold. First, the exercise was organized around an actual historical event, Hyder Ali’s invasion of the Carnatic region in 1780, an assault that threatened the protective alliance the British had forged with the Nabob of Arcot. Second, the participants were asked to draw on, and incorporate into their solutions, a substantial amount of primary source material, including both the campaign records from 1780 and contemporary route books, military reports and various other kinds of intelligence materials on southern India.⁴⁴ Third, the exercise was organized as a set of clearly defined tasks that each participant was expected to complete with an appropriate written report. The tasks were broadly divided into two parts: preparatory work completed before the outbreak of (re-enacted) hostilities and war intelligence in the field. The two parts were subdivided into schemes or six “special ideas,” each of which was designed with well-defined objectives (not unlike a teacher’s lesson plan) to teach a specific set of skills. The product of each special idea was then evaluated, discussed and graded before proceeding to the next one. Prior to

⁴³ See General Staff, India, 1913. There is no continuous pagination in the copy of the report located in the India Office records. Instead there are individually titled and paginated portions, all of which begin with the header **Intelligence Exercise. Army Headquarters, 1913**, followed by a title for the individual parts. I will provide the title of the part in the first citation of it in a note and the page number in text.

⁴⁴ From the “Introductory Lecture by Director,” 1–10; cited hereafter in text as ILD.

the beginning of the exercise, officers were expected to have familiarized themselves with a set of readings, including the current field service regulations, the Staff Manual of War, a work on the principles and practices of field intelligence, and a historical account of Hyder Ali's invasion of the Carnatic, with information on his forces and on himself as a commander.⁴⁵

The exercise was introduced by Col. Bingley, the director of the program. In his comments, Bingley emphasized the importance of intelligence work and the necessity for being aware of the special characteristics of warfare in Asia. After drawing attention to two forms of intelligence (peacetime and wartime), Bingley proceeded to identify what he termed "the working tools of the modern intelligence officer" (ILD, 1). These were the genres of intelligence discussed throughout this study, all of which were the products of peacetime intelligence and the raw material from which a peacetime plan of war was constructed. Conversely, while these tools were presumed to remain useful after a war began, they were seen as in and of themselves insufficient for wartime intelligence. New sources of information would have to be cultivated, which often meant that intelligence officers had to be prepared to acquire data on the enemy under difficult and dangerous conditions.

Having drawn the distinction between the two kinds of intelligence, the director observed that few officers at the time actually had experience of wartime intelligence. Moreover, such experience was impossible to recreate in maneuvers or war games, owing to the actual conditions of the battlefield and "the fog that obscures all its proceedings" (ILD, 2). Still, there were things that could be done to prepare officers for wartime intelligence collection. They could, for example, be trained in the best ways of using source materials – understanding in practice their virtues and limitations – for planning military campaigns. Through exercises like war games, officers could also learn the specific tasks related to wartime intelligence. In either case, the exercise at hand was designed to stimulate powers of deduction. Intelligence work, "like detective work, was the art of following up clues and piecing together scraps of evidence, so that one could build up a theory, based upon reasonable suppositions and inferences, as to what the enemy has done or is likely to do" (ILD,

⁴⁵ A complete list of preliminary readings are on p. iv of the prefatory material. Included are two volumes of *Field Service Regulations*, the second of which contained an "Indian Supplement" (see General Staff, War Office, 1909). The staff manual in question was probably the 1912 edition, which was also labeled provisional; see General Staff, War Office, 1912.

4). Good detective work involved, in turn, the methodical organization of information in the form of registers and summaries (recall Collen's description of the activities at the Intelligence Department in London). Good detection also meant testing sources such as route books and military reports for their accuracy and the extent to which they were current (ILD, 5).

Some of the tasks the participants would perform were outlined in War Office staff manuals, but officers also needed to be aware of the peculiar conditions of warfare in Britain's Asian empire. If hostilities broke out in Afghanistan, for example, the British might have to address disturbances in the rear, meaning the Punjab, caused by "religious fanaticism" (ILD, 6). Thus, intelligence officers had to be prepared to work with the internal security regime in India while planning and executing military operations in Afghanistan. Colonial warfare, it would seem, meshed the internal and external elements of the security apparatus in ways other than those contemplated in Europe, where the issue was one of enemy spies infiltrating the strictly territorial state.

The director then turned attention to a subject that does not appear in the war games and staff rides previously discussed: the psychology of enemy leaders, by which he seems to have meant "the study of character" (ILD, 8). The sources for this sort of evaluation were the Who's Who documents that had long been compiled by intelligence officers. While acknowledging that character study was a difficult task in Asia – information was not as readily available or as accurate as that produced by British military attachés on the psychologies of German, French and Russian officials – Bingley argued that the best effort had to be made, even if the outcome looked like a cross between "Burke's Peerage and a Scotland Yard Black List" (ILD, 9).

Having raised the issue of the psychological study of native leaders, the director went further to highlight the importance of understanding Asian "character, customs, and prejudices." "The oriental mind," he explained, "is subtle and suspicious, it loves crooked ways, and is full of inconsistencies. You meet Indians who are secretive to a degree, and yet who are so vain that it may be said that natives are far more affected by sentiment, that is to say by the influence of sympathy and a kindly manner, than by reason, logic or abstract justice" (ILD, 9). While there is nothing particularly unusual about this characterization – it is standard issue Orientalism – there is something intriguing in the director's recommendations for how officers could learn more about "the oriental mind" particular to India. Now available in translation were numerous autobiographies and biographies of important Oriental personages,

as well as books such as *The Confessions of a Thug* and *From Sepoy to Subadar*.⁴⁶ The idea that officers should familiarize themselves with these sources was pointed out in a footnote, and readers were directed to an appendix listing additional memoirs.

Even more fascinating, Bingley recommended that another useful resource was the Christian Bible. "There are no works," he explained, "which reveal the life and character of orientals, and more especially of orientals of the Semitic type, such as Afghans, Pathans, Baluchis, and certain classes of Indian Musalmans, more clearly than the books of the Old Testament." In addition to providing numerous character studies, he said, the Old Testament also contained telling examples of the Semitic tendency to religious fanaticism, a trans-historical characteristic evident in the past through the Jewish assault on the altars of Baal, and in the present in the form of Muslim jihads (ILD, 9). In sum, therefore, if officers relied upon existing intelligence sources, used their powers of deduction, and studied the native mentality, which like the minds of Afghans and Wazirs was stable and fixed over vast stretches of time, officers ought to be able to evaluate native leaders and their forces.

Instruction began with Special Idea No. 1, which itself was prefaced by the goals of the exercise.⁴⁷ The purposes of the first exercise were to teach officers to organize an intelligence service that would fill the needs of external and internal security, and to aid officers in identifying information required by the intelligence unit and how to obtain such information. An overall objective was to demonstrate to participants that intelligence work in peacetime was necessarily concerned with preparation for war, and that such work needed to be continuous in order to insure smooth transitions from peace to war. Having established the justification for a permanent war-planning regime, Special Idea No. 1 also strove to make clear the importance of sharing information with civil, political and military authorities "to insure reciprocity and cooperation."

Special Idea No. 1 was also designed to demonstrate that intelligence involved more than estimates of the strength of enemy forces and the topography of potential battlefields. Intelligence officers also had to obtain and organize military statistics on all matters that might affect the conduct of war, including the civil administration and finances of the enemy, their medical services, supplies, transport, war materiel and

⁴⁶ The first of these autobiographies refers to participation in the so-called murder cult of the goddess Kali; the latter refers to a military career begun as the equivalent of a private and promotion to an officer.

⁴⁷ There is no pagination for "Special Idea No. 1": it simply follows immediately upon the Director's introduction and is dated January 1, 1912.

manufacturing resources, their alliances and internal political stability, and the character and capabilities of their leaders. With the exception of the last item, this list is part of the filing categories for information assembled in military reports. They were also among the main categories of military statistics that had been defined by the German and Russian General Staffs some six decades earlier.

Having indicated the kinds of information that ought to shape written solutions, Bingley's assistant, Col. Dirom, transformed the particular objectives of the exercise into an official order (again following the German model) directed at pairs of intelligence officers who were to work together in writing an "appreciation": this was the technical term for their response to the special idea. The order indicated that at the time of the Hyder Ali invasion that formed the basis of the exercise (1780), no intelligence organization existed in the Indian Army. Thus, the first step for the war game was to create one. At the disposal of each pair of participants were six British officers and one officer of the native army. Dirom explained that the participants were to determine the best use of their staff, identify the information that was required, determine the best methods for obtaining the desired information, and expect that the organization proposed would be immediately adaptable to warfare. Officers were to complete Special Idea No. 1 essentially in the dark – they were told that little intelligence existed "at present" because civilian authorities had forbidden the creation of an intelligence unit. Each pair of officers was then expected to construct a plan that would be a systematic approach to the collection of the information necessary for the initial stage of planning.

Although the responses of the officers were not printed in the report, we can deduce them from the director's comments on Special Idea No. 1 that follow upon it.⁴⁸ After observing that the way decisions were reached was more important than the decisions themselves, and indicating that all that was required was an outline scheme of systematic steps to be taken in forming the intelligence unit and obtaining information, the director noted that the main problem in all of the appreciations was "failure to apply general principles to a special case." By this he meant that officers had parroted principles culled from training manuals and the Staff Manual for War, the latter of which, as he pointed out at the end of his comments, produced a "war organization applicable to peace, not a *peace organization applicable to war*" (emphasis in the original). Second, knowledge garnered from books required testing

⁴⁸ "Director's Comments on Solutions Submitted to Problem Set in Special Idea No. 1," p. 2; cited hereafter as DC1.

in an actual case before it could be applied. Only through such tests could one come to an understanding of the circumstances under which a departure from the manual might be permitted.

The director then turned to the structure of appreciations. Ideally, this would be what Bingley called “form at a glance.” The written document must be put together in such a way that the reader, in this case a superior officer, might grasp the “essentials of the case with the minimum of trouble and in the minimum of time.” To achieve instant clarity, appreciations ought to:

Avoid long and complicated sentences with *a string of dependent clauses*. Write clearly, break up your text into paragraphs of convenient length, and number them for *facility of reference*. Introduce headings and marginal references wherever they help to make things clearer, and lose no opportunity of showing conclusions or proposals in *tabular or graphic form*. (DC1: 2; emphasis in original)

This early twentieth-century version of the executive summary was, of course, the kind of technical writing in which officers were supposed to have been trained at the Staff College and in the Scientific Corps schools. It is also the basic form of writing and structure to be found in *précis* military reports, staff manuals and field manuals. By beginning with the mandated structural form of the report, the director’s comments suggest that in addition to providing an opportunity for officers to share a common experience of staff planning, part of the experimental element of this particular war game involved continued education on how to make reports legible to the trained eye of superior officers – hence, “form at a glance.”

The director then addressed the issue of the “special case,” that is, war in Asia. Bingley explained that the staff manual officers had been asked to review prior to the exercise was designed to meet the requirements of an expeditionary force entering a country equipped with all the resources of a “civilized state.” It had, in other words, been organized like the continental war games and staff rides then occurring in Britain under the Directorate of Military Operation. In places like “India, Afghanistan, Persia and China,” however, it was necessary to make certain modifications to the regulations and procedures laid down in the manual. In Bingley’s view, two of the fundamental elements that distinguished Asia from Europe, thus requiring modification of the directions to be found in the staff manual, were the nature of the population and the nature of the state (DC1: 3).

The oriental, Bingley observed, was a born intriguer. Consequently, officers had to keep “constant vigilance” over religious and political movements that might affect the internal security of European colonies

or “affect the discipline” of native troops. Asian empires came, in other words, with built-in fifth columns, a situation that required internal surveillance in any conflicts with an external enemy. Second, Asian states maintained such a “low standard” of military and administrative structure that they could not be relied on to produce the kind of military statistics published openly by European states. Further, communication lines in Asia were either “defective or non-existent,” with nothing like the network of motor roads and railway lines that existed in Europe. Hence, intelligence work in Asia was far more laborious, requiring consistent efforts to develop reliable sources of information and needing special reconnaissance techniques that could collect factual material on military resources, routes and so forth. The resulting intelligence products, “Gazetteers, Route Books, and Military Reports,” were intensive works in progress, requiring repeated and diligent updating. For the army to stay current, however, required a special kind of intelligence network, one made up in part of native soldiers in the Indian Army who had been trained to do surveying and to gather intelligence. Lest the participants should not fully appreciate this point, Bingley drew on a historical example. Col. Mark Bell, a key member of the original Intelligence Branch of the Indian Army, had been able to carry out a successful reconnaissance of Persia by relying on the valuable service of Sha Sowar of the Corps of Guides (DC1: 3–4).

These, then, were the elements of the “special case” that had to be figured into the appreciation of Special Idea No. 1. Insofar as the Staff Manual produced in London could be useful, Bingley argued, it was as a foil to the practical realities of how the British actually needed to operate in conditions of uncivilized warfare where the natives were both intriguers and, when properly trained, invaluable sources of information on military geography and statistics. Thus it was important not to draw too literally from the staff manual for an organizational form. The more primitive state of warfare in Asia required, it would seem, a military organization built along different lines.

It should be clear from this review of the director’s comments that the evaluation process went well beyond assessing the success or failure of textbook notions of plans of action. Officers needed to demonstrate in their responses an awareness that conditions in Asia differed from those in Europe, and they had to develop an understanding of how to address those differences. At the very least, such a demonstration required a thorough familiarization with a pre-exercise reading list and a command of the intelligence forms particular to the case at hand. Having grasped these points, participants then had to organize their solution to the problem through a disciplined form of writing.

The appreciation was to be written in short, declarative sentences with key words in the margins, allowing the particulars of the report to be absorbed “at a glance.”

As a guide to participants, a “correct” solution to Special Idea No. 1 followed Bingley’s assessment of the appreciations. Included in the solution was a table of organization for an intelligence unit, with duties clearly laid out and a list of assignments for the number of officers who had been mentioned in the original order prepared for the 1913 exercise by Dirom. There were also plans for obtaining information on Hyder Ali’s forces.

The peacetime part of the exercise was then linked to the wartime portion by a narrative of imaginary events that had taken place, not in 1780, but between January and April 1913. In Special Idea No. 2 participants were provided with information about the current disposition of British forces and a collection of military intelligence sources, including route books, military reports, a *Who’s Who of Mysore*, a handbook on the Mysore Army, and maps of southern India and the Carnatic, few of which would have existed 130 years earlier. Using these resources, officers were to prepare a 1500-word appreciation on the appropriate strategic disposition and concentration of British forces, as well as the expected deployment of the forces of the opposing side. In addition to planning the geographic placement of British forces, they were also to draw on current military reports and route books to produce an analysis of supply and transport requirements, including an assessment of available resources in the campaign area. The purpose of organizing Special Idea No. 2 in this way was to impress upon officers both the positive value and the limitations of route books and military reports, the necessity of concentrating forces appropriately, and “the close connection between strategical and tactical moves and administrative and financial requirements.”⁴⁹

If one recalls the plans and reports concerning the defense of India that we have seen from the time of MacGregor forward, it is perhaps notable here, in Special Idea No. 2, that a new realism is evident in the planning of exercises and in the training of officers. It is as if the many negative messages sent from London concerning Simla’s methodology of formulating plans for the defense of India had finally found purchase. The exercise documents also point to the practical use to which intelligence genres were being put in peacetime. They were critical elements,

⁴⁹ This is a summary of the “Objects of the exercise,” that follow immediately upon the second special idea. As in the previous case, Bingley’s comments appear next, followed by the correct solution.

the raw material for creating through pedagogy and disciplined writing forms a peacetime organization that could adjust immediately to a state of war.

The remainder of the exercise followed the same structure. Special ideas were presented one after another, officers worked up solutions in their appreciations, the director critiqued the submissions, usually emphasizing local practicality over creativity, and the exercise ended with a sample correct solution. The second part of the exercise, as noted earlier, shifted to wartime intelligence. Thus, each of the exercises in part two was structured around activities in the field. Special Idea No. 3, for example, tested the participants' abilities to summarize the battlefield situation on a given day. They were to encrypt the summary and dispatch it to headquarters, along with a map showing the current disposition of forces and including an intelligence diary containing a register of communications between headquarters and units in the field. The purpose of the diary was to impress upon officers the necessity of keeping orderly records of communications, ones that could then be transformed into concise summaries for superiors. Special Idea No. 4 was designed to provide officers with practice in compiling a simple graphic presentation emphasizing the close connection between supply and the operations of war. Special Idea No. 5 involved the use of a spy network and information gathered from a variety of other sources, all of which had to be systematically organized in such a way as to draw credible inferences that would, of course, be reported to command. And the last, Special Idea No. 6, dealt with the compilation of reports on the distribution of enemy forces, the preparation of a visual panorama to indicate the distribution and a suggestion of a plan of attack.

From this summary of its structure, it should be clear that the 1913 war game was designed to teach officers working under the special conditions related to warfare in Asia how to construct a war-planning regime and how to perform as staff officers in such a regime. But it was more than this. Bingley indicated as much when he announced to the participants that he had been asked to report on the clarity of the Staff manual. This request came from the War Office, and as such, makes an important point. It signals the emergence of a more congenial relation between Simla and higher authorities in Britain. Bingley made clear in his remarks that military officials in Britain were interested in the Indian war game as a practical test of the manual. Such testing was able, in theory at least, to align the practices of the Indian and British armies, thus achieving the kind of cooperative interaction that the Committee of Imperial Defence and the General Staff in Britain hoped to foster.

An improved relationship with London had another significance as well: it signaled that a training and planning regime set in place by a succession of army reforms after the Boer War was now established in India. The systematic steps officers took as they worked through the exercise, each of which sought to develop a different skill set, with one building on another, was consistent with state-of-the-art staff training in Europe, particularly as exemplified in the Imperial German Army. At the same time, however, as sophisticated as the training exercise of 1913 was, it missed a critical point. The Indian Army had essentially been engaged in “savage” warfare since its reorganization after the 1857 Indian Rebellion. The bulk of this actual military activity had occurred on the Northwest Frontier of India. But the records reviewed in this chapter indicate no signs of a training regime – at least on paper – for the kind of guerilla warfare that had long been under way on the Northwest Frontier. Nor did there seem to be exercises that sought to deal with the particular logistical challenges that the Punjab–Afghan mountains posed to the Indian Army. And although officers like Bingley might emphasize the differences in warfare in India, as noted above, pamphlets and more robust field manuals on the special case of frontier warfare were not compiled and published until after World War I.

If the training regime seemed oriented to realities other than those the army had been facing in India, the intelligence genres discussed here raise different sorts of issues. As we have seen, they could be turned to rhetorical and perhaps even ideological account, as MacGregor and, to a degree, those who commanded the Indian Army had done when it suited their purposes in debates with London over border policy and army funding. But these instances of what might be understood as the misuse of intelligence seemed only to involve privileging one fact over another, or ignoring facts that did not support a particular position. More unsettling than a rather predictable manipulation of facts was the character of what passed for factual information. The common-sense Orientalist knowledge that Bingley propagated, constructing Asia as a special case of “savagery,” with a number of failings and shortcomings, is disturbing enough. Far more unsettling, however, was the essentialization of the martial races and the systematization and naturalization of particular characteristics imputed to those who resisted British hegemony in the region.

Equally troubling was the sort of “authentic” material that was supposed to provide novices with an understanding of the oriental mind. Consider, for example, two of the sources Bingley recommended. The first of these, *Confessions of a Thug*, was admitted by the author, Philip Meadows Taylor, to be a novel, although one purportedly based on such

a confession having been made to him by a prisoner of the East India Company named Ameer Ali. In this tale, while captive Ali turned in other Thugs and recalled in vivid detail his many murders, including that of his own sister.⁵⁰ It is not simply that this peculiar product of the Anglo-Indian encounter should give pause regarding its “truth” value, but also that it was one of those staple forms of “knowledge” of the indigenous that served, like *sati*, to justify British rule in India.⁵¹

The second work recommended by Bingley is equally suspect. It is a translation into English of a memoir of an Indian soldier, Sita Ram Pandey. Yet, as researchers of the “memoir” invariably point out, no original seems to exist. Moreover, the translator, James Norgate, in an 1873 edition of the work, claimed to have first published his translation ten years earlier in a defunct Indian periodical that was enthusiastically reviewed by *The Times*, but neither claim can be verified. Nevertheless, Norgate’s English translation was later retranslated into Urdu and became a staple text for the training of British Army officers in that language. Walter Hakala suggests that one reason for the work’s popularity was that it delivered an “authentic” Indian voice, one that had difficulty with facts and temporality, two well-known oriental characteristics, but was also loyal and grateful to the British for having been allowed to serve in the army.⁵²

But perhaps more importantly, in the framework of “mythical spaces” (Slotkin, 1990) like Afghanistan and the Northwest Frontier, where nightmares of Russian invasions and the necessity of punitive actions became a norm, and an India populated by the loyal sepoy and savage Thug, the fanatic became an epistemological category. He carried specific, uniform traits: ignorance (even of the Koran and Islamic law), superstition, intrigue and irrational hatred of the British. Those who followed the fanatics were by definition savage, which was also an epistemological category still current in anthropology (for example) several decades after Bingley’s reports.⁵³ The truth value these categories gained over the decades during which military intelligence developed in Asia produced and justified from one generation to the next the forms of violence directed against the various Pathan tribes. This truth

⁵⁰ First published in 1839, the three-volume work seems to have remained in print throughout the nineteenth century and was reissued by Oxford in 1985.

⁵¹ For a critical engagement with the *Confessions*, see Poovey, 2004. On the fantastic qualities of British reporting on Thugi, see Gordon, 1969.

⁵² See Hakala, 2005. Safadi provides an overview of the publishing and translation history of the work, scholarly interpretations, and a convincing argument that it is a forgery; see 2010.

⁵³ See the introductory chapter in Trouillot, 2003.

not only normalized punitive actions as a military necessity – hence they could be systematically organized like mere drill – but asserted that such measures were what the Pathan expected from the “civilized” British. On this line of reasoning, had the British not blown up towers and destroyed orchards, the Pathans would have held them in contempt. Such fantasies inscribed within the scientific rationality of the security regime elements that blurred and confounded the line between fact and fiction, between the imaginary and the real.

8 The effects of the imperial security regime in Asia and Great Britain

In the last chapter, we saw how the products of intelligence – route books, military reports, handbooks and precision maps – were used as basic resources in a variety of ways within the British imperial security regime. These sources were at times manipulated to produce a desired outcome (e.g., gaining more support in Britain for Indian Army initiatives) and at other times called as evidence to question the arguments and calculations of strategic interlocutors. Intelligence genres could be used as authoritative evidence precisely because they were imagined as ideologically neutral, a collection of empirically observable facts. But I have also argued that factual representation could be skewed and prejudiced in struggles over resources or when stereotypes and fictions about characteristics of those who resisted the British entered the picture, creating blind spots that had long-term effects on policy and on the populations affected by the security and information regime. In this chapter, I want to explore how the effects of the imperial security regime expanded beyond the specialized points of view discussed in previous chapters. In order to provide some sense of what I believe were far-reaching effects, I consider military reforms in Japan and China, Pathan resistance to the British on the Northwest Frontier, the construction of colonial and imperial conflicts as “small wars,” public discussion in Great Britain concerning India’s security, and popular representations in Britain of colonial warfare. I begin with the making of new armies in East Asia.

Japan, China and new armies

The Intelligence Branch of the Indian Army considered East Asia part of the security system that protected India and British interests in Asia. By the 1860s, British efforts to secure imperial interests in the East had resulted in two invasions of China involving Indian Army troops (1839–42, 1857–60), as well as a naval engagement with Japan. The upshot of these violent encounters was a new order in the region, one

that was institutionalized in treaties that gave Great Britain and various Euroamerican powers special privileges across the region. Treaty “rights” included low tariffs on foreign goods, most-favored-nation status, permanent diplomatic legations in the Qing capital at Beijing and in the Tokugawa Shogunate’s capital at Edo, and the right to open new ports to western trade. In these treaty ports, foreign nationals lived outside of local jurisdiction (in other words, they enjoyed extraterritoriality) and could only be tried for crimes by their own consuls. The net effect of these so-called unequal treaties was to embed colonial enclaves within an increasingly troubled Chinese and Japanese sovereignty. And when treaty rights were perceived to be infringed, they were backed by military force. The justification for the Second Opium War (1856–60), for example, invoked in the rhetoric of the officials in Britain and France, was the charge that treaty rights had been violated by the Qing government.¹

This particular expression of the British military-diplomatic apparatus was, however, unusual in a number of ways. First, it not only sought to protect the British right of access to China, but also enmeshed other European powers, the United States and eventually Japan in a legal structure – based on a series of treaties resulting from military action – the integrity of which Great Britain guaranteed both militarily and diplomatically. Second, by forcefully placing their own security interests ahead of those of other sovereign entities in East Asia, British diplomats and military leaders asserted that the region was an exception to “normal” balance of power in international politics. Yet, at the same time that China and Japan were increasingly denied control over their relations with western powers, they were also forced to comply with European rules of state-to-state relations or “international” law. Chinese and Japanese leaders were compelled, in other words, to alter their modes of governance. Moreover, if they were going to defend themselves against what they understood as foreign aggression, some leaders realized that they had to acquire the means to resist. New weapons and new armies were required, and new ways of making war had to be learned. China and Japan were forced to modify their security regimes, producing ones that would by necessity be hybrid formations, if they were going to regain control of their external relations. The development of such regimes began in the two countries in the 1860s. I take up

¹ North China was invaded in 1860 by a joint British and French force. The Qing capital at Beijing was forced to surrender, and the emperor’s Summer Palace outside the city was looted and destroyed; see Hevia, 2003: 29–118.

changes in Japan first, in part because certain military developments there had direct effects on China.

Japan and the construction of a military apparatus

In 1858, Japan was drawn into the emerging new order in East Asia when representatives of the United States persuaded the Tokugawa Shogunate that it could avoid the sort of violence visited upon China by peacefully agreeing to “open Japan.” The result was a treaty of “Amity and Commerce” that looked much like the accords signed by the Qing dynasty, and soon after the treaties came into force the United States and European countries established legations in Japan. Discontent with the foreign presence soon emerged, culminating in a one-sided military confrontation in 1863, when a British naval fleet bombarded the coastal town of Kagoshima in retaliation for “outrages” against foreigners in Japan. Although this encounter was minor in comparison to British assaults on Chinese cities, the incident demonstrated to the Shogunate the superior military technology of the European powers. The government became determined to improve Japan’s security by obtaining European weapons and building a new army along European lines. In order to do the latter, Japan’s leaders decided to hire foreign experts, in this case, military instructors from Europe.²

Having determined that the French Army was the premier military organization in Europe, the Japanese government contracted for a small number of instructors to be sent in 1867, but their efforts were interrupted by civil war in Japan. After the dissolution of the Shogunate and the formation of a new government with the Meiji emperor as its head, a more robust French mission arrived in 1872 – some twenty-five instructors in all.³ For the next five years, French officers and non-commissioned officers drilled the Japanese recruits, taught them military ceremonies and courtesy, and instructed them in the care of equipment and uniforms, the style of which was European pants and tunics. Technical classes stressed the responsibilities and tactics of units from the battalion level down to the company. Although some senior officers objected to the emphasis on small unit operations, in part because such exercises ignored issues of strategy, the French were convinced that the Japanese were not prepared to deal with more complicated maneuvers until training at the lower levels was fully incorporated into the army.⁴

² For a more detailed overview of these events, see Jansen, 2000, chapters 9–11.

³ Drea provides the following figures on the French instructors: 25 in 1872, 24 in 1873, 37 in 1874, 43 in 1875, 38 in 1876, and 13 in 1877; see 2009: 276–77.

⁴ Drea, 2009: 57–58, and Presseisen, 1965: 67.

Nevertheless, more complex institutions began to appear. An Army Staff Bureau was formed in 1871 and became the General Staff in 1878. At that time, the staff was also separated from the authority of the Ministry of Military Affairs and, following the Prussian model, placed directly under the emperor. In 1875, a military academy for the training of officers was established. By the early 1880s, there was some concern about the rate of progress under French tutelage and a military investigation mission led by the army minister Gen. Oyama Iwao and three other senior officers toured military establishments in Europe. In Germany, they visited the Prussian War Minister, Gen. Bonsart von Shellendorf, from whom Oyama requested a recommendation of an officer to teach at Japan's recently created staff college. Bonsart von Shellendorf consulted Moltke, the Chief of Staff, and he recommended Maj. Klemens Meckel, a veteran of the Austrian and Franco-Prussian wars. Meckel was also a graduate of the Berlin War Academy, had published extensively on tactics and new technologies, and had been teaching at the German Army staff college for a number of years. In 1885, he took up a position as chief lecturer at the staff college in Japan.⁵

Among his first initiatives was the introduction of the Prussian field service manual, which became standard across the Japanese Army by the early 1890s. Next, Meckel began to train Japanese officers in large unit strategy and tactics. The curriculum of the college was shifted from the French emphasis on technical proficiency to the German model of a broad education in the arts of war (Drea, 2009: 59). With this new orientation, Meckel prepared officers for the creation of a strategic plan to defend the Japanese islands against an amphibious invasion. In his early lectures, Meckel started with military history, tactics and the operation of the General Staff. To illustrate his points, he used maps and operational plans of the Franco-Prussian War, a teaching technique that appealed to his students.

At the end of the first year, Meckel introduced the practice of holding staff rides, and these continued annually even after his departure in 1888. Staff rides dealt with possible invasion sites in different parts of the Japanese islands, with an emphasis on the creation of a flexible force that could mobilize quickly and move rapidly to meet the threat. From their outset, the rides dealt with the most basic elements – mobilization and movement of troops – and proceeded to the analysis of topography and disposition of forces. At each stage of the ride, Meckel would question his charges, turning the exercise into a critical exchange between teacher and pupil.

⁵ Presseisen, 1965: 61–63, 79–85, and Drea, 2009: 58.

In 1888, Meckel moved his instruction to another level with the first large-scale maneuvers. Held in northern Kyushu and lasting a month, the maneuvers involved a simulated landing and repulsion of an invading army. As in the Prussian model, each portion of the exercise culminated in a critique by the commanding instructor along with question-and-answer sessions. The results of the maneuvers were subsequently compiled and published. According to Presseinen, the exercise remained a benchmark in Japanese staff training well into the twentieth century (1965: 115–25).

The construction of a formative model of training and execution, as represented in the 1888 maneuvers, is one example of the lasting effects that Meckel had on the development of a German-style military apparatus in Japan. Other significant effects of his program came through the translation and dissemination of his staff college lectures and from the translation of his works on military matters that had preceded his arrival in Japan. The lectures and publications were complemented by recommendations he made to the Japanese General Staff for the development of the army. These included his notion that the army division, rather than the current garrison system or the corps, was the appropriate form of organization for the defense of Japan. The self-sufficient division, he argued, provided both flexibility and the necessary level of complex organization to deal with defensive requirements. In another report, he laid out the proper division of responsibilities for the Army establishment. In his scheme, the Army Ministry would deal with all administrative matters, including procurement and medical and veterinary duties. But the General Staff should be the war-planning agency of the army, with the responsibility of managing communications and logistics and directing the staff college. Lastly, he recommended that an independent Inspectorate General be created with the authority to evaluate the state of the army.

The training regime established by Meckel formed the core of the new army. But Japan's military leaders did not rely on the staff college alone for instructing junior officers. Many Japanese officers were regularly sent to military schools in France and Germany well into the 1890s. In addition, Japanese military attachés began to appear in Europe's capitals by the last decade of the century; while there, they collected military statistics on European armies. Moreover, the Japanese army independently created specialized training schools in medicine, transport and sanitation, all of which were in place by the turn of the century.⁶

⁶ Drea, 2009: 60–61; also see Lamarre, 1998: 597–98, on Mori Rintaro, a pioneer of military hygiene.

In 1890, the new army that Meckel had created held maneuvers near Nagoya to which representatives of the foreign powers with legations in Japan were invited. The maneuver staged an invasion involving over thirty thousand soldiers and twenty-three warships. The European officers were impressed (Presseisen, 1965: 117–18, 133). Five years later, western military observers were even more impressed when Japan defeated China in an eight-month war (1894–95) and imposed a treaty settlement much like the one Britain and other powers had implemented earlier. By that time, the Japanese army had in place the beginnings of a military intelligence branch (Nish, 1987; Best, 2002). The performance of the Japanese army, as it joined the seven other allied powers during the Boxer war, continued a process by which Japan was rather rapidly recognized as maturing into a serious regional power in the “Far East.”

Hedging their bets, the British government moved in 1902 to create an alliance between Great Britain and Japan. The agreement pledged that each party would remain neutral if the other went to war, and agreed to provide support should either become involved in war with more than one belligerent. At roughly the same time, the War Office in London began to train military attachés in the Japanese language for assignment to the British legation in Tokyo. In 1904, when the Russo-Japanese war broke out, the leaders of the Japanese army, cognizant of “international” military etiquette, invited British officers to observe the campaign. The results of the observer team’s many positive reports on Japan’s military apparatus were compiled by the General Staff at the War Office and published in 1906.⁷ Meanwhile, an increased number of British officers, some in the Indian Army, began Japanese language training in Tokyo.⁸ In the forty years since the British had bombarded the port of Kagoshima in 1863, Japan had transformed itself into an imperial power, one that at least for the time being could become a partner in insuring the security of the British Empire in Asia.

China and military westernization

The new order imposed on the Qing dynasty following its defeats in the Opium wars of 1840 and 1860 came to include a British-style foreign

⁷ See General Staff, War Office, 1906; also the recent reprint with an introduction by Dobson (2000).

⁸ Francis Piggott was one of these officers. He was Japan in 1904, where he did most of his training with a personal tutor employed by the British government. Piggott also provides an interesting account of the social life of British officers in Japan; see 1950: 24–49. The Indian Army language trainees are mentioned on p. 38.

office, a customs service led by an Englishman, Sir Robert Hart, to deal with foreign trade, legations in European capitals, and the translation of international law into Chinese.⁹ Some Qing officials argued that it was necessary to go further in making institutional accommodations to an international order. China must strengthen itself through the introduction of military reforms, including the acquisition of new weapons, the creation of officer training facilities, and the creation of a new army based on organizational forms borrowed from Japan. As some of these reforms were being instituted, factions within the Qing imperial court, as well as traditionalists in the imperial bureaucracy, objected, and it was their resistance that gave the military-diplomatic apparatus introduced in China a very different look from what was emerging in Japan.¹⁰

Part of the reason for the different trajectories of European-style military reform in the two countries had to do with the fact that the Qing monarchy was a conquest regime made up of Manchus from north of the Great Wall. Manchu emperors had retained the throne for some two hundred years by diffusing power and creating institutions that bypassed classic forms of Chinese dynastic governance in order to prevent an opposition forming against them (Hevia, 1995: 30–36). Rather than a strong government centralizing the process of army reform as had occurred in Great Britain, or imposing institutional change militarily as had happened in Japan, individual Qing government officials, with positions sometimes at the highest levels and other times at the provincial level, inaugurated their own reform efforts. Thus, rather than the creation of a coordinated security regime with a clear chain of command, military authority and development was diffuse and scattered. Some reforming leaders were thus able to establish personal power bases.

But important changes did occur. For example, members of the newly formed diplomatic apparatus were often able to check, or at least manage, European penetration into China by insisting on a strict reading of treaty provisions and by aggressively meeting European challenges. For example, Rudolph (2008) and Reinhardt (2007 and forthcoming) discuss cases in which the Qing foreign office (*Zongli yamen*) effectively used the treaties to forestall greater European commercial penetration of the Yangzi valley. Contrary to observations made at the time

⁹ For stimulating discussion of the processes by which international law and technical science was translated into the Chinese language, see Liu, 2004: 108–39 and Elman, 2006: 165–80.

¹⁰ On opposition to the self-strengtheners, see Kuo, 1978: 529–31, and Hao and Wang, 1980: 172–88.

and later by some scholars, many of the officials responsible for diplomatic successes were not opposed to the introduction of Euroamerican technologies such as steamships and the telegraph. Rather, they were interested in ensuring that it would be Qing subjects, rather than foreign firms, who built and owned new transport and communication technologies. They were understandably concerned that if foreigners controlled these technologies, they would be able to pose a direct threat to Qing sovereignty.¹¹

Concern about sovereignty also animated efforts to acquire European and American weapons and to create a military training regime and a new army. Defeat in the First and Second Opium Wars, coupled with the experience of Qing employment of European and American military advisors during the suppression of internal rebellions in the 1850s and 1860s, energized elements within the Qing elite toward a clear-eyed assessment of the enormous military gap that had opened between China and Euroamerica (Smith, 1994). Officials who came to prominence for having successfully put down the mid-century Taiping and Nian rebellions, such as Li Hongzhang and Zuo Zongtang, and provincial officials such as Zhang Zhidong, as well as mid-level officials in coastal provinces and observers in treaty ports, concluded that the European challenge was unprecedented in China's history. They argued that it was essential for the survival of the Qing to learn the intricacies of international law and diplomatic practices and to shift resources to the acquisition of the powerful weapons with which European powers had humiliated the dynasty.¹² But there was no clear consensus over whether such changes should be directed at securing the east coast of China against further European incursions or at achieving the reconquest of Xinjiang (Chinese Turkestan), which had broken away while the dynasty was distracted with the rebellions in eastern China.¹³

Meanwhile, as the mid-century rebellions were being suppressed, some provincial governors took matters into their own hands and built a number of arsenals for the manufacture of western-style cannons, rifles, machine-tooling equipment and steam ships. The first to appear was in Suzhou under the management of Halliday Macartney, an Englishman in the employ of Li Hongzhang. That same year an arsenal was opened

¹¹ Zhou (2006) and Reinhardt (2007) make the point about fears that Euroamerican communications technologies might undermine Qing sovereignty. While there were debates in various quarters about the efficacy of introducing telegraph and steamships among Qing officials, the general view, as Zhou puts it, had more to do with who controlled the technology and how it was to be used (2006: 8).

¹² See the discussion in Kuo, 1978: 496–97, and Hao and Wang, 1980: 156–72.

¹³ For a discussion of the maritime vs. frontier policy debate, see Hevia, 2003: 172.

in Shanghai, which also served as a training facility for personnel working in arsenals located in other parts of China. Two years later, an even larger facility was established near Shanghai, the Jiangnan arsenal, which was the first to produce smokeless powder and large guns for coastal and river defenses (Kennedy, 1978: 48). Soon plants opened in the north at Tianjin and further inland on the Yangzi River at Nanjing. These and other sites were usually launched with either foreign supervisors like Macartney or foreign technicians as advisors. At these same arsenals, Chinese students were learning the intricacies of European science and armaments technology (Elman, 2006: 172–80). By the end of the century, plants like the Jiangnan arsenal were producing breach-loading steel cannon with rifled barrels and high explosive ammunition for the large guns now mounted at sites along the Yangzi and at the Dagou forts near the capital at Beijing. Some of the larger guns produced at Jiangnan were modeled on weapons like those built by Armstrong in Great Britain, and Armstrong engineers were hired to design the prototypes and modify the production facilities to manufacture even larger cannons (some of these may well have been the guns identified in the British reconnaissance of the Yangzi Valley in 1905). Coterminous with these developments, the arsenals also started to manufacture rifles following American and European designs. In the absence of a centralized command structure such as a General Staff that could concern itself with technical standards, however, two different caliber rifles, one based on the German Mauser, the other on the Austrian Mannlicher, were being manufactured in the early 1890s. This meant that unlike in the European and Japanese armies, there was not a common rifle for training and use in the various units in the Qing army (Kennedy, 1978: 107, 110, 129–31).

Initially, the resources for the development of the Qing arms industry came from revenues of the Imperial Maritime Customs under Robert Hart's management (Kuo, 1978: 514). These funds also set up army and navy training schools, brought in foreign experts as instructors, and paid for the training abroad of Chinese students in the sciences, mathematics and engineering.¹⁴ At the Fuzhou and Jiangnan arsenals, translation bureaus were created and eventually expanded into engineering schools (Kuo, 1978: 525–29, 531–37; Elman, 2006). In addition, Li Hongzhang established a military academy in Tianjin in the early 1880s and, like Japan's military leaders, hired German instructors, who introduced a

¹⁴ Other sources on the development of Qing armaments and training include Spector, 1964: 163; Kuo, 1978: 520–25, 537–42; Hao and Wang, 1980: 170; and Liu and Smith, 1980: 248–50, 257–58, 266–68.

new curriculum (Smith, 1978: 24). Zhang Zhidong opened a similar institution in Hubei around the same time (Deng, 1997: 20). Some of these institutions benefitted from contact and cooperation with secular education projects undertaken by Euroamerican missionaries (Cohen, 1978: 576–80). At the same time, however, there seems to have been little coordination among the various schools.

The training of a new army also lacked coordination. The creation of army units trained in European military methods, like the adoption of western military technologies, tended to be at the initiative of regional officials. While acting governor general at Nanjing in 1894, Zhang Zhidong, for example, organized the “Self-Strengthening Army.” Modeled along German lines, it was made up of eight battalions of infantry, two squadrons of cavalry, two battalions of artillery and one battalion of engineers, all of whom were uniformed and equipped in European style. Zhang employed some thirty-five commissioned and non-commissioned German officers to train his soldiers and, for a time, to command the units (Powell, 1955: 62). A similar but somewhat later example of this kind of semi-autonomous operation was Yuan Shikai’s Beiyang Army. Yuan established an officer training school at Baoding in 1902 and dispatched some of its graduates to Japan for advanced training. He also brought in fourteen Japanese officers to teach at Baoding (MacKinnon, 1980: 94).

The first major test of the military reform undertaken by Li and Zhang occurred during the Sino-French War of 1884–85, with mixed results. Although Qing land forces held their own along the Vietnam border and on Taiwan, the French navy destroyed the Fuzhou shipyard (Rawlinson, 1967:109–28). Thereafter, the central government took a somewhat more active part in directing technological development. A Naval Department was created, and funds raised to support it came through foreign loans. Pressure was also brought to bear on provincial authorities to remit taxes (Liu and Smith, 1980: 254–55). But fiscal shortages continued to plague both education and technology transfer, while opposition forces within the government slowed or undermined programs. Moreover, these self-strengtheners found it difficult to create an institutional structure that would effectively use and reward those trained in new skills. Nothing was put in place like the merit system for professional men that emerged in the European continent and in Great Britain, or the centralized system of military training and management that dominated Japan.

In spite of these difficulties, foreign intelligence-gatherers found much to praise in the Qing effort. On the eve of the Sino-Japanese War in 1894, some of these experts thought that China was ahead of Japan

and even predicted a victory for the former if the two ever went to war.¹⁵ From this perspective, it would not be difficult to conclude that, like imperial Japan, the Qing was well along in the process of transforming itself into a European-style nation state with a newly formed security apparatus. Yet, not everyone rendered positive assessments of the Qing military reforms. As we saw in Chapter 6, Mark Bell and A. W. S. Wingate, intelligence officers in the Indian Army, both argued that change in the Chinese military was superficial, disorganized and haphazard. When China was defeated by Japan in 1895, Bell's assessment and those of other skeptics seemed justified. And even though, in the first decade of the twentieth century, elements within the Qing government turned to Japan as a more appropriate model for China to follow and increased numbers of military cadets were sent to Japan for education, military reform did not produce a unified, centralized national army in China as similar processes had in Japan.¹⁶ Instead, there now existed a number of local militarized power bases in the hands of cliques beholden to their commander, rather than to the Qing state. As is well known, after the fall of the dynasty in 1911 the fragmentary structure that had resulted from military reform led directly to an era of competing warlords, making China as a whole ever more easy to exploit for predatory western imperial powers.¹⁷ It was not until 1949, with the establishment of the People's Republic of China, that a centralized state could again claim control over the territory – and the military – that had made up the Qing Empire.

Accommodation and resistance to British imperialism in India

As leaders in China and Japan were attempting to transform or create new security institutions that mirrored those of the Great Britain and other European powers as a means of survival, the peoples of South and Central Asia engaged the British in other ways. Some became participants in the Imperial security regime created by the British after 1857.

¹⁵ See Liu and Smith, 1980: 245, 268–69, and the sources they cite, which include assessments by American and British military observers.

¹⁶ On the growing connections between China and Japan in the first decade of the new century, see Reynolds, 1993. He points out that relations went well beyond the army; one explanation for the attraction of Japan as a tutor was that the Japanese had already translated terminology from science and technology into *kanji* terms, which moved easily into the Chinese language.

¹⁷ On the connection between the new armies and warlordism, see MacKinnon, 1973, and Dreyer, 1995. In a study of Hubei and Hunan, McCord provides a more nuanced interpretation of warlordism; see 1993. Also see the discussion in Zarrow, 2005.

For their support of the British Raj, native troops received rewards and privileges, becoming the military equivalents of loyal Indian go-betweens envisioned by Lord Macauley in his famous Minute on Education. Others continued to resist the British militarily, developing new guerilla warfare tactics and acquiring, through various means, British arms. Here I focus on the incorporation of the “martial races” of India into the Indian Army and warfare on the Northwest Frontier.

The martial races and the new Indian Army

The British could not have constructed and maintained a security regime in India without the cooperation of many elements of the indigenous population. Militarily, it meant identifying male Indians who had the qualities of a soldier. This was no simple task, for as Gen. George MacMunn of the Indian Army observed in 1911, “it is one of the essential differences between the East and the West, that in the East, with certain exceptions, only certain clans and classes can bear arms; the others have not the physical courage necessary for the warrior.”¹⁸ Recall that after the Indian rebellion against British rule in 1857 British military leaders in India determined to transform the army by infusing regiments made up of “martial races” into it. These were the “certain classes and clans” referred to by MacMunn.

The emphasis on the recruiting of the martial races also had a basis in something other than British notions of racial characteristics. It was commonplace for military historians like MacMunn to point out that during the Indian “mutiny” units from the northwest, including Sikhs and Pathans, as well as a number of new irregular cavalry units from the same region, had remained loyal to the British. The pact between the British and the martial races began to serve as a convenient way for separating groups in India into loyal and hostile classes, and this form of co-optation became a model for divide-and-rule tactics in other parts of the British Empire.¹⁹ These forces also provided the British Raj with

¹⁸ The quote is from MacMunn, 1911 [1980]: 129, which is a work on the armies of India. He also did a study of the martial races; see his 1933 work.

¹⁹ This was a common explanation regarding the make-up of the Indian Army after 1860; see MacMunn, 1933: 218–19. The actual size of the Army varied over time, but following Lord Kitchner’s re-organization in 1903, the regular army numbered some 240,000 men. They were divided into 39 cavalry regiments and 135 infantry battalions, 17 of which were made up of Gurkhas. There were also 12 mountain artillery batteries, 3 sapper regiments, and a frontier unit called the Guides. In addition to the regular army, the semi-independent Indian princely states were allowed their own military forces in the 1880s. Designated Imperial Service Troops, there were 20,000 men in 20 cavalry regiments and 14 infantry battalions at the time of the Kitchener reforms. There were also Northwest Frontier forces made up of scouts, militia, and

units that could be deployed not only in China, but on the Northwest Frontier, where loyal martial races might encounter more resistant martial races. This was the case, for example, in the Tirah campaign where Sikh and Gurkha regiments fought effectively against the Orakzai and Afridi Pathans.

The scale of the involvement of the loyal groups in the British Indian security regime is evident from the fact that the Indian Army participated in forty-eight military operations on the Northwest Frontier in the sixty-year period between the incorporation of the Punjab into British India and 1908. Twenty-one Indian Army cavalry regiments, sixty-eight infantry battalions, three regiments of Sappers and Miners, the Queen's Own Corps of Guides and several native artillery units were combined with regular British regiments in these engagements. The military honors – individual medals and unit citations – and *esprit de corps* that came with participation in campaigns like these was one way that Indian Army regiments were tied to the crown. They were also linked to the crown through the spread of lore that grew up around their exploits, including the reports of war correspondents such as Shadwell (1898) and James (1898), the semi-official histories like those of Hutchinson (1898), and the widely disseminated works of writers such as Rudyard Kipling and G. A. Henty.

Special privileges also came with service to the Queen Empress. Some of these privileges were connected to the new form of colonization that emerged in the late nineteenth century in the Punjab. British hydraulic engineers opened up vast tracks of marginal land in central and western Punjab, allowing military-agricultural settlements to be established there.²⁰ Land grants were given to soldiers from the martial races, distinguishing them and their families and clans from other Indians, and tied them as loyal friends and servants to the crown. These soldiers and their families could also rely on government protection of their economic interests, education for their children and preferential employment once out of the army.²¹

In addition to creating reliable indigenous interest groups, martial race recruitment policy also had long-term effects. To begin, the policy created a privileged class that after independence served as key power brokers, especially in Pakistan and Nepal. Moreover, many of the regiments tracing their origins to the 1860 reorganization of the Indian

constabulary units totaling 8 in number; see, for example, MacMunn, 1911: 173–207, Mason, 1974 and Farwell, 1989.

²⁰ On the hydraulic projects in the Indus Valley, see Gilmartin, 1994.

²¹ See Mazumder, 2003: 67–68, 130–38, and Mason, 1974: 388.

Army and to Kitchener's reforms in the early twentieth century continue to exist in the Pakistani and Indian armies today. For example, Fane's and Probyn's Horse, after undergoing name changes and amalgamations in the twentieth century, are now the 9th Lancers and 5th Horse of the Pakistani armored corps.

Here it is sufficient to note that the knitting together and entrenching of the interests of the martial races with the imperial state not only sustained the military security establishment of British South Asia, but also provided a significant amount of flexibility for protecting British interests in East Asia and in Africa. Some of the units raised during the 1857 rebellion, such as Fane's and Probyn's Horse, joined other Indian Army units and British regiments in the invasion of north China in 1860. The China Relief Expedition of 1900 was almost completely drawn from India. Indian Army units also served in Abyssinia (1867–68), and a number of British officers from the Indian Army participated in the Egyptian campaign (1882). During World War I, Indian Army regiments served on the western front and in the Gallipoli, Sinai, Palestinian, Mesopotamian and East African campaigns.²²

In addition, Indian soldiers were surveyors in the Survey of India, members of various boundary commissions and participants in the precision mapping operations carried out in China. In frontier regions that the British found difficult to penetrate, Indian soldiers, as noted in Chapter 5, operated as native informants and as clandestine agents gathering geographic data and military statistics (Raj, 2006). Some also participated with Englishmen in secret reconnaissance expeditions in Persia and Mesopotamia.²³ As a result of these activities, it is difficult to imagine the colonial security regime of British India or one of its appendages, the Intelligence Branch of the Indian Army, functioning effectively without the participation of the martial and less martial races of India.

The successful incorporation of South Asian peoples into the Indian security regime also served as a model for the success of British imperialism in other parts of Asia and Africa. Most non-white colonies had

²² On the overseas and frontier campaigns of the Indian Army through 1901, see Intelligence Branch [Simla], 1907–10. See Trench on the Indian Army and World War I (1988). Approximately three quarters of a million members of the Indian Army were deployed in France (90,000), East Africa, Mesopotamia and Egypt. Over 35,000 were killed and another 59,000 wounded. For exact figures, see *Memorandum on India's Contribution to the War in Men, Material, and Money* (c. 1919) in IOR L/MIL/17/5/2/2381.

²³ G. Younghusband tells the tale of a Guide leading an English officer named "Smith," (probably Mark Bell, as Bingley suggested) and saving his life when the latter's disguise failed; 1908: 144–59.

either army or police security forces led by British officers, and even in non-colonies the British were not averse to using local levies of one sort or another. In China, for example, the British raised what was termed a Coolie Corps to do the heavy lifting in the First and Second Opium Wars and during the Boxer Relief Expedition of 1900. And, as noted earlier, they also created a Chinese regiment in the late 1890s (Barnes, 1902).

Frontier warfare and Pathan resistance

Once the decision had been made, by the middle of the nineteenth century, to consider Afghanistan a British protectorate critical to the defense of India, it followed that lines of communication had to be maintained through the mountains to Kandahar and Kabul. In fits and starts, military bases and outposts were established, roads improved, and the boundary between Afghanistan and British India more or less established. These actions on the part of the British were resisted to one degree or another by the groups living in the mountains, however. The military campaigns that resulted were of such scale that more than Indian Army regiments were required to deal with them. From the annexation of the Punjab in 1849 to 1908, battalions from forty-three different British regiments participated in campaigns against the Pathan or Pashtu-speaking peoples of the mountains. Frontier warfare involving large numbers of British and Indian Army soldiers points to the other side of the indigenous response to the seemingly ever-expanding scope of the imperial security regime: open, often violent opposition to British expansion.

How did the British military officials account for efforts to halt the extension of their security regime into Central Asia? In the case of the Afghan frontier, there were essentially two lines of thought. The first involved the notion that the hill tribes were made up of fiercely independent individuals who often resisted the authority of even their own elders. Thus, it was not surprising that they might take offense at British incursions into their territory. The other explanation, as noted earlier, was that the tribes were especially susceptible to the fanatical instigations of Muslim religious leaders or mullahs. These rather simplistic – and directly contradictory – explanations were a far cry from even the relative sensitivity to Pathan beliefs that could be found, for example, in the martial race handbooks discussed in the previous chapter.

More importantly, while there had been conflicts from the 1860s through the 1880s, incidents escalated after the completion of the

boundary settlement between the Amir of Afghanistan and the Government of India in 1893. Once an agreement had been reached, the Government of India sent survey parties into southern Waziristan in 1894 to demarcate the border by setting up boundary pillars. The surveyors soon came under attack from Waziri and Mahsud tribesmen. According to Nevill in his history of frontier warfare, the cause of the outbreak was the “jealously guarded independence”²⁴ of the tribes coupled with their collective fanaticism, stimulated in this case by the Mullah Powindah (Nevill apparently saw little contradiction in these characterizations of the Pathans). At the same time, however, Nevill granted that, subsequent to the suppression of the 1894 outbreak, military posts had been established at Wana, in the Tochi and Kurram Valleys, in Chitral, and on the Malakand Pass and the Samana Ridge (1912: 57). Recall the earlier discussion (Chapter 6) of the increase in “fanatical outrages” along the frontier from 1895 forward. Other statistical summaries noted not only an increase in attacks on British Army officers, but increases in thefts of arms and attacks on sentries and outposts.²⁵ Hence, the increased British military presence running southwest to northeast in the mountains might have been understandable as the cause of subsequent conflicts. But it is also clear that while some British observers could at least comprehend the desire of the Pathans to keep the mountains free of a British military presence, accounts like those of Nevill normally pay scant attention to the motives of the people living in the mountains, beyond jealousy and fanaticism, while taking for granted imperial security interests and retailing clichés about Pathan character.

Where military outposts were established, where survey parties traversed, there were outbreaks, with almost continuous warfare in 1897–98 involving some 70,000 British troops. The scale of the uprising was, as in 1894, put down to fanaticism and not generally attributed to the increased presence of British forces in the mountains. Instead, there were repeated tales of a Mad Fakir or Mad Mullah,²⁶ who promised heavenly miracles such as immunity to British bullets. Other accounts

²⁴ Jealousy was a common trope for explaining resistance to British expansion. Chinese “mandarins” or high officials, according to British observers, shared this trait with the Pathans.

²⁵ See Chief of Staff’s Division, 1906a. Compiled by W. Mallenson, the report is organized by districts and covers the period 1899–1906. Northern and Southern Waziristan were reported as having 144 and 170 incidents respectively that ranged from animal theft to kidnapping for ransom, disruption of communication lines including the cutting of telegraph wires, and murders of army officers.

²⁶ On the role of mad mullahs in the ideology of British India, see Edwards, 1989.

mention the involvement of the *Akhud* of Swat, Hadda Mullah and Mullah Sayyid Akbar, all holy men blamed for inciting the tribes.²⁷

Typical of the punitive expeditions that were launched to discipline the hill peoples was the Tirah campaign of 1897–98. With the Khyber Pass closed, blocking free communication between India and the Amir of Afghanistan in Kabul, Gen. Sir William Lockhart led a force of 35,000 men made up of British and Indian Army units toward the Tirah region to the west of the pass. There they were met by Afridi and Orakzai fighting men numbering around 50,000. The tribesmen were well armed with breech-loading Martini-Henrys, Sniders and even some Lee-Netfords (the newest rifle in the British Army), some of the ammunition for which the tribesmen appear to have been manufacturing in their own forges (James, 1898: 152). The fighting was fierce, but cannon and the discipline of well-drilled British units eventually allowed the Indian Army to push their way through the Orakzai country into the fertile valleys of Tirah, where supposedly no white man had been before.²⁸ As the columns of British and Indian Army troops advance, Col. Thomas Holdich and his surveyors carried out the first map-making reconnaissance of the region. Holdich makes much of the 1897–98 campaigns providing the opportunity for filling in the final blank spaces on the British frontier maps.²⁹

Once the British forces entered the Tirah, the Afridi and Orakzai forces melted away and resorted to guerilla warfare and sniper fire. Frustrated, Lockhart turned to waging total war against the inhabitants of the valley. Crops were seized, orchards destroyed, villages looted,

²⁷ See Rittenburg, 1988: 41. In a communication from the Secretary of State George Hamilton to the Viceroy of India concerning military operations on the Northwest Frontier of India, Hamilton reviewed the narrative of events as they were represented in dispatches from India as the uprising unfolded. He blamed that outbreak on fanatical mullahs (1898: 176–77). Also see East India (North-West Frontier), 1901: 6–7. This is the official correspondence from India in the wake of the uprisings and deals with troop dispositions along the frontier. Mills (1897: 34–35), Shadwell (1898) and James (1898) provide newspaper correspondents' accounts in which fanaticism is emphasized, and Davies (1932: 96–97) reviews the received wisdom some three decades after the uprisings. Holy men promising immunity to the weapons of Euroamerican armies have corollaries in North America (Sioux ghost shirts) and China (Boxer talismans) at roughly the same time.

²⁸ Although it was fall, the fertility of the rich alluvial soil of the Tirah Valley is mentioned in many of the campaign accounts. In addition to grains, fruit and walnut trees were abundant. See the description in Shadwell, 1898: 165, 172–81; James, 1898: 156; and Holdich, 1901a: 359.

²⁹ Holdich devotes an entire chapter to Tirah, noting the difficulty of surveying and plane-tabling under fire much of the time. His team was made up of Col. Wahab, Lt. Leslie, RE, and Lt. Holdich of the Cameronians, who may have been one of his sons, and several Indian surveyors; see 1901a: 351–65.

watchtowers and houses burned or dynamited, and eventually flocks and herds of the residents of the valley captured.³⁰ The only things that seem to have been left standing were mosques. As Capt. Lionel James, a correspondent for the *Pioneer* and the *London Daily News* on the campaign, summed matters up, in the valleys of the Tirah, the British forces had

laid waste with fire and sword from end to end ... unearthed and consumed the grain and fodder supply of the country, uprooted and ringed the walnut groves, prevented the autumn tillage of the soil, and ... caused the inhabitants to live the life of fugitives, upon exposed, bleak and bitterly cold hilltops. (1898: 231)

Lockhart also could count over a hundred villages destroyed and numerous watchtowers blown up.³¹ There was also great pleasure taken in having located the dwelling of Sayyid Akbar, one of the mullahs blamed for inciting fanaticism. His house was destroyed and, more important, a group of documents were seized that “proved” a trans-frontier conspiracy among the mullahs.³²

With the onset of winter, the elders of the Afridi clans, many of whom wore medals of service in the Indian Army, began to sue for peace. At one of the resulting conclaves, Sir Robert Warburton, an experienced frontier officer, mentioned an exchange with one of these veterans in which the latter said to him: “With the exception of your field guns, which we have not, man to man we are as good as any of you.”³³ This was the crux of the issue faced by the British. The Afridi and other groups might sue for peace, but they certainly did not think they had been beaten by British or Indian Army soldiers; they had only been required to succumb to their better weapons.

As Lockhart’s forces withdrew back into India through the re-opened Khyber Pass, they were dogged every step of the way by snipers. Over

³⁰ Two accounts by war correspondents describe the destruction of the valleys of the Tirah. See Shadwell, 1898, and James, 1898. The latter describes the “magnificent sight” of seeing the Massuzai Valley engulfed in “one mass of rolling flame” (217). Also see the accounts in Hutchinson, 1898, especially 64, 111, 118, 162, 165, 191 and 208. He quotes Lockhart to the effect that his troops had visited every part of Tirah, “a fact which will be alive in the minds of future generations by ruined forts and towers in their remotest valleys” (223).

³¹ There are numerous references to the destruction of houses and towers in the accounts by Shadwell (1898) and James (1898).

³² See Shadwell, 1898: 208, and James, 1898: 182–83. These are probably the documents that were reproduced in Hutchinson, 1898. The destruction of the dwelling of an identified culprit for “outrages” against the British and the seizure of documents that purport to prove his guilt have parallels in the Second Opium War in China; see Hevia, 2003: 58–59.

³³ Warburton, 1900: 302. James also mentions seeing tribal elders wearing medals from campaigns in Burma and Egypt; see 1898: 196.

a thousand British and Indian Army soldiers and untold numbers of Pathans were killed in the course of this five-month campaign, and hundreds more women, children and elderly people must have starved during the winter of 1897–98.³⁴ Left uncounted were the thousands of pack animals who because of poor logistical planning died for lack of food and water, or simply collapsed from fatigue and were put down (MacMunn, 1936: 238; Holdich, 1901a: 355–56). A little over a decade later, Nevill argued that the rearguard actions that had typified the Tirah campaign, “that most difficult of all operations which civilized troops have to carry out in savage warfare,” made the campaign especially worthy of study for the military reader (1912: 307).³⁵ In this way, the cumulative disasters of punitive mountain warfare were displaced onto the study of the tactical considerations and the unique features of a naturalized and technicized mountain warfare.

One would expect, therefore, that those responsible for launching expeditions against the Pathan tribes would have organized an appropriate planning and training regime to deal with mountain warfare. In his study of several of the campaigns from the 1890s to the 1930s, Moreman, while granting that new tactics emerged on both sides as weapons technologies changed, also points to the fact that while the British might have learned certain lessons from each campaign, including respect for the adaptability of the Pathan guerilla warrior, the lessons, as we have seen, were not codified into manuals on mountain warfare or into a training regime until the 1920s (Moreman, 1998: 136). Debacles and near debacles that continued well into the 1930s were generally put down to the use of poorly trained troops, which would of course have been the martial races. It was as if the security regime was only capable of collecting names, affiliations and campaign records, while the causes and nature of the almost permanent state of war in the mountains, much like the situation in present-day Afghanistan, were lost in the fog of war or willful ignorance.

The fact that military disasters, while understood, were haphazardly incorporated into the frontier warfare training was paralleled by another blind spot in British thinking. As in other cases of resistance to British

³⁴ See Nevill, 1912: 174–304. I also draw on Miller’s reconstruction of the campaign from original sources; see 1977: 272–80. Like most such accounts, it oscillates between romantic heroism and raw realism. Miller suggests that it was religious tolerance that can account for the British not destroying mosques. I suspect that it was more fear of the consequences. British leaders had no difficulty destroying or desecrating the religious sites of other “fanatics” either before or after the Tirah campaign – attacks on things deemed to be sacred to others has been an important form of humiliation in British colonial warfare; see Hevia, 2003.

³⁵ Also see the studies of H. D. Hutchinson, 1898, and Callwell, 1911.

imperial and colonial expansion, the impulse was to conclude that only fanatical religious leaders or benighted rulers could contemplate opposing the British and willingly invite the inevitable harsh retribution. And only “ignorant, bigoted, priest-ridden” natives, as Davies put it in 1932, would follow such irrational leaders. Thus, the collective “fanaticism” of the Pathans would seem to have been all that was required to justify the kind of warfare practiced by Lockhart. Yet, Davies also acknowledged that there was another sort of change in the mountains, one that at the time of the 1897 outbreak affected most of the tribes: there had been a substantial rise in the salt tax. Like British officials at the time, he saw no direct causal relation between the tax increase and the uprisings, except insofar as it gave mullahs yet another axe to grind (Davies, 1932: 97–98).

If British officials discounted the economic interests of the mountain groups, they also ignored other possible explanations for forceful objections to a British presence in the mountains. When survey teams traversed the mountains between the Punjab and Afghanistan in order to put up stone pillars and fix the boundary between British India and Afghanistan, they entered territory that was also filled with pilgrimage routes and the sacred burial places of holy men. The mountains were, in other words, dotted by *ziarats* or shrines that the British had known about at least since the publication of Henry Bellew’s account of a mission to Kabul in 1857.³⁶ Frontier officers like Sir Robert Warburton understood that Pathans were sensitive to the presence of outsiders around such sites. In his autobiography, he related an event that occurred in 1880 at a *ziarat* near the Khyber Pass. A shrine attendant begged him and his Indian aide to take away another Englishman who was drawing a picture of the *ziarat*. He explained that the Talibs (students, seekers of wisdom, Ridgeway’s Talib-um-ilms) would soon be there to pray, and if they saw the British visitors they would attack them and hang him (1900: 96).

Less understood, but certainly knowable had the British been interested, was the fact that *ziarat* shrines were only one sort of sacred place venerated by the populations of the mountains. Some sites were

³⁶ Bellew had accompanied the mission of Maj. Peter Lumsden as interpreter. At *ziarats*, he noted, devotees would purchase “charms” from mullahs to ward off illnesses and as protection from the “evil eye” and “jins” or “genii.” The charms, he asserted, were only as powerful as the value of the offerings of the devotee (1862: 107–8). Bellew also produced a Pashtu grammar and dictionary and was one of the earliest British experts on Afghanistan and the mountain tribes, hence the frequent citation of his work in military reports. Among other works, he authored *A General Report on the Yusufzais* (1864), *Afghanistan and the Afghans* (1879), *The Races of Afghanistan* (1880) and *An Inquiry into the Ethnography of Afghanistan* (1891).

believed to have the power to cure specific maladies and may have been linked to beliefs that pre-dated Islam in the region.³⁷ Moreover, religious shrines in the mountains may have had additional significance in the last decade of the nineteenth century. *Ziarats* were focal points of the Islamic revivalism that, as Barbara Metcalf has noted, swept through northern and northwest India between 1860 and 1900 (1982). But whether the place of burial of a holy man, of a miraculous power or of reform Islam, shrines made up a sacred geography of the mountains that clearly found little purchase in the epistemological projects of surveying, mapping or the gathering of military statistics.³⁸ Moreover, even the clear evidence that the mountains may well have been criss-crossed with more than one kind of sacred geography seemed to stimulate little interest among British surveyors. The Buddha that hovered over them in the Pamir Mountains was documented without comment (Fig. 8.1).³⁹

In addition, it may also have been the case that many of the *ziarats* were not connected to orthodox Islam, but rather to Sufism. Stressing the individual's quest for union with Allah, Sufism placed an emphasis on bodily disciplines and mental training among its practitioners. Men who achieved such union were seen as having spiritual powers allowing them to mediate, somewhat like Catholic saints, between the Muslim god and ordinary men. When they died, their spiritual powers were believed to remain with them and to be passed on through their descendants, or *pirs*. In a society that was often fraught with inter-clan competition and conflict over land rights and male honor, the *pirs* served as one of the few extra-lineage sources of authority that could mediate disputes. Moreover, because *pirs* were also very much invested in the protection and sustenance of the *ziarats*, they could serve as intertribal points of unification when the sacred terrain of pilgrimage and shrine was threatened with desecration by outsiders or unbelievers (Rittenburg, 1988: 38–41).

Bellew, Ridgeway and Warburton, as we have seen, knew something about the significance of shrines. But because most of the British civil and military authorities could only treat the beliefs of Pathan groups

³⁷ Dupree notes that some of the *ziarats* could be endowed with singular powers. One near Jalalabad specialized in curing insanity; another mad-dog bites; and in a valley north of Kabul, some forty were devoted to fertility; see his 1973: 105.

³⁸ One can find a similar lack of interest in indigenous beliefs in Tod's report on the Burma-China boundary commission. Much like that of the benighted and malleable Pathans, Burmese opposition to the survey was attributed to tribal superstitions and manipulation by outside agents, in this case Chinese officials (see 1899: 23).

³⁹ See Maj. Gen M. G. Gerard, 1897; the photograph follows p. 32 of the report.



8.1 Buddha, from the Pamir Commission

who resisted them as superstition or as an inferior form of Islam, they were unable to acknowledge that they were trespassing on sacred space. Nor could they acknowledge that by doing so, they were providing a rationale for both Pathan resistance and an occasion for intertribal confederations directed against them. To put this another way, the British establishment in the Indian Army would have had to grant that mullah “fanaticism” could also be interpreted as outrage at the ignorant desecration of sacred sites by uninvited intruders.

Violent incidents involving boundary demarcation may have had an additional cause, one that again, even if it had been known, would have been dismissed as superstition. Dupree notes that there is a class of local shrines in Afghanistan that are marked by piles of stones. Such shrines may indicate the site of a significant miracle or a well or hot spring with curative powers. Visitors often added stones to the cairn (1976: 4–5). It seems possible, therefore, that when survey teams began assembling piles of stone to make a boundary pillar, they were unwittingly mimicking an indigenous practice. One can imagine local people considering the surveyors’ pillars to be mocking their beliefs or attempting to disrupt the sacred geography of the region by introducing false shrines.

Be that as it may, the question remains open as to why the British could only show a substantive understanding of the cultural characteristics of the martial races, even those of Pathan recruits, when compiling military handbooks. Even the other forward policy, the one promoted by Robert Sandeman, provides little help in answering this question. As noted earlier, Sandeman believed that his success among the tribes involved working with their existing institutions and absorbing them into a frontier security regime based on tribal responsibility. What allowed Sandeman to construct matters in these terms was his conviction that a common human nature made it possible to appeal to the self-interest of the frontier peoples, and thus to convince them to make common cause with the British (Thornton, 1895: 356). Such appeals to a universalism, while admirable, allowed little room for the specificities of Pathan religious beliefs.

Other military officers were not, however, as generous in their assessment of the tribal peoples. For all the grudging admiration for Pathan martial skills British military officers might have indicated in their writings, they could not accept the fact that these tribal groups stood up to and continued to resist the British. The only solution to that sort of defiance from people seen to be fundamentally inferior on moral and cultural grounds was warfare. But in order to engage in the brutal and retributive warfare evident in the valleys of the Tirah in 1897–98, or in and around Beijing in 1900, the British had to construct their adversaries as bigoted, treacherous, jealous, benighted and capable of understanding only savage punishment rather than rational argument (Hevia, 2003: 195–240). By the last decade of the nineteenth century, as Moreman has demonstrated, the notion of savage warfare, as distinct from the civilized warfare held to be carried out among European powers, had become a norm in the military literature on warfare in Asia and Africa (1998: 41). It had also become common sense.

Colonial conflicts as small wars

By the end of the nineteenth century officers in military intelligence began to differentiate civilized warfare, by which they meant conflicts between technologically developed nation states, from conflicts like those being fought on the Northwest Frontier of India. The latter sort, which occurred in Africa and Asia, were referred to as “savage wars” or as irregular warfare. On one side were uniformed, well-drilled forces, equipped with sophisticated weapons and guided by the strategical, tactical and logistical sciences of warfare – all of which, as we have seen, was of quite recent vintage. On the other were groups who displayed

few if any of these “modern” characteristics. Irregular forces were seen as raised on an ad hoc basis with little or no organization or training, and with weapons deemed far inferior to those carried by European or European-led native regiments. The term “irregular” also drew attention to the physical topography of the ground on which these conflicts were fought – deserts, jungles, mountains, bush country – where there were no rail lines, few if any improved roads and limited resources to support an army. On such terrain, it was difficult for a regular army to secure lines of communication. Moreover, irregular conflicts, like savage wars, suggested conditions in which the usual rules of warfare did not apply. Recall the earlier discussion of “punitive expeditions.” Such “symbolic” actions on the part of civilized forces were necessary, it was argued, because this was the only effective way to discipline Pathan tribes and uncivilized Chinese Boxers.

But there was another name that began to stick to these conflicts, one that links the colonial past of irregular warfare to today’s counter-insurgency operations.⁴⁰ The term is “small wars,” a concept that, if not coined by Charles Callwell, was certainly made prominent in his 1896 book of the same title. Callwell was perhaps the first military theorist to see the asymmetrical conflicts of the nineteenth century as a global phenomenon, implicating more than the British Empire. In his work, Callwell analyzed such conflicts in terms of comparative global processes and developed a set of taxonomic categories into which physical features of terrain, population types and practices of warfare could be filed.

Who was Charles Callwell, and what makes his work significant? Callwell was one of the new men produced by the reformed officer training programs in Britain after 1870. He graduated from the two-year program at the Royal Military Academy in 1877, was commissioned in the Royal Field Artillery, and completed the advanced training course for new officers at Woolwich. He then served in India and South Africa, where he participated in the Second Afghan War and the First Boer War respectively. In 1884 he returned to Britain to complete the two-year staff college program at Camberley. Throughout his early career he published regularly in military journals, including that of the Royal United Services Institute, where he won a gold medal in 1886 for an essay on lessons learned from colonial campaigns since 1865.

In 1887, Callwell was assigned to the Intelligence Branch in the War Office. In this position, he carried out several reconnaissance missions

⁴⁰ I will have more to say on the relation between irregular warfare and counter-insurgency in the final chapter.

in the Austro-Hungarian and Ottoman empires and in French colonies in North Africa, and compiled military reports on, for example, Turkey in Asia (1892). After a tour as the commander of a mobile column in South Africa in 1901–2, he was appointed to the Mobilization Branch of the War Office. In 1907, Callwell retired on half pay but was recalled to duty when World War I broke out. Promoted to the rank of Major General, he took up the post of Director of Military Operations and Intelligence at the War Office. Thus, with the exception of the Intelligence Branch in Simla, Callwell served in almost all the key institutions discussed in this study, and was a producer of many examples of both the disciplinary and regulatory forms of knowledge outlined in Chapters 5 and 6. In 1893, while appointed in the London War Office, he turned to the writing of *Small Wars*, the first edition of which was published in 1896 as an official government publication.⁴¹ A second edition appeared in 1903 with new chapters on hill and bush warfare, and a third in 1906 with additional examples.⁴²

Structurally, *Small Wars* is a complex book on a number of levels and may be read more than one way. For example, it is perhaps the most comprehensive single record ever assembled of resistance by subjugated populations to Euroamerican imperial expansion in the second half of the nineteenth century;⁴³ but it is hardly ever read that way. Nor is it usually seen as what it also is, a global history of imperial/colonial conflict from a techno-military point of view. Moreover, it seems never to have been read as an example of the failures of imperial security regimes and their information system. Instead, *Small Wars* serves primarily as a how-to book for waging irregular warfare and a reference guide to tactics for dealing with indigenous opposition to foreign occupation of territory.

Like any good intelligence officer of the time, Callwell approached his subject as a compilation and filing task. His categories included causes

⁴¹ The first edition was published by Harrison and Sons, the official organ of Her Majesty's Stationery Office, while the second bore the name of the Intelligence Division of the War Office. A third and final edition appeared in 1906, also published by Harrison and Sons, and continues to circulate. It was reprinted by the General Staff, War Office, London, 1909; Harrison and Sons, 1914; E. P. Publishing, Wakefield, England in 1976; Greenhill Books, London, 1990; and the University of Nebraska Press, 1996. It is also now available online at Google Books.

⁴² Although it is unclear whether Callwell made a contribution to the 1909 edition of field regulations, the first volume contains a chapter entitled "Warfare against an Uncivilized Enemy" and divided into two sections, one on mountain, the other on bush warfare. See General Staff, War Office, 1909: 191–212.

⁴³ Callwell drew examples from the US Army campaigns against the plains Indians, the Spanish in Cuba, the British and French in Africa and Asia, and the Germans in Africa.

of insurgency, objectives of small wars, intelligence, supply, conduct of campaigns, tactics and lines of communication. This emphasis on classification and categorization makes the book less a history and more a science. It presents a specialized type of warfare that was understood to be both universal (rebellion against European rule spans the global) and particular (terrain and fighting qualities of indigenous populations vary) in an orderly way. Read this way, *Small Wars* has much to say about the strains such conflicts placed on regular armies and their intelligence systems. Obvious throughout the book are the problems such encounters posed in the nineteenth century for the conventional genres that disciplined space and regulated facts, such as route books and military reports. In many cases, Callwell explained, works like military reports, handbooks and gazetteers either did not exist for uncivilized areas or, when they did, contained an inadequate amount of information for planning.⁴⁴ Lurking in the book was, thus, a very real sense of the epistemological crisis irregular warfare had come to pose to conventional armies. Why was this so? Why were the epistemological elements of the security regime under undue stress or threat from warfare with savages or uncivilized armies?

Unlike civilized countries, where accurate information about armies, topography, communications and military resources was readily available, similar knowledge about places where small wars broke out was limited. These deficiencies, Callwell concluded, could be divided into two types – “want of knowledge of the theatre of war” and uncertainty concerning the fighting abilities, organization and strength of the enemy. Of these two, the first, he argued, was the most important. In contrast to wars against “regular,” “modern armies,” small wars were primarily “campaigns against nature,” that is, against the difficulties posed by the rugged or undeveloped terrain of the country invaded (1906: 44, 68). Much of the rest of the book pivots around this observation. Limited knowledge of the routes, topography and the location of supplies of water and food could only result, as Mark Bell had suggested, in desultory warfare, problematic lines of communication, prolonged campaigns and, occasionally, complete disasters.

We might pause here a moment to consider the implications of these observations. If knowledge of “nature” was so critical a factor in warfare, one might ask why the absence of such knowledge did not serve as

⁴⁴ Callwell’s identification of critical knowledge gaps in the military archive might be contrasted with the optimism of Charles Brackenbury. Recall the latter’s presentation of the sort of material made available to Garnet Wolseley prior to the Ashanti campaign discussed in Chapter 4.

a deterrent to irregular war. Part of the reason that ignorance did not check such campaigns probably had a good deal to do with "reason of empire" rhetoric and the expansive proclivities of imperial states. Small wars, Callwell explained, were "campaigns of conquest or annexation, campaigns for the suppression of insurrections ... or for the settlement of ... annexed territory, and campaigns undertaken to wipe out an insult, to avenge a wrong, or to overthrow a dangerous enemy" (1906: 25). Thus, these were wars that were not about a balance of power, the primary concern of the military-diplomatic apparatus in the "civilized" world. Instead, they involved imperial expansion, managing resistance and countering affronts to such expansion. They were also wars in which British commanders were convinced not merely of the absolute superiority of their armies, but of the necessity of demonstrating such superiority for symbolic and pedagogical purposes. Callwell did not question the necessity of these wars, nor did he express any doubt that they were justified. Rather, he laid out a series of cautions and warnings, beginning with geographic issues and the problems posed to tactical and logistical considerations by an absence of knowledge about terrain.

At the same time, however, the knowledge gap that gave Callwell such concern was, to a degree, being narrowed in the early part of the twentieth century, when the third edition of *Small Wars* was published (1906). As noted above, a rapid expansion of knowledge, particularly with respect to China and the Northwest Frontier of India, had been made possible by a major increase in opportunities for first-hand field reconnaissance that accompanied military campaigns. Although Callwell does not discuss these changes, he was aware that irregular warfare not only relied on intelligence, but invariably produced new knowledge, not only of geography, but of indigenous populations as well. Moreover, each campaign produced information that, with the help of Callwell's comparative analytic, seemed to correspond with experience in other theaters of war.

So, for example, in the chapter on intelligence, Callwell emphasized that information from local informants must be carefully weighed because the savage and uncivilized peoples of the world all suffered from the vaguest notions of "time, numbers and distances" (e.g., see *From Sepoy to Subedar*) even when they tried to tell the truth (1906: 50). However, British experience in Africa and India showed Callwell that an efficient and well-organized field intelligence unit could overcome the problem, essentially through aggressive on-site reconnaissance.

A key kind of knowledge generated in these wars had to do with the capacities of irregular forces. It was precisely because of their low level of organization that the enemy had greater mobility and speed of

movement. This condition, for Callwell, essentially negated the “strategical rules” of warfare by which he meant maneuvering for position (1906: 52). Irregulars also had certain tactical advantages because they were operating on familiar ground and could rely on indigenous non-combatants as primary sources of information about the movement of occupying forces. The locals might not understand modern weapon or tactics, but being “closer to nature,” they were far more observant than Europeans. “By a kind of instinct,” Callwell tells us, “they interpret military portents even when totally deficient of courage or fighting capacity.” So disposed, indigenous people were able, in a most mysterious fashion, to communicate this information over great distances and at high speed (1906: 54).

These characteristics of the indigenous and irregular forces – tactical advantage, mobility, lightweight operations and mysterious means of communication – would serve as foundational knowledge for all future studies of low-intensity conflicts and guerilla warfare. These putative characteristics would become the objects against which the superior brainpower of the world’s military techno-elite would be pitted. They are also characteristics and features that were specifically ascribed to the Pathan populations on the Northwest Frontier in subsequent military reports and handbooks such as *Frontier Warfare – India* discussed above.

How should the empire’s armies deal with this seemingly organic yet invisible network and succeed in pacifying or suppressing resistance? Drawing from the global experience of civilized armies, Callwell made a number of observations and suggestions. First, regarding the indigenous communication system, he suggested overloading it with “fictitious information.” Second, the indigenous tactical advantage could be offset by actively gathering knowledge of the physical terrain in the theater of war by systematically describing the natural and built environment. Third, although the natives might be savage or uncivilized, they still possessed things they valued. As a general strategy of punishment and suppression, the object – here Callwell cites Garnet Wolseley – should be to determine what the natives prized and destroy or take it away from them (1906: 40, 145–46).

In some cases, China perhaps being the prime example, the thing judged to be most prized was the imperial capital in Beijing. In 1860 and 1900, the British invaded north China so as to occupy the city and force concessions on the Qing court. In the case of the Pathans, it was considered to be their towers, homesteads, walnut and fruit tree groves, and food supplies. Hence, the necessity of seizing such highly valued objects and destroying things that could not be easily replaced.

Moreover, if such actions were not carried out, if what the natives prized were not made the primary target of civilized violence, the indigenous peoples would think less of the invaders. "The uncivilized races," Callwell assured his readers, "attribute leniency to timidity" (1906: 148).⁴⁵

Success in small wars was thus primarily predicated on a particular form of experiential knowledge – knowledge that had been accumulated by British and other military men over time and in many places. This knowledge indicated universal patterns, ones that constituted an imaginary of irregular warfare that served to fill in for an absence of more reliable military statistics. Insufficient geographic knowledge, on the other hand, meant that any such campaigns were fraught with danger until such time as field reconnaissances could be performed. Under such circumstances, Callwell advised that it was important to protect and not to overextend lines of communication prior to conquest because of the mobility of the irregulars and the general treacherousness of indigenous populations (1906: 50, 115–24).

To summarize, by the beginning of the twentieth century, the British imperial security regime found itself facing two distinctly different kinds of warfare: "civilized" and "irregular" conflicts. At the London War Office, the military geographic and statistical data that had been assembled by intelligence officers led many to conclude that the primary threat to the British Empire lay not with Russian expansion into central and eastern Asia, but with the growing power of Germany on the European continent. Moreover, the wealth of intelligence data that had led officers like James Grierson to draw such a conclusion also made it possible to train and plan for the embarkation of an expeditionary force to the continent. At the same time, however, the reorganized British Army had no practical experience in "civilized warfare." By contrast, British forces in India and Africa had a wealth of experience in irregular warfare, having been actively engaged in it from at least the middle of the nineteenth century. But the practitioners of small wars in the colonies and on frontiers such as China and Afghanistan, while eager to duplicate the disciplinary and regulatory practices of War Office intelligence, were constrained, as Callwell indicated, by a shortage of the sorts of statistical information that aided those planning operations in Europe.

⁴⁵ These assertions were commonplace among British colonial army officers. Nevill, for example, noted that "the Zulu, the Turcoman, the Arab, and the American Indian" are all said to understand that "vengeance is the prerogative of might, forbearance the corollary of weakness" (1912: 374).

We have seen throughout this study the various efforts on the part of the Indian Army to close the knowledge gap. It is also clear, however, from a reading of Callwell, Nevill, the military reports on Afghanistan and Waziristan, and handbooks like *Frontier Warfare – India*, that geographic and statistical knowledge of the regions of conflict was primarily collected in and through the campaigns themselves. From these engagements, a typology of the rebellious other emerged along with a privileged methodology for dealing with the type: punitive expeditions. The decimation of the Tirah Valley and the sacking of Beijing and desacrilization of its Forbidden City in 1900 stand as emblematic of the primary directive laid down by Wolseley and repeated by Callwell – seize what they prize and take it away from them. Yet, this wholly masculine form of imperial knowledge and action was also disturbed and haunted by the irregular, by the uncertainties that the terrain and the mobility of the natives posed to the imperial security regime. Callwell's *Small Wars* could not avoid naming the disasters that occurred even to those who commanded the powerful technologies of empire and their many forms of knowledge. Put another way, the epistemological system that sought to produce comprehensive knowledge for the command and control of the space of empire came up against its limits in places like the Sudanese desert, the mountains on the Northwest Frontier, and Isandlwana in South Africa where the Zulus destroyed a British regiment (1879). Ultimately, it was superior force and ruthless practices, more often than positivist knowledge and taxonomical classification schemes, that decided colonial conflicts. The reliance on violence, if not the cheapest means, seemed the most appropriate and obvious way of dealing with “primitives” and “savages.”

The impact of the security regime in Great Britain

Security policy in India did not receive universal acclaim in Great Britain. Some questioned whether Russia had any designs on India, while others opposed the further expansion of the British Empire. In the latter case, critics such as John Bright, Richard Cobden and, later, J. A. Hobson pointed to the heavy costs of empire, whether in Asia or elsewhere. Some officials in India agreed with them, opposing the forward policy, for example, because of its waste of human and financial resources. Implicit in any of these critiques were questions about the nature and justification for the imperial security regime, both the financial burden it represented and the degree to which security concerns deflected attention from pressing problems in Britain. How, some asked, were the Afghan frontier, East Asia or the colonies in general,

all thousands of miles away from the British Isles, connected to the well-being of the population of Great Britain? Still others charged that empire brought out the worst features of British national character and wondered if Britain could be both a democracy and an empire.⁴⁶

These concerns were, in turn, part of far-ranging discussions about the nature of the British Empire. How had the British gained and expanded their empire? Was it possible to maintain global hegemony indefinitely or was reform of the imperial order prudent? Such questions animated geo-political and geo-strategic debates in England in the last quarter of the nineteenth century.

Before being appointed Viceroy of India in 1898, Lord Curzon wrote a series of books and articles arguing that the future of the British Empire lay in the resolution – in Britain's favor – of the Eastern Question. This question, as it was discussed in Great Britain, addressed the fate of the Ottoman and Chinese empires as they came under intense pressure from European and Russian expansion into western, central and eastern Asia (Curzon, 1889a, 1889b, 1892, 1896). When these empires collapsed, as they surely would, Curzon thought it essential that Britain be in a position to intervene to guarantee the security of its Asian dominions. Others, such as John Seeley (1883), Charles Dilke (1890, 1899) and J. A. Froude (1886), felt that Asian colonies merely gave Englishmen the satisfaction of providing good governance to those unable to govern themselves and argued that the long-term future of the empire lay elsewhere, in federation with "Greater Britain," the "community of blood" or "white" colonies of Canada, New Zealand, Australia and South Africa.⁴⁷

For both advocates and critics of empire, the nature of historical causation and interpretation of contemporary events played a central role in the debates, arguments and analyses of the meaning and effects of British overseas expansion. In this section, I will focus on three writers whose authority to pronounce on these issues was substantial, though their views were quite different. The three I have selected all had practical experience in India. Sir Alfred Lyall was an official in British India and later a member of the Council of India. Henry Hanna was an officer

⁴⁶ On the financial cost of empire, see the discussion in Porter, 1968: 25–34, 41. On empire and national character, see Pitts, 2005: 254–57. On the question of empire as a threat to democracy, the debate over the act that made Victoria empress of India is instructive. See, for example, Sir Henry James's resolution against the Act in *Hansard's Parliamentary Debates, House of Commons*, May 11, 1876, vol. 229, cc. 370–474. Also see Knight, 1968.

⁴⁷ For a comprehensive overview of the notion of Greater Britain see Bell, 2007. See Seeley on blood, 1883: 184–85.

in the Indian Army. The last, Robert Bruce, was a frontier officer and protégé of Robert Sandeman. I begin with Lyall.

In 1891, Alfred Lyall published two articles, one of which took exception with John Seeley's notion that the British had acquired India "unintentionally," "blindly," and "accidentally," with "little enough of calculation or contrivance in our colonization" and his insistence that Britain had a moral obligation to remain in India.⁴⁸ The other article offered a theoretical and historical explanation for British expansion in Asia. Lyall's intervention into debates over the meaning and import of the British Empire came from a position of authority based upon thirty years' experience as an official in India. He had served at the district and provincial levels, as secretary to Lord Lytton, the Viceroy, for three years, and upon retirement, was appointed to the Council of India. While in India, Lyall published a number of essays in prominent British journals, including ones that analyzed Indian religions, compared beliefs and governance in India and China, and assessed Britain's future in Asia. As an expert on Asian affairs, Lyall cautioned against too rapid reform in India and supported an Anglo-Russian settlement of the Eastern Question. These two positions were developed from his studies of religion and history, his experiences in India, and his understanding of views about empire in Britain that he thought ill-conceived.

In the first of these articles, Lyall noted that Seeley's characterization of how the British had acquired India was "controverted by known facts."⁴⁹ One of those facts was that India had been conquered numerous times by outside invaders; the British were simply the most recent. More importantly, conquest by invaders was a historical regularity that helped to explain the peculiar state of Indian religion, society, and character. Repeated invasions and rule by despots had crushed the progressive development of society and indigenous institutions in India. Thus, when despotisms weakened, Lyall observed, India reverted to anarchy, a state of disorder that was only resolved by another wave of despotic

⁴⁸ The quotation can be found in Seeley, 1883: 179. Seeley was the Regius Professor of History at Cambridge University. His views were expressed in a series of lectures given in 1882 and published the following year as *The Expansion of England*. The work was enormously influential, especially among supporters of empire, and remained in print until the 1950s. On Britain's accidental acquisition of India, see Seeley, 1883: 179. As for the necessity of Britain staying on in India, Seeley put it this way: "To withdraw our Government from a country which is dependent on it and which we have made incapable of depending upon anything else," he argued, "would be the most inexcusable of all conceivable crimes and might cause the most stupendous of all conceivable calamities" (1883: 196).

⁴⁹ Entitled "The Rise of British Dominion in India," Lyall later expanded the article into a book published in 1893; Lyall, 1891a: 83. The passages Lyall cites from Seeley are from the latter's 1883, pp. 179 and 213.

conquests. The upshot was stagnation or arrested development, with no evolution beyond a stage of barbarism or early civilization.

What the British had stepped into in the seventeenth century was a *Pax Mugolica*, a “top-heavy” despotic order that had destroyed all indigenous political institutions (1891a: 85). In the following century, the Mughal Empire began to decline, and in 1738 Nadir Shah, an Afghan adventurer (a reference those concerned about the Northwest Frontier could not have missed), sacked Delhi and inaugurated a new era of anarchy. India was fragmented and made more chaotic because of rivalries between petty despots, as well as between the French and the British, both of whom had interests in India. It was hardly absence of mind or meaningless contingencies that had led the British to confront the French, but ongoing competition for survival that had been played out in the Americas as well as in Asia. The British had won the contest in India in 1763. From then until 1805, a succession of British leaders – Clive, Hastings, Cornwallis and Wellesley – built a native army imbued with European discipline and defeated their Indian rivals for dominion over much of the subcontinent.

Intentional conquest was, however, only part of the English story in India. The other major element for Lyall had to do with the fact that, unlike past rulers, Britain did not have as its primary goal the exploitation of India for its own benefit. Instead, the British were in the process of transforming the country, establishing not only law and order and good governance, as Seeley had observed, but also something missing from Seeley’s assessment. The British introduction of science and European thought, according to Lyall, was stimulating a mental transformation that was leading Indian intellectuals out of the tangle of Hinduism. British rationality and disinterested governance, its commitment to “light and liberty,” were providing, as he put it, an “enormous impulse and a totally new direction to the civilization of that continent” (1891a: 94; 1882, 1: 300–2). India was changing, but it was early days yet. Britain had, therefore, two responsibilities. The first, as humanitarians might have argued, was to continue the good work of civilizational transformation. The other responsibility, essentially a political realist position, was to protect British interests and Indians from external predators, who were now no longer the wild tribes of Central Asia, but modern European powers, especially Russia.

If he had established practical and rational reasons why Britain expanded into and stayed on in India, reasons that disputed Seeley’s views, Lyall also offered a more complex explanation for British expansion in India. Expansion was defensive to be sure, but how exactly had it occurred? What was the logic or rationale behind the growth of British

India? Lyall's answer came in a second publication entitled "Frontiers and Protectorates." In it he proposed that progressive generations of Englishmen had been motivated to seek a natural, that is defensible, frontier for British territory. This "true frontier," he argued, delineated not only land administered, but land protected (1891b: 317). What did Lyall mean by land administered and protected? How did they differ? Expansion in India, he explained, had always involved a "double step forward." The first step marked the advanced limit of administrative occupation, which brought law and order and rational institutions of governance. The second step drew a strategic and political boundary well in advance of actual governance (land protected). This dual movement of consolidation and the throwing forward of protectorates or buffers was always a dynamic work-in-process. The operation of a "system of protectorates" beyond the changing borders of administrative control accounted for the British conquest of India over an extended period of time and, more importantly, explained the rationale governing expansion. Why then had the process not continued until all of Asia was under British administrative control? Expansion was arrested, he explained, at the point where natural barriers intervened to halt it, the Northwest Frontier being a prime example. In other cases, territorial expansion stopped where other forms of "the solid resistance" presented themselves – "another well-organized state," for example. In this case, when the frontiers of two strong states abutted, a process of "civilized diplomacy" ensued in which boundaries were determined and ratified. In other instances, Afghanistan for example, the meeting of two powerful states might be interrupted by geographic barriers. The intervening territory would then become either a sphere of influence or a buffer zone for one or the other power.

In sum, Lyall found both discernable intent and a deliberate policy of expansion in Britain's occupation of India. In essence, he had also identified a succession of "forward policies," one following upon another as British frontiers and protectorates marched across the Indian subcontinent. Thus, his objection to Seeley's interpretation – a sort of empire without empire-makers argument – was, I would argue, more than a quibble over the location of agency. The theoretical structure in which Lyall developed his argument, especially in the frontiers and protectorates piece, had broader implications. First Lyall identified and elaborated on the logic of a security regime that was in place in India well before the Intelligence Branch and the General Staff began their operations in the Indian Army. If I were to contrast the two, the frontiers and protectorates were a throwback to old-fashioned territorial imperialism, one that justified itself on the basis of stabilizing disorderly frontiers.

Lyall's contribution was to clarify how the original security regime worked in practice. The other security regime, the one coming into view near the end of Lyall's career in India, focused its attention on the maintenance of territory gained, but did so in novel ways. It went about safeguarding territory not through law or administrative rule, but instead through the command of an information order and the management of communication lines that could be used to deploy force against predictable and expected threats and resistances. It also projected protectorates well beyond the topographical barriers Lyall took as India's natural frontier.

Second, Lyall made a significant point when he recognized that the logic of nineteenth-century empire-building operated outside the development of international law and the concept of sovereignty that had been important components in the development of the European balance-of-power security regimes. He noted, for instance, with particular reference to the scramble for Africa and other parts of Asia, that

it is not yet settled precisely what are the reciprocal rights and duties of the superior State and the native ruler in one of these protectorates; no one has definitely laid down what laws apply, within the vast grants of land held by chartered companies to persons of different nationalities or in what exact degree the rights and responsibilities of government are divided between the companies and the parent States. (1891b: 325)

And he expressed his concern that the absence of clear rules, especially in the face of developments that looked to him like those that had occurred in India from the eighteenth century on, would create flashpoints of conflict between powerful European states. What Lyall seemed to be pointing to in his understanding of both frontiers and the new dynamic of empire-building was that the kind of security regime, the military-diplomatic apparatus, that had operated in Europe since the Napoleonic Wars was under severe strain from the new imperialism of the late nineteenth century.

But if Lyall made Seeley look somewhat naïve about the nature of empire and the constituent elements of imperial power, he also suggested that the rationale for empire in Asia and its maintenance had to do with some things other than British responsibility to protect and uplift underdeveloped India. Seeley's moral economy of empire was for Lyall only a partial explanation of why Britain stayed in India. Britain also remained because India played a critical part as the base of the British imperial security network in Asia. Yet, as sophisticated as Lyall's theory of British expansion was, it does seem to have elided a significant question. If the frontier of India stopped at the base of the Suleiman

Mountains and the Hindu Kush, did this mean that a protectorate or sphere of interest existed in the mountains? Lawrence's answer to this question had been no. But the forward policy had nullified Lawrence's "masterly inactivity." Not only had the British ventured into the mountains, but with the Durand agreement in 1893 they had thrown forward the India frontier deep into Pathan territory. With that extension of the frontier, there existed a situation in the mountains that had produced the various Pathan outbreaks discussed in the previous section.

Between 1895 and 1896, Col. Henry Bathurst Hanna of the Bengal Field Force addressed the implications of the new security regime that had emerged in northwest India. In three book length essays (1895a, 1895b, 1896), Hanna argued that the "forward policy" had compromised the "safeguards essential to the preservation of the British India Empire" (1896: 110). Since the Crimean War, the justification for the policy – protecting the passes leading into India from Afghanistan and eventually pushing fortified positions into the mountains lying across the Punjab-Afghan frontier – assumed that once the Russians had consolidated their rule over Central Asia, they would move on India. In his first book, Hanna presented comprehensive data demonstrating the impossibility of a Russian invasion of India. Much as War Office Intelligence officers had demonstrated in their confidential critique of Indian Army scenarios, Hanna concluded that the Russians would not be able to secure lines of communication through, nor mobilize sufficient pack animals to move supplies across, Afghanistan. Moreover, the likely communication line to India, the Herat-Kandahar line of advance, was exposed to attacks that could be launched from Persia. Even if the Russians managed to overcome these problems, their army would have to break out onto the northwest plain of India through lengthy bottleneck passes. There they would find waiting for them the true natural defense line of India, the Indus River, and well-equipped and supplied British and Indian Army regiments (1895a).

In the second essay, Hanna argued that the defense of the scientific frontier – strategic points of advantage along the Afghan border – was unsound.⁵⁰ In particular, he found the whole process of establishing fortified outposts in the Afghan-Punjab mountains strategically indefensible because the units were almost impossible to supply, reinforce or relieve expeditiously. The forts and posts also caused another problem. They were a point of friction with the mountain tribes and had generated substantial ill will toward the British (1895b: 63–71).

⁵⁰ On the scientific frontier and its import for the defense of India, see Curzon, 1888.

In the final book, Hanna addressed the cost of maintaining the forward policy. He argued that, in order to militarize the frontier, the Government of India had had to impoverish much of the population of the northwest territories and the Punjab, and strain the economy of the rest of India to the point where it could quickly become a threat to internal stability. He recommended that the fortified encampments be removed from the mountains, and that a defensive line be established at the Indus River, where lines of communication were unimpeded to the rest of India. He then detailed the extensive savings – including the reduction in the size of the army – that would result in such a move (1896: 115–30).

Initially, Hanna's advice was ignored, but when Lord Curzon became Viceroy in 1899 he instituted a set of reforms that contained elements of Hanna's recommendations. Although it is unclear whether Curzon had read Hanna, he too concluded that the forward fortified outposts were both indefensible and provocative to the mountain tribes. Curzon withdrew troops from these positions and concentrated them in the rear; organized mobile flying columns that could be expeditiously deployed in case of a conflict; and built outposts near key passes that were linked to the rear by light rail lines. He then drew from Sandemen's book of frontier administration and had British political officers introduce a tribal service system, including the creation of local militias and better-trained units under the command of British officers. Lastly, Curzon restructured the administration of the frontier by creating a new province.⁵¹

The new structure placed decision-making power in the hands of those who had direct contact with the Pathan groups. However, although Curzon's reforms seemed to have ameliorated the problem, they did not eliminate confrontation and punitive expeditions. There were major confrontations in 1902 and 1908, the latter of which resulted in the destruction of the Bazar valley on a scale similar to the Tirah expedition.⁵² There were also punitive expeditions into the mountains in 1919, coterminous with a British invasion of Afghanistan, and more unrest in the mid 1930s.⁵³ In addition, frontier

⁵¹ For Curzon's memorandum on military reform and India Office approval of his plan, see *East India (North-West Frontier)*, 1901: 115–21; on administrative reform, see pp. 121–50.

⁵² As the report to Parliament put it, "every fort and watch tower in the valley has been razed to the ground, large supplies of wood and fodder have been obtained, and the losses among sheep, goats and cattle ... have been great"; see *East India (North-West Frontier)*, 1908: 115. On the earlier campaign, see *East India (North-West Frontier)*, 1902.

⁵³ On the Third Afghan War, see *East India (Afghanistan)*, 1919. During these hostilities, one of the units reorganized under the Curzon reforms, the Khyber Rifles, was disbanded over loyalty issues. On 1936, see *East India: Waziristan*, 1937.

warfare became even more deadly as new weapons, many the result of technological developments during World War I (motor transport, airplanes, cannons and lighter-weight machine guns) were introduced. The Indian Army even contemplated the use of mustard gas and aerial bombardment, although ultimately only the latter seems to have been deployed.⁵⁴ Indeed, by the 1930s, bombing of the property of those identified as perpetrators of crimes along the frontier became what was probably a cheap substitute for sending expeditions into the mountains.⁵⁵

Soon after the last of Hanna's books was published another sort of critique appeared, one that argued that a British presence in the mountains was justified on the grounds that communication lines had to be secured from the Punjab and Baluchistan side of the mountains to the Kandahar–Kabul line in Afghanistan. However, the securing of such lines, as Robert Sandeman had shown with his “tribal responsibility” system, was better insured through partnerships with the tribes than by the establishment of fortified outposts. Moreover, Richard Bruce, the author of these observations, a frontier officer and colleague of Sandeman, went on to argue that the tribal system was the more appropriate forward policy. The problem, as Bruce saw it, was not that Sandeman's system was ineffective with groups such as the Waziris, Mahsuds and Afridis, but that it had not been pursued with sufficient vigor or commitment. Why was this the case? Bruce thought it was because the rewards for frontier duty went overwhelmingly to military men, whereas the political commissioners were not only without honors for the hard work of maintaining good relations with the tribes, but were seldom given sufficient rank and pomp to impress tribal leaders. Moreover, it was much easier to implement the “knock-down policy of punitive expeditions” than to engage in the laborious project of winning the “hearts and minds” of the Pathans. Yet, he remained convinced, after thirty years on the frontier, that the more diplomatic approach had proved, and would in the future prove, far more effective in ensuring frontier security. Bruce concluded that rather than military

⁵⁴ On the effects of new communications, transport and weapons technologies on the frontier, see Moreman, 1998: 125–32.

⁵⁵ Like the formal order of destroying Pathan villages by land forces, bombing of them came with elaborate protocols that included leaflet warnings dropped by aircraft, the last of which was printed on red paper. See, for example, Government of India, Defence Department, 1941: 1–7. The document is in IOR L/P&S/20/B308.

outposts what should be pushed right up to the Durand Line was the Sandeman system.⁵⁶

Bruce's presentation of the virtues of Sandeman's approach to frontier security ought to have a familiar ring. It was very similar to Lord Lugard's notion of indirect rule in Africa and followed upon efforts in other parts of Asia to shift some of the burden for insuring the security of British interests to the local populations. The Sandeman-Bruce method for dealing with colonized peoples also looks much like liberal, humanitarian imperialism with its emphasis on improving the economic lot of indigenous populations. But I think there is another way to look at it as well. If we consider the Sandeman approach to be a variation of the diplomatic elements of the security apparatus, then the two "forward policies" of soft and hard imperialism tell us something significant about the relation between diplomacy and the military on the frontiers of empire. The critique generated by Bruce points to an inherent tension and contradiction in the security apparatus, especially in a racialized situation in which native resistance could only be understood as savagery. Bruce gave no reason to believe that under the extreme conditions of frontier warfare and scorched earth retribution the parts of the apparatus would complement each other, as seemed to be the case in Europe. British activities on the Northwest Frontier and in China suggest the opposite: that punitive measures and gunboat diplomacy were all too easy solutions to disagreements whose peaceful resolution would have required substantial unappreciated and unrecognized efforts.

In these three writers, we see the problems and tensions evident within an imperial order that at the end of the nineteenth century found itself embattled by upstart powers on the periphery of empire (e.g., Germany, the United States, Japan) and unresolved issues concerning security and governance within colonies. Critical to these arguments were interpretations of the historical record of empire and views about the nature of human agency. For Lyall, both agency and intent were evident in the rational actions of British actors, actors who also operated within the framework of broad strategic and political considerations. In Hanna, agency became attenuated to an extreme of hyper-militarization and illogical reasoning, undermining the entire enterprise of empire. Lastly, Bruce provides a disturbing critical perspective on the

⁵⁶ See Bruce, 1900: 357–59. Almost four decades later, C. E. Bruce, Richard's son and himself a long-time frontier officer, wrote that frontier conflicts remained an acute problem because the Government of India had failed to enthusiastically embrace Sandeman's system (1938).

military-diplomatic regime operating on the frontiers of empire. In a situation overdetermined by racial typologies and pronouncements on savage warfare, it was far easier to turn to “legitimate” violence to resolve disputes instead of the hard work of everyday cultivation of social relations across “races.” The use of violence was, moreover, encouraged by a reward system in which careers were made through performance in military campaigns.

Moreover, since the British understood that male honor among the Northwest Frontier tribes was closely tied to acts of vengeance for affronts (i.e., “blood feuds”), what could they possibly have imagined the destruction of the valleys of Tirah would lead to in the future? Much the same could be said about the actions of the Indian Army in China, where British officials thought they were engaging and combating an indigenous notion of “face.” In 1900, the British took a number of deliberately destructive steps designed to make Chinese people “lose face.” In both cases, British civilian and military officials seemed to think that calculated acts of violence would teach permanent lessons. Instead, on the Northwest Frontier militarization produced a security regime of perpetual war and perpetual acts of revenge; in China, British atrocities became the key events in a “century of humiliation,” the ideological cornerstone of Chinese nationalism to this day (Hevia, 2003: 332–45).

Empire and British popular culture

If, as Richard Bruce suggested, colonial warfare made military careers, it also sold newspapers, books and soap, and inspired painters, poets, song writers and, in the twentieth century, filmmakers.⁵⁷ In late nineteenth-century Britain, the military engagements on the Northwest Frontier of India and in north China took up their place alongside other savage wars in which the British and Indian armies participated in Africa and Southeast Asia. Events on the frontiers of empire were delivered to the publics of Europe and North America in new or reformatted media forms – World’s Fairs and exhibitions, illustrated newspapers

⁵⁷ In his pioneering work entitled *Propaganda and Empire* (1984), John MacKenzie dealt with all these topics, and more. Subsequently, a number of works published in the Manchester University Press Studies in Imperialism series, edited by MacKenzie, have appeared that discuss and analyze the range of popular representations of empire and their many venues in late nineteenth- and twentieth-century Britain. See, for example, Summerfield (1986) and Russell (1992) on music hall entertainment and songs; Bratton (1986) and J. Richards on juvenile literature (1992); Stearn on war correspondents and the press (1992); and J. Richards on film (1986 and 2001).

and adventure fiction, much of which was directed at boys.⁵⁸ These new forms of media were supported by a vastly expanded transportation and communication systems that linked the east coast of China and India into global steamship and railroad networks capable of rushing reporters to the scene of action in two to three weeks. Submarine cables across the Pacific and through the Indian Ocean made it possible for newsmen to communicate by telegraph with Europe and North America at high speed. Into this milieu came a new kind of reporter, the war correspondent, often on special assignment from a daily or weekly newspaper, who appeared on the scene to record and sometimes participate in sensational campaigns, where stalwart bravery and numerous acts of self-sacrifice were the norm.⁵⁹

The incidents themselves, Charles Callwell's "small wars," were normalized by newspapermen, politicians and public intellectuals like Robert Seeley into confrontations between brave and patriotic British soldiers and loyal indigenous forces, on one side, and savage, wily and barbaric natives on the other. Paralleling military understanding of resistance to British rule, members of the popular media presented the causes of colonial warfare and indigenous rebellions as the misguided acts of the ignorant, uncivilized peoples and fanatics. Pictures of Mad Mullahs (Fig. 8.2), wild savages "cursing the infidel" (see ILN, February 19, 1898: 255), and Chinese Boxers appeared in the illustrated press, where they were objects of both amusement – how could this disheveled lot stand up against well-uniformed and drilled British soldiers? – and apprehension. I have written previously about the links between British security interests, imperial warfare and popular culture in late nineteenth- and early twentieth-century Britain. In that work, I traced the textual and visual representations to be found in newspaper accounts, juvenile literature and advertising of violent encounters between British and Indian army regiments with Qing forces during the invasions of China in 1860 and 1900. In English-language sources, especially ones concerning the events of 1900 involving the siege of the Euroamerican legations in Beijing, warfare was treated as a pedagogical project of teaching lessons to the benighted, while its aftermath was organized as retributive justice (2003: 273–81, 301–5). Seldom in

⁵⁸ On fairs and exhibitions in Britain, see Hoffenberg, 2001. On imperialism and exhibitionary culture see, for example, Greenhalgh, 1988, Mitchell, 1989, and the articles in Blanchard *et al.*, 2008. On the pictorial press, see Jackson, who includes an extended discussion of the *Illustrated London News*; see 1885: 302–14.

⁵⁹ For a contemporary account of war correspondents as heroic figures, see Bullard, 1914. For a more critical account, see Stearn, 1992.



8.2 Mad Mullah – *The Graphic* September 18, 1897

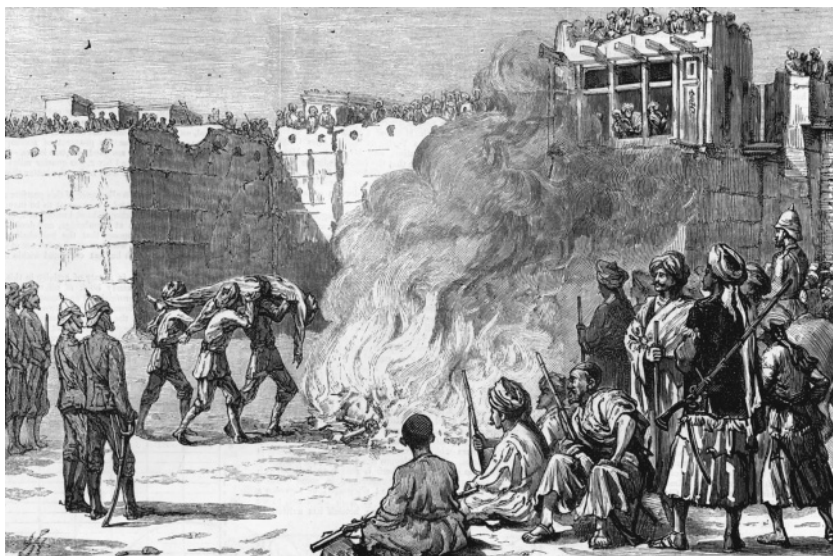
popular accounts was the excessive violence of British or Euroamerican soldiers, in contrast to that of the local opposition, acknowledged.⁶⁰

Instead, the usual forms of presentation involved tragic, romantic or sentimental narratives, spiced with spectacular images of imperial warfare. Juvenile fiction, for example, was built around notions of the romance of empire, with tales of great games and high adventure, and the paternal and sentimental affection Englishmen showed to appreciative colonized peoples. These stories were filled with incidents that tested the manly and Christian virtues of bravery, self-sacrifice, loyalty, duty, chivalry, nobility and patriotism and produced subjects worthy of ruling over the less civilized world (Richards, 1992). Significantly, such tales often drew directly from the accounts of war correspondents. This was the case in the work of G. A. Henty, whose youthful heroes found themselves deposited directly into the center of official histories and dispatches where they displayed the inherent virtues of the imperial masculine subject and learned what it meant and what it cost to bring order to the otherwise chaotic colonial world.⁶¹ A similar narrative pattern is evident in textual and visual presentations of warfare to be found in media such as the *Illustrated London News* (hereafter, ILN) and *The Graphic*. In both of these cases, extensive coverage was given to colonial conflicts and the inevitable defeat of chaos and disorder by the stern and upright soldiers of the Queen.

During the campaigns on the Northwest Frontier of India in 1897–98, for example, the *Illustrated London News* carried extensive reports. Coverage often began with the initial disposition of British and Indian army units at the various sites of “uprisings,” and continued through the key engagements, the tribulations of mountain warfare such as ambushes and sniper fire, the “conveyance of the dead” Indian and British troops for burial, the ultimate retribution, including the destruction of villages and the sites where the leaders of the uprisings met to organize their forces against the British, and the return to Britain of units involved in the campaigns. Readers could literally follow the unfolding of this stock narrative from week to week until British and Indian army units restored order.

⁶⁰ Exceptions can be found in accounts such as Lynch, 1901: 311–17, and Dillon, 1901.

⁶¹ Henty, who wrote over a hundred works for boys, produced novels, filled with racial stereotypes, on the First Afghan War (*To Herat and Kabul*, 1902), the Boxer Uprising (*With the Allies to Peking*, 1904) and the Northwest Frontier (*Through Three Campaigns*, 1904). Although he wrote on Frederick Roberts, it was not with respect to Afghanistan, but rather his campaign in the Boer War (*With Roberts to Pretoria*, 1901). According to Janet and Peter Phillips, Henty's sales were as high as 250,000 copies a year (1978: 166). It is somewhat disturbing to discover that these books not only remain in print, but seem quite popular among home-schooling parents.



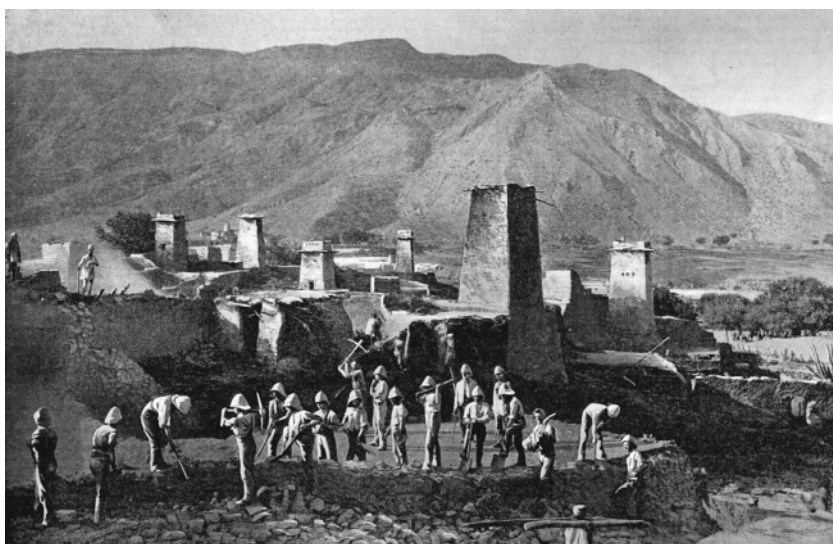
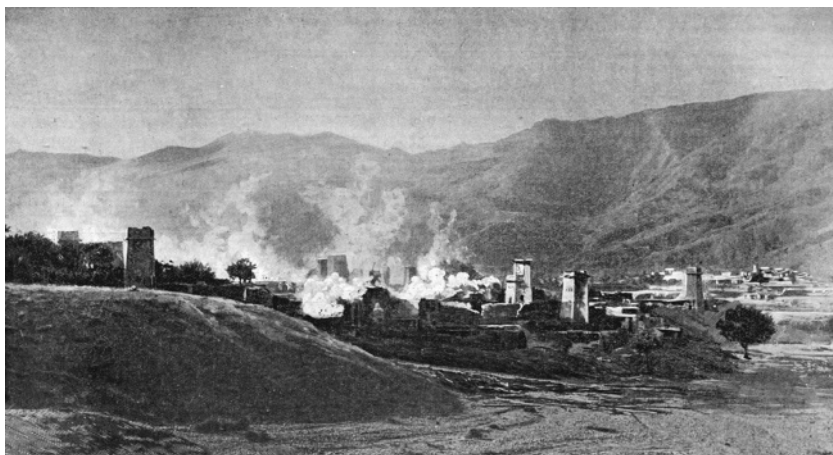
8.3 Burning a fanatic – *The Graphic* February 8, 1879, p. 140

In the mediated venue of the daily and illustrated weekly presses, the British public also received clear images, in either verbal description or illustration, of the punishments meted out to those who violated the “just” laws of the civilized. During the Second Afghan War (1878–80), for example, a picture of a dead “assassin” being tossed into a pier of burning logs appeared in *The Graphic* (February 8, 1879: 140; Fig. 8.3). An accompanying text explained that the man was not an inhabitant of Jellalabad, where the attempted assassination occurred, but a “wandering Ghazi, or fanatic” who prowled the country looking to murder as many infidels as possible, and to be martyred, “as he imagines.” It then went on to note that his imagining was for naught, because “the burning of the body ... after death renders a man unfit to be revered as a martyr and a saint; *hence the supplemental sentence*” (i.e., the cremation; emphasis added, p. 126). A similar incident during the troubles of the mid 1890s also resulted in the burning of the corpses of executed fanatics. This time, though, a photograph provided more vivid evidence of the nature of the fanatic – three disheveled-looking men were shown in chains prior to their execution (*The Graphic*, November 28, 1896: 678; Fig. 8.4). Hanging and the burning of bodies was, like the attack on Chinese “face” mentioned earlier, specifically designed to address and assault indigenous beliefs.



8.4 Fanatics in chains – *The Graphic* November 28, 1896, p. 678

The imperial lessons directed at the “fanatic” were complemented by ones that addressed whole populations. Recall the earlier discussion of the blowing up of towers in Pathan villages. Images of such events appeared in *The Graphic* (February 15, 1879: 165) during the Afghan campaign and again later in the 1890s. In coverage of the Tochi Valley campaign in 1897, a set of etchings showed the towers of a village identified as Shelan being blown up and its defensive walls broken apart by British soldiers (*The Graphic*, August 28, 1897: 280, Fig. 8.5). In other cases, drawings appeared showing assaults by British forces (*ILN*, December 18, 1897: 875; Fig. 8.6), the dangers of mountain warfare including sniper fire and ambushes (*ILN*, December 18, 1897: 882–83; Figs. 8.7 and 8.8), and a smoke-filled sky caused by numerous villages set ablaze as punishment (*The Graphic*, February 5, 1898: 4 [Fig. 8.9] and *ILN*, January 8, 1898: 53). Through images and texts like these, the British public was kept abreast of the specificities of the problems the Indian Army faced on the Afghan frontier. And because the images of frontier warfare were juxtaposed with the many other colonial military campaigns involving British forces, sources like *The Graphic* and the *Illustrated London News* made seamless connections between the many challenges facing the imperial security regime and the solutions that were preferred, and felt to be necessary.



8.5 Destruction of Shelan – *The Graphic* August 28, 1897, p. 280

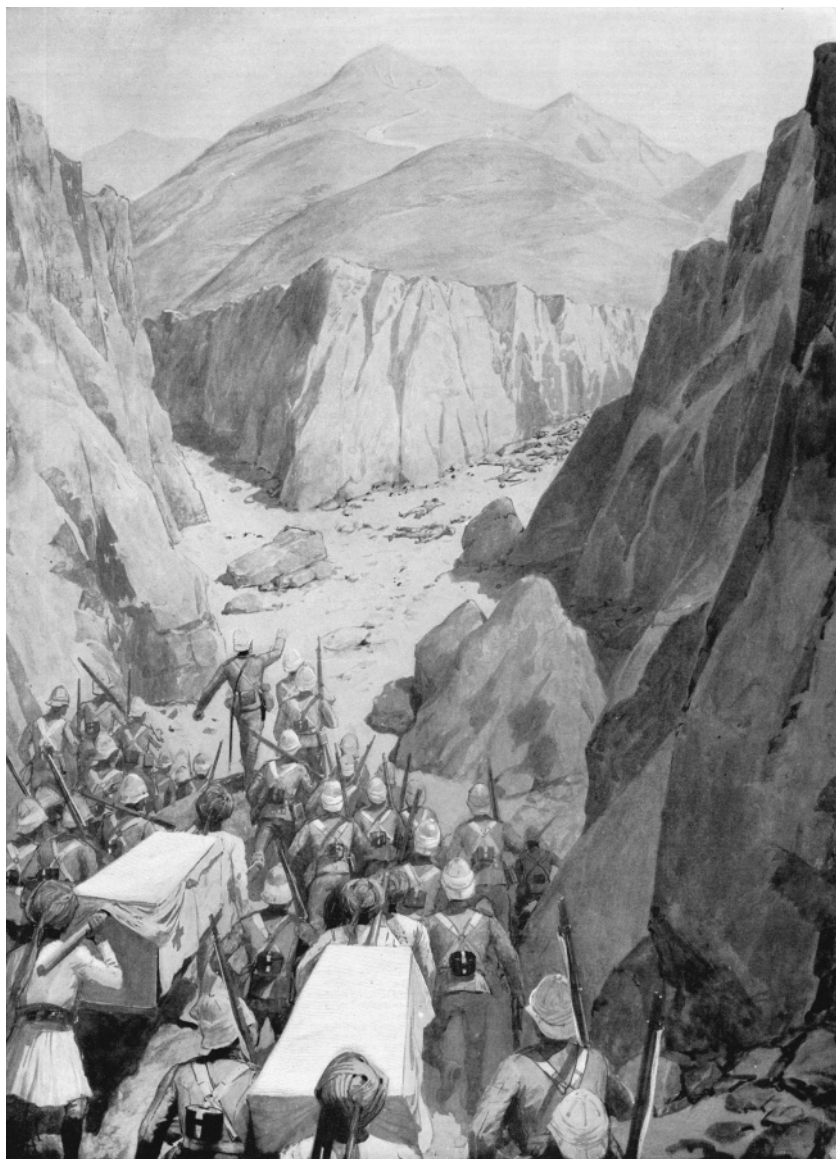
Official accounts and newspapers also provided the grist for another form of popular entertainment: reconstructions of military encounters in public parks, at World's Fairs, on the stage and at a specially designed performance site called Belle Vue Gardens outside Manchester. In what Ben Shephard has termed “showbiz imperialism” (1986), Belle Vue provided a fixed, long-running site where from around 1850 through World War I battles and sieges were moved directly from pictures in



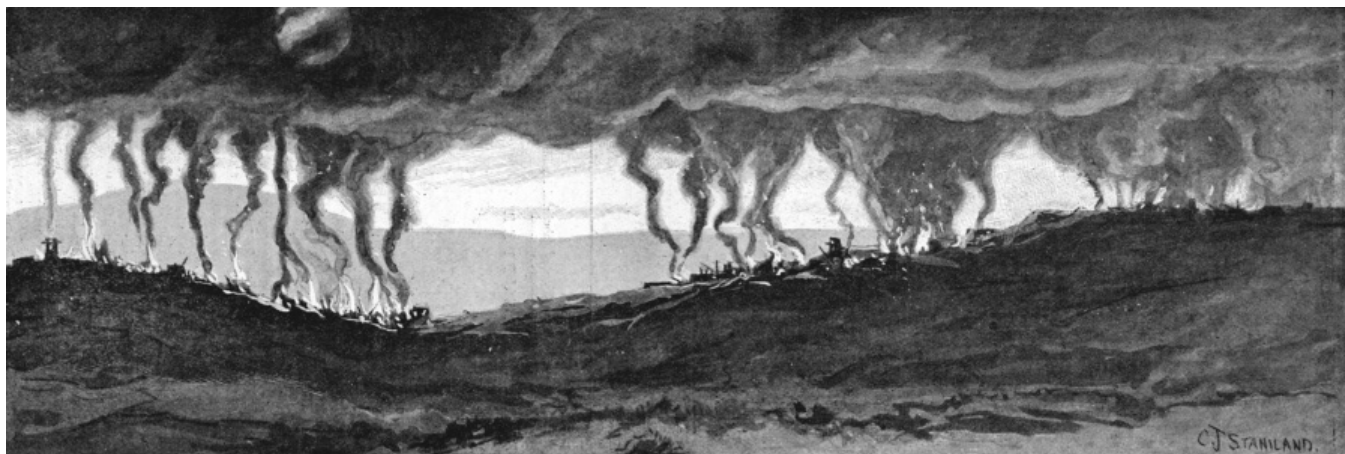
8.6 Assault – *ILN*, December 18, 1897, p. 875



8.7 Sniper fire from above – *ILN*, December 18, 1897, p. 882



8.8 Massacre of cut-off soldier – *ILN*, December 18, 1897, p. 883



8.9 Burning villages – *The Graphic* February 5, 1898, p. 4

the illustrated press to the stage. Famous for its pyrotechnic displays, Belle Vue also served the useful ideological function of explaining away the brutality of colonial warfare, while informing the public about the power and usefulness of new technologies. So, for example, the librettist at Belle Vue had this to say of the Battle of Omdurman where close to 10,000 Muslim Sudanese were killed and another 13,000 wounded, as opposed to 47 British dead. The battle, he explained:

proves that stubborn valour is of but secondary import in the struggle against a fanatical half-savage foe. The resources of civilization must be brought into action; the most murderous weapons of our inventive age alone can cope with the wild rush of men, to whom death or victory is equally Paradise. But it proves more: that civilization must conquer by modern methods; that the railway must be recognized as the greatest force holding the country [Egypt] against sand and sterility, toughest of enemies;^[62] that by it alone can be maintained the reconquest of the Soudan. (Cited in Mayer, 1992: 191)

Much the same could have been said about the utility of the latest weapons and rail lines in dealing with the “fanatics” of the Northwest Frontier and indeed was by those in support of militarizing the frontier. We do not know whether the librettist repeated something along the lines of what he had to say about the Sudan when a year later Belle Vue presented the conflicts between the Indian Army and the Afridis and Orakzais. What is clear, however, is that there was an avalanche of conflicts between 1896 and 1903, including wars against the Matabele and Ndebele in southern Africa, the Boer War, the Pathan wars in India and the Boxer Uprising in China, many of which, drawing on accounts from the popular press, were re-enacted at Belle Vue (Mayer, 1992).

Showbiz imperialism and images in the popular press were supported ideologically by an outpouring of non-fiction publications about the history of the British Empire, the lives of great men, and the great battles of the British Army and navy. Macmillan introduced a series in 1889 called “The English Men of Action,” the numbers of which sold out immediately. G. R. Low’s *Battles of the British Army* was hugely popular. And in the 1890s, *Strand Magazine*, publisher of the Sherlock Holmes stories, began a series entitled “Stories of the VC: Told by those who have won it.”⁶³ Tales of heroic men of action, when combined with newspaper accounts of colonial warfare, created an atmosphere in which even the more thoughtful observers could not escape the received categories.

⁶² Note that here the librettist, like Calwell, suggests that colonial war is a battle against nature.

⁶³ On these and other examples of popular history, see Jablonsky, 2000: 7, who cites Phillips and Phillips, 1978: 164–66.

So, for example, Winston Churchill, who covered the campaign of the Malakand field force in 1897 as a correspondent for the *Daily Telegraph* and the *Pioneer*, provided substantial eyewitness detail on tactics of the Pathan guerilla fights, which clearly impressed him. He even acknowledged that they were motivated by patriotism. Perhaps more significantly, Churchill saw that the British sphere of influence on the frontier overlapped and was in conflict with the Pathans' "sphere of existence." At the same time, however, he could not see the Pathans as anything other than superstitious fanatics under the tyranny of "numerous priesthoods." *Ziarats*, a word he knew, were treated as little more than fetish objects where believers left offerings to support some misguided and wholly preposterous notion of causal relations (1898: 6–7, 92, 204, 213).

If reporters like Churchill were, as I've suggested here, dominated by narrative conventions that limited their ability to understand the complexities of the frontier peoples, other conventions were equally limiting concerning the British themselves. Henty and other popularizers of empire reduced the motives of British actors to simple economic advantage combined with exemplary heroic behavior. Others elevated prominent soldiers into hagiographic figures that became models for all age groups, genders and social classes in Britain. At the end of the nineteenth century, one such figure was Frederick Lord Roberts of Kandahar, a peerage that came with his successful leadership in the Second Afghan War. Roberts, son of Gen. Abraham Roberts of the 1st Bengal European Fusiliers, was born in Cawnpore and educated in Britain. He returned to India as a twenty-year-old subaltern in 1852 and was assigned to a unit in Peshawar. When the Indian rebellion broke out in 1857, Roberts was a member of the Punjab forces that retook Delhi and relieved the siege of Lucknow. He was, in other words, involved in two of the key events that became mythologized in future years as emblematic of British will and determination to retain India.

Over the next four decades, Roberts served in a number of military campaigns in the northwest, was a key figure in the creation of the Indian Army Intelligence Branch, and became a member of the pantheon of great British military leaders when in 1880 he marched a 10,000-man force from Kabul to Kandahar, relieving the garrison under siege by the forces of Ayub Khan. He then directed his army in the defeat of the Khan, which ended the Second Afghan War. After returning to Britain in the late 1890s, he published a two-volume reminiscence entitled *Forty-one Years in India*.⁶⁴ In 1900, after the British

⁶⁴ Originally published in 1897, the work went through numerous editions. I have used the 1900.

Army had experienced a series of devastating defeats and inconclusive campaigns against the Boers, Roberts was given command of British forces in South Africa. He led a campaign that seized the major cities of South Africa, defeating one after another Boer army on the march. Upon his return to Great Britain at the end of 1900, he was awarded the Order of the Garter, an earldom, a grant of £100,000 and the position as Commander-in-Chief of the British Army. Soon after, G. A. Henty entered Roberts into his roll call of heroes with the publication of *With Roberts to Pretoria* (1902).

It should be clear from this brief review of Roberts's career that he performed sufficient exploits to become an exemplary model of British imperial manhood. Moreover, Roberts seemed to demonstrate his leadership qualities under the most trying of circumstances, a quality that matched the supreme model of military manhood of the age, the Duke of Wellington, who led the British Army in the defeat of Napoleon at Waterloo. Not surprisingly, therefore, he was the object of a number of biographies while still alive, one of the more interesting of which was written by Violet Brooke-Hunt.⁶⁵

Brooke-Hunt's book on Roberts was hagiographic in a number of ways. When Roberts returned to India in the 1850s, she told her readers, he stood out because of his lack of height; it gained him the nickname "Little Bobs" (1914: 16) and later, just plain Bobs. The nickname became both a term of affection and an iconographic marker of a man whose stature was certainly greater than his physical form. Brooke-Hunt established his greatness by placing him in the midst of monumental events and heroic personages involved in the suppression of the Indian rebellion in 1857, whether Roberts met them or not, including Henry Lawrence and Henry Havelock. Positioning Roberts in proximity to other great men created a set of affiliations by association. The qualities he shared with them – steadfast bravery, nobility and self-sacrifice – indicated that the "pluckiest, keenest young staff officer in India" was destined for greatness (1914: 89). And like Lawrence and Havelock, Roberts was exemplary in other important ways. Throughout the biography, Brooke-Hunt drew attention to his humility, piety, unwavering Christian beliefs and temperance, qualities that distinguished him from other soldiers.

Not surprisingly, back on the Northwest Frontier Roberts built a reputation as a brave, cool-headed commander, resolute and faithful to

⁶⁵ See her biography in the *Oxford Dictionary of National Biography*. Brooke-Hunt was later awarded a war medal and the order of Lady of Grace of St. John of Jerusalem for her services in South Africa.

his duty. When Roberts left India after forty-one years of selfless service, there was a universal expression of affection for him. Brooke-Hunt noted that "Europeans, Hindus, Mohammedans, and Sikhs, soldiers and civilians, joined in bidding him a regretful farewell" (1914: 281). After the Great War broke out and Indian Army units were rushed to the front, Roberts, ever faithful, determined to visit "friends of other days" in the trenches and give them "words of encouragement" so that they would feel less like "strangers in a strange land" (1914: 360). Unfortunately, the day of his visit was cold and sleety; Roberts contracted pneumonia and died not long after.

As presented by Brooke-Hunt, the life of Frederick Roberts mimics the tales in that formative bestseller of the Victorian era and model for Christian heroism, *Foxe's Book of Martyrs*. The lives of others, such as Charles "Chinese" Gordon, who was felled by the forces of the Sudanese Mahdi at Khartoum in 1885, were also treated in this way.⁶⁶ As such, hagiographic biographies like those of Roberts and Gordon help to explain why colonial warfare could be so out of focus in Britain and why accounts of warfare of extermination like the Tirah Valley campaign seldom made a negative impression even when the details were presented in newspapers and books.

Perhaps more important, running through the hagiography of Roberts were many displays of sentiment on his part, as well as those directed at him by his subordinates, not to mention his biographer. The sort that Roberts displayed at various points of his career, and especially in 1914 as one of the final acts of his life, was one broadly shared by soldiers and encouraged among all classes of the British public. Churchill noted it in the songs soldiers sang around campfires after battle (1898: 208), and such sentimentalism runs like a thread through Kipling's stories and poetry of army life. Hence, if heroic sieges and their daring relief by self-sacrificing soldiers took up one part of the public's attention concerning empire, another was taken up with intensely emotional expressions towards those who fought the good fight to maintain empire and Christian civilization. Precious little room was left for revelations of British atrocities and brutalities, or for tales of careerism of the kind Bruce noted on the part of British officers.

The sentimentalism represented by and for Roberts, when combined with his other stellar qualities, also suggest that there was much more than jingoism, as Hobson put it, animating the age. Through the lives

⁶⁶ For a detailed discussion of the soldier-hero and imperial masculinity, see Dawson, 1994: 117–51. Also see MacKenzie (1992) on Victorian heroes and imperial mythology.

of a handful of exemplary figures, colonial warfare was elevated above the baser instincts of human nature onto a plane where duty, heroic masculinity, sacrifice and Christian piety found ample room for expression. Beside these selfless virtues also stood images of empire as high adventure and as an opportunity for almost light-hearted excitement. It is perhaps worth noting that the same year that Brooke-Hunt first published her hagiography on the life of Lord Roberts, Rudyard Kipling published *Kim*. In *Kim* one sees an almost childlike glee for adventure and competition, much like the games learned at school (Mangan, 1986). Kipling turned the pleasures of such rivalries into a "Great Game," one in which all of Asia was the playing field.

As sentiment and adventure came to dominate the domain of public expression, popular media had little space for the consideration of the religious beliefs of the Pathans, the outrage of Chinese peasants at European incursions into the interior of China or the cost of the forward policy. There was, moreover, little reason to examine or critique the vast security regime built on reconnaissance, information management and rational planning, or to explore the impact of the regime across Asia. As a result, the realm of illustrated press, music halls, theaters and international exhibitions,⁶⁷ where most of the population of Great Britain acquired its understanding of the colonial world, was filled with fantasies of civilizing missions, righteous warfare and heroic sacrifice, as Kipling so well put it, "lest we forget."⁶⁸

In the period after World War I, these images of heroic self-sacrifice on the frontier of empire were kept alive in the new media of motion pictures. Films such as *Lives of a Bengal Lancer* (1935), *Charge of the Light Brigade* (1936) and *Gunga Din* (1939), to name but a few examples, all maintained the strict division between civilization and barbarism and were also enormously successful in both Great Britain and the United States.⁶⁹ Print media continued apace with some new and intriguing twists. Blackwood, for example, began a series of books with short pieces entitled *Tales from the Outposts*, of which twelve volumes in all seem to have been published. One of these, *Tales from the Border* (Bethell, ed., 1936), collected together fourteen stories on the Northwest Frontier, all of which show signs of having been written either by or under the

⁶⁷ On exhibitions in Great Britain, see Durbach, 2008: 81–88, and Greenhalgh, 1988.

⁶⁸ This is a phrase that appears in Kipling's poem "Recessional," which was composed on the occasion of Queen Victoria's Diamond Jubilee in 1897.

⁶⁹ For an excellent discussion of films with British imperial themes, see Richards, 1986: 153–58.

guidance of experts with frontier experience.⁷⁰ Stories of “pestilent” mullahs, Pathan blood feuds, oriental fatalism, punitive expeditions involving the destruction of crops, houses and towers, steadfast officers and loyal martial races⁷¹ were recirculated for another generation (in the case of my copy, it was given as “Senior Prefect’s Prize” at Shooter’s Hill School, Greenwich in 1938). In at least one instance, however, there was a noted difference from the past. The new technologies produced during World War I – airplanes armed with machine guns and bombs, armored vehicles and more powerful cannon – were said to have altered the nature of conflict between the Indian Army and the hill people. The use of these weapons against Pathan villages led to attacks on the domestic space of British Indian Army forces, leaving an “embittered” and “vindictive” feeling behind. Gone was the “large-heartedness of the Borderland,” the chivalric spirit of an earlier age, a spirit that could turn the Pathans into something akin to the Scottish highlanders that resisted English armies in the seventeenth and eighteenth centuries.⁷² Such imperial nostalgia is not unusual. In this case, however, it suggests that by the 1930s, for some at least, the events of the Tirah Valley punitive expedition of 1898 had been forgotten.

⁷⁰ Others dealing with imperial security issues include *Frontiers of Empire* (1933) and *Small Wars of the Empire* (1933). As in the works on native character recommended by Bingley, it is difficult to tell what in these tales is fact and what fiction. Some have names attached to them, but most have pseudonyms such as “X,” “Hathi” or simply initials.

⁷¹ See Bethell, ed., 1936: 18–21, 102, 128, 146–49, 223–25 and 242. Although most of the pieces mention “blood feuds,” one entitled “Grit” is completely devoted to the subject (123–42).

⁷² The comparison between Scottish highlanders and Pathans is dwelt on in “Border Manners”; see Bethell, ed., 1936: 1–5.

9 Imperial security and the transformation of Asia

During his 1893 mission to the court of Amir Abdur Rahman at Kabul, Mortimer Durand noted a “peculiarity.” The Amir doubted the accuracy of British maps because, as he put it, he had been to these places. Recalling one such expression of incredulity, Durand reported that the Amir sent for “a sheet of foolscap and a box of colored chalks” and made a rough sketch, one that Durand thought bore no “resemblance whatever to the country in question.” On another occasion, the Amir commented that the British maps always presented his “alleged encroachments” into their territory as very large, while the British incursions into Afghan territory were invariably shown as a “tiny little thing.”¹ At around the time that Durand visited the Amir’s court, Xie Fucheng, the Qing court’s ambassador in London, was embroiled in a dispute between his own government and the Government of India over the border between Yunnan province and Burma. The maps possessed by the two sides did not correspond, and Xie feared that if Qing officials did not express firm resolve they would lose territory that would make Yunnan vulnerable to further British encroachments.²

The concerns of Abdur Rahman and Xie Fucheng point to the fundamental ways in which the space of Asia was transformed by the British imperial security regime. Asia was reconfigured through the same sorts of knowledge technologies that had earlier produced European states as precisely bounded, sovereign entities. Relations between such sovereignties would now be organized through military-diplomatic forms of knowledge and practices, and in this way, help resolve one of the problems presented by Asia: the chronic uncertainty over the strategic and political map of the vast continent.

¹ Henry Mortimer Durand to W. J. Cunningham, December 20, 1893; cited in Yunas, 2003: 26.

² Chien, trans., 1993: 102, 136, 144, 173–74 and 182. Xie also thought that international law was a sham – those with the most powerful weapons took what territory they wanted (13).

Thus, the increasing techno-scientific resolution of the problem of territorial indeterminacy had a dual effect. The forms of techno-science mobilized by the British military made it possible to imagine Asia as a whole in geo-political terms. That is, once Asia could be constructed as a contiguous series of known sovereignties and dependencies, it became possible to calculate balances of power between potentially sovereign entities. The scientific reconfiguration and re-description of the continent and its agents through statistics and route reports also made it possible to construct Asia geo-strategically with military ends in mind. The military frontiers of empire (recall Henry Brackenbury's concern), and the lines of communication that crossed and maintained those frontiers, were made legible through intelligence operations. Thus the information collected by British imperial agencies became capable of entering as known factors into a training and planning regime for the defense of empire.

Underlining these developments was Durand's utter certainty that the Amir's drawings could not possibly correspond to a real, physical terrain. At the same time, even though the comments of the Amir and the concerns of Xie Fucheng registered an awareness of the changes wrought by European expansion into Asia, they themselves could not easily reproduce the positive, instrumental knowledge concerning territory and populations that British Army intelligence had crafted from north China to Mesopotamia. In the Amir's case, his knowledge of the geography of his kingdom was inadmissible and irrelevant to the task of resolving "Eastern Questions." All the borders of his kingdom were created either by the British or through Anglo-Russian collaboration. In the Qing case, because the British had demonstrated a willingness to use force to impose treaties, officials had little recourse but to participate in boundary-making diplomacy, as defined in British terms and enforced through European "international law."

The explicit task of the imperial security regime was to protect British interests in Asia. These were defined as maintaining the colonial regimes of South and Southeast Asia and advancing British commercial activities in China and eastern Asia in general. The geo-strategy for accomplishing these goals involved the protection of major lines of communication, especially the sea lanes, between Britain and the East. Protection included the creation of a string of naval and military bases stretching from the Mediterranean Sea, through the Indian Ocean to the Malacca Straights, into the South China Sea. In addition, protectorates and strategic colonies were established along the sea routes (e.g., in territory bordering the Suez Canal, at Aden on the southern approach to the Red Sea, at Singapore on the strait between

the Pacific and the Indian Oceans, and in Hong Kong and Shanghai on the China coast). The British military-diplomatic apparatus was organized to secure these lines of communication and to securely maintain Asian territories as British possessions.

The theory and practice of security, in turn, constituted Asia as a problem, one that demanded and justified interventions of many kinds. If Asians could not solve the problem of Asia – and by definition they could not, because they were unable to recognize either the causes or the solutions to the problem – then white men with the appropriate technologies of knowledge would do so. As British politicians, colonial administrators and military officers organized a security regime based on command of information about territory and military statistics, they also convinced themselves that their interventions were for the good of the indigenous populations.

Put another way, the British imperial security regime constituted Asia as unstable terrain occupied by suspect populations. In order to manage threats posed by problematic topography and uncivilized or semi-civilized peoples, those responsible for maintaining the security of the British Empire determined that specialized knowledge of places and peoples was, as Lyall explained, a critical component of expansion and consolidation. After 1857, then, empire-maintenance in Asia was no longer understood as the defense of exclusively commercial interest, but as a succession of eastern questions the management of which served to sustain and reproduce the security regime itself. Equally important, the processes that reproduced empire had effects that ramified well into the twentieth century, one of which was the notion that mechanisms of management or containment were required to keep the problematic parts of Asia from threatening Euroamerican interests throughout the “East.”

The question addressed in this final chapter involves the extent to which the dynamics of the military-diplomatic apparatus of the British Empire in Asia and its forms of knowledge persist into the present. Clearly, given the number of military interventions in parts of Asia after World War II, the continent is still seen to be a problem, especially by the United States. What, if any, is the relation between the activities of the United States and its allies and those of the British security regime discussed throughout this book?

From empire to hegemony

When World War II ended, only two significant powers were left on the greater Eurasian landmass: the Soviet Union, which directly controlled

the old Tsarist empire and parts of the eastern half of Europe, and the United States, whose naval and air power had achieved a global reach. Bankrupt and dependent on the United States, Great Britain soon dismantled its empire in Asia. In its wake emerged a group of independent nation states, whose sovereignty was modeled after the European form (e.g., India, Pakistan, Burma). These states were, however, understood to be weak and unstable: their political institutions were new and often imported from the outside, their economies were undeveloped, and their populations were poorly educated. From the point of view of the leadership of the United States, the new nations of Asia were directly threatened by the Soviet colossus that dominated the northern part of Asia. The task for the American security regime, then – both geo-strategically and geo-politically – was to insure that the Soviet Union expanded no further in Asia. Soviet Russia was to be forcibly contained through diplomatic, economic and military power.

The idea of containing Russia was, of course, a central element in the thinking of British leaders about the security of their empire in Asia. And although American interests in the region prior to World War II primarily involved the penetration of the China market, there was at least one US strategist who saw matters in terms similar to the British: Alfred Thayer Mahan. At the turn of the twentieth century, Mahan published a series of articles under the title, “The Problem of Asia.” In them, he argued, Russia, “in obedience to natural law and race instinct,” was working its way southward into western and central Asia. The only check at present to Russian expansion was the British Empire.³ But from Mahan’s point of view, the problem of Asia was more than a simple question of a British-Russian face-off. Other powers, such as the United States, Germany and Japan, had expanded into different parts of Asia, an expansion that was in part dependent upon the regional stability fostered by Great Britain. From this relationship ensued a “solidarity of interests” among the four powers. In the long term, the best way of protecting those interests would be for indigenous groups in the region to build strong, progressive states, understanding that their own interests were convergent with those of the four powers. But for such development to happen, the Powers would have to invest in places like Turkey, Persia and China, and understand that time would be required for new economic and political orders to evolve and take

³ Mahan’s “The Problem of Asia” originally appeared in the March, April and May editions of *Harper’s New Monthly Magazine* in 1900. Later that year, the three pieces along with two others were published in book form in Britain; see Mahan, 1900. The above paragraph and the one that follows are a condensation of his views; see 1900: 26–29, 44–45, 59, 63–69, 72–74 and 93.

hold. To buy that time, Mahan argued that the British, Americans, Germans and Japanese had to come to a formal agreement to cooperate in checking Russia.

We see here, in Mahan's ruminations, the embryonic form of post-World War II US strategic thought about dealing with the problem of Asia. In addition to the "modernization" of former colonies and of the weaker Asian states, the American mode of containing Russia included a collective security system organized around integrated military command structures (e.g., NATO, US-Japan Security Treaty), regional economic cooperative organizations, procedures for consensual decision-making and the funding of development schemes. In this security regime, the United States was recognized as a hegemonic power and it treated other states in the region as spheres of influence (now thought of as areas of American political influence) and protectorates or client states (now understood as sites of American geo-political preponderance; see, for example, Brzezinski, 1997: 28–29). American hegemony also included the strategic placement of military bases ringing Asia, from Greece and Turkey in the west to Japan, Taiwan and the Philippines in the east. Although the United States maintains a vastly greater number globally, its Asian bases have frequently been situated at precisely those points that the British had deemed crucial for the defense of India.⁴ These bases not only protected the communications lines between the United States and southern and eastern Asia, but provided secure access to the oil fields of Saudi Arabia, Iraq, Iran and the Persian Gulf. They have also provided platforms for the launching of a variety of overt and covert operations onto the continent, such as the Vietnam War.

Until the collapse of the Soviet Union in 1991 and economic reform in China in the 1980s, all of these operations were carried out in the name of containing communism, with an accompanying strategic assumption that if any of the countries bordering Russia and China should also go communist, the others would fall like a row of dominoes.⁵ At present, the US concern seems to be to guarantee regional stability so that American and transnational corporations can maintain access to Asian

⁴ The exact number of American military and naval bases outside the United States is unknown. See Nick Turse, "Empire of Bases 2.0" at <http://truth-out.org>; accessed January 23, 2010. See C. Johnson, 2004: 151–85. Cumings (2009) provides a detailed overview of the US military establishment in the Pacific.

⁵ The domino theory seems to have been coined by Dwight Eisenhower, who, like Mahan, thought that containment could only be achieved through a coalition of like-minded partners; see Ambrose, 1991: 141–42.

markets, while insuring the supply of Middle East oil for the US and its European and Asian allies.⁶

In addition to a security regime built around strategic bases, a second element that can be traced from the British Empire in Asia to the Cold War and post-Cold War eras has to do with another kind of security issue that has only been lightly touched on here. As noted in the previous discussion of Afghanistan, the British often worried about the power of Islamic religious figures to incite Pathan fanaticism. These concerns were probably most pronounced during and in the aftermath of World War I. When the war broke out, the Ottoman Empire had joined the Central Powers, and the Sultan/Caliph in Istanbul declared a jihad against the Allied Powers. With a population in excess of one million Muslims within the empire, the British faced what seemed to them daunting security questions, not least of which, in the case of India, was the possibility of a Muslim invasion from the outside, subversion from within by disaffected subjects who took seriously the Sultan's call for a jihad, and a potential mutiny of the Islamic "martial races" that had made up a key component of the Indian Army.

In the face of a possible transregional Muslim alliance directed at their empire in Asia, British leaders developed a new set of priorities and political strategies. First, they threw support behind Arab nationalism, including the encouragement of an Arab rebellion against Ottoman rule. Second, they developed policies to placate Muslims within the empire, for a while favoring them over other groups. And last, during the war, the British high command in Cairo developed the notion that while there should be a caliph, he need not be the Sultan of the Ottoman Empire. No alternative Caliphate was created, but there were extensive discussions of the possibility.⁷

After the war, the British, with the aid of the French, broke up the Ottoman Empire. When it was later clear that British postwar machinations posed a threat to the Caliphate, Indian Muslims launched non-cooperation campaigns. The issue was muted, however, in 1924 when the new government of Turkey abolished the Caliphate.⁸ Still, the British in India remained alert to the possibility of a Pan-Islamic movement. One fear was that Muslim agitators might stir up either the

⁶ On security involving oil, see Klare, 2001. Oil issues include the notion that global reserves have peaked and shortages are inevitable, making control of Middle East reserves a US national security question. On oil's decline, see Deffeyes, 2001.

⁷ I draw on Oliver-Dee: see 2009: 163–72.

⁸ For a study of Pan-Islamism and the Ottoman and British empires, see Özcan, 1997. On the postwar settlements that broke up the Ottoman Empire and ended the Caliphate, see 184–204. Also see Oliver-Dee, 2009: 109–37.

border tribes on the Northwest Frontier or the crown's Muslim subjects in India – or even perhaps produce an Afghan–Bolshevik alliance.⁹

These evolving concerns over the security of British interests in Asia find their counterpart in the long history of US involvement in the region after World War II. The US security presence in Asia has included the backing of repressive regimes, the toppling of governments (Iran in the 1950s, Afghanistan and Iraq more recently), land wars in Korea and Vietnam, covert operations in many of the countries on the continent and, as noted above, the establishment of bases and military outposts throughout the region. For a long time, the ostensible justifications for these actions was the Soviet threat, but since the 1990s the US government has identified Pan-Islamism in the guise of international terrorism as the main threat to American interests in the Middle East and other parts of Asia. One primary concern over the last two decades has been with Al Qaeda, whose leader, Osama bin Laden, called for Pan-Islamic unity, a restoration of the Caliphate, the purging of corrupt governments in Muslim countries, and war with the United States as an act of Muslim self-defense.¹⁰

When on September 11, 2001, members of Al Qaeda directly attacked the United States, destroying the World Trade Center in New York, and targeting the Pentagon and the White House in Washington, DC, the American government's interpretation and response to these attacks was similar to that of the British a century earlier over border incursions on the Northwest Frontier of India. The US government labeled Al Qaeda's actions as terrorist attacks, the contemporary version of the nineteenth-century British notion of fanatical outrages. Much like the Second Afghan War (1878–80), when the British deposed Shere Ali and replaced him with Abdur Rahmin as amir, the United States and some of its allies, including Great Britain, launched something akin to a

⁹ As the General Staff in India put matters in 1919:

It is to be remembered, moreover, that with the existing unsettled conditions in Central Asia, the former problem of a powerful and hostile Russia on the northern border of a buffer Afghanistan has in some degree been revived; with the difference that, instead of a Moslem Afghanistan being a buffer between two Christian Empires, she may become the outwork of a Pan-Islamic or pan-Turanian [Turkic] Federation extending from the Caspian to China. (p. 1)

The possibility of collusion between the Bolsheviks and Afghanistan was raised in the wake of a Russian mission to Kabul in 1919; see the report on Central Asia, Persia and Afghanistan in IOR L/MIL/17/14/91, which is a *précis* of events between November 1 and November 30, 1919, labeled "Secret."

¹⁰ The work on Al Qaeda is voluminous. James Robbins provides a helpful introduction to the organization's goals and strategies; see 2002: 354–66.

punitive expedition into Afghanistan, toppled the Taliban government and installed a new regime. Not long afterwards, claiming that Saddam Hussein also provided safe haven for terrorists and possessed weapons of mass destruction, the administration of George Bush launched an invasion of Iraq that resulted in a regime change there as well.¹¹ However, unlike the British Raj, the Americans couched their actions not only in terms of eliminating terrorist threats, but also in a rhetoric of bringing freedom and democracy to the peoples of Afghanistan and Iraq.¹² The American-led coalition would not colonize either country, but would remain until law, order and good government were established.

China has posed other sorts of problems for the American security regime. Nineteenth-century British fears over Russian control of China seemed to materialize when the Chinese Communist Party came to power in 1949. With the establishment of the People's Republic of China (PRC) that year, the US expanded its containment efforts to include both East and Southeast Asia. Two wars were fought (Korea and Vietnam) to demonstrate the US will to prevent further expansion of communism. The Sino-Soviet split in the early 1960s, and the recognition by the Nixon administration that a rapprochement with China might bring an end to the Vietnam War and create a possible ally against the Soviet Union, resulted in an easing of tensions in the 1970s. Diplomatic recognition between the United States and China followed in 1979. The United States, like Great Britain with the Qing dynasty after the Second Opium War (1860), intensified ties with the PRC and self-consciously took up a position as tutor for China's reentry into the "family of nations."¹³

Since the 1980s, however, China has become a new kind of problem for the United States. Economic reform in the post-socialist PRC produced a supposedly unprecedented historical anomaly. A booming capitalist economy in China has been overseen by a one-party political system that, in name at least, remains communist. China's enormous economic growth and liberal market freedoms under what is understood by many to be a repressive one-party state, coupled with the technological upgrading and expansion of its armed forces, seems to pose a threat to US interests in Asia, but the older forms of domination,

¹¹ The robust interventionism of the Bush administration was suggested prior to the election of 2000 in the policy proposals of a neo-conservative organization called "Project for the New American Century." See www.newamericancentury.org/; accessed January 27, 2011.

¹² On democratization of the Middle East as part of US security interests, see, for example, the comments of President George Bush in "Bush Shares dream of Middle East Democracy," the online edition of *Asia Times*, February 3, 2003: www.atimes.com/atimes/Middle_East/EB28Ak02.html; accessed January 27, 2011.

¹³ On British pedagogy in China during the second half of the nineteenth century, see Hevia 2003.

such as treaty reparations and extraterritorial privileges, are no longer an option. Some observers issue dire warnings, while others, especially those within academic China studies in the United States, attempt to see China's rise in a historical perspective that places less emphasis on China as a threat and more on its integration into a global order of trade and diplomacy.¹⁴ Nevertheless, the US national security apparatus, punctuated by periodic expressions of concern from the Pentagon, prepares for possible confrontations.¹⁵ No doubt, like the British War Office and Admiralty before them, the US military maintains and updates contingency plans and carries out exercises for war with China in undisclosed locations on the Asian mainland.

Another feature of the American security regime that finds a corollary in the activities of the British in Asia is a continued commitment to the production of pertinent military, economic and political knowledge about the region. Critical to the development of such knowledge, after World War II, was the investment by the United States government and private foundations in area studies programs and the strategic social sciences (i.e., political science, sociology, psychology and anthropology) in American universities.¹⁶ The British had established something along these lines when the School for Oriental and African Studies (SOAS) was launched in 1916.¹⁷ However, the US initiative that began in the postwar period was much grander in scope than that of Britain in the earlier part of the century. Initial funding for the development of programs in foreign area studies was provided by the Ford, Rockefeller and Carnegie foundations. In 1950, Ford's Foreign Area Fellowship, which was at first managed by the Social Science Research Council and the American Council of Learned Societies, helped to launch a variety of area centers located at major public and private universities across the United States. Eight years later, under Title VI of the National Defense Education Act (NDEA),¹⁸ the federal government began to provide

¹⁴ *Red Dragon Rising* by Edward Timperlake and William C. Tippet II (Washington, DC: Regnery Publishers, 2002) seems typical of the dire warning school. More balanced assessments can be found in the articles collected in Yee, ed. 2010, Womack, ed. 2010, and Wills, ed. 2011. Also see my discussion in 2003: 323–26.

¹⁵ For a recent Pentagon pronouncement on the China threat, see the *New York Times* August 26, 2010.

¹⁶ For a report on the state of area studies in American universities carried out by the Social Science Research Council on the eve of major private and government investment, see Steward, 1950.

¹⁷ Originally, the School was created to centralize instruction in oriental languages (see the Parliamentary report ROOSL, 1909). Later, the curriculum of SOAS was expanded and courses added on Africa and African languages. For a history of SOAS, see C. Phillips, 1967.

¹⁸ Enacted as Public Law 85–864 on September 2, 1958. See United States Congress, 1959: 1580–1605 for the full provisions

funds for the sustenance and expansion of centers and research facilities, as well as for critical language programs.¹⁹ These programs built on links already established during World War II between universities and the state and closely followed wartime training and research programs.²⁰ Language study was combined with interdisciplinary regional and national studies that included courses in history, geography, anthropology, philosophy, economics, politics and literature.

Area studies research was useful for providing multifaceted, interdisciplinary pictures of the object under investigation and, within certain disciplines, specialists might also provide recommendations on policy and programs that could be useful in transforming the region or country in question (e.g., democratic nation-building in Japan, for example, under the auspices of the American occupation). However, with the advent of the global competition between the United States and the Soviet Union in the "third world,"²¹ academic, government and military planners adopted an approach – a common language, set of concepts, or theoretical structure – termed "operations systems theory" that both transcended regions and identified common elements that linked them together.

Unlike the engineering form of knowledge that animated the British security regime of the nineteenth century, the one that emerged in twentieth century United States was based on managerial science and technologies of administration, with social scientists added to government agency research teams. Developed during World War II, the operational systems approach was made up of three basic components – the investigation of past performance as a means of clearly defining the problem, statistical analysis and model-building to help explain the problem, and use of microeconomic analysis to develop a range of appropriate interventions.²²

As it was refined, the systems approach synthesized ideas and tools from the physical sciences, mathematics, quantitative social sciences

¹⁹ See Szanton, 2004: 1–33. Also see Cumings, 1998. On China, see P. Cohen, 1984; Barlow, 1993; Farquhar and Hevia, 1993; and Marks, 1985.

²⁰ See the essays in Shiffrin, ed. 1997, and Simpson, 1996. Simpson has also documented various projects linking the academy and the American Cold War state (1994). For an analysis of the development of area studies during World War II, see Fenton (1947).

²¹ On the origins of the concept of three worlds – capitalist, communist and developing – see Pletsch, 1981.

²² See Waring, 1995: 30. By the early 1950s, the systems approach became a standard way of addressing managerial problem in large-scale enterprises. It was diffused through newly created professional organizations and their journals, taken up by think tanks such as the RAND corporation, adopted by business schools in prestigious public and private universities, and applied to production planning and analysis at major industrial corporations.

and engineering, and reformulated problems in the cybernetic terminology of information and communication.²³ According to Robert Lilienfeld, systems analysis was an ideology well-suited for bureaucratic planners and centralizers.²⁴ And because proponents and practitioners incorporated elements from multiple disciplines and technologies of knowledge, the systems approach, with its promise to make manifest problems in their entirety and offer efficient and cost-effective solutions, provided a common language linking civilian government agencies, the military bureaucracy, corporate enterprises, think-tanks, and various individuals and departments in large and small universities. At the same time, it could also absorb into itself the products of area studies as structured data or, following Talcott Parsons and Edward Shils, as pattern variables.²⁵ In this formulation, systems analysis, with social and cultural patterns added in, became a tool for measuring “modernization,” the processes through which the third world was supposed to embark upon that universal historical path leading to democratic capitalist nation-statehood (Latham, 2000: 44–46).

But perhaps most importantly, because operational systems methodology had first been developed as a means for dealing with the complex relations between technology and warfare, it meshed neatly with the global expansion of American capitalism and military bases, providing a vast tool kit of techniques for organizing the planning, deployment, and logistics of the American security regime. Once the plans were put into operation as either war games or military interventions, the systems approach became an indispensable means for evaluating the effects of action, whether they were “brinksmanship” confrontations with the Soviet Union or the many military interventions in smaller countries and regions undertaken by the United States from 1950 forward.²⁶

But if a systems approach with its interdisciplinary social science and area studies components can be distinguished from the sort of military knowledge produced by British engineers and artillery officers, there has not been a complete severing of the British past from the American

²³ See Waring, 1995: 30–36, who provides a list of the administrative-management techniques incorporated into systems approaches.

²⁴ See 1978: 263. Lilienfeld was extremely critical of advocates who saw systems theory as a solution to all problems. Arguing that it held no monopoly on truth, he saw it as basically a means for maintaining a technocratic elite in a managerial society.

²⁵ For an analysis of the relation between systems theory and area studies, see Latham, 2000, especially 30–46.

²⁶ Perhaps most famously, the systems approach was used in Vietnam to measure “pacification” through a program entitled “Civil Operations and Revolutionary Development Support.” For a critical analysis, see McCoy, 2007: 236–43; Gibson, 1986: 270–315; and Young, 1991: 240–41.

present. The figure that bridges the two and remains pertinent to what has come to be called counterinsurgency doctrine is Charles Callwell and his book *Small Wars*. In a comparative study of counterinsurgency strategy and tactics, Col. John Nagl, a veteran of the Iraq wars, singled out Callwell as a critical figure in distilling the essence of small wars and placing the wars fought in the British Empire into the same framework as those of Spain in Cuba and the United States in the Philippines (Nagl, 2005: 39). More recently, Callwell's book has resurfaced as one of the "classics" cited in the US Army field manuals entitled *Counterinsurgency* FM 3-24 (2006) and *Tactics of Counterinsurgency* FM 3-24.2 (2009).²⁷ What, then, is the appeal of Callwell to the American military thinkers?

As Nagl suggests, Callwell's decision to deal with small wars as a global comparative phenomenon is perhaps the most important aspect of his seminal work, one that elevated it above the usual accounts of specific conflicts and placed it in the broader field of strategic and tactical studies. This generalizable knowledge came, moreover, with an original set of taxonomic categories generated by Callwell, such as mountain, bush and guerilla warfare, which facilitated comparison across regions. Second, by highlighting the asymmetric relations of power involved in small wars, Callwell characterized such confrontations as irregular warfare; that is, he saw such conflicts as warfare that operated by different rules than "civilized" warfare and consequently required different forms of strategic thinking and tactical practice. Third, and this became especially relevant after the Bush administration decided to invade Afghanistan following the events of September 11, 2001, Callwell provided abundant examples of British experience in hill or mountain warfare with the Pathan (now called Pashtun) tribes inhabiting the mountains between Pakistan and Afghanistan. It was in these mountains that Osama bin Laden supposedly found safe haven. Lastly, Callwell had a penchant for ordering information in a classificatory schema. This style had a certain appeal, perhaps, to those American military trainers who still constructed field manuals, much as the British had before them, to provide rational and systematic structures for thinking about hard-to-control warfare. And indeed, the contemporary counterinsurgency field manuals are made up of sections that define the problem, highlight important steps for dealing with the

²⁷ Both the manuals are available on line and can be found by searching on FM 3-24 and FM 3-24.2. FM 3-24 was also published by the University of Chicago Press. I will cite it as Petraeus and Amos, 2007.

problem, and lay out a series of definitions, plans, recommendations and guidelines.

There, however, the similarities seem to end, for even a cursory reading of the manuals makes it quite clear that the control and command of data in these sources is not the taxonomical order that determined the structure of Callwell's presentation; nor do more recent manuals include Callwell's sense that tribal uprisings were epiphenomenal events much like natural disasters – they rise, flourish and are made to dissipate. In contrast to incursions into uncivilized areas bordering British colonial territory, counterinsurgency operations take place in a sovereign nation state where an insurgent group (guerillas or terrorists) seeks either to overthrow the existing government or to break away from its control to form a separate territorial entity. Counterinsurgency programs are purported to be able to prevent this from happening. In addition to incorporating into itself the tactics of irregular warfare, counterinsurgency seeks to stabilize the existing government by providing economic support, models of good governance, and a planning and training regime for improving or creating a security regime for the "host nation."²⁸ Thus, in contrast to the short-term punitive engagements that were the hallmark of British actions on the Northwest Frontier and in Qing China, counterinsurgency involves military occupation on behalf of the host nation, nation-building development schemes, ample resources and long-term commitments.

Put simply, although the typologies and analyses produced by the British imperial security regime continue to have pedagogical value for considerations of tactics in army classrooms and in field manuals, twentieth-first-century American treatment of insurgency and counterinsurgency differs markedly from the interventions and rapid withdrawals that were typical of the campaigns Callwell analyzed. Counterinsurgency in its present guise does not appear to be equivalent even to earlier American experiences with irregular warfare or to the Soviet experience in Afghanistan in the 1980s, a topic conspicuously absent from the counterinsurgency manuals.²⁹ Rather, the kind

²⁸ See Petraeus and Amos, 2007, chapters 2, 6 and 8. The manual also devotes much more space than Callwell to intelligence, as well as to the planning and executing of operations.

²⁹ The non-appearance of lessons the Soviet Army learned in fighting a counterinsurgency war in Afghanistan is even stranger because a study of the war by Russian staff officers in the 1990s was available in English. The work had been translated by a former US Army officer and member of the Foreign Military Studies Office at Fort Leavenworth, Kansas, Lester Grau, and published in 1996. Also see Jalali and Grau, 1995, which is based on interviews with former Mujahideen in Peshawar, Quetta, and Islamabad, Pakistan.

of knowledge required by and produced for counterinsurgency seems overwhelmingly to be expressed as measurable and representable in numeric form. The name currently given to this form of knowledge is metrics – that is, measurements of “specified levels of performance” within an operational system.³⁰

This most recent version of systems analysis is, moreover, wedded to new information technologies exponentially more powerful than the “camel equation” discussed above – high-speed computers with sophisticated software programs that process masses of data, making possible the comprehensive aggregation of metrics beyond the capacity of any individual or collective experts. Through the use of performance metrics, so the claim goes, it becomes possible to identify what is happening at any stage of a process within a complex system and to make tactical interventions to improve efficiencies.

Why, however, would this contemporary version of systems methodology be useful for understanding insurgencies and for planning how to counter them? One answer to this question, according to advocates, is that insurgencies are themselves complex systems.³¹ David Kilcullen, one of the architects of contemporary counterinsurgency, argues that insurgencies are “complex and adaptive” organic systems. As such, they become knowable like any other multifaceted system – they produce information at various points in their operational processes, and this evidence can be collected and measured (2010: 192–98). By analyzing data produced through field intelligence – that is, as signs that are legible to the eyes of a trained observer or through electronic surveillance at a distance – counterinsurgents can establish benchmarks and develop tactical interventions to disrupt or alter the patterns of action within the “enemy” system. The effects of these interventions can then be measured and performance determined.³²

A second answer argues that contemporary insurgencies like those in Iraq and Afghanistan are of a unique and unprecedented nature. The reason why this is the case is because of world historical change over the last four decades involving “a population explosion, urbanization, globalization, technology, the spread of religious fundamentalism,

³⁰ For an overview of business metrics, see Gary Smith, “A Primer on Metrics” (2004), which was published on the internet in three parts; see www.intelligententerprise.com/showArticle.jhtml?articleID=177011632; the other two articles are ID=18300123 and ID=18401434; accessed September 16, 2010. The quotation on performance is from the first installment.

³¹ On the complexity of insurgencies and counterinsurgencies, see the articles in *PRISM* 1.1 (December 2009) – www.ndu.edu/press/prism.html; accessed April 19, 2011. I am grateful to Marilyn Young for bringing this journal to my attention.

³² See Petraeus and Amos, 2007: 41 and 189.

resource demand, climate change and natural disasters, and proliferation of weapons of mass destruction.”³³ These changes have made it possible for contemporary insurgents, unlike the “savage” tribal groups discussed by Callwell, to circulate propaganda globally through up-to-date communications technologies (e.g., the internet, cell phones), to have access to widely dispersed resources, and to connect to a global clandestine network that provides secret financing.³⁴ These characteristics of contemporary insurgencies require, therefore, new tactics, adaptability, and forms of knowledge other than those deployed in previous small wars.

One of these new forms of knowledge is described as “social network analysis.”³⁵ The social networks in question are to be understood as bearers of identifiable cultural forms distinct from those of the counterinsurgents. To identify such “pattern variables” requires the expertise of social scientists (social and cultural anthropologists, sociologists), or that of soldiers specially trained in army programs organized by social scientists. In order to penetrate these networks and “decisively influence a local population,” soldiers and social scientists are organized into what the US Army has labeled Human Terrain Teams.³⁶

The use of “cultural” specialists to directly interview local populations (the “human terrain”) is supposed to produce reliable and meaningful results in support of pacification. They are also supposed to build trust among the Afghan people for the counterinsurgency effort, relay the benign intentions of the US, and express empathy and understanding for their plight.³⁷ The claim here is that through culturally sensitive communication the Americans will be able to decode the indigenous

³³ *Tactics of Counterinsurgency*, FM 3–24.2, viii. See [www.fas.org/irp/doddir/army/fm3–24–2.pdf](http://www.fas.org/irp/doddir/army/fm3-24-2.pdf); accessed January 25, 2011.

³⁴ Here I draw from Kilcullen’s discussion of the virtual Islamist jihad state; see 2010: 200–201. A number of these defining elements can also be found in Petraeus and Amos, 2007: 4–8. Kilcullen has advised both the previous and current commanders of NATO forces in Afghanistan, Generals McChrystal and Petraeus respectively.

³⁵ See Petraeus and Amos, 2007: 305–33, on social network analysis.

³⁶ The quotation is from Matthew Arnold, “Improving the Coalition’s Understanding of ‘The People’ in Afghanistan: Human Terrain mapping in Kapisa Province,” *Small Wars Journal*, April 12, 2010. See <http://smallwarsjournal.com/blog/2010/04/human-terrain-mapping-in-kapisa/>, accessed January 24, 2011. On Human Terrain Teams, see <http://hts.army.mil>, accessed September 19, 2010. A fuller presentation of the purposes and procedures of the teams can be found in Cpt. Nathan Finney, *Human Terrain Team Handbook*, Fort Leavenworth, Kans.: US Army, 2008, which is available on the internet under this title.

³⁷ See the *Chicago Tribune*, August 22, 2010, section 1, p. 25. In addition, Female Engagement Teams were formed who were to reach out to Afghan women, make friends, and gather information about local grievances and the Taliban. See the *New York Times*, March 6, 2010.

side and produce actionable (objective) information about patterns of behavior for the use of military units in the field, while at the same time winning hearts and minds. The approach will generate, as it were, a reasonable representation of the nature, causes, tactics and personnel engaged in the insurgency and lay the groundwork for the destruction of it. This genre clearly goes beyond the logistics-oriented military reports of the British Indian Army, though there are parallels at the level of content.

But what is perhaps of greatest interest is the turn to culture as a major consideration in developing effective counterinsurgency strategies and tactics. Although there are certain affinities with the ethnographic sections of British intelligence military reports and martial race handbooks, culture seems to be accorded more significance in counterinsurgency than in the earlier discursive formation. The counterinsurgency manual talks of culture as a “web of meaning,”³⁸ but also as an “operational code” conditioning an individual’s range of action. It is made up of beliefs, values, attitudes and perceptions, all of which are closely tied to systems of communicative symbols, or language (Petraeus and Amos, 2007: 89–94). Moreover, unlike social structure, which can be identified through a limited number of forms, cultural codes can be arbitrary and highly variable, and thus critical to understand if field operations are to succeed. As Kilcullen puts it, cultural competence is a “critical combat capability” because culture establishes “protocols for system behavior.” Or, using the language of metrics systems analysis, culture provides many of the “links, boundaries, and boundary interactions” within the structure of the insurgency. Thus, the precise places where metric measurements occur are “culturally determined.” Understanding these cultural markers does not only imbue with meaning what otherwise would appear senseless acts by the insurgents. Commanders, intelligence officers, and covert operators can apply this knowledge as “leverage” for generating “operational effects” (2010: 222–24).

Afghan and Pashtun cultures thus become sources of variables in counterinsurgency analysis, factors that need to be understood if the effects of tactics are to be properly determined, measured and assessed; and if teams operating in the field are to avoid sending the wrong signal to a local population or misinterpreting the signals being sent to them. In the twenty-first century, then, culture is a much more complex and fraught concept than the now rather innocent-seeming ethnology of Indian Army military reports and handbooks on the martial

³⁸ Someone had probably read Clifford Geertz on “thick description”; see Geertz, 1973.

racess. Its study, moreover, is understood to be the province of trained experts; hence the decision to coax those who study culture into the counterinsurgency effort. And although the Human Terrain Teams may be reminiscent of Robert Sandeman's idea of winning the "hearts and minds" of the mountain tribes, the teams in practice seem little more than another means for ferreting out the networks of the insurgency and identifying its leaders.³⁹ Here the objective has been, at least since the around the end of 2009, to "decapitate" or destroy the leadership of the insurgency in Afghanistan.⁴⁰ The specific technologies deployed to accomplish this goal have been unannounced attacks by "Predator" drones armed with laser-guided "Hellfire" missiles⁴¹ and "hunter-killer" or execution teams.⁴² This tactic is obviously not the sort of pedagogical exercise imagined by the British in their punitive expeditions and air raids. Moreover, because the execution teams and drones are instrumental in the deaths of people who are clearly not insurgents, they "appear to be in direct conflict," as Pratap Chatterjee has observed, with the development and communications objectives of counterinsurgency.⁴³

Thus, much like the British before them, US leaders seem to prefer military solutions to what are essentially political problems. For all the sophisticated analysis, for all the money being spent, for all the calculations, and for all the words generated to explain it, counterinsurgency, like earlier punitive measures designed to deprive the indigenous people of what they valued most, seems rather simple. The object is to discipline and regulate⁴⁴ the "host nation" population in such a way as

³⁹ See González, 2009 and Wax, Griffen, González and Price, all in Kelly *et al.*, 2010, for a discussion and critique of the uses of anthropology in counterinsurgency.

⁴⁰ While commander of US forces in Afghanistan, Gen. Stanley McChrystal both confirmed "decapitation" as operating successfully in Afghanistan and identified it as ineffectual. See *The Nation*, May 13, 2010 and *The Wall Street Journal*, June 12, 2010.

⁴¹ See Christopher Drew, "Drones Are Playing a Growing Role in Afghanistan," www.nytimes.com/2010/02/20/world/asia/20drones.html; accessed January 23, 2010. According to statistics gathered by the New America Foundation, drone strikes increased in Pakistan from 53 in 2009 to 118 in 2010. See <http://counterterrorism.newamerica.net/drones>; accessed January 23, 2011.

⁴² While reports had existed of such teams, full confirmation came from documents released on the WikiLeaks website. See the reports in *Spiegelonline*, July 26, 2010, and *The Guardian*, July 25, 2010. Also see the *Chicago Tribune*, August 17, 2011, p. 35. The story, with somewhat more detail, also appeared at www.bloomberg.com on August 12, 2011.

⁴³ See "The Secret Killers: Assassination in Afghanistan and Task Force 373," posted by Truth-out.org at www.truth-out.org/the-secret-killers-assassination-afghanistan-and-task-force-37362460; accessed January 23, 2011.

⁴⁴ A key part of the regulatory regime is the effort to retinal-scan millions of Afghans and mountain groups; see www.wired.com/dangerroom/2010/09/afghan-biometric-dragnet-could-snap-millions/; accessed August 29, 2011.

to separate it from the insurgents, while simultaneously building support for the government recognized by the imperial power. This, however, remains difficult to do, especially in Afghanistan. Like the British imperial security system, the American one operates within a set of categories and modes of analysis that obscure or ignore the sources of resistance.

Today's terrorists and insurgents occupy a discursive space similar to that previously occupied by fanatics and irregulars, while suicide bombers are not unlike the perpetrators of fanatical outrages. Yesterday's "mad mullahs" are now "hardline" or "radical" religious leaders who whip up mobs to commit violent acts against "infidels." Meanwhile, the Pashtun peoples of the mountains remain firmly fixed in a pre-modern stage of development as "tribes."⁴⁵ These local or even cultural patterns of behavior, rather than the presence of foreign forces across Afghanistan, but especially in the Afghan-Pakistan mountains, are blamed as the causes of the problem. Such patterns, which became known through intelligence operations, were also invoked to justify punitive expeditions in the past. Now they support the use of execution teams and killer drones to knock out the leadership of the insurgency. There is, of course, a difference. The British were straightforward about the necessity for using violence, and they usually directed their attacks at a population as a whole. It was, they said, the one thing savages and uncivilized peoples understood and the least they expected from their enemies. If American military and civilian leaders believe this, it appears they cannot say so openly. They are forced instead to create imaginary Afghans, ones whose "hearts and minds" can be measured for reliability through a culturally sensitive counterinsurgency program.

We seem to have moved a great distance from the world of Daniel Dravitt, Peachy Carnahan, Charles Callwell and Mark Bell. That distance involves more than the distinction drawn earlier between Great Game romantic adventure and workman-like, technical military intelligence constructed by engineers and artillery offices. Although we remain in a framework of "rule of experts" (Mitchell, 2002), it would seem that the nature of expertise has fundamentally changed. Now it is

⁴⁵ "Taliban Seen Stirring Mob to Violence," *New York Times*, April 10, 2011. The atavistic nature of the Pashtun peoples is reinforced by organizations like the Tribal Analysis Center (TAC), which is made up of academic specialists and retired security officials. In addition to providing online courses for those who would like to become tribal analysts, their website offers for sale Robert Johnson's study of the Tirah campaign, which claims to provide the Pashtun point of view, and the works of C. E. Bruce (1938) and Charles Callwell on Tirah (1911). Forthcoming works include "Pashtun Storytelling: A Clue to Their Violent Culture" and "Jirgas: How They Vary from Tribe to Tribe." See www.tribalanalysiscenter.com/; accessed August 24, 2011.

civilian and military leaders with advanced degrees in business and public administration, public policy and international relations, academic fields that are dominated by variations on systems theory, who operate in the military-diplomatic apparatus and develop the arts of governance for dealing with threats to the security of hegemonic states.⁴⁶

But if the security regime that the US has deployed in Afghanistan and Iraq looks different from its predecessor, it still shares certain features with that of the British. For both regimes, Asia remained a problem, a source of instability that threatened the global interests of each. Those interests have been perceived, in turn, almost as if the peoples living in various parts of the continent were suspect tenants and the British or Americans judicious landlords. Whether Chinese, Indians, Burmese, Pathans or Afghans, the populations of Asia have been constructed as objects to be worked on through the instrumental knowledge produced through modern, rational arts of governance (engineering then, systems methodology now). They were to be disciplined, instructed, managed, and encouraged to abandon a way of life that was clearly perceived as inferior. The practitioners of these arts demonstrate an unwavering faith in rational methods for understanding the minds of others and planning and assessing interventions. They also show a similar faith in technological solutions to complex problems, be they weapons systems, modes of organizing and processing information, or communications and surveillance techniques. And like the British before them, the US and its allies believe that security will eventually be only a matter of training an indigenous police force that can keep the local population in order. The experts of security also appear to possess an absolute conviction that they are on the side of the right, that their mode of organizing and addressing the world is not only correct, but superior and true, and that those who oppose them are fundamentally irrational. No military setback, no amount of squandered resources, and no clear failures of policy weaken their conviction. They are, to put this another way, akin to the “crackpot realist” for whom, according to C. Wright Mills, war seemed to resolve all problems (1956: 87–88).

The British and American “tools of empire” obscure, however, the human costs of security regimes, the lost, shattered and warped lives created by military techno-scientific interventions and by the

⁴⁶ A broader field of expertise made up of people with similar degrees and managerial outlooks is also available to the planners of counterinsurgency. Organizations like RAND Corporation, the Brookings Institute and the Center for Strategic and International Studies (CSIS) all regularly produce their own analytic reports on the metrics of Afghanistan and Iraq; see www.brookings.edu/foreign-policy/afghanistan-index.aspx; www.rand.org/; and <http://csis.org/> (all accessed January 27, 2011).

application of instrumental knowledge. As Mark Bradley's work on the Vietnam War eloquently demonstrates, postwar Vietnam remains haunted by hungry ghosts whose bodies disappeared in napalm strikes and carpet-bombing raids, while in the United States family members and friends continue their vigil at the Vietnam War memorial in Washington, DC, awaiting word on those missing in action.⁴⁷ In the current crisis, Hamid Karzai, the president of Afghanistan, has made repeated, often emotional protests over civilian deaths caused by the raids and drone strikes carried out by US forces.⁴⁸ Presumably he would have much to gain from an achieved security state imposed through US intervention. Yet even he, a modern democratically elected Asian leader, dares to contest, much like the Amir of Afghanistan and the Qing ambassador to London, the knowledge so expensively accumulated by military intelligence.

Karzai tends to be one of the few Afghan voices that are present in American media, but there are other equally passionate witnesses of the daily disasters of war in that country, many of whom are poets. During tours as a BBC correspondent in Afghanistan, Jonathan Charles learned how important poetry was to Afghans (he found the bards he met equivalent to film and rock stars in the US and Europe). In late 2010, Charles made an appeal to Afghans to send him their war poetry. He was overwhelmed by the response and has since been able to carry out interviews with some of the poets. The interviews were broadcast January 21, 2011, on BBC World Service.⁴⁹ They included a poem written by Zalesh Hafiz. Sickened by sights of desperate parents selling their children on the streets of Kabul, hearing explosions and gun fire, and seeing dismembered bodies, Hafiz wondered if what Afghans were experiencing could possibly be called life. And so, she turned to poetry.

If I were Queen of the whole world
I would gather all the guns and the weapons from the warlords
I would teach them to live a humane life
I would open better schools and universities

If I were Queen of the whole world
I would remind the powerful ones about the power of God
I would tell them that only he is the owner of life and death

⁴⁷ See Bradley, 2009, and Haas, 1998.

⁴⁸ Some examples of Karzai's protests appeared in the *Washington Post*, June 24, 2007; *USA Today*, November 5, 2008; *Washington Times*, April 19, 2009; and Reuters, August 5, 2010, all accessed January 27, 2011.

⁴⁹ These were broadcast as "Lost Voices of Afghanistan" and can be heard at www.bbc.co.uk/worldservice/documentaries/2011/01/110120_afghanistan_lost_voices_tx.shtml; accessed January 27, 2011.

If I were Queen of the whole world
I would make people of whatever color live together in peace and
 harmony
Not because of their color, race, language or belief
But because of their human merits

If I were Queen of the whole world
I would form a white army of peace to fight against hatred and war
I would make the people understand the real meaning of life
And would declare to them that I am the Queen of Peace
I am the ruler of happiness.

In its stark contrast to the logic of the military-diplomatic apparatus, Hafiz's generous and heartfelt humanism points to the real problem of Asia. The issue lies in the inability of those, be they engineers, artillery officers or systems analysts, to see beyond their technologies of knowledge, beyond the devices they place faith in to produce order. British and American security regimes provide no equations to calculate the tragedies to which Hafiz bears witness. There are no differential equations or metrics for life without life.

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The two primary archives drawn on in this study are the National Archives (hereafter, NA) and the India Office Records (IOR) of the British Library, both of which are in London. Sources in the National Archives include Foreign Office (FO) and War Office (WO) records. Those in the India Office Records are designated L/ and are followed by either a Political and Secret (P&S) or a Military (MIL) designation. Also from the India Office are files labeled ORB. Additional sources from the British Library are labelled as such in the bibliography.

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Index

- adventure
 - colonial knowledge and, 14
 - stories and, 233, 235
- Afghan Boundary Commission (joint Anglo-Russian), 82, 95–106
 - boundary markers and maps, 97
 - British-Russian negotiations over, 95–96
 - House of Commons Sessional Papers and, 97
 - make-up of Indian Army contingent, 96
 - military statistics and, 114–16
 - records of, 97–98
 - route books and, 97
 - as a source for route books, 90
 - surveying and reconnaissance linked, 101
 - surveying team and, 100
- Afghan War (1878–1881)
 - cause of, 94
- Afghan-India border
 - geography of, 113
- Afghanistan, *see also* Human Terrain Teams, culture
 - character of population, 173–74
 - counterinsurgency and, 261–67
 - gazetteers and, 121
 - Indian army intelligence after 1886, 119–26
 - military intelligence of Afghan Boundary Commission, 115–19
 - military reports and, 108, 121
 - as “mythical space”, 191
 - route books and, 121
 - tribes of, 174
 - uncertainty of borders, 92–93
 - Anglo-Russian correspondence concerning, 93
 - United States invasion of, 255–56
 - Who’s Who* and, 124
- Agamben, Giorgio
 - Foucault’s notion of apparatus (*dispositif*), 7
- Al-Qaeda
 - attacks in United States and, 255
 - objectives of, 255
- American Civil War
 - British army, impact on, 49
 - European continental armies, impact on, 19
 - railroads and, 25
- Amu Darya
 - Khoja Saleh and, 95
 - northern border of Afghanistan and, 95
- Andrew, Christopher, 3
- Anglo-Japanese alliance (1902), 198
- Anglo-Russian agreements
 - Afghan border (1887), 105
 - regarding Afghanistan’s northern border (1873), 92
- animal transport
 - campaign planning and, 165–66
 - CID assessment and, 165, 167
 - failure of Indian Army to consider, 165–68
 - Russian losses in Central Asian campaigns and, 166
 - wastage and, 165
 - Winston Churchill and, 165
- Archive, *see also* Intelligence Branch, War Office, London; Intelligence Branch, Simla; Intelligence at Simla, creation of, 88
 - military intelligence and, 60
 - reconnaissance and, 88–91, 118
- Area Studies
 - foundations and, 257
 - interdisciplinarity and, 258
 - United States government funding and, 257–58
 - universities and, 257

- armaments smuggling, Northwest Frontier, 121
- Barrow, Maj. E.G.
effects of Afghan terrain on army movement and, 159
The Military Geography of Afghanistan, 119
- Bayly, Christopher, 2
- Beijing legation
Intelligence Branch, Simla and, 128–29
- Bell, Mark, 266
campaign accounts and, 172
China reconnaissance and, 87, 89, 127–29
Chinese military capabilities and, 148, 203
Defence of India and, 159
on equipment necessary for reconnaissance, 76, 79
on relation between route reports and trigonometric mapping, 79
on the relation between reconnaissance, mapping and docile bodies, 87
reconnaissance and, 73, 75, 89–90, 187
route reports and, 76, 78
- Belle Vue Gardens
“show biz” imperialism and, 238
Battle of Omdurman and, 243
- Bellew, Henry, 1
career of, 1
On Kafiristan, 1
Works of, 212
Ziarsats and, 212
- bin Laden, Osama
Afghanistan and, 260
pan-Islam and, 255
- Boxer Relief Expedition
Indian army and, 130
intelligence report for, 130–31
intelligence unit and, 132–33
- Brackenbury, Charles, 32
determine duties of attachés, 55
précis of Natal and, 61
report on continental staffs, 55–56
statistics available in public sources and, 67
visit to continental staffs and, 21, 55
- Brackenbury, Henry
criticism of Indian Army assessments of Russian capabilities, 159–63
Gen. O.R. Newmarch and, critical of Indian Mobilization Committee, 162–63
in India, 163
India’s military frontier and, 159–60, 250
recommends creation of special planning committee in India, 161
- Bradley, Mark
war memory and, 268
- Brett, Reginald, Lord Esher, 166
chairman of War Office (Reconstitution) Committee, 166
- Brewer, John, 35
- Bright, John, 222
- British army
professionalization and, 43–50
reforms of
Cardwell reforms, 38–39
Director-General of Education, 39, 43
resistance to reform and continued organizational problems, 63
- Brooke-Hunt, Violet
hagiography of Lord Roberts and, 245–46
- Bruce, Richard, 224
colonial warfare and careers, 230
critical of punitive expeditions, 230, 232
protégé of Robert Sandeman, 230
supports Sandeman’s tribal service system, 231
- Callwell, Charles
career, 216–17
characterization of “uncivilized”, 218, 219
counterinsurgency and, 260, 266
epistemological crisis and small wars, 218
importance of punishment in small wars, 220
publication history of *Small Wars* and, 217
small wars and, 10, 216–21
- Cambridge, Duke of, 37
army reform and, 38, 48
- Cameron, Aylmer, 157
evaluation of Charles MacGregor’s *Defence of India*, 156–58
- Carnahan, Peachy, 1, 9, 266
- Central Asia Question, 153
- Charles, Jonathan
interviews with Afghan poets, 268
- Chatterjee, Pratap
critique of United States tactics in Afghanistan, 265

- Churchill, Winston
 animal transport and, 165
 Pathan resistance and, 244
 sentimentalism of soldiers' songs and, 246
- Civil Service Reform (Great Britain)
 Civil Service Commission created, 37
 parliamentary commissions and, 35–36
 reasons for, 35
- Clarke, George
 critical of Indian Army war games, 169
 Secretary of CID, 167
- Cobden, Richard, 222
- Cohn, Bernard, 2
- Collen, Edwin
 advocates creation of intelligence branch in India, 69–70
 report on the organization of Intelligence Branch, War Office, 57–63
 visit to Intelligence Branch, War Office, 56
- Colquhoun, Archibald, 10, 49
- Colquhoun, J.A.S.
 advocates intelligence unit in India, 68
- Committee on Imperial Defense (CID), 166–69
- Confessions of a Thug*
 critique of, 190
 recommended reading for Indian Army intelligence officers, 184
- Conolly, Arthur
 on need for geographical and statistical knowledge, 13
 as origin of Great Game, 10
 contingency plans (military), 55
- counterinsurgency
 in Afghanistan and Iraq, unprecedented nature of, 262
 contrasted with punitive expeditions, 261
 culture and, 264
 form of knowledge and, 261, 264
 Nagl, John and, 260–61
 small wars and, 216
- Counterinsurgency* FM 3–24, 260
 culture and, 264
- cultural revolution
 Phillip Corrigan and Derrick Sayers and, 4, 34–35
- culture
 counterinsurgency and, 264
 pattern variables and, 259
- Curzon, George
 Anglo-Russian rivalry and, 10
 Eastern Questions and, 223
 reform of forward policy, 229
- Defence of India, 13
 Charles MacGregor and, 155–56
 contending strategies, 113–14
 debate between War Office and Indian Army, 153–64
- Dilke, Charles, 223
- Director-General of Military Education, 39, 43
- Dravot, Daniel, 1, 9, 126, 266
- drones
 Afghanistan and, 265
- Durand Line, *see* Mortimer Durand
- Durand, Mortimer
 Abdur Raman's maps and, 249
 Afghanistan, eastern border of, and, 121, 163
- Eastern Question, 49, 224, 250–51
 Anglo-Russian rivalry and, 92, 223
 European balance of power and, 13
 geo-strategic conception of and, 13
 military interventions and, 251
 reproduction of security regimes and, 251
- Edney, Matthew
 history of trigonometric survey in India, 76, 78
- epistemophilia, definition of, 103
- ethnology and intelligence, 173
- fanatical outrages, 122, 125, 208
- fanatics, 122, 124, 173, 179, 183, 184
 British illustrated newspapers and, 233–36
 as epistemological category, 191–92
- forward policy
 as aggressive approach on Northwest Frontier, 112, 161, 170, 215
 Durand Line and, 163
 opponents of, 222, 228–29
 Quetta and, 153
- Foucault, Michel
 arts of governance and, 6, 107
 disciplinary regimes and, 5, 73
 governmentality and, 6
 military-diplomatic apparatus and, 6–7
 notion of warfare and, 7
 regulatory regime and, 5–7
- Franco-Prussian War (1870–71)
 historical significance of, 4
- French army
 Franco-Prussian war, impact of, 31
 General staff and, 30

- From Sepoy to Subadar*
 critique of, 191
 recommended reading for Indian Army
 intelligence officers, 184
Frontier Warfare – India, 175, 220, 222
 Froude, J.A., 223
- gazetteers, 66
 compared to military reports,
 107–08
 sources of for Central Asia, 67
 statistics and, 107
- General Staff, Great Britain, 166
 General Staff, India, 170
 General Staffs, 19
 forms of knowledge and, 21
 Great Britain and, 32–33, 63
 effects of creation of, 64–65
 intelligence and, 21
 professionalization and, 19
 Prussian and war planning, 27
 geo-strategic planning and intelligence
 sources, 157–58
- Gladstone, William, 95
 Gleichen, Edward, military attaché, 63,
 172
- Graphic, The* 236–37
 execution of fanatic and, 236
 Tochi Valley campaign and, 237
- Great Game
 Critique of, 9–12
 Kipling and, 9–10
 Robert Johnson on, 12
 Romantic adventure and, 9, 266
 Sources of, 11–12
- Greater Britain
 community of blood and, 223
- Grierson, James, 32, 129, 140, 160
 aide to Charles MacGregor, 155
 career of, 63–64
 critique of 1903 Indian Army war
 game, 165–66
 Director of Military Operations, 167
 member of joint staff, China, 132
 named head of Directorate of Military
 Operations, 64
 reports on foreign contingents in
 China and, 132–34
- Hafiz, Zalesh
 poetry on Afghan War, 268–69
- hagiographic biographies
 compared to tales of Christian martyrs,
 246
- Hamilton, Capt. A.S.
 military report on Waziristan and,
 121–23
- Hanna, Henry, 171, 223
 critical of British military actions on
 Northwest Frontier, 228–29
- Hart, Robert
 arsenals and, 201
 Head of Imperial Maritime Customs
 (China), 199
- Hazaras, 120
 Maitland on, 117
- Henty, G.A.
 boys' adventure stories and empire,
 235
 Lord Roberts and, 245
- Hobson, J.A., 222
- Holdich, Thomas
 Afghan Boundary Commission
 and, 82
 appointed head of the survey branch,
 Afghan Boundary Commission, 96
 head of survey team, Tirah campaign,
 209
 on ignorance regarding Afghanistan,
 96
 on knowing precise location, 86
 on the accomplishments of the
 surveying team in Afghanistan,
 101, 103
 Pamir Boundary Commission and, 105
 Royal Geographic Society and, 97
- Human Terrain Teams
 Afghanistan and, 263–64
 compared to Robert Sandeman's
 policies, 265
 culture and, 263
 hearts and minds and, 266
 social network analysis and, 263
- Hutchinson, H.D.
 on the use of the prismatic compass, 86
- Illustrated London News*, 235
 1897 Pathan uprisings and, 235
- illustrated newspapers (Great Britain)
 and imperialism
 colonial warfare coverage and, 235
 Muslim "fanatics" and, 233–36
- India Office, 2
- Indian Army
 China wars and, 206
 kinds of warfare engaged in, 68
 military engagements and, 205–06
 size of, 204
 Survey of India and, 206
 World War I and, 206

- Intelligence Branch
 center of calculation, Latour's notion of, 59
 Royal Engineer and Artillery officers and, 54
- Intelligence Branch, Simla, 2,
see also Afghan Boundary Commission, Northwest Frontier, China, Boxer Relief Expedition, North China Command
- China and construction of Asia, 149–51
- China and military reports (1900–1903), 134
- compared to War Office Intelligence Branch, 110
- correspondence with Beijing legation, 128–29
- creation of, 65–70
- field of operations, 71
- library, 108–10
- limited access to areas bordering India, 67
- military reports and, 107–08
- occupation of north China (1903–1910) and, 71
- operations in China prior to 1900, 127–30
- range of correspondents, 70
- reorganized into Military Operations Section (1906), 71
- route books and, 78, 87–91
- site of institutional memory, 172
- as unit responsible for logistics and planning the defence of India, 13
- as vantage point, 111, 150
- Intelligence Branch, War Office, London
 Collen's report on organization of, 56–63
- continental armies and, 66
- creation of, 54
- critical of Indian Army's assessment of Russian threat, 156–64
- critical of Indian Army's war games and staff rides, 164–70
- duties defined, 55
- library, 14
- list of activities, 1877, 62–63
- Topographical and Statistical Department as precursor of, 54
- intelligence, military, *see also* Route Books, Military Reports, Military Statistics
- Afghan Boundary Commission and, 115
- colonization and, 150
- declassification of sources and, 3
- empiricism and, 4
- filing system and, 61
- form and nature of, 4
- indeterminacy of, 152
- intelligence sources and geostrategy, 158
- planning regime and, 5, 22
- précis*, as a form of military knowledge, 58
- reform in Great Britain and, 4
- standardization of knowledge and, 149–50
- state-formation and, 5, 53
- statistics and, 67
- tool of empire and, 53
- treatment of in scholarship, 3–4
- Iraq
 United States invasion of, 256
- Isaac, William
 historian of War Office Intelligence unit, 64–65
- James, Lionel
 reporter with Tirah campaign, 210
- Japan, new army and, 195–98
- French instructors and, 195
- Klemens Meckel and, 196–97
- Prussian General Staff and, 196
- juvenile literature (Great Britain) and imperialism
- adventure and, 235
- masculine virtues, 235
- Tales from the Outposts* and, 247
- Kafiristan, 1
- Karzai, Hamid
 critique of United States military tactics in Afghanistan, 268
- Khoja Saleh
 boundary site on Afghan border, 95
- confusion over location of, 103–05
- Russian evaluation of, 105
- Kilcullen, David
 counterinsurgency and, 262
- cultural competence and, 264
- Kipling, Rudyard, 2, 9–10, 247
- Great Game and, 9–10
- Kim*, 9, 247
- technological change and, 12
- Man who would be king* and, 2
- Sacrifice for empire and, 247

- Sentimentalism in, 246
 Sources of term Great Game and, 10–11
 knowledge, *see also* Area Studies, General Staffs, Military Reports, Military Statistics, Route Books, Statistics
 Afghan Boundary Commission and, 105
 archive and, 88
 China and, 149–51
 colonial order and, 87
 empire and, 2, 5, 87
 intelligence and, 3
 legibility and, 4
 power relations and, 7
 rule of experts and, 14
 as practices, 14
 statistics and, 6
 technologies of, 7, 51, 101–02
- Latour, Bruno
 cascades, 88
 center of calculation, 59, 83
 immutable mobiles and, 83, 135
- Lawrence, John
 policy of, on Afghan frontier, 112, 228
 rejects forward policy, 112
- Li, Hongzhang
 arsenals and, 200–01
 Qing military reform, 200
 Tianjin military academy and, 201
- library, Intelligence Branch Simla, 108–10
- lines of communication
 centrality of in strategic planning, 72
- Lockhart, William
 Commander, Tirah campaign, 209
 destruction of Tirah and, 209, 210
 logistics, 7, 14, 21, 31, 47, 53, 56, 101,
see also Quartermaster General
 animal transport and, 165–68
 defined, 8
 warfare in Asia and, 156
- Lumsden, Maj-Gen. Peter
 appointed head of British contingent,
 Afghan Boundary Commission, 96
- Lyall, Alfred
 British success in India and, 225
 criticizes Seeley, 224–25
 frontiers and protectorates, 225–27
 protectorates and, 91
- Macartney, Halliday
 advisor to Li Hongzhang, 200
- MacGregor, Charles
 advocates creation of intelligence unit
 in India, 66
Defence of India and, 155–56
 gazetteer of Central Asia and, 66–67,
 68, 70
 head compiler of *Routes in Asia*, 66,
 89
 Khorassan reconnaissance and, 89
 Russian threat to India and, 92
- MacMunn, George
 Afghan invasion plan and, 169
 change in the Quartermaster General's
 Department and, 54
 on Pathans, 122
 on race and martial spirit, 204
- Mahan, Alfred Thayer
The Problem of Asia and, 252
- Maitland, Capt. Pelham
 appointed member intelligence
 branch, Afghan Boundary
 Commission, 96
 extension of Intelligence form of
 knowledge into Central Asia, 116
- Hazaras and, 116
 intelligence diaries and, 115–16
 as source, 120
- martial races of India
 handbooks on, 178–80
 hierarchy of, 178
 military elite and, 205
 new Indian army and, 204–07
 land grants and, 205
- Marvin, Charles, 156
 interviews with Russian military
 leaders, 156
- masculinity, military (Great Britain),
 50–52
 intellectual skills and, 50
 professionalism and, 50
 technologies of knowledge and, 52
- masterly inactivity, 162
 close border and, 112
 John Lawrence and, 112, 228
- Meckel, Klemens
 at Staff College, Japan, 196–97
- Merv
 Duke of Argyll and “Mervousness”,
 94
 proximity to Herat, 94
 Russian annexation of, 94, 155
- Metcalf, Barbara, 213
- metrics, 262
 counterinsurgency and, 262
 systems theory and, 262, 264
 military attachés, 19

- military attachés (*cont.*)
 - British army, in China and, 127, 129–30
 - Chinese language classes and, 139
 - intelligence gathering of, 137, 138
 - British army, in Japan and, 198
- military professionalization
 - as European-wide phenomenon, 15
 - military journals and, Great Britain and, 40–50
 - masculinity and, 50–52
 - United Services Institute (Great Britain and India) and, 48–50
- military reports
 - categories of, 107
 - compared to Who's Who and gazetteers, 107
 - ethnology and, 178–79
 - incorporation of other sources into, 108
 - limits of, 180
 - regulatory device and, 15, 107, 110–11
- military science and technology, 20
- military statistics, *see also* knowledge, statistics, military report
 - British version of, 59–60
 - forms of, 114
 - logistics and, 60
 - military reports and, 107–08
 - tribal tables, Who's Who, mullahs and, 114
- military-diplomatic apparatus, 17–18
 - British in East Asia, 194–95
 - General Staffs and, 19
 - technological change and, 19
- Mills, C. Wright
 - "crackpot realists" and, 267
- Mitchell, Timothy
 - rule of experts and, 14, 34
- Moltke, Helmuth von, 23, 196
 - railroads and, 25–26
 - staff rides and, 24
 - war games and, 24
- Montgomerie, Thomas
 - clandestine surveying and, 84–86
- Moreman, T.R.
 - Indian army training manuals and, 211
- Morgan, Gerald
 - critique of Great Game, 10
- Mullah Powindah, 208
 - Lord Kitchener's characterization of, 125
- mullahs, 122, 124–25
 - contemporary Afghanistan and, 266
 - "fanaticism" and, 179, 208, 209
 - jihad and, 179
 - military intelligence and, 124
 - punishment of, 210
 - "mythical space"
 - Northwest Frontier as, 191
- Nagl, John
 - counterinsurgency and, 260–61
- Nevill, Hugh
 - Northwest Frontier campaigns and, 208, 211
- Norie, Capt. Evelyn, 130
 - Indian army intelligence unit, China and, 132
 - official history of Boxer Relief Expedition and, 132
 - Short Military Report on the Province of Chih-li*, 130
- North China Command
 - arms import, Chinese government, 147
 - Chinese military capabilities, reports on, 147–48
 - creation of, 137
 - forms of representation and, 140
 - Yangzi reconnaissance and, 140–45
- Northcote, Stafford, 36
 - as Foreign Secretary, 104
- Northwest Frontier of India, 10, 15, 49, 66, 67, 90, 111, 112
 - compared to British actions in China, 232
 - fortification of, 94
 - intelligence and, 121–26
 - as "mythical space", 191
 - tribes and, 49, 68
 - warfare (1897–98), 208–11
 - causes of, 208, 212, 214
- operational systems theory
 - compared to knowledge produced by imperial security regime, 259
 - as link between government, business, university, 259, 265
 - metrics and, 262
 - pattern variables, culture and, 264
 - rationality and, 267
 - security and, 258
 - technology and warfare, 259
- optical consistency, 22, 87, 109, 111, 112, 134, 154, *see also* route books and military reports
- principle of organizing
 - information, 88
- standardization of names and, 88

- Oxus River, *see* Amu Darya
- Pamir Boundary Commission, 105
- pan-Islam, 254–55
- Panjdeh, 96
- Parsons, Talcott
 pattern variables and systems theory, 259
- Pashtun language, 112
- Pathan “tribes”
 beliefs, 179, 212
 ziarats (shrines), 212
 blood feuds and, 174, 179, 232, 248
 composition of, 112, 122
 dictionary of, 123
 fanaticism of, 179, 207
 forms of punishment used by Indian Army, 175–76
 punitive expeditions and, 113, 125, 174, 209
 Tirah valleys and, 209
 military tactics, 176–77
 resistance to British and, 207–15
 Waziris and Mahsuds, 122, 174, 176, 208
- Peacocke, Capt. William
 appointed member intelligence branch, Afghan Boundary Commission, 96
 diary of, 115
 explanation of coordination of surveying technologies for fixing points, 101–02
 reconnaissance work in Afghanistan, 115
 surveying of Khoja Saleh area, 104
 surveying work, 100
- People’s Republic of China
 economic reform and, 256
 United States containment of, 256
- Piggott, Francis, Royal Engineer and military attaché, 51, 198
- popular culture (Great Britain) and imperialism, *see also* illustrated newspapers, juvenile literature
 colonial warfare and, 233
 adventure and, 235
 hagiography and, 244
 movies and, 247
 non-fiction literature of, 243
 sentimentalism towards soliders and, 247
- Porter, Whitworth
 on Royal Engineers, 50, 51
- précis*, as a form of military knowledge, 58
- Prussian army
 British reactions to reforms of, 33
 General Staff in, 22–24
 Austrian reaction to, 27
 Helmuth von Moltke and, 23
 industrial mechanization of war and, 26
 punitive expeditions, 113, 125, 174, 176, 191, 216
 China and, 175
 counterinsurgency and, 261
 normalization of, 192
 reconnaissance and, 121
 small wars and, 216
 Tirah campaign as, 209–11
- Qing China, *see also* People’s Republic of China
 British India and, 16, 111–12
 British notion of Chinese “face”, 232
 fortifications and armaments on the Yangzi River and Dagu forts, 201
 humiliation of, by British, 232
 India Army intelligence operations in, 127–51
 Manchu rule in, 199
 military intelligence version of, 150
 military reports on, 134–37
 new army and, 198–203
 occupation of north (1900–1903) and intelligence, 132–37
 Russian relations and, 16
 warlordism and, 203
 Zongli yamen and foreign relations, 199
- Quartermaster General, 8, 53
 in India and intelligence, 66, 68–70
- Rahman, Abdur
 Afghanistan’s eastern border and, 121
 made Amir of Afghanistan, 94
 Mortimer Durand and, 249
- Raj, Kapil
 on disciplined bodies and geographic knowledge, 84
 on the pundits, 85
- Rawlinson, Henry, 10, 48–49, 110, 153
 as British resident in Kandahar, 11
 as correspondent of Arthur Conolly, 11
 on Russian threat to India, 153–54
- reconnaissance
 frontier warfare and, 222
 Indian army surveyors and, 206
 Mark Bell and, 75
 route reports and, 74
 transformative nature of, 92

- Records of the Intelligence Party, Afghan Boundary Commission*, 115–19
 compared to reports on “martial races”, 118
 ethnological reports and, 117–18
 as future resource, 118
 tribal reports and, 116
- Rich, David, 29
- Ridgeway, Lt. Col. Joseph West
 appointed head of the political branch, Afghan Boundary Commission, 96
 new Afghan border and, 97
 problem of locating Khoja Saleh, 104–05
- Roberts, Frederick, 1
 career of, 244–45
 hagiographic biography of, 245–46
 Intelligence Branch, War Office and, 66
 purpose of route books and, 87
 supports creation of intelligence branch in India, 70
- Robertson, William
 in Directorate of Military Operations and, 64
 observations on short-comings of Intelligence Branch, Simla, 170
- route books
 Austrian army version of, 56
 Central Asia and, 91
 content described, 76
 disciplinary device and, 15, 74, 78
 as divisible series of segments, 78, 106
 Intelligence Branch (Simla) and, 78, 88–91, 97
 reconnaissance and, 74–76, 108
 reducer of “friction”, 76
 secret nature of, 91
 survey mapping and, 73–74
- Royal Artillery
 intelligence officers and, 54
- Royal Commission on the War in South Africa, 166
- Royal Engineers, 45, 50
 intelligence officers and, 54
 Journal of, 48
- Royal Geographic Society, 49, 106
 as authenticator of geographic knowledge, 85, 97
- Royal Military Academy and curricular reform, 40, 42–44, 51, 66
- Royal Statistical Society, 60
- rule of experts, 34, 266
 as alternative to Great Game, 14
- Russia
 expansion into Central Asia and, 92
 debates in Great Britain over significance of, 92
 plans for invasion of India and, 171
- Russia, as threat to India
 plans for invasion of India, 170
 use of secret British sources for planning, 170
- War Office views on, 154
- Russian General Staff, 28–29
 aristocracy and, 29
 military statistics and, 28
 Miliutin’s reforms and, 27
 planning and, 29
 relation to Russian society and, 29
 war games and, 28
- Sandeman, Robert
 ‘hearts and minds’ and, 113, 265
 tribal service system and, 113, 215, 230
- savage warfare, 174, 215
 Asia as special case of, 190
 British popular culture and, 232–44
 Indian Army and, 190
 small wars and, 215–16
- School for Oriental and African Studies, 257
- School of Gunnery at Shoeburyness, 45
- scientific corps, 34, 40, 42, 43, 47, 48, 83, 167, 186, *see also* military professionalization
- Scientific Training Commission and, 40–43
- security regime, 8, 12, 15, 17–18, 107, 151, 269
 Afghanistan and, 106
 area studies and, 257
 Eastern Question and, 249–50
 effects in Asia and, 268–69
 elements of, 152
 Foucault on, 6–8
 geo-strategy and, 250
 geo-strategy and logistics, 13
 human costs of, 268–69
 in Great Britain, 33, 43–48
 India and, 14
 India as model in colonial world, 206
 Ottoman Caliphate and, 254–55
 Pan-Islam and, 254
 planning for war and, 5, 8
 Prussian innovations and, 32
 rationality and, 267
 reproduction of, 251
 social sciences and, 258
 techno-military elite and, 32

- United States and, 251
- Seeley, John, 223
- Short Military Report on the Province of Chih-li*, 130–31
- Sino-French War (1885), 202
- small wars, 215–22
 - civilized violence and, 222
- Soviet-Afghan War, 261
- St. John, Col. O.B.C.
 - difficulty of supplying armies in Afghanistan, 158
- Staff College, Camberley, 39, 47, 64, 216
 - curriculum reform and, 47
- staff rides, *see* war games and staff rides
- statistics, 2
 - dearth in Asia, 67
 - geography and, 21
 - governmentality and, 5–7
 - military and, 4, 8, 14, 23, 28, 30, 32
 - military attachés and, 19
 - military reports and, 107
 - positive knowledge and, 34
 - Russian army and, 28–30
 - states and, 2
- Stephen, Alexander Condie, 156
- surveying, 73
- telegraph, use of in trigonometric surveying, 102
- Tirah campaign (1897–98), 209–11
 - destruction of Tirah valleys and, 210
- Trevelyan, Charles, 36
- Trigonometric Survey of India, 2, 51, 74, 78, 84, 90
 - Indian soldiers and, 206
- trigonometric surveying, 78–79
 - “racial” organization of, in India, 82
 - method of, 80–83
 - sources, 80
 - technologies of, 80, 101–03
 - chronometer, 102
 - plane table, 81, 97, 100
 - prismatic compass, 80
 - telegraph, 102
 - theodolite, 80, 97, 100
 - triangulation and surveying in Afghanistan, 100
- United Services Institute (Great Britain), 48, 56, 110
- United Services Institution (India), 49, 66, 68, 110
- United States
 - Al-Qaeda and, 255
 - Asian bases and, 253
 - containment and, 252
 - invasion of Afghanistan and, 256
 - military interventions and covert operations in Asia and, 255–56
 - security and hegemony, 253
- Vambery, Armin, 10, 49
- Wahab, Maj. Robert, 106
- war games
 - in Indian Army, 164–72
 - in Prussia/Germany, 23–25
 - in Russia, 28
- war games and staff rides
 - 1903 war game, India, 164–66
 - 1910 staff ride, India, 169
 - 1913 war game, India
 - assessments of, 185–88
 - Bible and oriental mind, 184
 - form at a glance and, 186
 - military reports and, 185, 188
 - oriental mind and, 183
 - route books and, 188
 - special ideas and, 184–85, 189
 - structure of, 181–82
 - study of character and, 183
 - as element of planning and training, 180–81
 - war office continental expeditionary force and, 172
- War Office, 2
- War Office (Reconstitution) Committee, 166
- Warburton, Robert
 - frontier officer, 210
 - ziarats* and, 212
- Wingate, Capt. A.W.S., 130
 - Chinese military capabilities and, 148, 203
 - Tianjin area map and, 139
 - Yangzi reconnaissance and, 140
- Wolseley, Garnet
 - critique of Indian Army planning, 159
 - Natal invasion and, 61
 - on seizing the valuables of the “uncivilized”, 220, 222
- Xie Fucheng, maps of Yunnan-Burma border and, 249
- Yangzi reconnaissance, *see* North China Command

- Yate, Lt. Arthur
 - book on Afghan Boundary Commission, 96, 97
 - on water sources in Afghanistan, 100
- Younghusband, Francis, 128
- Yuan, Shikai
 - Qing military reform, 202
- Yunnan province, China, 249
 - Indian army intelligence on, 131–32, 135
- Zhang, Zhidong
 - German instructors and, 202
 - Hubei military academy and, 202
 - Qing military reform, 200
- ziarats* (Muslim shrines), 104, 105, 179, 244
 - powers ascribed to by Pathans, 212–13
 - Sufism and, 213
- Zuo, Zongtang
 - Qing military reform, 200