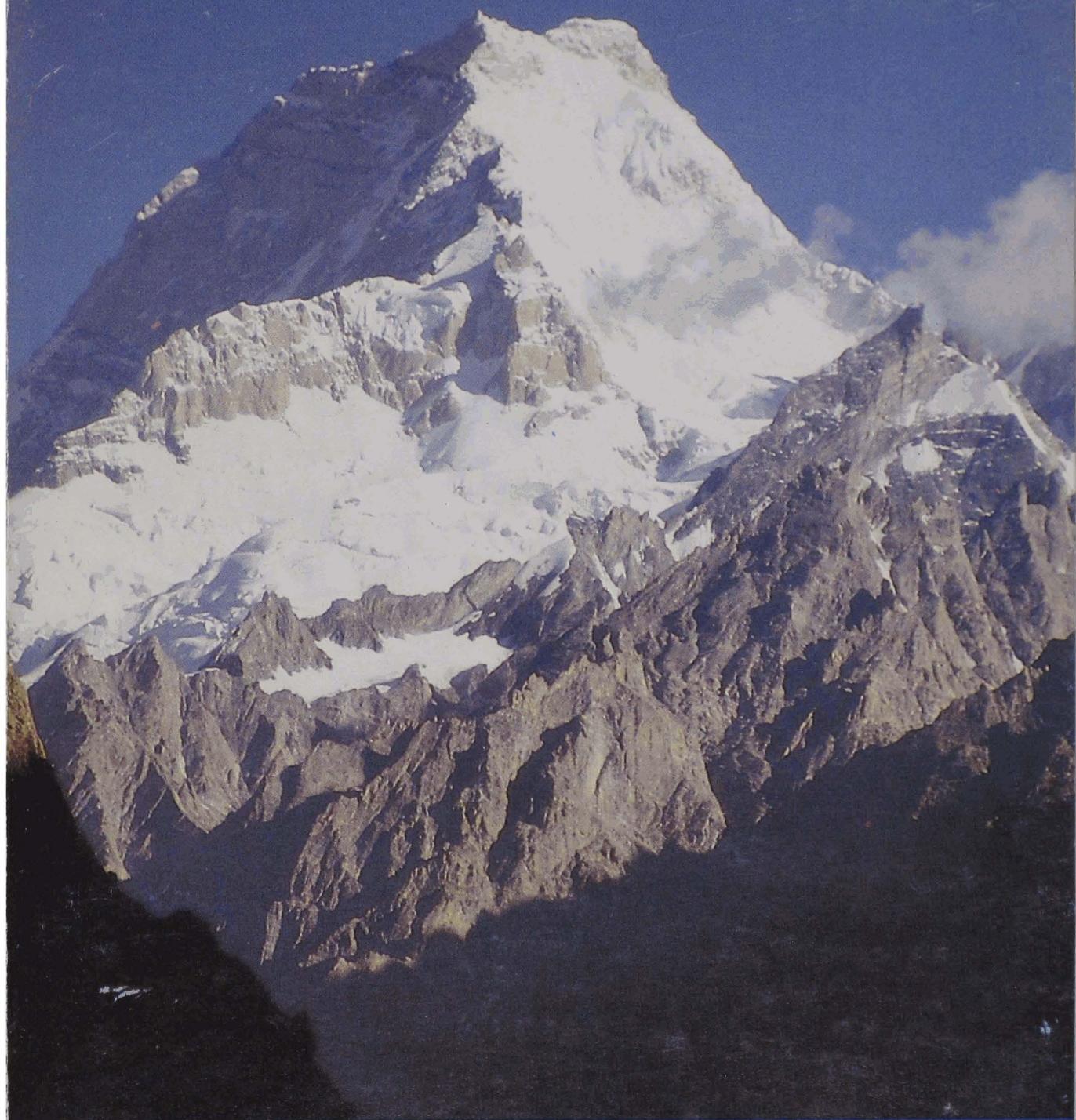

Karakorum Himalaya
**SOURCEBOOK FOR A
PROTECTED AREA**

Nigel J.R. Allan



Karakorum Himalaya: Sourcebook for a Protected Area

Nigel J. R. Allan

A handwritten signature in black ink that reads "Nigel J. R. Allan". The signature is written in a cursive style with large, flowing letters.

The views expressed in this publication
are not necessarily those of IUCN.

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Preface

This sourcebook for a protected area has its origins in a lecture I gave at the Environment and Policy Institute of the East-West Center in Honolulu in 1987.

The lecture was about my seasons of field work in the Karakorum Himalaya. Norton Ginsberg, the director of the Institute, alerted me to the fact that the *Encyclopedia Britannica* would be revising their entries on Asian mountains shortly and suggested that I update the Karakorum entry. The eventual publication of that entry under my name (Allan 1992), however, omitted most of the literature references I had accumulated. As my reference list continued to expand I decided to order them in some coherent fashion and publish them as a sourcebook to coincide with the IUCN workshop on mountain protected areas in Skardu in September 1994.

I could not have published this book without the goodwill and cooperation of a number of colleagues and others who share my interest in the Karakorum Himalaya and mountain protected areas. The staff of IUCN have been most helpful. On the international side, Jim Thorsell, Senior Advisor on Natural Heritage, and Larry Hamilton, Vice-Chair for the Mountain Protected Areas section of IUCN, provided encouragement in the preparation of this bibliography. P.H.C. Lucas, Senior Advisor to IUCN for the Committee for National Parks and Protected Areas, clarified the "Associative Cultural Landscape" category of the World Heritage Convention. In Islamabad, Abdul Latif Rao prepared the way for publication with the encouragement of Stephan Fuller and Arshad Gill. Dhunmai Cowasjee and Saneeya Hussain of the Karachi office of IUCN saw my draft through to publication.

Like so many other scholars and scientists working in the Greater Himalaya, one has to thank Lucette Boulnois and Pierrette Massonnet, and the staff of the Centre Nationale de la Recherche Scientifique, Centre d'Etudes Himalayennes Library, in Meudon, France, for their painstaking collection and collation of all materials on the Himalaya-Karakorum-Hindukush, which results in the annual publication of their acquisition list.

Many colleagues brought important references to my attention, including John Bray in his excellent bibliography on Ladakh, Henry Osmaston on the eastern Karakorum, and Dave Butz, Farida and Ken Hewitt, Are Knudsen, Ken Macdonald, Kim O'Neil and John Mock, and Jack Shroder, on Baltistan and Gilgit. Irmtraud Stellrecht, the leader of the German Culture Area Karakorum project, and her colleagues, were especially helpful in providing historical material. Rod Jackson and John Fox introduced me to Literature on

the fauna of the Karakorum, Dan Blumstein gave me material, especially "grey" literature on wildlife and vegetation found in the Karakorum. Shoaib Sultan Khan of the Aga Khan Foundation provided access to Gilgit records and activities. Luo Qian Chang, Vice President of the Xinjiang Agricultural College in Urumchi, contributed important material for the Karakorum area in China as well as assisting me in my travels in the Sarikol and Shaksgam areas of Xinjiang in the mid 1980s. Helena Norberg-Hodge gave me complete access to her library holdings in Leh. In California, Dena Bartholome assisted me in tracking down and providing examples of rare books on the Karakorum Himalaya.

Bernd von Droste, Director, and Mechtild Roessler of UNESCO's World Heritage Centre provided documentation assistance. I am grateful to Karl Ryavec, a Tibetologist and scholar of the Inner Asian ecumene, for drafting the Karakorum Himalaya map that accompanies this book. Not the least acknowledgement should be to David Sonam Dawa of Leh whose prompt attention to my dire straits rescued me from high altitude pulmonary edema.

The sourcebook could not have been compiled and produced without the financial support of the United States Information Agency. Its annual appropriations to the American Institute of Pakistan Studies, and the academic endorsement by AIPS director, Charles H. Kennedy, supported my field research over the entire Karakorum mountains for many years. I am also deeply indebted to Barry C. Bishop and to the Committee for Research and Exploration at the National Geographic Society who supported me for many years on the South Asian mountain rimland to Inner Asia, the U.S. National Science Foundation, and the U.S. National Research Council, Division of International Programs.

While in Pakistan my home-away-from-home has been the United States Education Foundation office in Islamabad. For many years its staff has been supportive of my peripatetic ways and has nursed me through a variety of ailments. Equal thanks must be extended to my wife and daughter who have tolerated those peripatetic ways and nursed me through the lingering after-effects of various ailments.

Because a bibliography is all about books and associated materials I think that it is appropriate to dedicate this book to the memory of Ghulam Mohammad Beg, whose book shop in Gilgit was always a hub of activity among Karakorum devotees. His tragic death in a plane crash in August 1989 while on a trip down to Islamabad, undoubtedly to order and buy more books about the Karakorum mountains and adjacent regions, was mourned by all his patrons and friends.

Introduction

As a schoolboy I was well acquainted with the Karakorum Himalaya. I had five library cards to check out books from the innumerable public libraries that Andrew Carnegie had bequeathed Scotland and I had discovered the *Scottish Geographical Magazine*, which over this past century had probably published more articles on the Karakorum Himalaya than any other journal. Reading about bygone adventurers and explorers in the Karakorum was a pleasant diversion from the cold, wet, stultifying conditions of growing up in post-war Britain. Adventurers, of course remain, today we call them adventure travelers in all their variant pursuits: mountain climbing, mountain biking, trekking, rafting, and so on. And we still have people who think they are “exploring” the Karakorum mountains. Despite the criticisms heaped upon these people, they all possess that positive attribute of finding value in the biophysical environment. Problems arise, however, when members of an alien culture impinge upon the values and beliefs of the local inhabitants. To ameliorate conflicts that might arise in such a situation it is necessary to formalize local rights to resources, whether they are water, arable land, pasture, hunting, and rights of access. One aspect of this action is to reward stewardship of the land by the indigenous inhabitants, and another, more modern one, is to enshrine some hallowed land under some form of protection or conservation as a legacy for forthcoming generations. This sourcebook was compiled as an aid to formulating how the Karakorum Himalaya might emerge under the category of being a “Protected Area”.

Foremost in any environmental design process for creating a protected area is the requirement for enhancing the quality of life of the local population through the development and preservation of the mountain landscapes that are meaningful, relevant and sustainable: meaningful in that they reinforce the sense of community, sense of place, and sense of self; relevant in that they provide a solution to environmental problems rather than contributing to them, and sustainable in that they embody long-term, perpetually beneficial relationships between human culture and the physical/natural environment. The first step for the design process is to make an inventory of all the available pertinent literature sources on the designated area. This sourcebook fulfills that initial quest.

Protecting a mountain range that is riven by the nation-state boundaries of three countries is no easy task. We have seen elsewhere in the Himalaya that one area designated as a national park, Mt. Everest

(Sagarmatha/Chomolungma), although it has experienced teething problems, has been expanded into a cross-border park with a massive appendage in Tibet Autonomous Region, China, and now also further to the east, in the creation of Makalu-Barun protected area (Taylor-Ide 1995). It is to be hoped this example of cross-border agreement of protected areas might assuage any local territorial conflicts in those areas designated as protected.

In the outline of this sourcebook I have followed the format of the UNESCO World Heritage Centre nomination form for a World Heritage Site. There are some problems associated with the UNESCO format, not the least of which is the bifurcation of the natural (biophysical) landscape separated from the cultural landscape. The International Union for the Conservation of Nature (IUCN) has abundant experience in preparing Natural Heritage Site nominations and for executing the designing of protected areas. The International Committee for Monuments and Sites (ICIMOS) nominates Cultural Heritage Sites. In Groetzbach's (1988) "Typology of High Mountain Regions" the Karakorum habitat and society would fall under Type A, 1, a: "Population of Mountain Peasants"; therefore it is necessary to document the symbolic aspects of the Karakorum that are held by the local population. The recent designation of Tongariro in New Zealand's north island and the Uluru-Kata Tjuta National Park (Australia's Ayers Rock and the Olgas) in the new category of the UNESCO World Heritage Site, "Associative Cultural Landscape," done in conjunction with ICIMOS, is a welcome recognition of the way in which the indigenous populations, create, value, and adapt to their environment. This new category supplements the UNESCO Natural Heritage Site appellations already bestowed upon Tongariro, a volcano, and Ayers Rock, an inselberg, by UNESCO. The Karakorum residents, occupants of the greatest collection of high mountains in the world, deserve similar recognition.

The dichotomy between natural and cultural literature on the Karakorum shows up dramatically in this sourcebook. For every five hundred geology articles on the Karakorum mountains we have less than one article that might give us an insight into how the indigenous population creates and values its habitat. For example, the Karakorum Himalaya is almost the last place on earth where the Neolithic goat cult, which was once common from the Alps to the Himalaya, still plays a role in the management of livestock. Parkes (1987) gives us an insight into these practices still prevalent in the region. Before any portion of the Karakorum is classified as a protective area it is mandatory that the connective relationships between humans, the biophysical environment, and animals be explored and documented.

During the construction of this sourcebook I have been uncomfortable in assigning citations to categories that are not of my own making. As a Scotsman and now latter-day Californian, I am uneasy about the social

construction of the term "Protected Area". In Scotland, there is no such protected area as a "National Park". As Terry Coppock has explained, the Scots do not need a national park because they have a set of vernacular rights and obligations that impose certain behavior on all Scots in the countryside. Scots law, unlike the laws of England, assigns the citizenry the obligation to protect the biophysical environment. It is rights and obligations of this type that are, unfortunately, not documented in this sourcebook for the Karakorum mountains because no literature on the topic exists. Furthermore, in compiling this sourcebook I have taken some liberties in allotting sources to various categories. In designating part of a mountain range as a protected area it is helpful to refer to the experiences of other countries in constructing national parks and protected areas. Duncan Poore's (1993) guidelines are simple yet applicable to almost any mountain area. Thorsell and Harrison's (1995) vast compilation of all mountain protected areas in the world and the criteria by which they were created is regarded as the foundation for the designation of future protected areas where natural heritage is dominant.

Aschoff (1991) in his bibliography lists over seventy specialized Himalayan bibliographies on a great variety of topics. My sourcebook is not an exhaustive survey of the Karakorum mountain range of the Greater Himalaya but one that only focuses on the greatest collection of high mountains in the world as an ecumene. I have done field research in all four segments of the Karakorum Himalaya: the Western section, west of the Hunza river; the northern portion to the east into Xinjiang Province of China; the central bastion in Gilgit and Baltistan; and the eastern Karakorum bounded by the big bend of the Shyok river, which is in northern Ladakh. I have also flown across the Karakorum several times so I have a clear idea of what this place looks like. But on the ground there is too much material for one person to comprehend; hence I have relied on colleagues to supply some necessary information compiled for my edited book, *North Pakistan: Karakorum Conquered* (New York: St. Martin's Press, 1996). Karakorum habitat and society cannot be viewed as a discrete entity; I have therefore included coverage of the contiguous regions especially in the west, the Hindukush valleys and even the Pamirs, in the south in that interesting nineteenth century social/political construction called Dardistan, better known as the upper Indus tracts, and to the east in Ladakh, which is so well known through the medium of the literary Tibetan language. Much less covered is the northern area bordered by the Oprang and Shaksgam river and everything to the north, despite my efforts in Kashgar, Urumchi, and Beijing to uncover more pertinent materials. My coverage of non-European language material is almost zero. Where possible I have included English translations of Tibetan, Urdu and Persian works. For more general sources on the adjacent area the reader should consult Aschoff's excellent

bibliography.

In listing the principal features that would comprise a designation as a "Natural Heritage Site" I have only listed general works or historical documents relating to geology, glaciology, and geomorphology. There are now two excellent edited books for coverage of geology, glaciology, and geomorphology of the mountains (Michael Searle, editor, *Geology and Tectonics of the Karakoram Mountains*, New York: Wiley, 1992, and John F. Shroder, Jr., editor, *Himalayas to the Sea*, London: Routledge, 1992). There is no need for me to duplicate the extended coverage in these books and the long list of referenced literature that appears in them.

The Karakorum people are integral parts of an intercontinental system. In the days of the trans-Himalaya trade they were part of a great regional communication network. My guru, the late Agehananda Bharati, would agree with me. From him I learned that the Karakorum Himalaya, like the rest of the Himalaya, are frequently perceived as a mountain barrier for South Asia. This metaphor is grossly over wrought. Like Professor Bharati I like to think of these mountains as a part of an international highway between Inner Asia and South Asia. Despite this historical role there is very little literature about the indigenous culture in this region, especially in Baltistan and Gilgit. Ladakh is much better documented with Snellgrove and Skorupski's volumes and Martin Brauen's study. Much of the scholarly literature that does exist is not in English. Comprehensive coverage in Gilgit and Baltistan is very thin and information about local ideas and beliefs about mountains is particularly scant. These lacunae prevent the Karakorum from being considered as an "Associative Cultural Landscape". Although not within the immediate territory under examination here, it is worth mentioning the Kalasha community in southern Chitral as an example of a site much better documented. This small community is analogous to the Khumbu Sherpa in that it has generated a substantial literature, with contributions from the Cacopardos, Darling, Glavind-Sperber, Pahwal, K. Hewitt, Parkes, Siiger, and now Maggi. The unique culture of these people provides us with insight into the indigenous population of many centuries ago. Yet another example is Dah village, on the Cease-fire Line in Ladakh that was never Tibetanized, Hinduized, nor Islamicized. Such landrace communities give insight into the current thoughts of habitat and society in these mountains.

Since the early part of the century, and indeed one can go back to the days of the Schlagintweit brothers in the middle of the last century, the topic of Karakorum physiography has dominated field research. Knowledge of climatic processes is less well known but the work of the Canadians in the past decade has added immeasurably to our basic knowledge. For information about local vegetation the reader need only look at Schweinfurth's 1957 vegetation map of the Himalaya to find a benchmark

that has seen little improvement in filling in the blank portions of that map as they relate to vegetation cover.

Hunting wildlife is firmly entrenched in the local culture. Unfortunately, much of the wildlife has been eradicated, most of it by former colonial officers on leave and, with the creation of Pakistan, by local hunters well equipped with accurate high powered rifles. Hunters are, however, accurate reporters of the status of wildlife. The old accounts of hunting provide a detailed view of the amount and dispersal of the wildlife. Trophy hunting was very much the objective of visitors to the Karakorum in the Imperial area. (One geography department created during this period was at Oxford University, and it is no surprise to find today in the main hall of its baronial quarters a large display of the horns of Gilgit Agency fauna: blue sheep, urial, ibex, Marco Polo sheep, markhor and chiuru among others.) Any creation of a protected area must include not only a consideration of the remaining fauna but a knowledge of wildlife once found in that area if we are to understand the ecological relationships found there. Pakistan's experience with protected areas in mountains, the Chitral Gol and Khunjerab parks, has had a checkered existence. Poaching of wild animals is rampant, and the influence of local elites in hunting severely damages the integrity of the protected areas. Aside from continual hunting, the other major issue is the entitlement and obligations of graziers in these protected areas. Because the summer graziers, almost all of whom reside outside the protected areas in question, have only informal rights to grazing, any attempt at just compensation for the prohibition of traditional activities in the protected area is difficult. In northern Gilgit district, graziers with hereditary rights of access to mountain pastures have, on a sporadic basis, been banned from grazing their animals in the Khunjerab National Park. This has led to a brouhaha with local officials as Wegge (1991) has discussed in the popular literature on the Himalaya. For the creation of any new protected area in the Karakorum it will be necessary to plot all the traditional grazing areas that the surrounding residents have used. Moreover, these informal rights will have to be formalized through legal procedures to enable the residents to receive compensation for perceived loss of grazing rights.

What is much less known about land and life in the Karakorum are the systems of indigenous land tenure, water allocation, grazing rights, and especially the religious, artistic or cultural associations with the natural element. Many of these traditional livelihoods are now in a state of flux as men and boys renounce the lonely life as shepherds and seek cash labor in the lowlands or in the armed services. (I can empathize with the desire of these people to find more amenable labor, having been a fourteen-year-old full time shepherd in the drenching landscapes of the Western Highlands of Scotland.) Much of the local law has never been codified and remains

the knowledge of community appointed men who adjudicate disputes about land, water, pastures, and territory. With the emigration of many young men to the urban areas women's roles have changed as they have had to assume male jobs in the subsistent household in addition to their extensive domestic duties. The problems created by male emigration are only now being explored and are not yet well documented.

By the end of the nineteenth century photographic developing and printing was being accomplished in the field. European visitors were surveying and photographing the high peaks and glaciers of the Karakorum in order to authenticate their travel and climbing achievements. Some of these early photographs, for example those by Sella, are excellent. Most of the books published today on the Karakorum are greatly embellished by high quality photographs taken during climbing expeditions. Sometimes disputes about nomenclature were the subject of heated disputes in Victorian Britain where the Royal Geographical Society did not allow Britishers to have their names given to topographic features. Hence problems in nomenclature remain as can be seen in the dispute about the triglossal "K2", a surveyor's designation, but which also bears the name of Godwin Austin, an early surveyor, and Chogori, a local name given by travelers through the Mustagh Pass. For nomenclature in English in this sourcebook, there is no need for me to disagree with the toponymic conventions of Marc Aurel Stein, a foremost early European scribe of this region: Karakorum not Karakoram, Hindukush not Hindu Kush, and Himalaya not Himalayas.

Geographers see the world through a different prism than others, hence my inclusion of all segments of the Karakorum mountains and adjacent regions in this sourcebook. The fact that the region is divided today among three different nation-states in the twentieth century is no reason to ignore the inherent historical geography found here. The Greater Himalaya mountains were known for their role in acting as conduits for the trade between South, and Central and Inner Asia. To give just one example of how little they acted as a barrier to commerce, *gur* (raw sugar) was transported from India in the nineteenth century across the mountains to Khotan where it was processed into confectionery and then carried back across the mountains to India where it was sold at a profit. Many of the historical sources cited in the sourcebook portray life as it was in the Karakorum while much of life today bears little connection with the past. For a foray into the intellectual history of Europeans in the Karakorum Himalaya the reader must consult the excellent essay by Hewitt (1989) on that topic.

As a schoolboy my mind was fixed on those bombastic Scots who bullied and bashed their way into the mountains in these parts. Some had genuine contributions to make like Mountstuart Elphinstone and George Scott Robertson on the Hindukush people and culture and Forsyth's expedition across the Karakorum to Yarkand. Who can forget "Bokhara" Burnes

getting hacked down in Kabul or the painting of Surgeon-Major Brydon, from the Orkney Islands, slumped on his pony staggering into Jalalabad, the sole remnant of the much vaunted Army of the Indus. These people and others were prominent in the imagination of the Scots last century and were remembered for their exploits: Hayward getting his head lopped off in the western Karakorum, Dalgleish leaving his bones on the Karakorum Pass, and Macartney defending Chinabagh in Kashgar against the "Oriental" mobs. Of course the invaders were not all Scots; the English and the Continentals were at it too. Their graves testify to the range of their territory in and around the Karakorum mountains; Marc Aurel Stein and Henning Haslund-Christensen are buried in Kabul and the Moravian naturalist Ferdinand Stoliczka in Leh. I have included in the sourcebook many historical accounts of adventurers such as these in this region because the reader often gets a view of bygone life and landscape in their accounts of travel, and their hunting and shooting of a great variety of wild animals that once populated this area.

In the western Himalaya the creation of mountain parks has come on the heels of a massive road building program for military and political strategic reasons. Along these roads now come many tourists of various persuasions. Only now in the high Himalayan border country are places like Lahaul and Spiti being opened up to tourist activity. Before long it will be necessary to set aside some of these areas as protected. Ladakh presents a different situation because it is a prime destination for the European who has a short summer holiday. A week down to Agra to see the Muslim Taj Mahal, another week in Jaipur and Rajasthan to see the Hindu palaces, and a final week or ten days to visit Buddhist Ladakh and a short trek, and then off to Europe to return to work on Monday morning. For the more adventurous in Ladakh the tourist can go north over the Khardung Pass—the highest road in the world—down into the Shyok and across to the Nubra valley in the eastern Karakorum.

As yet none of northern Ladakh is designated as protected but the rationale behind the creation of a protected area is very much alive in the recent creation of Hemis National Park, which is formed around a viable snow leopard community in the Markha Valley south of the Indus river. The lesson to be learned from the creation of protected areas elsewhere in the Greater Himalaya is that it requires experts to delineate all the competing claims to the land designated to become protected, and more experts, local and expatriate, to enumerate the status of wildlife in the protected area, and an intense knowledge of the indigenous community and its cultural practices. Inexorable pressure from tourists now makes the creation of protected areas necessary for the maintenance of local stewardship of the land and access for all to highly desirable leisure landscapes.

Much of the tourism literature is focused on mountain climbing expe-

ditions. Issues of the *Alpine Journal* and the *Himalayan Journal* over the past two decades, since these mountains were reopened for mountain climbing, will bring the readers up to date on these activities. There are also large numbers of books written by the modern climbing fraternity about their exploits. All of this literature has a Eurocentric view and contributes little to our knowledge of habitat and society in the Karakorum. There is, of course, the occasional exception, like the contributions of Wilhelm Kick over the years who brought to our attention the scientific contributions of the Schlagintweit brothers of last century.

Another issue at the forefront is the accommodation for large numbers of tourists in this region. In Ladakh several Airbus 320 flights arrive each day during the tourist season, principally summer because it is dry, and they are accommodated in over 100 hotels of variable quality in Leh. In addition, the conflict in the Vale of Kashmir has not interrupted the flow of tourists because the overland tourists now travel by bus from Manali in Himachal Pradesh over several 5000m passes to the Indus valley and then downstream to Leh. The Karakorum mountains in Gilgit and Baltistan have yet to experience a fraction of this tourist load on their facilities. The number, however, is rising and within the past two years the Aga Khan Foundation has given program assistance to Gilgit villagers in developing simple, hygienic overnight accommodation for foreign tourists. Among Himalayan countries Pakistan has taken the lead in setting a fixed rate and schedule of payments for using porters in the high country.

In this century, the Karakorum mountain literature has been dominated by climbing accounts. Many of these are covered in Dorothy Middleton's introduction to the Miller (1983) books on a surveying expedition to the Karakorum celebrating the 150th anniversary of the Royal Geographical Society. The dominant theme of these and similar volumes is the jaded view of Europeans looking at local culture. On some occasions, these views border on racism as seen in the four books and twenty-three articles written by Reginald Schomberg that I managed to unearth at the library of the Royal Geographical Society. The authors were products of their day, as Schomberg was, and his views may seem more understandable in the context of his time, but similar views of indigenous people, Fourth World people as some would have it, regrettably remain in many contemporary books on expeditions to the Karakorum. A reader of the Karakorum literature need only consult the products of two prominent mountain photographers, one American and the other Japanese, to discern the bigoted gaze by the First World elite of the indigenous inhabitants. Butz and MacDonald have done much to sensitize us to these distorted views, not only of Europeans but those exhibited by Indians and Pakistanis from the urbanized plains.

For the Karakorum territory not at the eastern end, essentially encompassing Baltistan and Gilgit, I have included a substantial amount of "grey"

literature gleaned from the Pakistan Forest Institute library in Peshawar, the IUCN library in Islamabad, and the AKRSP library in Gilgit. By "grey" literature I mean agency reports, consultants' reports, and any other material that is not published in a formal sense. Much of this literature is of considerable utility but it never sees the light of day because it is buried in bureaucracies.

I have listed many archaic accounts, especially of the last century, to portray the important role that the Karakorum residents once had in this area, "The Crossroads of Asia". A vestige of that importance is the presence of feral Bactrian camels wandering in the buckthorn bushes of the Shyok river. These animals, along with yaks and ponies, were the beasts of burden that carried the commerce between the two cultural strongholds of South and Inner Asia.

This sourcebook is not only designed for the bureaucrat or scholar but also for the informed lay person; hence it is to be hoped that the reader will delve into the large historical literature that exists on the Karakorum mountains. Many of the books referenced are now available at bargain prices in reprint form. A caveat, however, is in order, in that many portrayals of the Karakorum landscape and people are imperialist constructions. (A powerful antidote to this literature is Peter Bishop's *The Myth of Shangri La* (1989) about the European social construction of Tibet, especially in the nineteenth century.) No coverage of the Karakorum could be complete without listing the "classics" that are written in European languages about "explorers" of the last century. A good place to start would be the biographies: Garry Alder's excellent account of Moorcroft (most of southern Leh is now called "Moorcroft's garden"), Josef Kolmas on Stoliczka, Jeannette Mirsky on Aurel Stein, and Gerald Morgan on the legendary Ney Elias. While I was on a visit to the University of Innsbruck in 1983, Klaus Frantz brought to my attention the mounting literature on the Schlagintweit brothers, Adolph, Herman and Robert, who were pioneer scientists in this part of the world. Wilhelm Kick and others, including a Schlagintweit descendent, have contributed to a special volume (Mueller, Raunig 1982) on these three remarkable brothers.

Some key works are cited by Brauen on Ladakhi society, Berger and Buddruss on Baltistan and Gilgit; a study of these will provide the reader an entry to the intense details of the social and linguistic components of the region under consideration. John Bray's extensive bibliography focusing on Ladakh should be consulted for further reading in that eastern end. Scholarly scrutiny of the Ladakh end of the Karakorum is much more extensive than the Baltistan and Gilgit portions. European writing on Ladakh appeared much earlier, no doubt because of the more frequent access to cynosures like Leh and the added facility of the literature in the Tibetan language. As an example, one need only cite the prodigious output of Au-

gust Francke who produced more than seventy publications about the region. He wrote about Tibetan petroglyphs found on the Darkot Pass off to the west of the Karakorum and of the Christian Nestorian petroglyphs found in Tangtse far off to east, all of which lend an air of the historical ecumenical diversity of the Karakorum region. Karl Jettmar has added considerably to our knowledge of the travelers from the past who have criss-crossed the Karakorum.

John Bray has also dealt with the role of the Moravian mission in Ladakh. Lest anyone think that their activities were only confined to religion, it was the Moravian missionaries who recorded daily meteorological measurements atop the mud brick tower built well over a century ago by the Survey of India, which lies in ruins today down an alley opposite the entrance to the Moravian Mission school in Leh. These records were used by Ellsworth Huntington to buttress his arguments set forth in *The Pulse of Asia*. Huntington's environmental determinism was meant to be an antidote to Darwinism but eventually fell out of favor in the 1920s; strangely, it rears its ugly head whenever authors write about mountain people in the geocology paradigm.

I have refrained from becoming immersed in the conflict over Kashmir. Among the vast amount of literature on this topic are the listings in Warikoo's bibliography on Kashmir. Garry Alder and Alastair Lamb provide exceptionally sound commentaries on this topic. Wirsing (1993) analyzes the Siachen glacier situation.

In summary, this sourcebook has a two-fold purpose. One obvious objective is to highlight the role of protected areas in and around the Karakorum Himalaya. But it should also bring to the reader's attention the rich literature that exists on the Karakorum Himalaya and the adjacent territory. By today's standards the lay person might regard the residents as remote and isolated but these descriptors mask the vital role that these people played in centuries past. This place was indeed the "Crossroads of Asia" and the local people had a vital role in this transcontinental highway.

Finally, it is to be hoped that this sourcebook for a Karakorum protected area will provide some assistance to the sojourner in the Karakorum Himalaya who values and enjoys this unique and treasured place.

1

History

Natural Heritage

Geology

- Anon. 1965. *Geology of the Karakoram and Hindu Kush*. Kyoto: Kyoto University.
- Anon. 1985. *Geology of the Chogo Lungma-Biafo-Hispar Area, Karakorum (NW Pakistan)*. Roma, Italy: Accademia Nazionale dei Lincei.
- Anon. 1989. *Quaternary of the Karakoram and Himalaya*. Berlin: G. Borntraeger.
- Andrews-Speed, C. P. and M.E. Brookfield. 1982. "Middle Paleozoic to Cenozoic Geology and Tectonic Evolution of the northwestern Himalaya." *Tectonophysics* 82:253-275.
- Brookfield, M.E. 1981. "Metamorphic Distributions and Events in the Ladakh Range, Indus Suture Zone and Karakoram mountains." In *Metamorphic Tectonites of the Himalaya*, edited by P.S. Saklani, 1-14. New Delhi: Today and Tomorrows Publishing.
- Brookfield, M.E. and C.P. Andrews-Speed. 1984. "Sedimentology, Petrography and Tectonic Significance of the Shelf, Flysch and Molasse Clastic Deposits Across the Indus Suture Zone, Ladakh, Northwest India." *Sedimentary Geology* 40:249-286.
- Brunsdon, D. and D.K.C. Jones. 1984. "The Geomorphology of High Magnitude-Low Frequency Events in the Karakoram Mountains." In *The International Karakoram Project, Vol. 1*, edited by Keith J. Miller, 383-388. Cambridge: Cambridge University Press.
- Brunsdon, D., D.K.C. Jones and A.S. Goudie. 1984. "Particle Size Distribution on the Debris Slopes of the Hunza Valley." In *The International Karakoram Project, Vol. 2*, edited by Keith J. Miller, 536-580. Cambridge: Cambridge University Press.
- Cerveny, P.F., C.W. Naeser, P.B. Keleman, J.E. Lieberman and P.K. Zeitler. 1989. "Zircon Fission-Track Ages From the Gasherbrum Diorite, Karakoram Range, Northern Pakistan." *Geology* 17:1044-1048.

- Dainelli, G. 1924-35. *Relazioni Scientifiche della Spedizione Italiana De Filippi nell'Himalaia, Caracorum e Turchestan Chinese (1913-1914)*. Series II, 10 vols. Bologna: Zanichelli.
- Dainelli, G. 1934. *La Esplorazione della Regione fra l'Himalaia, Caracorum e Turchestan Chinese (1913-1914)*. Series II, Vol. 1. Bologna: Zanichelli.
- Dainelli, G. 1935. *La Serie dei Terreni: Spedizione Italiana De Filippi nell'Himalaia, Caracorum e Turchestan Chinese (1913-1914)*." Series II, Vol. 2. Bologna: Zanichelli.
- de Filippi, F. 1911. "The Expedition of H.R.H. the Duke of Abruzzi to the Karakoram Himalaya." *Geographical Journal* 37: 19-30.
- De Terra, H. 1932. *Geologische Forschungen im Westlichen K'un-lun und Karakorum Himalaya*. Berlin: Reimer and Vohsen.
- Derbyshire, Edward and L. A. Owen, eds. 1989. "Quaternary of the Karakoram and Himalaya." *Zeitschrift fuer Geomorphologie*, Supplement Vol. 76. Berlin: Gebrueder Borntraeger.
- Desio, Ardito. 1930. "Geological Work of the Italian Expedition to the Karakoram." *Geographical Journal* 75:402-411.
- Desio, A., E. Tongiorgi and G. Ferra. 1964. "On the Geological Age of Some Granites of the Karakoram, Hindu Kush, and Badakshan, Central Asia." *Proceedings of the 22nd International Geological Congress, New Delhi* 11:479-496.
- Ebblin, C. 1976. "Tectonic Lineaments in Karakorum Pamir, and Hindu Kush from ERTS Imageries." *Accademia Nazionale dei Lincei, Rendiconti* 60:245-253.
- Farah, A. and K. A. DeJong, eds. 1979. *Geodynamics of Pakistan*. Quetta: Geological Survey of Pakistan.
- Fielding, E., B. Isacks, M. Barazangi, C. Duncan. 1994. "How Flat is Tibet?" *Geology* 22:163-167.
- Finstertwaller, R. 1937. "Eine Gletscher des Nanga Parbat." *Zeitschrift fuer Gletscherkunde* 25:57-108.
- Foster, D.A., A.J.W. Gleadow, and G. Mortimer. 1994. "Rapid Pliocene Exhumation in the Karakoram (Pakistan), Revealed by Fission-Track Thermochronology of the K2 Genesis." *Geology* 22:19-22.
- Gansser, Augusto. 1964. *Geology of the Himalayas*. London: Wiley.
- Gansser, Augusto. 1980. "The Significance of the Himalayan Suture Zone." *Tectonophysics* 62:37-52.
- Gansser, Augusto. 1983. "The Morphogenetic Phase of Mountain Building." In *Mountain Building Processes*, edited by K.J. Hsu, 221-228. London: Academic Press.
- Gattinger, T.E. 1961. *Geologischer Querschnitt des Karakorum vom Indus zum Shaksgam*. Vienna: Geologische Bundesanstalt.
- Goudie, A. S., et. al. 1984. "The Geomorphology of the Hunza Valley, Karakoram Mountains, Pakistan." In *International Karakoram Project, Vol. 1*, edited by Keith J. Miller, 359-410. London: Royal Geographical Society.

- Harrison, T.M., P. Copeland, W.S. Kidd and An Yin. 1992. "Raising Tibet." *Science* 255:1663-1670.
- Hewitt, Kenneth. 1969. "Geomorphology of the Mountain Regions of the Upper Indus Basin." 2 vols. Ph.D. dissertation, University of London.
- Humboldt, Alexander, von. 1843. *Asie Centrale: Recherchés sur les chaines de montagnes et de climatologie compare*. 3 vols. Paris: Gide.
- Kazmi, A.H. and R.A. Rana. 1982. *Tectonic Map of Pakistan (Scale 1:2 million)*. Quetta: Geological Survey of Pakistan.
- Kick, Wilhelm. 1964. "Der Chogo Lungma Gletscher im Karakoram." *Zeitschrift fuer Gletscherkunde und Glazialgeologie* 5:19-24.
- Le Fort, P. 1975. "Himalayas: The Collided Range: Present Knowledge of the Continental Arc." *American Journal of Science* 275-A:1-44.
- Le Fort, P. 1986. "Metamorphism and Magmatism During the Himalayan Collision." In *Collision Tectonics*, edited by M.P. Coward and A.C. Ries, Special Publication 19, 159-172. London: Geological Society.
- Lydekker, R. 1881. "Geology of Part of Dardistan, Baltistan and Neighbouring Districts." *Records of the Geological Survey of India*, Vol. 14. Dehra Dun: Survey of India.
- Maluski, H. and P. Matte. 1983. "Ages of Alpine Tectonometamorphic Events in the Northwestern Himalaya (Northern Pakistan) by $^{39}\text{Ar}/^{40}\text{Ar}$ method." *Tectonics* 3:1-18.
- Marussi, Antonio. 1964. *Geophysics of the Karakorum*. Leiden: E. J. Brill.
- Mason, Kenneth. 1927. "The Shaksgam Valley and Aghil Range." *Geographical Journal* 69:289-332.
- Merla, Giovanni. 1922. *Fossili Natrocolitici del Caracorum*. Bologna: Zanichelli.
- Miller, Keith J. 1982. *Continents in Collision*. London: George Philip.
- Miller, Keith J., ed., 1984. *International Karakoram Project*. 2 vols. Cambridge: Cambridge University Press.
- Muir, T. S. 1917. "The Eastern Karakoram: A Review." *Scottish Geographical Magazine* 33:544-547.
- Nevé, Arthur. 1910. "The Ranges of the Karakorum." *Geographical Journal* 36:571-577.
- Oestreich, K. 1906. "Die Taeler des Nordwestlichen Himalaya." *Petermanns Geographische Mitteilungen* Vol. 155, No. 3.
- Pfannl, H. 1904. "Von meiner Reise zum K2 in den Bergen Baltistans." *Mitteilungen der Geographischen Geschichte Wien* 47:247.
- Schlagintweit, H.A. von and R. von Schlagintweit. 1860-1866. *Results of a Scientific Mission to India and High Asia*. 4 vols. London: Atlas, Truebner.
- Searle, Michael P., editor. 1992. *Geology and Tectonics of the Karakoram Mountains*. New York: Wiley.

- Shroder, John F., Jr., M.S. Khan, R.D. Lawrence, I. Madin and S.M. Higgins. 1989. "Quaternary Glacial Chronology and Neotectonics in the Himalaya of Northern Pakistan." In *Tectonics and Geophysics of the Western Himalaya*, edited by L.L. Malinconico, Jr. and R.J. Lillie, Special Paper 232, 275-293. New York: Geological Society of America.
- Shroder, John F., editor. 1992. *Himalayas to the Sea*. London: Routledge.
- Tahirkheli, Rashid A. K. 1982. *Geology of the Himalaya, Karakorum and Hindukush in Pakistan*. Peshawar: University of Peshawar.
- Tahirkheli, Rashid A. K. and M.Q. Jan. 1979. "Geology of Kohistan, Karakorum Himalayas, Northern Pakistan." *Geological Bulletin of the University of Peshawar, Pakistan* 11:187.
- Tapponnier, P., G. Peltzer and R. Armijo. 1986. "On the Mechanics of the Collision Between India and Asia." In *Collision Tectonics*, Special Publication, no. 1, edited by M.P. Coward and A.C. Ries, 115-157. London: Geological Society.
- Thakur, V.C., N.S. Viridi, H. Rai and K. R. Gupta. 1981. "A Note on the Geology of Nubra-Shyok Area of Ladakh, Kashmir, Himalaya." *Geological Society of India Journal* 22: 46-50.
- Treloar, P.J., D.C. Rex, P.G. Guise, M.P. Coward, M.P. Searle, B.F. Windley, M.G. Petterson, M.Q. Jan and I.W. Luff. 1989. "K-Ar and Ar-Ar geochronology of the Himalayan collision in NW Pakistan: Constraints on the Timing of Suturing, Deformation, Metamorphism and Uplift." *Tectonics* 8:881-909.
- Trifonov, V.G. 1978. "Late Quaternary Tectonic Movement of Western and Central Asia." *Bulletin of the Geological Society of America* 89:1059-1072.
- Visser-Hoeft, Jenny. 1936. *Among the Kara-Korum Glaciers in 1925*. London: Edward Arnold.
- Voskresenkiy, I.A., K.N. Kravchenko and B.A. Sokolov. 1968. "The Tectonics of West Pakistan." *Geotectonics* 2:93-99.
- Wissmann, H. von. 1959. "Die Heutige Vergletscherung und Schneegrenze in Hoch Asien." *Abhandlung der Mathematisch-Naturwissenschaftlichen Klasse* 14:1103-1431.
- Wyss, Rudolf, Hans Hermann Renz and Manfred Reichel. 1940. *Geologie der Karakorum*. Leiden: Brill.

Glaciology

- de Filippi, F. 1923. *Storia della Spedizione Scientifica Italiana nell'Himalaia, Caracorum e Turchestan Chinese 1913-1914*. Bologna: Zanichelli.
- Desio, Ardito. 1954. "An Exceptional Glacier Advance in the Karakoram-Ladakh Region." *Journal of Glaciology* 2:383-385.

- Drew, Fredric. 1873. "Alluvial and Lacustrine Deposits and Glacial Records of the Upper India Basin." *Quarterly Journal of the Geology Society* 29:441-471.
- Godwin-Austen, H.H. 1864. "On the Glaciers of the Mustagh Range (Trans-Indus)." *Proceedings of the Royal Geographical Society* 34:19-56.
- Goudie, A.S., D.K.C. Jones, and D. Brunsden. 1984. "Recent Fluctuations in Some Glaciers of the Western Karakoram Mountains, Pakistan." In *The International Karakoram Project, Vol. 2*, edited by Keith J. Miller, 411-455. Cambridge: Cambridge University Press.
- Gunn, J.P., H.J. Todd, and Kenneth Mason. 1930. "The Shyok Flood 1929." *Himalayan Journal* 2:35-47.
- Hayden, H.H. 1907. "Notes on Certain Glaciers in Northwest Kashmir." *Records of the Geological Survey of India* 35:127-137.
- Hewitt, Kenneth. 1961. "Karakoram Glaciers and the Indus." *Indus (Lahore)* 2:4-14.
- Hewitt, Kenneth. 1964. "A Karakoram Ice Dam." *Indus (Lahore)* 5:18-30.
- Hewitt, Kenneth. 1967. "Ice-front Sedimentation and the Seasonal Effect: A Himalayan Example." *Transactions of the Institute of British Geographers* 45:93-106.
- Hewitt, Kenneth. 1968b. "The Freeze-Thaw Environment of the Karakoram Himalaya." *Canadian Geographer* 12:85-98.
- Hewitt, Kenneth. 1969. "Glacier Surges in the Karakoram Himalaya (Central Asia)." *Canadian Journal of Earth Sciences* 6:1009-1018.
- Hewitt, Kenneth. 1982. "Natural Dams and Outburst Floods of the Karakoram Himalaya." In *Hydrological Aspects of Alpine and High Mountain Areas*, edited by J. Glen, 259-269. London: International Hydrological Association.
- Hewitt, Kenneth. 1985. "Snow and Ice Hydrology in Remote, High Mountain Regions: The Himalayan Sources of the River Indus." Snow and Ice Hydrology Project. Working Paper no. 1, Waterloo, Ontario: Wilfrid Laurier University.
- Hewitt, Kenneth, ed. 1986. "Annual Report: Snow and Ice Hydrology Project (Upper Indus Basin)." Waterloo, Ontario: Wilfrid Laurier University.
- Hewitt, Kenneth, ed. 1987. "Snow and Ice Hydrology Project (Upper Indus Basin): Annual Report." Waterloo, Ontario: Wilfrid Laurier University.
- Hewitt, Kenneth. 1988. "Catastrophic Landslide-Deposits in the Karakoram Himalaya." *Science* 242:64-77.
- Hewitt, Kenneth. 1989a. "European Science in High Asia: Geomorphology in the Karakoram Himalaya to 1939." In *History of Geomorphology: Hutton to Hack*, edited by K.J. Tinkler, 165-203. Boston: Unwin Hyman.
- Hewitt, Kenneth. 1989b. "The Altitudinal Organization of Karakoram Geomorphic Processes and Depositional Environments." *Zeitschrift fuer Geomorphologie*, Supplement Volume 76:9-32.

- Hewitt, Kenneth and G.J. Young. 1993. "The Snow and Ice Hydrology Project; a Pakistan-Canada Research and Training Programme." In *Snow and Glacier Hydrology. Proceedings of the International Symposium, Kathmandu, 1992*, edited by G.J. Young, 49-59. Waterloo, Ontario: Wilfrid Laurier University.
- Humboldt, Alexander von. 1820. "Sur la limite inferieure des neige perpetuelle dans les montagnes de l'Himalaya at des regions equatoriales." *Annales de Chimie et de Physique* 14:5.
- Kelly, Richard E.J. 1991. *Characteristic Discharge and Suspended-Sediment Relationships in Two Glacier-Fed Rivers in the Karakoram*. Ottawa: National Library of Canada.
- Khan, Mohammad Inamullah. 1989. *Ablation on Barpu Glacier, Karakoram Himalaya, Pakistan: A Study of Melt Processes on a Faceted, Debris-covered Ice Surface*. Ottawa: National Library of Canada.
- Lyall-Grant, I. and Kenneth Mason. 1940. "The Upper Shyok Glaciers, 1939." *Himalayan Journal* 1:52-63.
- Mason, Kenneth. 1914. "Examination of Certain Glacier Snouts of Hunza and Nagar." *Records, Trigonometric Survey of India* 6:49-51.
- Mason, Kenneth. 1929. "Indus Floods and Shyok Glaciers." *Himalayan Journal* 1:10-29.
- Mason, Kenneth. 1930. "The Glaciers of the Karakoram and Neighbourhood." *Records of the Geological Survey of India* 63:214-278.
- Mason, Kenneth. 1935. "The Study of Threatening Glaciers." *Geography Journal* 85:24-41.
- Mayewski, P.A., G.P. Pergent, P.A. Jeschke, and N. Ahemad. 1980. "Himalayan and Trans-Himalayan Glacier Fluctuations and the South Asian Monsoon Record." *Arctic and Alpine Research* 12:171-182.
- Mercer, J.H. 1975. "Glaciers of the Karakoram." In *Mountain Glaciers of the Northern Hemisphere*, edited by W.O. Field, 371-409. Hanover, NH: United States Army Cold Regions Research and Engineering Laboratory.
- Morris, C. J. 1928. "Some Valleys and Glaciers in Hunza." *Journal of Geography* 71:513-537.
- Norin, E. 1925. "Preliminary Notes on the Late Quaternary Glaciation of the Northwestern Himalaya." *Geografiska Annaler* 7:165-194.
- Nosenko, G.A. 1993. "Distribution and Regime of Karakorum Glaciers from Space Imagery." *Mapping Sciences and Remote Sensing* 13, 85-95.
- Oestreich, K. 1911-12. "Der Tschotschogletscher in Baltistan." *Zeitschrift fuer Gletscherkunde* 6:1-30.
- Osmaston, Henry A. 1986. "The Siachen and Terong Glaciers: East Karakoram." *Himalayan Journal* 42:87-96
- Royal Geographical Society. 1918. "Glaciers and Passes of the Karakorum." *Geographical Journal* 51:3842.

- Shroder, J.F., Jr. In press. "Satellite-Image Analysis of Glaciers of Northern Pakistan." In *Satellite Image Atlas of Glaciers of the World*, Professional Paper 1386, edited by R.S. Williams, Jr. and J.R. Ferrigno. Reston, VA: United States Geological Survey.
- Todd, H.J. 1930. "Gilgit and Hunza River Floods (Correspondence)." *Himalayan Journal* 2:173-175.
- Vigne, G.T. 1842. *Travels in Kashmir, Ladakh, Iskardo: the Countries Adjoining the Mountain-Course of the Indus, and the Himalaya North of the Punjab*. London: Colburn.
- Visser, Ph.C. 1928. "Von den Gletschern am Obersten Indus." *Zeitschrift fuer Gletscherkunde* 16:169-229.
- Visser-Hooft, Jeannette. 1926. *Among the Karakorum Glaciers in 1925*. London: E. Arnold.
- Visser-Hooft, Ph.C. and J. Visser-Hooft. 1935-1938. *Karakorum: Wissenschaftliche ergebnisse der Niederlandischen Expeditionen den Karakorum und die Angrenzenden Gebiete in den Jahren 1922, 1925, 1929-30, und 1935*. Leiden: E.J. Brill.
- Wake, Cameron P. 1987. "Spatial and Temporal Variation of Snow Accumulation in the Central Karakoram, Northern Pakistan." Master's thesis, Department of Geography, Wilfrid Laurier University, Waterloo, Ontario.
- Wake, Cameron. 1987. "Snow Accumulation Studies in the Central Karakoram, Pakistan," In *Proceedings 44th Eastern Snow Conference*, edited by J. Lewis. 19-33. Waterloo, Ontario: Wilfrid Laurier University.
- Washburn, A.L. 1939. "Karakoram Glaciology." *American Journal of Science* 235:138-146.
- Young, G.J. and Kenneth Hewitt. 1993. "Glaciohydrological Features of the Karakoram Himalaya: Measurement Possibilities and constraints." In *Snow and Glacier Hydrology*, edited by G.J. Young, 273-283. Waterloo, Ontario: Wilfrid Laurier University.

Associative Cultural Landscape

Local Ideas and Beliefs about Mountains

- Asboe, Walter. 1938. "Social Festivals in Ladakh, Kashmir." *Folklore* 49:376-389.
- Brauen, Martin. 1979. "The Pha-spun of Ladakh." In *Tibetan Studies in Honour of Hugh Richardson*, edited by Michael Aris and Aung San Sui Kyi, 53-58. Warminster: Aris and Phillips.
- Brauen, Martin. 1980. *Feste in Ladakh*. Graz: Akademische Druck und Verlagsanstalt.

- Brauen, Martin. 1980. "Ladakh: Menschen und Kunst Hinter dem Himalaya." *Die Kunstzeitschrift* 1:16-64.
- Clarke, Graham, E. 1977. "Who Were the Dards? A Review of the Ethnographic Literature of the North-Western Himalayas." *Kailash* 5:323-356.
- Dilthey, Helmtraut. 1970. "Versammlungsplatze im Dardo-Kafirischen Raum." Ph.D. dissertation, Suedasien-Institute der Universitaet Heidelberg, Wiesbaden: Steiner.
- Dollfus, Pascale. 1987. "Lo-gsar: the People's New Year in Ladakh." *L'Ethnographie* 83:63-96.
- Dollfus, Pascale. 1989. *Lieu de Neige et de Genévriers: Organisation Sociale et Religieuse des Communautés Bouddhistes du Ladakh*. Paris: Editions du CNRS.
- Drew, Frederic. 1876. "Notes on the Castes and on Certain Customs of the Dards." In *Transactions of the Second Session of the International Congress of Orientalists held in London in September, 1874*, 400-405. London: Truebner.
- Dyhrenfurth, Guenter O. 1935. *Daemon Himalaya*. Basel: Renno Schuabe.
- Erdmann, Ferry. 1983. "Social Stratification in Ladakh: Upper Estates and Low Castes." In *Recent Research in Ladakh*, Schriftenreihe Internationales Asienforum, Vol. 1, edited by D. Kantowsky and R. Sander, 139-165. Munich: Weltforum Verlag.
- Francke, August Hermann. 1906. "The Dards at Khalatse in Western Tibet." *Memoirs of the Asiatic Society of Bengal* 1:413-419.
- Francke, August Herman. 1906. "Archaeology in Western Tibet." *Indian Antiquarium* 35:237-241, 325-333.
- Francke, August Hermann. 1929. "Islam Among the Tibetans." *Moslem World* (New York) 19:134-140.
- Francke, August Herman. 1972. *Antiquities of Indian Tibet*. 2 vols. 1926. Reprint. New Delhi: S. Chand.
- Frembgen, Juergen. 1983. "Die Nagerkuc im Licht der Populaeren Reiseliteratur: Ein Beitrage zuer Vorurteilsforschung in Nordpakistan." In *Ethnologie und Geschichte: Festschrift fuer Karl Jettmar*, edited by P. Snoy, 147-162. Wiesbaden: Steiner.
- Frembgen, Juergen. 1984. "Ethnographical Field Research on the History and Culture of Nagar: Some Preliminary Remarks on the Process of Settlement." *Journal of Central Asia* 7:29-38.
- Frembgen, Juergen. 1985. *Zentrale Gewalt in Nager (Karakorum): Politische Organisationsformen, Ideologische Begrueudungen des Koenigtums und Veraenderungen in der Moderne*. Wiesbaden: Steiner.
- Frembgen, Juergen. 1986. "Aspekte der Oralitaet und Literalitaet: Ihre Implikationen fuer das Geschichtsbewubtsein der Muslimischen Nagerkuts in Nordpakistan." *Anthropos* 81:567-574.

- Friedl, Erika. 1965. *Traeger Medialer Begabung im Hindukusch und Karakorum*. Vienna: Oesterreichische Ethnologische Gesellschaft.
- Graziosi, P. 1961. "The Wooden Statue of Desalik, A Kalash Divinity, Chitral, Pakistan." *MAN* 61:148-51.
- Jettmar, Karl and Lennart Edelberg, eds. 1974. *Cultures of the Hindukush: Selected Papers from the Hindu Kush Cultural Conference Held at Moesgaard, 1970*. Wiesbaden: Steiner.
- Jettmar, Karl, ed. 1975. *Die Religionen des Hindukusch*. Stuttgart: Steiner.
- Jettmar, Karl. 1957. "Heidnische Religionsreste im Hindukusch und Karakorum." *Wissenschaft und Weltbild* 10:126-131.
- Jettmar, Karl. 1957. "Schmiedebrauchtum im oestlichen Hindukusch." *Mitteilungen der Anthropologische Gesellschaft im Wien* 87:22-31.
- Jettmar, Karl. 1958. "Voelkerkundliche Forschung im Haramoshgebiet (Gilgit Agency)." *Zeitschrift fuer Ethnologie* 83:252-256.
- Jettmar, Karl. 1960. "Soziale und Witschaftliche Dynamik bei Asiatischen Gebirgsbauern (Nordwest Pakistan)." *Sociologus* 10:120-138.
- Jettmar, Karl. 1960. "Megalithsystem und Jagdritual bei den Dard Voelkern." *Tribus* 9:121-134.
- Jettmar, Karl. 1960. "Schnitze aus den Talern Tangir und Darel." *Archiv fuer Voelkerkunds* 14:87-118.
- Jettmar, Karl. 1961. "Ethnological Research in Dardistan 1958: Preliminary Report." *Proceedings of the American Philosophical Society* 105:79-97.
- Jettmar, Karl. 1977. "Fragment Einer Balti-Version der Kesar-Sage." *Zeitschrift fuer Asiatische Studien* 11:277-285.
- Jettmar, Karl. 1979. "Forschungsaufgaben in Ladakh: Die Machnopa." *Zentralasiatische Studien* 13:339-353.
- Jettmar, Karl. 1979. "Zuer Kesar-Sage in Baltistan und Ladakh: Vorbericht ueber die Ergebnisse einer Reise im August, September und Oktober, 1978." *Zeitschrift fuer Asiatische Studien* 13:325-337.
- Jettmar, Karl. 1989. *Antiquities of Northern Pakistan, Reports and Studies*. Vol. 1, *Rock Inscriptions in the Indus Valley*. Mainz: Philip von Zabern.
- Kaplanian, Patrick. 1984. "La Faune dans les Croyances et les Mythes Ladakhis." *Acta Biologica Montana* 4:583-589.
- Keller, Barbara. 1986. "A Qualitative Approach to the Study of Language and Identity in Ladakh." Master's thesis, University of Texas at Arlington.
- Kick, Wilhelm. 1956/57. "The People of Arandu and their Chogo Lungma Glacier." *The Mountain World* 4:163-172.
- Knudsen, Are J. 1994. "Concepts of Nature and Culture in a Twelver Shi'i Community: Implications for Common Property Management?" Manuscript.
- Lorimer, David L. R. 1931. "An Oral Version of the Kesar Saga from Hunza." *Folklore* 42:105-140.

- Nayyar, Adam. 1984. "Cosmology and Colour Perceptions in the Astor Valley." *Journal of Central Asia* 7:69-75.
- Schneider, H.-J. 1969. "Minapin-Gletscher und Menschen im N.W. Karakorum." *Die Erde* 2-4:266-286.
- Schuler, S. 1978. "The 'Story of the Creation of Shigar' of Wazir Ahmad." *Central Asiatic Journal* 22/1:102-120
- Shaw, R. B. Airy. 1873. "Religious Cairns of the Himalayan Region." British Association for the Advancement of Science, 42nd Meeting, report, 194-197.
- Shaw, R. B. Airy. 1878. "Stray Arians in Tibet." *Journal of the Asiatic Society of Bengal* 47:26-62.
- Siiger, Halfdan. 1956. "Shamanism among the Kalash Kafirs of Chitral." *Folk* 5:205-303.
- Snellgrove, D.L. and T. Skorupski. 1977. *The Cultural Heritage of Ladakh*. 2 vols. Warminster: Aris and Phillips.
- Sohnen, Renate. 1984. "Treasures of Literary and Musical Tradition, Baltistan." *Journal of Central Asia* 7:39-48.
- Vohra, Rohit. 1982. "Ethnographic Notes on the Buddhist Dards of Ladakh: The Brog-pa." *Zeitschrift fuer Ethnologie* 107:72-76.
- Vohra, Rohit. 1983. "History of the Dards and the Concept of Minaro Traditions among the Buddhist Dards in Ladakh." In *Recent Research on Ladakh*, Schriftenreihe Internationales Asienforum, Vol. 1, edited by D. Kantowski and R. Sander. Munich: Weltforum Verlag.
- Vohra, Rohit. 1985. "Ethno-Historical Notes on Nubra in Ladakh." In *Ladakh Himalaya Occidental: Ethnologie, Ecologie*, Acta Biologica Montana no. 5, edited by Claude Dendaletche and Patrick Kaplanian, 247-256. Pau: Centre Pyrénéen de Biologie et Anthropologie des Montagnes.
- Vohra, Rohit. 1987. "Ethno-Historicity of the Dards in Ladakh-Baltistan: Observations and Analysis." In *Proceedings of the Fourth Seminar of the International Association for Tibetan Studies*, Schloss Hohenkammer, Munich, 1985, Vol. 2, "Studia Tibetica: Quellen und Studien zur Tibetischen Lexikographie," edited by Helga Ueback and Jampa L. Panglung. Munich: Bayerische Akademie der Wissenschaften.

Culturally Specific Communication Networks

- Ahluwalia, M.L. 1958. "Ladakh's Relations with India: An Historical Study." In *Proceedings of the Indian Historical Records Commission* 33:1-8.
- Aitchison, J.E.T. 1874. *Handbook of the Trade Products of Leh*. Calcutta: Wynne.

- Allan, Nigel J.R. 1984 "Ecological Effects of Land Intensification in the Central and Eastern Hindukush Mountains." In *Beitraege zur vergleichenden Kulturgeographie von Hochgebirge*, edited by Erwin F. Groetzbach and Gisbert Rinshcede, 193-212. Regensburg: Pustet.
- Allan, Nigel J.R. 1989. "Kashgar to Islamabad: The Impact of the Karakorum Highway on Mountain Society and Habitat." *Scottish Geographical Magazine* 105:130-141.
- Bourbel, L. M. and D.C. De. 1897. *Routes in Jammu and Kashmir*. Calcutta: Bottomly and Sproule.
- Brocklehurst, F.D. 1869. "The Sooroo Route from Leh to Kashmere." *Alpine Journal* 4:192-203.
- Charak, Sukhdeva Singh. 1983. *Historical Study of Society and Culture in Dardistan and Ladakh*. New Delhi: Motilal Banarsidass.
- Chakravarti, S. 1980. "Leh-Kashgar Routes Through Karakoram and Changchenmo (nineteenth century)." *Geographical Review of India* 42:140-145.
- Dani, Ahmad H. 1983a. *Human Records on Karakorum Highway*. Islamabad: Lok Virsa.
- Datta, Chaman Lal. 1973. "Ladakh's Relations with Surrounding States." In *Journal of Indian History: Golden Jubilee Volume*, edited by T. Ravindran, 723-44. Trivandrum: University of Kerala.
- Emerson, Richard. 1984. "Charismatic Kingship: A Study of State Formation and Authority in Baltistan." *Journal of Central Asia*. 7: 2, 95-133.
- Francke, August Herman. 1929-30. "Notes on Khotan and Ladakh." *Indian Antiquary* 58:108-112, 147-152; 59: 41-45, 65-72.
- Franz, Johannes C. 1982. "The Karakorum Road; A Link between China and The Indian Ocean." *Zeitschrift fuer Wirtschaftsgeographie* 22:243-247.
- Fussman, Gerard. 1986. "La Route Oubliée entre la Inde et la Chine." *Histoire* 93: 50-60.
- Godfrey, S. H. 1899. "Appendix: The Trade of Ladakh with China and Thibet." In *A Summer in High Asia*, by F.E.S. Adair. London: Horace Cox.
- Grist, Nicola. 1985. "Ladakh, a Trading State." In *Ladakh Himalaya Occidental: Ethnologie, Ecologie*, Acta Biologica Montana no. 5, edited by Claude Dendaletche and Patrick Kaplanian. Pau: Centre Pyrénéen de Biologie et Anthropologie des Montagnes.
- Humbach, Helmut. 1983. "Phrom Gesar and the Bactrian Rom." In *Ethnologie unde Geschichte: Festschrift fuer Karl Jettmar*, edited by P. Snoy, 303-307. Weisbaden: Franz Steiner Verlag.
- Jafri, A.B.S. n.d. *On the Marco Polo Route*. Rawalpindi: Two Wing Enterprises.
- Jettmar, Karl. 1985. "Zwischen Gandhara und den Seidenstrassen: Felsbilder am Karakorum Highway." In *Ausstellungskatalog, Forschungsstelle der Heidelberger Akademik der Wissenschafte*, edited by V. Thewalt and R. Kauper. Mainz: Philipp von Zabern.

- Kamal, N.A. 1979. "Karakoram Highway: A Nation-Building Effort." *Strategic Studies* 2/3:18-31.
- Klimburg-Salter, D.E. 1982. *The Silk Route and the Diamond Path: Esoteric Buddhist Art on the Trans-Himalayan Trade Routes*. Los Angeles: Dershowitz.
- Kreutzmann, H. 1987. "Die Talschaft Hunza. Wandel der Austauschbeziehungen unter Einfluss des Karakoram Highway." *Die Erde*, 118: 37-53.
- Mason, Kenneth. 1929. *Routes in the Western Himalaya, Kashmir, etc.* Vol. 1, *Punch, Kashmir and Ladakh*. Calcutta: Government of India Press.
- Nakshabandi, Ahmed Shah. 1850. "Route from Kashmir via Ladakh to Yarkand." *Journal of the Royal Asian Society* 12:372-386.
- Noack, Edward F. 1979. "Caravan route to the Muztagh Karakoram." *Geographical Magazine* 52:132-139.
- Parker, E.H. 1897. "A Few Chinese Observations about Chitral, Hunza, Etc." *The China Review* 22:787-789.
- Parkes, Peter. 1987. "Livestock Symbolism and the Pastoral Ideology among the Kafirs of the Hindu Kush." *MAN* 22:637-660.
- Rawlinson, H.C. 1869. "On Trade Routes Between Turkestan and India." *Proceedings of the Royal Geographic Society* 12:10-23.
- Rizvi, Janet. 1985. "Peasant Traders of Ladakh." *India International Centre Quarterly* 12:13-27.
- Roerich, George N. 1931. *Trails to Innermost Asia: Five Years of Travel with the Roerich Central Asian Expedition*. New Haven: Yale University Press.
- Royal Geographical Society. 1918. "Routes from the Panjab to Turkestan and China Recorded by William Finch (1611): Discussed by Sir Aurel Stein." *Geographical Journal* 51:172-175.
- Sagaster, Klaus. 1984. "The Kings of Baltistan and Other Kings." *Journal of Central Asia* 7: 49-55.
- Vohra, Rohit. 1987. "An Old Route Across Karakorum Mountains, from Khapalu in Baltistan to Yarkand." *United Services Institution of India Journal* 122:268-276.
- Vohra, Sahdev. 1981. "Sinkiang and Ladakh." *United Services Institution of India Journal* 116:117-126.
- Warikoo, Kulbushan. 1985. "Ladakh, an Entrepôt of Indo-Central Asian Trade during the Dogra rule." *South Asian Studies* no. 20. Jaipur: University of Rajasthan.
- Warikoo, Kulbushan. 1988. "Central Asia and Kashmir: A Study in Political, Commercial and Cultural Contact in the Nineteenth and Twentieth Centuries." *Central Asian Survey* 7:63-83.

2

Description and Inventory

Physiography and Climate

- Allan, Nigel J. R. 1992. "Karakorum." *Encyclopaedia Britannica*, 15th ed., Vol. 14, 183-184.
- Allan, Nigel J. R. 1994. "Dardistan." *Encyclopaedia Iranica*, Vol. 7, fasc. 1:26-27.
- Haserodt, Klaus. 1984. "Abflussverhalten der Flüsse mit Bezügen zur Sonnenscheindauer und zum Niederschlag zwischen Hindukusch (Chitral) und Hunza-Karakorum (Gilgit, Nordpakistan)." *Mitteilungen der Geographischen Gesellschaft* 96:29-36.
- Haserodt, Klaus. 1984. "Aspects of the Actual Climatic Conditions and Historic Fluctuations of Glaciers in Western Karakorum." *Journal of Central Asia* 7:77-94.
- Rathjens, Carl. 1975. "Human Interference in the Natural Water Balance: Geomorphological Manifestations and Consequences in the Arid Areas of Afghanistan and North-West India." In *Natural Resources and Development: A Biannual Collection of Recent German Contributions Concerning the Exploration of Natural Resources*, Vol. 2, 20-30. Tübingen: Steiner.
- Rathjens, Carl. 1976. "Fragen der Horizontalen und Vertikalen Landschaftsgliederung im Hochgebirgssystem des Hindukusch." In *Landschaftsoekologie der Hochgebirge Eurasiens, Erdwissenschaftliche Forschung*, Vol. 4, edited by Carl Troll, 205-220. Wiesbaden: Steiner.
- Roche, Andre. 1949. *Karakoram Himalaya: Sommets de 7000*. Neuchâtel: V. Attinger.
- Singh, Harjit. 1981. "Environmental Constraints on Agriculture in a Cold Desert: A Case Study of Ladakh." In *Perspectives in Agricultural Geography*, Vol. 2, edited by Noor Mohammad, 25-40. New Delhi: Concept.
- Sircar, Joydeep. 1974. *The Himalayan Handbook: An Annotated Index of the Named Peaks Over 6095 M (19,980) of Afghanistan and the Indian Subcontinent*. Calcutta: Sircar.

Flora

- Abidi, Mehjabeen S. 1987. "Pastures and Livestock Development in Gojal." AKRSP Report no. 5. Gilgit: Aga Khan Rural Support Programme.
- Anon. 1965. *Cultivated Plants and Their Relatives*. Kyoto, Japan: Kyoto University.
- Bonnemaire, J. and Jest, C., eds. 1976. *Le Yak: Son Role dans la Vie Materielle et Culturelle des Eleveurs d'Asie Centrale*, Ethnozootechnie, Vol. 15. Paris: CNRS.
- Butz, David. A.O. 1989. "Pastures and Pastoralism in Shimshal." Report. Gilgit: Aga Khan Rural Support Programme.
- Chang, David H.S. 1981. "The Vegetation Zonation of the Tibetan Plateau." *Mountain Research and Development* 1:29-48.
- Cincotta, R.P., P.J. van Soest, J.B. Robertson, C.M. Beall, and M.C. Goldstein. 1991. "Foraging Ecology of Livestock on the Tibetan *Changtang*: A Comparison of Three Adjacent Grazing Areas." *Arctic and Alpine Research* 23:149-161.
- Crowden, J. 1989. "The Viability of Traditional Agriculture With Special Emphasis on Ladakh and in Particular the Productivity of the Zangskar Valley." In *The Future of Agriculture in Ladakh*, International Workshop, 11-18. Leh: Ladakh Ecological Development Group.
- Dani, Anis A. 1989. "Chaprote: Where the Forest Lives Again." AKRSP Village Case Study, no. 19. Gilgit: Aga Khan Rural Support Programme.
- Darokhan, M. D. 1986. "Animal Husbandry in Ladakh: An Ecological Perspective." In *Ecology and Principles for Sustainable Development*, 71-74. Leh: Ladakh Ecological Development Group.
- Dendaletche, Claude. 1985. "Esquisse Écologique du Ladakh (Himalaya Occidental)." In *Ladakh Himalaya Occidental: Ethnologie, Ecologie*, Acta Biologica Montana no. 5, edited by Claude Dendaletche and Patrick Kaplanian. Pau: Centre Pyrénéen de Biologie et Anthropologie des Montagnes.
- Dendaletche, Claude. 1988. "Connaissance des Montagnes du Ladakh à l'Écologie des Hautes Altitudes: La Grande Faune Sauvage." In *Wissenschaftsgeschichte und Gegenwaertige Forschungen im Nordwest-Indien*, Proceedings of the Third International Ladakh Colloquium, Herrnhut, 1987, edited by Peter Neumann and Gudrun Meier. Bautzen: Domowina.
- Hartmann, Hans. 1972. *Über die Vegetation des Karakorum: II. Geil: Rassen- und Strauchgesellschaften im Bereich der Alpinene und der Hoheren Subalpinen Stufe des Zentral-Karakorum*. The Hague: Mouton.
- International Union for Conservation of Nature. 1987. *Sustainable Forestry Development in the Aga Khan Rural Support Programme, Northern Areas*. Pakistan: IUCN.

- Kachroo, P., B. Sapru, and U. Dhar. 1977. *Flora of Ladakh: An Ecological and Taxanomial Appraisal*. New Delhi: Bisen Singh and Mahendra Pal Singh.
- Kitamura, Shiro. 1964. *Flowering Plants of West Pakistan*. Kyoto: Kyoto University.
- Kitamura, Shiro. 1964. *Plants of West Pakistan and Afghanistan*. Karachi: Indus Publications.
- Kloetzli, Frank R., R. Schaffner, and A. Bosshard. 1989. "Pasture Development and its Implications in the Hunza Valley: High Pasture Mission." Gilgit: Aga Khan Rural Support Programme and IUCN.
- Koyama, Tetsuo. 1956. *Quelques Cyperacees Nouvelles du Karakoram*. Kyoto: Kyoto University.
- Miller, Daniel J. 1990. "Grasslands of the Tibetan Plateau." *Rangelands* 12:159-163.
- Polunin, Oleg, and Adam Stainton. 1984. *Flowers of the Himalaya*. New Delhi: Oxford.
- Stainton, Adam. 1988. *Flowers of the Himalaya: A Supplement*. New Delhi: Oxford.

Fauna

- Ahmad, Ashiq. 1990. "The Feasibility of Wildlife Protection and Wise Use through Local Communities in the Bar Valley of Nagar Sub-Division (Northern Areas)." Report Prepared for AKRSP, IUCN, WWF-Pakistan and Forest Department, Northern Areas. Peshawar: Pakistan Forest Institute.
- Aleem, A. 1977. "Population Dynamics of Markhor in Chitral Gol." *Pakistan Journal of Forestry* 27:86-92.
- Aleem, A. 1978. "Markhor, Population Dynamics and Food Availability in Chitral Gol Wildlife Sanctuary." *Pakistan Journal of Forestry* 228:159-165, 29:166-181.
- Anonymous. 1978. "Wildlife Survey/Population Census Report of the Chitral Wildlife Division for 1978." Report. Chitral: Wildlife Office.
- Anonymous. 1963. *Insect Fauna of Afghanistan and Hindukush*. Kyoto: Kyoto University.
- Anonymous. 1983. "Survey Report of Wild Animals and Birds in Chitral District Carried Out During March-May, 1983." Report. Chitral: Wildlife Office.
- Anonymous. 1986. "Detail Survey Report of Wildlife Division Chitral for 1985-86." Report. Chitral: Wildlife Office.
- Beg, A. R. 1975. "Wildlife Habitats of Pakistan." Biological Sciences Research Division, Bulletin no. 5. Peshawar: Pakistan Forest Institute.
- Berg, Bengt M. K. 1931. *Der Lammergeier im Himalaja*. Berlin: D. Reimer, E. Vohsen.

- Bernard, L. 1985 "Rescue of the Snow Leopard." *World Wildlife Fund Pakistan Newsletter* 4:1-4.
- Blumstein, D.T. and M. Robertson. "Summer Diets of Tibetan Red Foxes and other Predators at Dhee Sar, Khunjerab National Park, Pakistan." Report. Gilgit: Wildlife Office.
- Burrard, S. 1925. *Big Game Hunting in the Himalayas and Tibet*. London: Herbert Jenkins.
- Chandawat, R. S. 1990. "Lynx Survey in Nubra Valley, Ladakh." *Wildlife Institute of India Newsletter* 5/2:42-44.
- Clers, B. des. 1985. "Conservation and Utilization of the Mongolian Argali *Ovis ammon polii*—a Socio-Economic Success." In *Wild Sheep: Northern Wild Sheep and Goat Council, Special Report*, edited by M. Hoefs, 188-197. Whitehorse, Yukon: Yukon Wildlife Branch.
- Fox, J. L., S.P. Singha, R.S. Chundawat and P.K. Das. 1986. *A Field Study of Snow Leopard Presence and Habitat Use in Northwestern India*. International Snow Leopard Symposium no. 5.
- Fox, Joseph et al. 1991. "Statutes of the Snow Leopard, *Panthera uncia* in Northwest India." *Biological Conservation* 55: 283-298.
- Fox, Joseph L. and C. Nurbu. 1990. "Hemis: A National Park for Snow Leopard in India's Trans-Himalaya." *International Pedigree Book for Snow Leopards* 6:71-84.
- Fox, Joseph L., Chering Nurbu, and Ragbir Chandawat. 1991. "The Mountain Ungulates of Ladakh, India." *Biological Conservation* 58:167-190.
- Fox, Joseph L. and Raghunandan S. Chundawat. 1988. "Observations of Snow Leopard Stalking, Killing and Feeding Behavior." *Mammalia* 52: 137-140.
- Fox, Joseph L., Satya P. Sinha, and Raghunandan S. Chundawat. 1992. "Activity Patterns and Habitat Use of Ibex in the Himalaya Mountains of India." *Mammalia* 73: 527-534.
- Fox, Joseph L. et al. 1986. "A Field Study of Snow Leopard Presence and Habitat Use in Northwestern India." *International Snow Leopard Symposium* 5:33-45.
- Fulton, H. T. 1903. "Rough Notes of the Mammalia of Chitral." *Journal of the Bombay Natural History Society* 14:758-760.
- Ganhar, J. 1979. *The Wildlife of Ladakh*. Srinagar: Haramukh Publications.
- Gergan, S.S. 1962. *Big Game of Jammu and Kashmir*. Srinagar: Broca's Artistic Press.
- Gridelli, E. 1964. *Results of the Study of the Entomological Collection of the Karakorum and Hindu Kush*. Leiden: E.J. Brill.
- Hess, Ruedi. 1986. "Number of Flare-Horned Markhors *Capra falconeri* and Siberian Ibexes, *Capra ibex sibirica* in the Areas of the Chitral Gol, the Shingall Nallah and the Barpu Glacier in Summer 1985 and Winter 1985/86." Report. Islamabad: National Council for Conservation of Wildlife.

- Holmes, P.R. 1986. "The Avifauna of the Suri River Valley, Ladakh." *Forktail* 2:21-41.
- Islam, S.U. and Z. Islam. 1984. "Sighting Marco Polo Sheep in Khunjerab." *World Wildlife Fund-Pakistan Newsletter* 3:11-13.
- Khan, A.A., L. Khan and S.U. Zaman. 1989. "Occurrence, Population and Management Problems of Endangered Species in Khunjerab National Park. Part I: "Marco Polo Sheep and Associated Species." Lahore: World Wide Fund for Nature - Pakistan.
- Khan, S. 1976. "Trout in Northern Areas." Report. Gilgit: Northern Areas Fisheries Department.
- Khan, S. A. 1984. "Conservation and Wise Exploitation of Wildlife in Northern Areas." *World Wildlife Fund Pakistan Newsletter* 3:1-5.
- Knudsen, Are J. 1995. "Forestry Management in Pakistan: Failed Policies or Local Mismanagement?" Report to the Norwegian Ministry of Foreign Affairs. Bergen: The Chr. Michelsen Institute.
- Malik, M. M. "Wildlife Survey Report for Chitral Wildlife Division for 1977." Report. Chitral: Wildlife Office.
- Malik, M. M. 1976. "A Preliminary Survey of Wildlife of Chitral." Report. Chitral: Wildlife Office.
- Mallon, D. 1983a. The Status of Ladakh Urial *Ovis orientalis vignei* in Ladakh, India." *Biological Conservation* 27:373-381.
- Mallon, D. 1988. "Snow Leopards in Northern Hunza." *Snow Line* 14:4.
- McMahon, A. H. 1899. "Notes on the Fauna of Gilgit District." *Journal of the Asiatic Society of Bengal Part II*, 67:105-109.
- McMahon, A. H. 1901. "Notes on the Fauna of Chitral." *Journal of the Asiatic Society of Bengal Part II*, 70:1-7.
- Miller, Daniel J. and Roderick M. Jackson. 1992. "Livestock and Snow Leopards: Making Room for Competing Users on the Tibetan Plateau." In *Proceedings of the 7th International Snow Leopard Symposium, July 27-31, 1992*. Xining, China.
- Naumann, C. and G. Nogge. 1973. "Die Grossaeuger Afghanistans." *Zeitschrift des Koelner Zoos* 16: 79-93.
- Osborne, Robert C. and D. P. Mallon and J.S.R.. Fraser. 1983. "Ladakh: Threatened Stronghold of Rare Himalayan Animals." *Oryx* 17:182-189.
- Osmaston, Bertram B. 1926. "Birds Nesting in the Dras and Suru Valleys." *Journal of Bombay Natural History Society* 31:186-196.
- Osmaston, Bertram B. 1936. "The Birds of Ladakh." *Ibis* 1:663-718.
- Rasool, G. 1986. "Population Status of Blue Sheep in Shamshal Valley." *World Wildlife Fund-Pakistan Newsletter* 5/2:1-2.
- Rasool, G. 1988. "Tibetan Wild Ass: Verging on Extinction." Report to World Wildlife Fund-Pakistan.
- Rasool, G. 1990. "Population Status of Wildlife in Khunjerab National Park." *Tigerpaper (Pakistan)* 17:25-28.

- Rasool, G. 1993. "Population Status of Wildlife in Khunjerab National Park." *World Wildlife Fund-Pakistan Newsletter*.
- Roberts, J. Thomas. 1977. *The Mammals of Pakistan*. London: Ernest Benn.
- Roberts, J. Thomas. 1991. *The Birds of Pakistan*. Vol. 1, *Non-Passeriformes*. Karachi: Oxford University Press.
- Roberts, Thomas J. 1992. *The Birds of Pakistan*. Vol. 2, *Passeriformes*. Karachi: Oxford University Press.
- Roberts, Thomas J. 1963. "A Note on *Capra falconeri* Wagner 1839." *Zeitschrift fuer Saeugetierkunde* 34:238-249.
- Roberts, Thomas J. 1985. "Distribution and Present Status of Wild Sheep in Pakistan." In *Wild Sheep: Northern Wild Sheep and Goat Council, Special Report*, edited by M. Hoefs, 159-163. Whitehorse, Yukon: Yukon Wildlife Branch.
- Sand, R. 1985. "The Patriarch of the North-West Frontier." In *Lords of the Pinnacles: Wild Goats of the World*, edited by R. Valdez, 166-175. Mesilla, NM: Wild Sheep and Goat International.
- Schaller, George B. 1974. "The Marco Polo Sheep in Pakistan." Report. New York: New York Zoological Society.
- Schaller, George B. 1976. "Mountain Mammals in Pakistan." *Oryx* 13:351-356.
- Schaller, George B. 1977. *Mountain Monarchs: Wild Sheep and Goats of the Himalaya*. Chicago: University of Chicago Press.
- Schaller, George B. 1979. *Stones of Silence*. New York: Bantam Books.
- Schaller, George B. and S. A. Khan. 1975. "Distribution and Status of Markhor, *Capra falconeri*." *Biological Conservation* 7:185-198.
- Schaller, George B., Junrang, R. and Mingjiang, Q. 1991. "Observations on the Tibetan Antelope (*Pantholops hodgsoni*)." *Applied Animal Behaviour Science* 29:361-378.
- Schaller, George B., L.H. Talipu, L. Hua, R. Junrang, Q. Mingjiang and W. Haibin. 1987. "Status of Large Mammals in the Taxkorgan Reserve, Xinjiang, China." *Biological Conservation* 42:53-71.
- Schaller, George B. and Z. B. Mirza. 1971. "On the Behavior of Kashmir Markhor, *Capra falconeri cashmiriensis*." *Mammalia* 35:548-566.
- Scully, J. 1881. "On the Mammals of Gilgit." *Proceedings of the Zoological Society* 20: 197-209.
- Stefanini, Giuseppe. 1928. *Molluschi e Brachiopodi Calloviani del Caracorum*. Bologna: Zanichelli.
- Ueno, Masuzo. 1963. *Insect Fauna of the Afghanistan and Hindukush*. Kyoto: Kyoto University.
- Wegge, Per. 1992. "Wild Caprids and Their Predators in Khunjerab National Park, Northern Pakistan." In *World Conference on Mountain Ungulates*, edited by S. Lovari and M. Locati, 41. Camerino, Italy: Universita degli Studi di Camerino.

Zoological Survey Department. 1987. "Map Wildlife of NWFP, Pakistan." Peshawar: Wildlife Wing, Pakistan Forest Department.

Juridical and Management Qualities

- Ahmad, Ashiq. 1991. "The Feasibility and Application of Different Management Options to Resolve the Problems of Khunjerab National Park (Northern Areas)." Peshawar: Pakistan Forest Institute.
- Bell, Barbara G., ed. 1991. *International Workshop on the Management Planning of Khunjerab National Park, Proceedings June 7-16, 1989*. Washington, DC: U.S. National Park Service, Office of International Affairs.
- Buzdar, Nek. 1988. "Property Rights, Social Organization and Resource Management in Northern Pakistan." Environment and Policy Institute, Working Paper no. 5. Honolulu: East-West Center.
- Chakrabarti, P. D. 1986. "Desert Development Programme in Ladakh: An Ecological Perspective." In *Ecology and Principles for Sustainable Development*, 36-39. Leh: Ladakh Ecological Development Group.
- Dani, Anis A. 1986. "Annexation, Alienation and Underdevelopment of the Watershed Community in the Hindu Kush-Himalayan Watersheds." In *Watershed Management: An Interdisciplinary Approach*, edited by K. William Easter, John A. Dixon and Maynard M. Hufschmidt. Boulder, CO: Westview.
- Dani, Anis A. 1988. "Peripheral Societies in a Nation-State: A Comparative Analysis of Mediating Structures in Development Process." Ph.D. dissertation, University of Pennsylvania.
- Dani, Anis A. 1989. "Mediating Structures in Development Process: Analysing Examples from Northern Pakistan." Senior Fellowship Report. Kathmandu: ICIMOD.
- Dani, Anis A., Christopher J.N. Gibbs, and Daniel W. Bromley, eds. 1987. "Institutional Development for Local Management of Rural Resources." Environment and Policy Institute, Workshop Report no. 2. Honolulu: East-West Center.
- Dixon, R. K. and J. A. Perry. 1986. "Natural Resource Management in Rural Areas of Northern Pakistan." *Ambio* 15:301-305.
- Dove, Michael Roger and Abdul Latif Rao. 1990. "Common Resource Management in Pakistan: Garrett Hardin in the Junglat." Environment and Policy Institute, Working Paper no. 23. Honolulu: East-West Center.
- Government of Jammu and Kashmir. 1987. "Status Survey Report of Notified and Proposed National Parks, Sanctuaries and Reserves in Ladakh." Srinagar: Department of Wildlife Protection.

- Hunzai, Azhar Ali. 1987. "The Political Economy of Forestry: The New Management System of Forest in Chalt-Chaprote." AKRSP Village Case Study No. 10. Gilgit: Aga Khan Rural Support Programme.
- Knudsen, Are J. 1991. "Traditional Use Rights Versus Conservation: A Management Problem in the Khunjerab National Park." Preliminary Report to IUCN Pakistan. Karachi: IUCN.
- Knudsen, Are J. 1992. "Nature Conservation in Northern Pakistan: Case Studies from Hunza, with Special Reference to the Khunjerab National Park." In *Asian Perceptions of Nature*, Nordic Proceedings in Asian Studies, no. 3 edited by Ole Bruun and Arne Kalland. Copenhagen: Nordic Institute of Asian Studies.
- Knudsen, Are J. 1992. "The Agro-Pastoral System in a Shin village: The Case of Torbetu Das and Implications for the High Pasture Mission in Lower Hunza." Report. Karachi: IUCN.
- Kreutzmann, Herman. 1988. "Oases of the Karakoram: Evolution of Irrigation and Social Organization in Hunza, North Pakistan." In *Human Impact on Mountains*, edited by N.J.R. Allan, G.W. Knapp and C. Stadel, 243-254. Totowa, NJ: Rowman and Littlefield.
- Malik, Mohammad Mumtaz. 1985. "Management of Chitral Gol National Park, Pakistan." In *People and Protected Areas in the Hindu Kush Himalaya*, edited by J.A. McNeely, J.W. Thorsell and S.R. Chalise, 101-106. Kathmandu: King Mahendra Trust for Nature Conservation and ICIMOD.
- Mock, J. 1990. "Field Trip Report and Discussion Paper on Conservation and Management of the Khunjerab National Park, Project 3892." Lahore: World Wide Fund for Nature, Pakistan.
- Mohammad, Noor. 1989. "Rangeland Management in Pakistan." ICIMOD Senior Fellowship Series, no. 1. Kathmandu: ICIMOD.
- Mumtaz, Sofia and Durr-e-Nayab. 1991. "Management Arrangements of the Chaprote Forest and Their Implications for Sustainable Development." *Pakistan Development Review* 3:1075-1086.
- Osmaston, Henry A. 1985. "The Productivity of the Agricultural and Pastoral System in Zangskar." *Acta Biologica Montana* 5:75-89.
- Osmaston, Henry A. 1989. "Agriculture in Ladakh: Building a Coherent Policy." In *The Future of Agriculture in Ladakh*, 4-10. Leh: Ladakh Ecological Development Group.
- Rao, A. L. 1985. "Legislation." In *The Nature of Pakistan: A Guide to Conservation and Development Issues, No. 1*, edited by M. Cawardine, 27-29. Gland: IUCN.
- Rasool, G. 1976. "Report on the Wildlife, National Park and Equivalent Reserves in Northern Areas." Report. Gilgit: Wildlife Office.
- Rasool, G. 1981. "Khunjerab National Park." *World Wildlife Fund-Pakistan Newsletter* June, :5-10.

- Schneider, Hans-Joachim. 1961. "Minapin: Gletscher und Menschen im N.W. Karakorum." *Die Erde* 100:266-286.
- Wegge, Per. 1988. "Assessment of Khunjerab National Park and Environs, Pakistan." Report submitted to IUCN Pakistan.
- Wegge, Per. 1991. "Khunjerab National Park: Ecological Status Management Recommendations." In *International Workshop on the Management Planning of Khunjerab National Park, Proceedings June 7-16, 1989*, edited by B.G. Bell, 45-48. Washington, D.C.: U.S. National Park Service, Office of International Affairs.
- Whiteman, Peter T.S. 1988. "Mountain Agronomy in Ethiopia, Nepal and Pakistan." In *Human Impact on Mountains*, edited by Nigel J.R. Allan, G.W. Knapp and C. Stadel, 57-82. Totowa, NJ: Rowman and Littlefield.
- Whiteman, Peter. 1985. "Mountain Oases: A Technical Report of Agricultural Studies in Hunza, Ishkoman and Yasin Valleys of Gilgit District." Integrated Rural Development Project PAK/80/009. Gilgit: UN/FAO.

3

Photographic and Cartographic Documentation

Historical Photographs

- Clark, R. W. 1859-1943. *The Splendid Hills: The Life and Photographs of Vittorio Sella*. London: Phoenix.
- Conway, William Martin. 1894. *Climbing and Exploration in the Karakoram-Himalayas, With Three Hundred Illustrations*. London: T. Fisher Unwin.
- Dainelli, Giotto. 1922. *Studi Sul Glaciale Tavole (Supplement) Resultat i Gelological e Geografica Series 2, Vol. 3*. Bologna: Zanichelli.
- Filippi, F. de. 1912. *Karakorum and Western Himalaya 1909*. N.Y.: Dutton.
- Sella Foundation. 1987. *Vittorio Sella with the Italian Expedition to the Karakorum in 1909*. Fiatagri: Sella Foundation.
- Smythe, Francis S. 1938. *Peaks and Valleys, With Seventy-Six Reproductions of Photographs by the Author*. London: A. and C. Black.

Large Format Books

- Shirahata, Hiro. 1990. *The Karakoram: Mountains of Pakistan*. Seattle: Cloudcap.

Landscape Paintings

- McCormick, A. D. 1895. *An Artist in the Himalayas*. New York: Macmillan.
- Waddell, Lawrence A. 1900. *Among the Himalayas, with Numerous Illustrations by A.D. McCormick, the author and others*. Philadelphia: Lippincott.
- Younghusband, Francis. 1909. *Kashmir. (Paintings by E. Molyneux)*. London: A. and C. Black.

Maps and Nomenclature

- Bolinder, Anders. 1990. *Karakoram: Orographical Sketch Map. Scale 1:250,000.* Zurich: Swiss Foundation for Alpine Research.
- Burrard, S. 1929. "The Mountains of the Karakoram: A Defence of the Existing Nomenclature." *Geographical Journal* 76:277-284.
- Conway, William Martin. 1893. "Correspondence: The Nomenclature of the Karakoram Peaks." *Geographical Journal* 1:177-178.
- Conway, William Martin. 1894. *The Karakoram Himalyas: Surveyed in 1892 by W. Martin Conway and Reduced From His Drawing.* London: Royal Geographical Society.
- Cunningham, Alexander. 1848. "Memorandum by Capt. A. Cunningham, Detailing the Boundaries Between the Territories of Maharajah Gulab Singh and British India." *Journal of the Asiatic Society of Bengal* 17:295-297.
- De Bourbel, R. 1897. *Routes in Jammu and Kashmir Arranged Topographically with Descriptions of Routes, Distances by Stages, and Information as to Supplies and Transport.* Calcutta: Thacker Spink.
- Desio, Ardito. 1969. *Geological Map of the Baltoro Basin (Karakorum).* Milan: University of Milan.
- Desio, Ardito. 1964. *Geological Tentative Map of Western Karakorum - 1:5,000,000.* University of Milan: Geological Institute.
- Exploration Pamir. 1975. *Geologische Karte, Pamir-e Wakhan, Dardistan.* Vienna: Exploration Pamir.
- Godwin-Austen, H. H. 1893. "Correspondence: The Nomenclature of the Karakoram Peaks." *Geographical Journal* 1:177.
- Hedin, Sven Anders. 1967. *Central Asia Atlas.* Stockholm: Sven Hedin Foundation.
- Kick, Wilhelm. 1957. "Place Names in Northern Baltistan." *The Mountain World* 4:191-200.
- Kurz, Marcel. 1952. *Karakorum.* Bern: Schweizerische Stiftung fuer Alpine Forschungen.
- Lombardi, Francesco. 1957. *Spedizione Scietifico-alpinistica Italiana, Al Karakorum, 1953-1955.* Florence: Istituto Geografico Militare.
- Longstaff, Thomas G. 1930. "Himalayan Nomenclature." *Geographical Journal* 75:44-45.
- Lorimer, David L. R. 1938. "A Note on Various Hunza and Shimshali Names." *Himalayan Journal* 10:121-125.
- Mason, Kenneth. 1930. "The Proposed Nomenclature of the Karakoram-Himalaya." *Geographical Journal* 75:38-44.
- Mason, Kenneth. 1938. "Karakoram Nomenclature." *Geographical Journal* 91:123-128.
- Mott, Peter. 1951. "The Muztagh Pass on the Society's Karakorum Map." *Geographical Journal* 11:113-114.

- Royal Geographical Society (Great Britain). 1939. *The Karakoram*. London: Royal Geographical Society.
- Stein, Marc Aurel. 1977. *Memoir of Maps Illustrating the Ancient Geography of Cashmir, 1899*. Reprint. Pataliputra Path: Indological Books.
- United States Central Intelligence Agency. *Himalayan Area Ethnolinguistic Groups*. 2-70. Washington, D.C.: United States Government Printing Office.
- Walton, J. 1982. "Resurveying the Wild Karakoram, 67 Years On." *Geographical Magazine* 54:642-647.
- Yoshizawa, I. 1978. *Mountaineering Maps of the World: Karakorum & Hindukush*. Tokyo: Gakushukenkyu-sha.

4

Public Awareness

Records of Expeditions

- Abruzzi, Duke of. 1910 "Viaggio di Esplorazione nei Moni del Karakoram." *Revista del Club Alpino Italiano* 29:26-35.
- Aosta, Aimone di Savoia. 1936. *La Spedizione Geografica Italiana al Karakoram (1929)*. Milano, Roma: S.A. Arti Grafiche Bertarelli.
- Bellew, Henry W. 1875. *Kashmir and Kashgar: A Narrative of the Journey of the Embassy to Kashgar in 1873-74*. London: Truebner.
- Bishop, Isabella Bird. 1892. "A Journey Through Lesser Tibet." *Scottish Geographical Magazine* 8:513-528.
- Bosshard, Walter. 1930. *Durch Tibet und Turkestan*. Stuttgart: Strecker und Schroeder.
- Bruce, C.G. 1910. *Twenty Years in the Himalayas*. London: Edwin Arnold.
- Butz, David A. O. 1987. "Irrigation Agriculture in High Mountain Communities: the Example of Hopar Villages, Pakistan." Master's thesis, Department of Geography, Wilfrid Laurier University, Waterloo, Ontario.
- Calciati, Cesare C. 1914. *Esplorazione della valli Kondus e Hushee nel Karakoram sudorientale*. Roma: Presso la Reale Societa Geografica.
- Conway, William Martin. 1894. *Climbing and Exploration in the Karakoram-Himalaya*. 3 vols. New York: Appleton.
- Conway, William Martin. 1893. "The Crossing of the Hispar Pass." *Geographical Journal* 1:131-138
- Corbellini, G. 1987. "Baltistan: la Geografia umana." *Universo* 67: 490-581.
- Cunningham, J. D. 1844. "Notes on Moorcroft's Travels in Lakakh, and Gerard's Account of Kunawar, Including a General Description of the Latter District." *Journal of the Asiatic Society of Bengal* 13:172-222, 223-253.
- Curzon, George N. 1896. "The Pamirs and the Source of the Oxus." *Geographical Journal* 8:15-54, 97-119, 239-263.
- Dainelli, Giotto. 1924-1935. *Relazione Scientifiche della Spedizione Italiana de Filippi nell'Himalaia, Caracorum e Turchestan Chinese (1913-14)*, 10 vols. Bologna: Zanichelli.

- Dainelli, Giotto. 1924. *Paesi e Genti del Caracorum: Vita di Caravona nel Tibet Occidentale*. 2 vols. Florence: Luigi Pampaloni.
- Dainelli, Giotto. 1924. *La Condizione delle Genti. Relazioni Scientifiche della Spedizione Italiana De Filippi nell'Himalaia, Caracorum e Turchestan Chinese (1913-1914)*. Series 1, Vol. 8. Bologna: Zanichelli.
- Dainelli, Giotto. 1925. "Le Gente e le Loro Condizioni Culturali." *Spedizione Italiana De Filippi nell'Himalaia [etc.]*, Vol. 10. Bologna: Zanichelli.
- Dainelli, Giotto. 1932. "A Journey to the Glaciers of the Eastern Karakoram." *Geographical Journal* 79.
- Dainelli, Giotto. 1932. *Il Mio Viaggio nel Tibet Occidentale*. Milan: A Mondadori.
- Dainelli, Giotto. 1933. *Buddhists and Glaciers of Western Tibet*. 1933. London: Kegan Paul Trench, Truebner.
- Dainelli, Giotto. 1959. *Esploratori e Alpinisti nel Caracorum*. Turin: Unione Tipografico-editrice Torinese.
- Darrah, H. Z. 1898. *Sport in the Highlands of Kashmir: Being a Narrative of an Eight Months Trip in Baltistan and Ladakh, and a Lady's Experiences in the Latter Country: Together with Hints for the Guidance of Sportsmen*. London: Rowland Ward.
- de Filippi and Dainelli, G. 1922-34. *Spedizioni Italiana De Filippi nell'Himalaia, Caracorum e Turchestan Chinese (1913-14)* Series 1, 3 vols. Bologna: Zanichelli.
- de Filippi, F. 1911. "The Expedition of H. R. H. the Duke of Abruzzi to the Karakorum Himalayas." *Geographical Journal* 37:19-30.
- de Filippi, F. 1912. *Karakoram and Western Tibet, 1909: An Account of the Expedition of H.R.H. Prince Luigi Amedeo of Savoy, Duke of Abruzzi*. Translated by C. de Filippi and H.T. Porter. New York: Dutton.
- de Filippi, F. 1932. *The Italian Expedition to the Himalaya, Karakoram and Eastern Turkestan (1913-14)*. London: Edward Arnold.
- de Terra, H. 1933. "A Scientific Exploration of the Eastern Karakoram and the Zaskar Himalaya." *Himalayan Journal* 5:33-45.
- Desideri, Ippolito. 1937. *An Account of Tibet: The Travels of Ippolito Desideri of Pistoia, S. J., 1712-1727*. Review edition, F. de Filippi. London: Routledge.
- Desio, Ardito. 1977. *The Work of the Italians in the Scientific Exploration of the Karakorum*. Roma: Accademia Nazionale dei Lincei.
- Dunmore, Earl of. 1893. *The Pamirs*. 2 vols. London: John Murray.
- Durand, Algernon. 1894. "The Eastern Hindu Kush." In *Climbing and Exploration in the Karakoram-Himalayas*, edited by William M. Conway, 3-17. London: Longmans.
- Durand, Algernon. 1899. *The Making of a Frontier: Five Years of Experiences and Adventures in Gilgit, Hunza, Nagar, Chitral and the Eastern Hindu Kush*. London: Thomas Nelson & Sons.

- Dyhrenfurth, G. O. 1935. *Daemon Himalaya: Bericht der Internationalen Karakorum Expedition, 1934*. Bern: Haupt.
- Dyhrenfurth, G. O. 1939. *Baltoro: Ein Himalaya-Buch*. Basel: Benno Schwabe.
- Eckenstein, Oscar. 1896. *The Karakorams and Kashmir: An Account of a Journey*. London: T. Fisher Unwin.
- Escarra, Jean, Henry de Segogne and Louis Neltner. 1938. *Karakoram: Expedition Francaise a l'Himalaya*. Paris: Flammarion.
- Ferber, A. C. 1905. "An Exploration of the Mustagh Pass in the Karakorum Himalaya." *Zeitschrift des Deutschen und Oesterreichischen Alpenvereins* 36: 113-132.
- Ferber, A. C. 1907. "An Exploration of the Mustagh Pass in the Karakorum Himalaya." *Geographical Journal* 30: 630.
- Forsyth, T.D. 1875. *Report of a Mission to Yarkand in 1873*. Calcutta: Foreign Department Press.
- Francke, August Hermann. 1921. *Durch Zentralasien in die Indische Gefangenschaft*. Herrnhut: Verlag der Missionsbuchhandlung.
- Government of India. 1922. *Explorations in the Eastern Karakorum and the Upper Yarkand Valley: Narrative Report of the Survey of India Detachment with the de Fillippi Scientific Expedition 1914*. Dehra Dun: Office of the Trigonometrical Survey.
- Graziosi, Paolo. 1964. *Karakorum: Prehistory, Anthropology*. Leiden: E.J. Brill.
- Gruber, G. 1981. "Zum Einfluss von Expeditionen und Trekking auf die Umwelt Dargestellt am Beispiel Baltistan/Nordpakistan." *Frankfurter Wirtschafts und Sozialgeographische Schriften* 36:21-55.
- Hayward, George W. 1870. "Journey from Leh to Yarkand and Kashgar." *Journal of the Royal Geographical Society* 40:33-166.
- Hedin, Sven. 1903. *Central Asia and Tibet: Towards the Holy City of Lhasa*. 2 vols. London: Hunt and Blackett.
- Hedin, Sven. 1903. *Im Herzen von Asien*. Leipzig: Brockhaus.
- Hedin, Sven. 1904-07. *Scientific Results of a Journey to Central Asia: 1899-1902*. 8 vols. Stockholm: Lithographic Institute, Swedish Army.
- Hedin, Sven. 1909-1913. *Transhimalaya: Discoveries and Adventures in Tibet*. 3 vols. London: Macmillan.
- Hedin, Sven. 1917-22. *Southern Tibet: Discoveries in Former Times Compared with My Own Researches in 1906-1908*. Vol. 7, *History and Exploration in the Karakoram Mountains*. Stockholm: Lithographic Institute, Swedish Army.
- Henderson, George and Allan O. Hume. 1873. *Lahore to Yarkand*. London: Reeve.
- Hervey, Mrs. 1853. *The Adventures of a Lady in Tartary, Thibet, China and Kashmir: Through Portions of Territory Never Before Visited by Europeans*. 3 vols. London: Hope.

- Izzet-Ullah, Mir. 1843. "Travels Beyond the Himalayas." *Journal of the Royal Asiatic Society* 7:283-342.
- Keay, J. 1977. *When Men and Mountains Meet: The Explorers of the Western Himalayas, 1820-75*. London: Century.
- Lockhart, W.S.A. and Woodthorpe, R.G. 1889. *The Gilgit Mission, 1885-86*. London: Eyre and Spottiswoode.
- Longstaff, Thomas G. 1910. "Glacier Exploration in the Eastern Karakoram." *Geographical Journal* 35:622.
- Longstaff, Thomas G. 1911. "The Baltoro Pass." *Alpine Journal* 25:670.
- Longstaff, Thomas G. 1910. "Glacier Exploration in the Eastern Karakoram." *Geographical Journal* 35:664-672.
- Mason, K. 1928. *Exploration of the Shaksgam Valley and Aghil Ranges, 1926*. Dehra Dun: Geodetic Branch Office, Survey of India.
- Middleton, Dorothy. 1984. "Karakoram History: Early Exploration." In *The International Karakoram Project, Vol. 1*, edited by K.J. Miller, 17-31. Cambridge: Cambridge University Press.
- Montgomerie, T. G. 1861. "Memoranda on the Progress of the Trigonometrical Survey in Kashmir." In *Selections from the Records of the Punjab Government, no. 5, no. 7*. Lahore: Punjab Government Publications.
- Moorcroft, William, and George Trebeck. 1837. *Travels in the Himalayan Provinces of Hindustan and the Panjab, in Ladakh and Kashmir, in Peshawar, Kabul, Kunduz and Bokhara*, edited by H.H. Wilson. 2 vols. London: John Murray.
- Moorcroft, William and Trebeck, George. 1971. *Travels in the Himalayan Provinces of Hindustan and the Punjab and in Ladakh and Kashmir, in Peshawar, Kabul, Kunduz and Bokhara*. 2 vols. 1837. Reprint. New Delhi: Sagar.
- Moorcroft, William and Trebeck, George. 1979. *Travels in the Himalayan Provinces of Hindustan and the Punjab and in Ladakh and Kashmir, in Peshawar, Kabul, Kunduz and Bokhara*. 2 vols. 1837. Reprint. Karachi: Oxford University Press.
- Moorcroft, William. 1827. "On the Purik Sheet of Ladakh." *Transactions of the Royal Asiatic Society* 1:49-55.
- Morgan, Gerald. 1971. *Ney Elias*. London: George Allen and Unwin.
- Mott, Peter. 1946. "1939 Karakorum Expedition." *Himalayan Journal* 13:9-27.
- Mott, Peter. 1950. "Karakoram Survey, 1950." *Geographical Journal* 116:89-95.
- Nakshabandi, Ahmed Shah. 1856. "Narrative of the Travels of Khwajah Ahmud Shah Nukshbundee Syud who Started from Cashmere on the 28th October 1852 and went through Yarkund, Kokan, Bokhara and Cabul in Search of Mr. Wyburd." *Journal of the Asiatic Society of Bengal* 25:344-358.

- Plint, Michael. 1993. "The Workmans: Travellers Extraordinary." *Alpine Journal* 97(341):230-237.
- Rabot, C. 1904. "Explorations des Glaciers du Karakorum." *La Géographie* 9:374.
- Royal Geographical Society. 1926. "The Monthly Record: Asia—Capt. Featherstone's Journeys in the Karakorum." *Geographical Journal* 67:87.
- Schlagintweit, Adolph von, et al. 1857. "Report on the Progress of the Magnetic Survey of Indian and Researches Connected with it from May to November 1856, in Himalaya Mountains and Western Tibet." 9 Reports. Dehra Dun: Survey of India.
- Schlagintweit, Hermann A. and Robert von Schlagintweit. 1861-66. *Results of a Scientific Mission to India and High Asia Undertaken Between the Years 1854 and 1858, Etc.* 4 vols. London: Truebner.
- Schlagintweit, Hermann A. and Robert von Schlagintweit. 1861. *Scientific Mission to India and High Asia*. Vol. 1. Leipzig: F.A. Brockhaus.
- Schlagintweit, Hermann von. 1869-80. *Reisen in Indien und Hochasien*. 4 vols. Jena: Constable.
- Schlagintweit, Hermann. 1875. *Die Paesse ueber die Kammlinien des Karakorum und des Kuenluen in Balti, in Ladak und im Oestlichen Turkistan: Nach Unseren Beobachtungen von 1865 und 1857 und den Neueren Expeditionen*. Munich: Verlag der Koeniglichen Bayerischen Akademie der Wissenschaft.
- Schomberg, Reginald C. F. 1936. "Lutkuh and Hunza." *Alpine Journal* 48:124-133.
- Schomberg, Reginald C. F. 1946. "The Aftigar Pass in Hunza." *Himalaya Journal* 13:78-86.
- Schomberg, Reginald C. F. 1947. "North Karakoram: A Journey in the Muztagh-Shaksgam Area." *Geographical Journal* 109:94-98.
- Schomberg, Reginald C. F. 1948. "Eastern Ladakh: From the Shyok to the Indus Valley." *Scottish Geographical Magazine* 64:89-92.
- Schomberg, Reginald C. F. 1950. "The East Mustagh Pass, in the Central Karakoram." *Himalayan Journal* 16:96-100.
- Shaw, R.B. Airy. 1984. *Visit to High Tartary, Yarkand and Kashgar (formerly Chinese Tartary), and Return Journey over the Karakorum Pass*. 1871. Reprint. Hong Kong: Oxford; London: John Murray.
- Shipton, Eric E. 1938. "The Shaksgam Expedition, 1937." *Geographical Journal* 91:313.
- Shipton, Eric E. 1938. *Blank on a Map*. London: Hodder and Stoughton.
- Shipton, Eric E. 1940. "Karakorum, 1939." *Geographical Journal* 95:409-427.
- Shipton, Eric, M. Spender, and J.B. Auden. 1938. "The Shaksgam Expedition, 1937." *Geographical Journal* 91:313-339.

- Smiraglia, C. 1987. "Baltistan: Le ricerche geografico-fisiche." *Universo* 67:582-619.
- Spender, Michael. 1938. "The Shaksgam Expedition, 1937." *Himalayan Journal* 10:22-39.
- Spoletto, Duke of. 1930. "The Italian Expedition to the Karakorum in 1929." *Geographical Journal* 75:385-401.
- Stein, Marc Aurel. 1928. *Innermost Asia: Detailed Report of Exploration in Central Asia, Kan-su and Eastern Iran*. 4 vols. Oxford: Clarendon Press.
- Thomson, Thomas. 1974. *Western Himalaya and Tibet: A Narrative of a Journey Through the Mountains of Northern India During the Years 1847-8*. London: Reeve.
- Thomson, Thomas. 1978. *Western Himalaya and Tibet: A Narrative on Ladakh and Mountains In Northern India*. 1852. Reprint. New Delhi: Cosmo.
- Tilman, H.W. 1951. *Two Mountains and a River*. Cambridge: Cambridge University Press.
- Trinkler, Emil. 1931. *The Stormswept Roof of Asia: by Yak, Camel & Sheep Caravan in Tibet, Chinese Turkestan & Over the Kara-Koram*. Philadelphia: Lippincott.
- Venables, Stephen. 1986. *Painted Mountains*. London: Hodder and Stoughton.
- Vigne, G.T. 1987. *Travels in Kashmir, Ladak, Iskardo, the Countries Adjoining the Mountain-Course of the Indus and the Himalaya, North of the Punjab*. 2 vols. 1844. Reprint. Karachi: Indus.
- Visser, Philips C. 1926. "Explorations in the Karakoram." *Geographical Journal* 68:457-473.
- Visser, Philips C. 1928. *Zwischen Karakorum und Hindukush, Eine, Reise nach dem unbekannnen Herzen Asiens*. Vol. 1. Liepig: Brockhaus.
- Visser, Philips. C. 1934. "The Karakoram and Turkestan Expedition of 1929-1930." *Geographical Journal* 84:281-295.
- Visser, Philips C. 1940. *Wissenschaftliche Ergebnisse der Niederlandischen Expeditionen in den Karakorum und die Angrenzenden Gebiete*. Leipzig: Brockhaus.
- Visser, P. C. and Visser-Hooft, J., eds. 1935-38. *Karakoram: Wissenschaftliche Ergebnisse der Neiderlaendischen Expeditionen, etc*. 3 vols. Leiden: Brockhaus.
- Visser-Hooft, Jenny. 1926. *Among the Kara-Koram Glaciers 1925*. London: Edward Arnold.
- Wade, C.M. 1835. "Notes Taken by Captain C. M. Wade, Political Agent at Ludhiana, in 1829, Relative to the Territory and Geovernment of Iskardoh, From Information Given by Charagh Ali, an Agent Who Was Deputed to Him in that Year by Ahmad Shah, the Gelpo or Ruler of that Country." *Journal of the Asiatic Society of Bengal* 4:589-601.
- Wiche, Konrad. 1958. "Die Oesterreichische Karakorum Expedition 1958." *Mitteilungen der Gegrapphische Gesellschaft Wien* 10:280-294.

- Wood, Hugh. 1922. *Kara-koram. Dehra Dun: Trigonometrical Survey.*
- Workman, Fanny B. 1900. *In the Ice World of Himalaya, Among the Peaks and Passes of Ladakh, Nubra, Suru, and Baltistan.* New York: Cassell.
- Workman, Fanny Bullock. 1914. *The Exploration of the Siachen or Rose Glacier, Eastern Karakorum.* London: Spottiswoode.
- Workman, Fanny Bullock and W. H. Workman. 1917. *Two Summers in the Ice-Wilds of Eastern Karakorum: The Exploration of Nineteen Hundred Square Miles of Mountain and Glaciers.* London: T. Fisher Unwin.
- Workman, William H. and Fanny B. Workman. 1911. *Call of the Snowy Hispar: A Narrative of Exploration and Mountaineering on the Northern Frontier of India.* London: Constable.
- Younghusband, Francis E. 1888. "A Journey Across Central Asia, from Manchuria and Peking to Kashmir, Over the Mustagh Pass." *Proceedings of the Royal Geographical Society, New Series* 10:485.
- Younghusband, Francis E. 1890. *Report of a Mission to the Northern Frontier of Kashmir in 1889.* Calcutta: Government of India.
- Younghusband, Francis E. 1892. "Journeys in the Pamirs and Adjacent Countries." *Proceedings of the Royal Geographical Society* 14:205-234.
- Younghusband, Francis E. 1904. *The Heart of a Continent: A Narrative of Travels in Manchuria, Across the Gobi Desert, Through the Himalayas, and Chitral, 1884-1894.* London: John Murray.
- Younghusband, Francis E. 1926. "The Problem of the Shaksgam Valley." *Geographical Journal* 68:225-235.

World Literature and History

- Afridi, Banat Gul. 1988. *Baltistan in History.* Peshawar: Emjay.
- Ahmad, S. Maqbul and Bano, Raja. 1984. *Historical Geography of Kashmir.* New Delhi: Concept.
- Ahmad, Zahiruddin. 1960. "The Ancient Frontier of Ladakh." *The World Today* 16:313-318.
- Ahmad, Zahiruddin. 1963. "Tibet and Ladakh: A History." *St. Anthony's Papers* 14:23-58.
- Alder, Garry J. 1963. *British India's Northern Frontier 1865-95: A Study in Imperial Policy.* London: Longmans.
- Alder, Garry J. 1985. *Beyond Bokhara: The Life of William Moorcroft, Asian Explorer and Pioneer Veterinary Surgeon 1767-1825.* London: Century.
- Allan, Nigel J. R. 1993. "Building Blocks for Balti Ethnicity." *Himal* (Sept-Oct):12-14.
- Amar Nath, Pandit. 1931. *An Echo of the Unknown or Guide or Ladakh.* Mangalore: Basel Mission Press.

- Arora, R.C. 1940. *In the Land of Kashmir, Ladakh and Gilgit*. Sikandra, Agra: CMS Press.
- Aynesley, J.C. Murray. 1879. *Our Visit to Hindustan, Kashmir and Ladakh*. London: W.H. Allen.
- Bajpai, Shiva Chandra. 1970. *The Northern Frontier of India: Central and Western Sector*. Bombay: Allied.
- Bajpai, Shiva Chandra. 1971. "Indo-China Boundary: Western Sector." In *The Sino-Indian Border Question: A Historical Review*, edited by S.P. Sen, 83-120. Calcutta: Institute of Historical Studies.
- Baldauf, Ingeborg. 1988. "Quellen zuer Geschichte der Bruedermission im West-Himalaja-Begiet im Archiv der Brueder-Unitaet in Herrnhut." In *Wissenschaftsgeschichte und Gegenwaertige Forschungen im Nordwest-Indien*, Proceedings of the Third International Ladakh Colloquy, Herrnhut, 1987, edited by Peter Neumann and Gudrun Meier. Bautzen: Verlag Domowina.
- Bamzai, Prithivi Nath Kaul. 1962. *A History of Kashmir: Political, Social, Cultural*. Delhi: Metropolitan.
- Bamzai, Prithivi Nath Kaul. 1980. *Kashmir and Central Asia*. New Delhi: Light and Life.
- Bamzai, Prithivi Nath Kaul. 1987. *Socio-Economic History of Kashmir (1846-1925)*. New Delhi: Metropolitan.
- Barker, Clive S. 1965-75. *Bibliography of Exploration, Mountaineering, Travel, History and Nomenclature of the Gilgit-Hunza River Watershed, Haramosh Range and Basha River Watershed in the Eastern Hindu Kush and Western Karakoram*. Wellington: The Author.
- Barret, R. L. and K. R. Barret. 1928. *The Himalayan Letters of Gypsy Davy and Lady Ba: Written on Pilgrimage to the High Quiet Places Among the Simple People of an Old Folk Tale*. Cambridge: Heffer.
- Barrow, E.G. 1885. *Dardistan and Kafiristan*. Calcutta: Aylton.
- Baume, Louis C. 1978. *Sivalaya: the 8,000 Metre Peaks of the Himalaya: A Chronicle and Bibliography of Exploration*. Goring, Berkshire: Gastons-West Publications.
- Beckwith, Christopher. 1987. *The Tibetan Empire in Central Asia*. Princeton: Princeton University Press.
- Biddulph, J. 1971. *Tribes of the Hindu Kush*. 1880. Reprint. Graz: Akademische Druock und Verlaganstalt.
- Boulnois, Helen Mary. 1923. *Into Little Tibet*. London: Simkin, Marshall, Hamilton, Kent.
- Bray, John. 1983. "The Moravian Church in Ladakh: The First Forty Years 1885-1925." In *Recent Research in Ladakh*, Schriftenreihe Internationales Asienforum, Vol. 1, edited by Detlef Kantowsky and Reinhard Sander. Munich: Weltforum Verlag.
- Bray, John. 1986. *Culture and Society in Ladakh*. New Delhi: Ess-Ess Publications.

- Burnham, B. S. Roy. 1990. "Degradation of the Himalayan Environment: Type and Causes." In *People's Participation in the Himalayan Eco-System Development*, edited by M. L. Dewan, 28-48. New Delhi: Concept.
- Chohan, Amar Singh. 1983. *Historical Study of Society and Culture in Dardistan and Ladakh*. New Delhi: Atlantic Publishers.
- Chohan, Amar Singh. n.d. *The Gilgit Agency 1877-1935*. New Delhi: Atlantic.
- Chopra, P.N., ed. 1978. *Cultural Heritage of Ladakh: Our Cultural Fabric Series*. New Delhi: Ministry of Education and Social Welfare.
- Clark, John. 1980. *Hunza: Lost Kingdom in the Himalayas*. 1957. Reprint. Karachi: Indus.
- Cockerill, G.K. 1902. "Byways of Hunza and Nagar." *Geographical Journal* 60:98-112.
- Cockerill, George K. 1907. "Pioneer Exploration in Hunza and Chitral." *Himalayan Journal* 11:15-41.
- Cunningham, Alexander. 1970. *Ladakh: Physical, Statistical and Historical with Notices of the Surrounding Countries*. Reprint. 1854. New Delhi: Sagar.
- Dahai, Gural Singh. 1977. "Ladakh from 1846-1905." Ph.D. dissertation, Guru Nanak Dev University, Amritsar.
- Dainelli, Giotto. 1924. "Le Condizioni delle Genti." In *Spedizione Italiana De Filippoi nell'Himalaia, Caracorum e Turchestan*, Series 2, Vol. 8. Bologna: Zanichelli.
- Dainelli, Giotto. 1928. *Le condizioni fisiche attuali*. Bologna: Zanichelli.
- Dainelli, Giotto. 1933. *Buddhists and Glaciers of Western Tibet*. Translated by A. Davidson. London: Kegan Paul, Trench, Truebner.
- Dani, Ahmad Hasan. 1989. *History of the Northern Areas of Pakistan*. Islamabad: Lok Virsa.
- Datta, Chaman Lal. 1969. "Zorawar Singh: Political Mission of J.D. Cunningham 1841-42." *Bengal Past and Present* 88:82-89.
- Datta, Chaman Lal. 1975. *Ladakh and Western Himalayan Politics 1819-1848*. New Delhi: Munshi Ram Manoharlal.
- Deasy, H.H.P. 1901. *In Tibet and Chinese Turkestan*. London: Unwin.
- Dendaletche C., ed. 1985. *Ladakh, Himalaya Occidental: Ethnologie, Ecologie. Recent Research No. 2*. Acta Biologica Montana 5, Pau: Centre Pyrénéen de Biologie et Anthropologie des Montagnes.
- Du Riche Preller, C. 1925. "Racial and Economic Conditions of Trans-Himalaya. Upper Indus Basin: Ladakh and Baltistan." *Scottish Geographical Magazine* 40:334-344.
- Dughlat, Mirza Haider. 1895. *Tarikh-i-Rashidi: A History of the Moghuls of Central Asia*, edited by Ney Elias. Translated by E. Denison Ross. London: Low Marston.
- Dughlat, Mirza Haider. 1985. *Tarikh-i-Rashidi: A History of the Moghuls of Central Asia*, edited by Ney Elias. Translated by E. Denison Ross. 1895. Reprint. Lahore: Book Trader.

- Duka, Theodore. 1885. *Life and Works of Alexander Csoma de Koeroes*. London: Truebner.
- Dutt, N.N. and Sharma, S. 1984. *Gilgit Manuscripts*, Vol. 1, 2nd ed. New Delhi: Motilal Banarsidass.
- Emerson, Richard M. 1984. "Charismatic Kingship: A Study of State Formation and Authority in Baltistan." *Journal of Central Asia* 7:95-133.
- Eppler, Peter. 1982. "Ladakh, ein Ehemaliges Koenigreich im Transhimalaja." In *Der Weg zum Dach der Welt*, edited by Claudius C. Mueller and Walter Raunig. Innsbrueck: Penguin.
- Francke, August Herman. 1907. "Historische Dokumente von Khalatse in West Tibet." *Zeitschrift der Morgenlaendische Gesellschaft* 583-614.
- Francke, August Herman. 1907. *A History of Western Tibet: One of the Unknown Empires*. London: Partridge.
- Francke, August Herman. 1977. *A History of Ladakh: With Critical Introduction and Annotations by S.S. Gergan and Fida M. Hassnain*. 1907. Reprint. New Delhi: Sterling.
- Francke, August Herman. 1978. *History, Folklore and Culture of Tibet*. Reprint. New Delhi: Cosmo.
- Francke, August Herman. 1978. *Ladakh: the Mysterious Land*. 1907. Reprint. New Delhi: Cosmo.
- Francke, August Herman. 1987. *Baltistan and Ladakh*. 1907. Reprint. Islamabad: Lok Virsa.
- Geary, C.L.H. 1948. "Western Tibet: A Record of a Threatened Civilization." Ph.D. dissertation, University of London.
- Guthrie, G. 1828. "The Late Mr. Moorcroft." *Asiatic Journal* 25:157-161.
- Goetz, Hermann. 1969. *Studies in the History and Art of Kashmir and the Indian Himalaya*. Wiesbaden: Harrassowitz.
- Hasan, Mohibul. 1959. *Kashmir Under the Sultans*. Calcutta: Sind-Sagar.
- Hashmatullah, Khan. 1987. *History of Baltistan*. 1939. Reprint. Islamabad: Lok Virsa.
- Hewitt, Kenneth. 1989. "European Science in High Asia: Geomorphology of the Karakorum Himalaya to 1939." In *History of Geomorphology: From Hutton to Haack*, edited by Keith Tinkler, 165-203. London: George Allen and Unwin.
- Hindley, G. 1971. "The Roof of the World." In *The Last Frontiers: Encyclopaedia of Discovery and Exploration*, Part 2. New York: Doubleday.
- Hirschberg, Helga. 1982. *Ladakh, das Andere Tibet*. Revised edition. Munich: Geobuch.
- Hofmann, Hermann. 1937. *Der Karakorum*. Inaugural Dissertation Munich. Wurzburg: K. Triltsch.
- Huntington, Ellsworth. 1907. *The Pulse of Asia: A Journey in Central Asia Illustrating the Geographic Basis of History*. London: Constable.
- Hurley, J. 1961. "The People of Baltistan." *Natural History* (Oct-Nov):19-27, 56-69.

- Hussein, Maliha H. 1984. "Shimshal: Exile to a Haven." *AKRSP Second Annual Review*, 56-60. Gilgit: Aga Khan Rural Support Programme.
- Icke-Schwalbe, L. and Gudrun Meier, eds. 1990. "The Ladakh Collection of Hernhut in Historical and Cultural Valuation." In *Wissenschaftsgesichte und gegenwärtige Forschungen in Nordwest-indien*. pp. 36-52. Dresden: Museum of Ethnology.
- International Union for Conservation of Nature. 1986. *The Nature of Pakistan: A Guide to Conservation and Development Issues*, No. 1. Gland: Conservation for Development Centre, IUCN.
- IUCN. 1992. "Towards a World Heritage Site in the Central Karakorum, Baltistan." Gland: IUCN.
- Jettmar, Karl. 1980. *Bolor: A Contribution to the Political and Ethnic Geography of Northern Pakistan*. Islamabad: Lok Virsa.
- Jettmar, Karl. 1987. *Between Gandhara and the Silk Roads: Rock Carvings Along the Karakorum Highway: Discoveries by German-Pakistani Expeditions 1979-1984*. Mainz: Philipp von Zabern.
- Jettmar, Karl. 1990. "Das Westtibetische Zentrum der Kesar-Sage." In *Wissenschaftsgeschichte und Gegenwärtige Forschungen in Nordwest-Indien*, 259-264. Dresden: Staatliches Museum fuer Voelkerkunde Dresden Forschungstelle.
- Kantowshi, D. and R. Sander, eds. 1983. *Recent Research on Ladakh: History, Culture, Sociology, Ecology*. Munich: Weltforum.
- Kapur, M.L. 1966. *History of Jammu and Kashmir State*. New Delhi: Ratna Sagar.
- Kaul, G.L. 1963. *Kashmir Through the Ages*. Srinagar.
- Kazmi, Abbas. 1993. "The Ethnic Groups of Baltistan." In *Anthropology of Tibet and Himalaya*, 158-164. Zuerich: Voelkerkundliches der Universitaet Zuerich.
- Keay, John. 1990. *The Gilgit Game: the Explorers of the Western Himalayas, 1965-1895*. New York: Oxford.
- Keay, John. 1982. *When Men and Mountains Meet: The Explorers of the Western Himalayas, 1820-75*. Hamden, Connecticut: Archon Books.
- Khalfin, Naftula Aronovic. 1987. "Indian Missions in Russia in the Late Nineteenth Century and British Historiography of International Relations in Asia." *Modern Asia Studies* 21: 639-646.
- Khan, Al-Haj Maulvi Hashmatullah. 1987. *History of Baltistan*. Translated by Adam Nayyar. Islamabad: Lok Virsa.
- Khan, Ghulam Hyder. 1835-36. "Mr. Moorcroft's Journey to Balkh and Bokhara: Journal of Gholaum Hyder Khan. Edited with Notes by Major Hearsey." *Asiatic Journal* 18:106-119, 171-182, 278-288; 19:35-42, 95-102.
- Khan, M.D. 1984. "Moghal Relations with Baltistan and the Northern Region: From Akbar to Aurangzeb." *Journal of Central Asia* 2:179-190.
- Khan, M.D. and Yar Mohammad. 1985. "The Political Relations of the Mughals with the Rulers of Northern Pakistan." *Journal of Central Asia* 8:161-169.

- Khan, Shoaib Sultan and Tariq Husain. 1983. "Principles and Implementation for Small Farmer Development." In *First Annual Review of the Aga Khan Rural Support Programme*, 1-23. Gilgit: AKRSP.
- Khosla, R. 1971. "End of an Era for Ladakh Monasteries." *Geographical Magazine* 43:333-341.
- Khosla, Romi. 1979. *Buddhist Monasteries in the Western Himalaya*. Bibliotheca Himalayica Series III, Vol. 13. Kathmandu: Ratna Pustak.
- Kick, Wilhelm. 1960. "The First Glaciologists in Central Asia." *Journal of Glaciology* 3:687-689.
- Kick, Wilhelm. 1982. "Alexander von Humboldt und die Brueder Schlagintweit." In *Der Weg zum Dach der Welt*, edited by C.C. Mueller and W. Raunig, 75-77. Innsbrueck: Penguin.
- Kick, Wilhelm. 1993. *Adolph Schlagintweits Karakorum: Forschungsreise 1856*. Munich: Deutscher Alpenverein.
- Kladnik, D. 1993. "Ladak—dezela med gorami." *Geografski Obzornik* 40:4-9.
- Klimburg-Salter, Deborah E. 1982. *The Silk Route and the Diamond Path: Esoteric Buddhist Art on the Trans-Himalyan Trade Routes*. Los Angeles, CA: UCLA Art Council.
- Knight, E.F. 1980. *Where Three Empires Meet: A Narrative of Recent Travel in Kashmire, Western Tibet, Gilgit and the Adjoining Countries*. 1893. Reprint. Lahore: Ferozesons.
- Knudsen, Are J. 1992. "Household Viability and Adaptability in a North Pakistan Mountain Village in Transition." Master's thesis, Department of Social Anthropology, University of Bergen, Norway.
- Kreutzmann, Hermann. 1989. *Hunza: Laendliche Entwicklung im Karakorum*. Freie Universitaet Abhandlungen Anthropogeographie, Vol. 44. Berlin: Dietrich Reimer.
- Kwanten, L. 1979. *Imperial Nomads: A History of Central Asia*. Leicester: Leicester University Press.
- Lall, John and A. D. Moddie, eds. *The Himalaya: Aspects of Change*. New Delhi: Oxford.
- Lawrence, Walter Roper. 1895. *Valley of Kashmir*. London: H. Frowde.
- Leitner, Gotlieb W. 1877. *The Languages and Races of Dardistan*. 3 Parts. Lahore: Government Central Depot.
- Leitner, Gotlieb W. 1868-1873. *Results of a Tour in Dardistan, Kashmir, Little Tibet, Ladakh, Zanskar, etc. in 1861*. London and Lahore: Truebner/Indian Public Opinion Press.
- Lorimer, David L.R. 1979. *Hunza: Materialien zuer Ethnographic von Dardistan (Pakistan)*, edited by I. Mueller-Stellrecht. Graz: Akademische Druock und Verlagsanstalt.

- Manger, Leif O. 1992. "On the Study of Islam in Local Contexts." *Forum for Development Studies* 1:51-65.
- Mann, R.S. 1986. *The Ladakhi: A Study in Ethnography and Change*. Calcutta: Anthropological Survey of India.
- Maraini, Fosco. 1963. *Karakorum*. Paris: Presses de la Cité.
- Marx, Karl. 1902. "Three Documents Relating to the History of Ladakh." *Journal and Proceedings of the Asiatic Society of Bengal*, Part 2. 71:21-34.
- McNeeley, Jeffrey A., James W. Thorsell and Suresh R. Chalise, eds. 1985. *People and Protected Areas in the Hindu Kush-Himalaya*. Kathmandu: ICIMOD.
- Mueller-Stellrecht, Irmtraud. 1978. *Hunza und China (1761-1891): 130 Jahre einer Beziehung und ihre Bedeutung fuer die Wirtschaftliche und Politische Entwicklung Hunzas im 18 und 19 Jahrhundert*. Wiesbaden: Steiner.
- Mueller-Stellrecht, Irmtraud. 1979-80. *Materialien zuer Ethnographie von Dardistan (Pakistan): Aus den Nachgelassenen Aufzeichnungen von D.L.R. Lorimer*. 2 vols. Graz: Akademische Drueck und Verlagsanstalt.
- Mueller-Stellrecht, Irmtraud. 1982. "Menschenhandel und Machtpolitik um Westlichen Himalaja: Ein Kapitel aus der Geschichte Dardistans (Nordpakistan)." *Zentralasiatische Studien* 15: 392-472.
- Mueller-Stellrecht, Irmtraud. 1983. "Der Thronantritt Muhammad Nazim Khans von Hunza (Nordpakistan): Ein Beispiel 'Indirekter Herrschaft' im Kolonialen Indien." In *Ethnologie und Geschichte: Festschrift fuer Karl Jettmar*, edited by Peter Snoy. Wiesbaden: Franz Steiner.
- Namgyal, C. and T. Taru. 1986. *A History of Ladakh Called the Mirror that Illuminates All*. Translated by T. Rabgyas. Leh: Norboo and Tsering.
- Nawang, Tsering Shakspo. 1988. *A History of Buddhism in Ladakh*, edited by John Bray. Delhi: Ladakh Buddhist Vihara.
- Nayyar, Adam. 1988. "Kala Dhaka." Research report no. RR-6-88. Islamabad: Lok Virsa Research Centre.
- Neate, Jill. 1986. *Mountaineering Literature: A Bibliography of Material Published in English*. Milnthorpe: Cicerone.
- Nevé, Arthur. 1913. *Thirty Years in Kashmir*. London: Edward Arnold.
- Norberg-Hodge, Helena. 1981. "Ladakh: Development Without Destruction." In *The Himalaya: Aspects of Change*, edited by J.S. Lall, 278-284. Delhi: Oxford.
- Oestreich, K. 1914. "Himalaya-Studien." *Zeitschrift Gesellschaft fuer Erdkunde* 6:417-451.
- Osmaston, Henry A. 1995. "Farming, Nutrition and Health in Ladakh, Tibet and Lowland China." In *Proceedings of Fourth and Fifth International Colloquia on Ladakh*, IALS, Bristol. London: International Association for Ladakh Studies and School of Oriental and African Studies.
- Paffen, K.J., Pillewizer, W. and Schneider, H.J. 1957. "Forschungen im Hunza-Karakorum." *Erdkunde* 10:1-33.

- Petech, Luciano. 1939. *A Study on the Chronicles of Ladakh (Indian Tibet)*. Calcutta: n.p.
- Petech, Luciano. 1948. "Notes on Ladakhi History." *India Historical Quarterly* 24:213-235.
- Petech, Luciano. 1977. *The Kingdom of Ladakh (c. 950-1842 A.D.)*. Roma: Instituto Italiano Per Il Medio Ed Estremo Oriente.
- Peter, Prince of Greece and Denmark. 1963. *A Study of Polyandry*. The Hague: Mouton.
- Ramsay, H. 1890. *Western Tibet: a Practical Dictionary of the Language and Customes of the Districts Included in the Ladak Wazirat*. Lahore: Superintendent of Government Printing.
- Raverty, H. 1888. *Notes on Afghanistan and Part of Baloochistan, Geographical, Ethnographical and Historical: Extracted from the Writings of Little Known Afghan and Tajik Historians, Geographers and Genealogists*. London: Eyre and Spottiswoode.
- Rizvi, Janet. 1983. *Ladakh: Crossroads of High Asia*. Delhi: Oxford.
- Roche, Andre. 1946. *Karakoram, Himalaya, Bezwingung von Siebentausendern*. Zuerich: Rascher.
- Rodale, J. I. 1949. *The Healthy Hunzas*. Emmaus PA: Rodale Press.
- Royal Geographical Society. 1938. "Karakoram Conference Report." *Geographical Journal* 91:129-152.
- Sapru, Arjun Nath. 1931. *The Building of the Jammu and Kashmir State: Being the Achievement of Maharaja Gulab Singh*. Lahore: Punjab Government Publications.
- Saunders, Frank. 1983. "Karakoram Villages: An Agrarian Study of 22 Villages in the Hunza, Ishkoman and Yasin Valleys of Gilgit District." Integrated Rural Development Project, Gilgit Technical Publication PAK/80/009. Gilgit: UN/FAO.
- Schlagintweit, S. 1982. "Die Brueder Schlagintweit: In Abriss ihres Lebens." In *Der Weg zum Dach der Welt*, edited by C.C. Mueller and W. Raunig, 11-13. Innsbrueck: Penguin.
- Schmidt, Ruth L. and Mohammed M. Zarin. 1984. "Discussions with Hariz: Land Tenure and Transhumance in Indus Kohistan," Working Papers on South and Southeast Asia. Berkeley: Center for South Asian Studies.
- Schmitt, Ericka. 1971. *Ornamente in der Gandharakunst und Rezenten Volkskunst im Hindukush und Karakorum*. Wiesbaden: Harrassowitz.
- Schomberg, Reginald C. F. 1935. *Between the Oxus and the Indus*. London: Martin Hopkinson.
- Schomberg, Reginald C. F. 1936. *Unknown Karakoram*. London: Martin Hopkinson.
- Schomberg, Reginald C. F. 1946. "The Deserts of the Kashmir Tibetan Frontier." *Scottish Geographical Magazine* 62:64-70.

- Searight, Sarah. 1976. "Ladakh: Barrier or Entrepot?" *History Today* 26:256-261.
- Shaw, Robert. 1871. *Visits to High Tartary, Yarkand, and Kashgar (formerly Chinese Tartary)*. London: John Murray.
- Sims-Williams, Nicholas. 1995. "The Sogdian Inscriptions of Ladakh." In *Antiquities of Northern Pakistan*, Vol. 2, edited by Karl Jettmar. Mainz: Philip von Zabern.
- Singh, Bawa Satinder. 1974. *The Jammu Fox: A Biography of Maharaja Gulab Singh of Kashmir 1792-1857*. Carbondale: Southern Illinois University Press.
- Singh, Ghansara. 1986. *Gilgit Before 1947*. Translated by Sher Baz Ali Khan Boroha. Rawalpindi.
- Singh, Harjit. 1978. "Evolution of Space Relations in a Semi-Closed System: A Case Study of Ladakh." In *Our Cultural Fabric: Cultural Heritage of Ladakh*, edited by P.N. Chopra. New Delhi: Ministry of Education and Culture.
- Singh, Harjit. 1978b. "Ladakh: Problems of Regional Development in the Context of Growth Point Strategy." Ph.D. dissertation. Centre for the Study of Regional Development, Jawaharlal Nehru University, New Delhi.
- Skrine, C. P. 1926. *Chinese Central Asia*. Boston: Houghton Mifflin.
- Skuhra, Rudolf. 1949. *Sturm auf die Throne der Gotter; die Angriffe auf die Achttausender im Himalaja und Karakorum von 1921-1950*. Frankfurt: Scheffler.
- Staley, John. 1982. *Words For My Brother: Travels Between the Hindu Kush and the Himalayas*. Karachi: Oxford.
- Stein, Marc Aurel. 1929. *On Alexander's Track to the Indus: Personal Narrative of Explorations Carried Out on the North-West Frontier of India*. London: Macmillan.
- Stein, Marc Aurel. 1977. *Ancient Geography of Kashmir*. Reprint. Calcutta.
- Streather, H. R. A. 1954. "Dr. Houston's Note on Hunza Porters." *Himalayan Journal* 18:79-80.
- Sufi, Ghulam M. D. 1948-49. *Kashmir, Being a History of Kashmir From the Earliest Times to Our Own*. 2 vols. Lahore: University of Punjab.
- Taylor, R. 1964. *Hunza Health Secrets*. New York: Dutton.
- Ujfalvy, C. D. 1896. *Les Aryens au Nord et au Sud de l'Hindou Kouch*. Paris: G. Masson.
- Verrier, A. 1991. *Francis Younghusband and the Great Game*. London: Jonathan Cape.
- Vigne, Godfrey T. 1981. *Travels in Kashmir, Ladak, Iskardo: The Countries Adjoining the Mountain Course of the Indus and the Himalaya, north of the Punjab*. London: Colburn.

- Vohra, Rohit. 1993b. "Antiquities on the Southern Arteries of the Silk route: Ethnic Movements and New Discoveries. In *Anthropology of Tibet and the Himalaya*, edited by Charles Ramble and Martin Brauen, 386-405. Zurich: Ethnological Museum of the University of Zurich.
- Vohra, Rohit. 1994. "Sogdian Inscriptions from Tangtse in Ladakh." In *Tibetan Studies. Proceedings of the 6th Seminar of the International Association for Tibetan Studies, Fagernes 1992*, edited by Per Kvaerne. 920-929. Oslo: Institute for Comparative Research in Human Culture.
- Warikoo, Kulbushan. 1976. *Jammu, Kashmir and Ladakh: A Classified and Comprehensive Bibliography*. New Delhi: Sterling.
- Wegge, Per. 1990. "A Khunjerab Workshop Gone Awry." *Himal* (Sept-Oct):33-34.
- Wessels, C. 1924. *Early Jesuit Travellers in Central Asia, 1603-1721*. The Hague: Martinus Nijhoff.
- World Bank. 1987. "The Aga Khan Rural Support Programme in Pakistan: An Interim Evaluation." Washington DC: World Bank Operations Evaluation Department.
- World Bank. 1990. "The Aga Khan Rural Support Program in Pakistan: The Second Interim Evaluation." A World Bank Operations and Evaluations Study. Washington, DC: World Bank.
- Yakushi, Yoshimi. 1984. *Catalogue of the Himalaya Literature*. Tokyo: Hakusuisha.

Tourism

- Abercrombie, Thomas J. 1978. "Ladakh: The Last Shangri-la." *National Geographic* 153:332-359.
- Adair, F. E. S. 1895. *Sport in Ladakh*. London: Horace Cox.
- Adair, F. E. S. 1899. *A Summer In High Asia: Being a Record of Sport and Travel in Baltistan and Ladakh*. London: Thacker.
- Anon. 1949. *Berge der Welt: Karakorum/Tibesti*. Bern: Buchverlag Verbandsdruckerai.
- Barrett, Robert Le Moyne. 1927. *The Himalayan Letters of Gypsy Davy and Lady Ba. Written on Pilgrimage to the High Quiet Places Among the Simple People*. Cambridge: Heffer.
- Bates, Robert H., et al. 1940. *Five Miles High: The Story of an Attack on the Second Highest Mountain in the World by Members of the First American Karakorum Expedition*. London: Robert Hale.
- Baume, Louis Charles. 1978. *Sivalaya*. Vancouver: Douglas & McIntyre.
- Bhavani, Enakshi. 1951. "A Journey to Little Tibet." *National Geographic* 99:603-634.
- Bircher, Ralph. 1942. *Hunsa: Das Voelk, das Keine Krankheit Kennt*. Bern: Wyss.

- Boulnois, Helen Mary. 1923. *Into Little Tibet*. London: Simkin, Marshall, Hamilton, Kent & Co.
- Brinckman, Arthur. 1862. *The Rifle in Cashmere*. London: Smith, Elder.
- Dani, Ahmad Hasan. 1983. *Guide to Karakorum Highway*. Islamabad: Lok Virsa.
- Darrah, Henry Zouch. 1898. *Sport in the Highlands of Kashmir*. London: Rowland Ward.
- Daud, Beg. 1964. "Hunza and Nager Valleys." *Pakistan Quarterly* 12/3:18-22.
- Desio, Ardito. 1955. *Ascent of K2*. (trans. D. Moore) London: Elek.
- Desio, Ardito. 1983. *K2: Verso il Cielo*. Milan: L'Altra Riva.
- Duncan, J.D. 1906. *A Summer Ride Through Western Tibet*. London: Collins.
- Eckenstein, Oscar. 1896. *The Karakorams and Kashmir; An Account of a Journey*. London: T.F. Unwin.
- Eppler, Peter. 1983. "The Impact of Tourism on Leh and Surroundings." In *Recent Research in Ladakh*, Schriftenreihe Internationales Asienforum, Vol. 1, edited by Detlef Kantowsky and Reinhard Sander, 253-234. Munich: Weltforum Verlag.
- Etherton, P. T. 1911. *Across the Roof of the World: A Record of Sport and Travel Through Kashmir, Gilgit, Hunza, The Pamirs, Chinese Turkestan, Mongolia and Siberia*. London: Constable.
- Featherstone, B.K. 1926. *Unexplored Pass: A Narrative of a Thousand Mile Journey to the Karakorum Himalaya*. London: Hutchinson.
- Foellmi, Olivier. 1983. *Deux Hivers en Zanskar*. Geneva: Editions Olizane.
- Fraser, S. 1986. "Mountains of the Snow Leopard." *Alpine Journal* 91:65-75.
- Frembgen, Juergen. 1983. "Tourismus in Hunza: Beziehungen Zwischen Gaesten und Gastgeber." *Sociologus* 12:174-185.
- Gompertz, M.L.A. 1928. *Magic Ladakh: An Intimate Picture of a Land of Topsy Turvy Customs and Great Natural Beauty*. London: Seeley Service.
- Gordon, T. E. 1876. *The Roof of the World*. Edinburgh: Edmonston and Douglas.
- Goudie, Andrew. 1981. "Fearful Landscape of the Karakoram (Pakistan)." *Geographical Magazine* 53:306-312.
- Government of Pakistan. 1983. *Tourism on Karakorum Highway: A Survey Report*. Islamabad: Government of Pakistan.
- Groetzbach, E. 1985. "Tourismus im Indischen Westhimalaya - Entwicklung und raumliche Struktur." *Arbeiten aus dem Fachgebiet Geographie* 1:27-47.
- Groetzbach, Erwin F. 1988. "Mountain Tourism in North Pakistan: Tourist Regions and Problems for Further Development." *Journal of Science and Technology* 12:23-27.
- Gruber, G. 1981. "Zum Einfluss von Expeditionen und Trekking auf die Umwelt, dargestellt am Beispiel Baltistan/Nordpakistan." *Frankfurter Wirtschafts und Sozialgeographische* 36:21-55.

- Guillarmod, J.J. 1904. *Six Mois dans l'Himalaya, le Karakorum et l'Hindu Kush*. Neuchatel: Sandoz.
- Gyr, H. 1949. "Karakorum-Expedition." *Berge der Welt* 4:3-95.
- Hamid, S. Shahid. 1979. *Karakorum Hunza: The Land of Just Enough*. Karachi.
- Harvey, Andrew. 1983. *A Journey in Ladakh*. London: Jonathan Cape.
- Haughton, H.L. 1913. *Sport and Folklore in the Himalayas*. London: Thacker, Spink.
- Hiebeler, Toni. 1980. *Himalaya et Karakoram*. Zurich: Silva.
- Irby, Augustus Henry. 1863. *The Diary of a Hunter from the Punjab to the Karakorum*. London: Longmans.
- Jettmar, Karl. 1977. "Sozialer Wandel am Karakorum Highway." *Indo Asia* 19:48-55.
- Jettmar, Karl. 1978. "Bruecken und Fluss im Karakorum: Aus dem Material Heidelberger Expeditionen." *Heidelberger Jahrbucher* 22:59-70.
- Jina, Prem Singh. 1994. *Tourism in Ladakh Himalaya*. New Delhi: Indus.
- Kennion, R.L. 1910. *Sport and Life in the Further Himalaya*. Edinburgh: Blackwood.
- Khan, Pervez A. 1986. *Karakorum*. Milano: Mondadori.
- Khanna, Yoginder C. 1980. *Saser Kangri, Yellow Goddess of the Karakoram*. New Delhi: Central Family Welfare Committee.
- Kinloch, 1885. *Large Game Shooting in Thibet, the Himalayas, and Northern India*. London: Thacker.
- Kreutzmann, H. 1987. "Die Talschaft Hunza (Northern Areas of Pakistan): Wandel der Austauschbeziehungen unter Einfluss des Karakoram Highway." *Die Erde* 118:37-53.
- MacIntyre, Donald. 1891. *Hindu-Koh: Wanderlings and Wild Sport on and Beyond the Himalayas*. Edinburgh: Blackwood.
- Markham, Frederick. 1854. *Shooting in the Himalayas*. London: Richard Bentley.
- Michaud, Jean. 1993. "Tourism as a Catalyst of Economic and Social Change. The Case of Highland Minorities in Ladakh (India) and in Northern Thailand." *Internationales Asienforum* 24:21-43.
- Michaud, J. 1991. "A Social Anthropology of Tourism in Ladakh, India." *Annals of Tourism Research* 18:605-621.
- Michaud, Sabrina and Roland Michaud. 1975. "Trek to Lofty Hunza and Beyond." *National Geographic* 148:644-670.
- Muir Wood, Robert and John Hunt. 1981. "High Road to Lonely Shimshal." *Geographical Magazine* 53:504-510.
- Nevé, Arthur. 1913. *Tourist's Guide to Kashmir, Ladakh, and Skardu*, 19th ed. Lahore: Superintendent of Government Printing.
- Nevé, Arthur. 1984. *Thirty Years in Kashmir*. 1913. Reprint. Lucknow: Asian Publications.

- Noack, Edward F. 1984. *Amidst Ice and Nomads in High Asia*. Burbank: National Literary Guild.
- Noyce, Wilfrid. 1962. *To the Unknown Mountain: Ascent of an Unexplored Twenty-five Thousander in the Karakoram*. London: Heinemann.
- Pitsch, Hans-Joachim. 1985. "The Development of Tourism and its Economic and Social Impact on Ladakh." Thesis, Heilbronn Polytechnic. Luebeck: Wahla Edition.
- Pakistan. 1983. *Tourism on Karakoram Highway: A Survey Report*. Islamabad: Research & Statistics Section Tourism Division.
- Qamar, A. S. K. 1973. *Lure of the Karakorams*. Rawalpindi: American Book Club.
- Rasool, G. 1991. "Potential of Tourism in Khunjerab National Park." In *International Workshop on the Management Planning of Khunjerab National Park, Proceedings June 7-16, 1989*, edited by G.B. Bell, 45-48. Washington, D.C.: U.S. National Park Service, Office of International Affairs.
- Roosevelt, Theodore and Roosevelt, Kermit. 1927. *East of the Sun and West of the Moon*. New York: Charles Scribner.
- Rovillé, G. 1985. "Présentacion du Baltistan." In *Ladakh Himalayan Occidental Recent Research*, Vol. 2 of *Ethnologie-Ecologie: Actes du Colloque International*. Paris: University of Paris.
- Rovillé, G. 1988. "Ethnic Minorities and the Development of Tourism in the Valleys of North Pakistan." In *Tourism: Manufacturing the Exotic*. IWGIA Document no. 61, edited by Pierre Rossel, 147-175. Copenhagen: International Work Group for Indigenous Affairs.
- Rowell, Galen. 1986. *In the Throne Room of the Mountain Gods*. San Francisco: Sierra Club.
- Shipton, Eric Earle. 1938. *Blank on the Map*. London: Hodder & Stoughton.
- Shipton, Eric Earle. 1943. *Upon that Mountain*, with a foreword by Geoffrey Winthrop Young. London: Hodder & Stoughton.
- Tobe, John H. 1960. *Hunza: Adventures in a Land of Paradise*. Toronto: McLeod.
- Wazir Mohammed and Ashraf Khan. 1969. "Heavenly Hunza." *Pakistan Quarterly* 16:81-86.
- Wiessner, Fritz. 1955. *K2, Tragdien und Sieg am Zweitchsten Berg der Erde*. Munich: R. Rother.
- Wilson, Andrew. 1979. *Abode of Snow*. Reprint. 1875. Kathmandu: Ratna Pustak Bhandar.
- Workman, Fanny B. 1899. "Ascent of the Biafo Glacier and Hispar Pass: Two Pioneer Ascents in the Karakoram." *Scottish Geographical Magazine* 25:523-526.
- Workman, Fanny B. 1901. "Amid the Snows of Baltistan." *Scottish Geographical Magazine* 17:74-86.
- Workman, Fanny B. and William H. Workman. 1900. *In the Ice World of the Himalaya: Amongst the Peaks and Passes of Ladakh, Nubra, Suru and Baltistan*. London: T. Fisher Unwin.

- Workman, Fanny B. and William H. Workman. 1908. *Ice-Bound Heights of the Mustagh: An Account of two Seasons of Pioneer Exploration and High Climbing in the Baltistan Himalaya*. London: Archibald Constable.
- Workman, Fanny B. and William H. Workman. 1910. "The Hispar Glacier." *Geographical Journal* 35:105-125.
- Workman, Fanny B. and William H. Workman. 1917. *Two Summers in the Ice-Wilds of the Eastern Karakoram: The Exploration on Nineteen Hundred Square Miles of Mountain and Glacier*. London: T. Fisher Unwin.
- Workman, William H. 1905. "From Srinagar to the Sources of the Chogo Lungma." *Geographical Journal* 25:245.

Scientific and Census Reports

- Ali, Tahir. 1983. "The Burusho of Hunza: Social Structure and Household Viability in a Mountain Desert Kingdom." Ph.D. dissertation, University of Rochester, New York.
- Ali, Tahir. 1984. "Ceremonial and Social Structure among the Burusho of Hunza." In *Asian Highland Societies in Anthropological Perspective*, edited by Christoph von Fuerer-Haimendorf, 231-249. New Delhi: Sterling.
- Allan, Nigel J. R. 1986. "Communal and Independent Mountain Irrigation Systems in North Pakistan." In *Proceedings, First International Irrigation Conference, Lahore*, edited by Mushtaqur Rahman, 82-102. Lahore: WAPDA/IGU.
- Allan, Nigel J. R. 1987. "Ecotechnology and Modernisation in Pakistan Mountain Agriculture." In *Western Himalaya: Environment, Problems and Development*, Vol. 2, edited by Y.P.S. Pangtey and S.C. Joshi, 771-789. Nainital: Gyanodya Prakashan.
- Allan, Nigel J. R. 1989. "Preliminary Observations about Gilgit District Villages, North Pakistan." Measurement, Evaluation, Research Section, Occasional Paper no. 23. Gilgit: Aga Khan Rural Support Programme.
- Allan, Nigel J. R. 1990. "Household Food Supply in Hunza Valley, Pakistan." *Geographical Review* 80:399-415.
- Allan, Nigel J. R. 1991. "From Autarchy to Dependency: Society and Habitat Relations in the South Asian Mountain Rimland." *Mountain Research and Development* 11:65-74.
- Anon. *Sociolinguistic Survey of Northern Pakistan*, Vol. 2. "Northern Areas." Dallas: International Academic Bookstore.
- Asboe, W. 1947. "Farmers and Farming in Ladakh (Tibetan Kashmir)." *Journal of Royal Central Asian Society* 34:186-192.
- Bailey, Grahame. 1924. *The Grammar of the Shina Language*. London: The Royal Asiatic Society.

- Barth, Fredrik. 1956. *Indus and Swat Kohistan: An Ethnographic Survey*. Oslo: Forende Trykkerier.
- Berger, Hermann. "Die mit-ar-Erweiterten Verben des Shina." *Wiener Zeitschrift fuer die Kunde Sud und Ostasiens* 5:53-67.
- Berger, Hermann. 1960. "Bericht uber Sprachliche und Voelkskundliche Forschungen im Hunzatal." *Anthropos* 55:657-664.
- Berger, Hermann. 1968. *Zwei Erzahlungen aus dem Hunzatal*, vols. 2-3. Zeitschrift fuer Kulturaustausch Jg. Stuttgart: Institute fuer Auslandsbeziehungen.
- Berger, Hermann. 1983. "Etymologische Bemerkungen zu Einigen suf Geister und Geisterglaube Bezugliche Worter im Burushaski." In *Religions of the Hindukush*, edited by Peter Snoy, 29-33. Weisbaden: Franz Steiner.
- Berger, Hermann. 1985. "A Survey of Burushaski Studies." *Journal of Central Asia* 8:33-37.
- Bernhard, Wolfram. 1983. "Beitrage der Physischen Anthropologie zum Geschichtsverständnis der Ethnischen Gruppen im Hindukush." In *Religions of the Hindukush*, edited by Peter Snoy, 34-51. Weisbaden: Franz Steiner.
- Bethlenfalvy, Géza. 1978. "Alexander Csoma de Koeroes in Ladakh." In *Proceedings of the Csoma de Koeroes Memorial Symposium held at Matrafuered, Hungary, 24-30 September, 1970*, edited by L. Ligeti, 7-25. Budapest: Akadémia Kiadó.
- Biddulph, J. 1971. *Tribes of the Hindoo Koosh*. Reprint. 1880. Graz: Akademische Druock und Verlagsanstalt.
- Biddulph, J. 1977. *Tribes of the Hindoo Koosh*. Reprint. 1880. Karachi: Oxford.
- Blumstein, D.T. forthcoming. "Khunjerab National Park: An Alpine Paradise in Jeopardy?" In *North Pakistan: Karakorum Conquered*, edited by N.J.R. Allan. New York: St. Martin's Press.
- Brauen, Martin. 1980. *Feste in Ladakh*. Graz: Akademische Druock und Verlagsanstalt.
- Buddruss, G. and Wiehler-Schneider, S. 1987. "Wakhi-Lieder aus Hunza." In *Jahrbuch fuer Musikalische Voelk's und Voelkerkunde*, Vol. 9.
- Buddruss, George. 1959. *Kanyawali, Proben eines Maiya-Dialaktes aus Tangir (Hindukusch)*. Muenchener Studien zuer Sprachwassenschaf. Munich: Kitzinger.
- Buddruss, George. 1963. "Aus Dardischer Voelksdichtung." In *Indo-Iranica*, Melanges presents à George Morgenstierne à l'occasion de son soixante-dixieme anniversaire, 48-61. Wiesbaden: Steiner.
- Buddruss, George. 1985. "Linguistic Research in Gilgit and Hunza: Some Results and Perspectives." *Journal of Central Asia* 8:27-32.
- Buechler, A. and R. Schumacher. 1990. *Die Naechlasse von Martinus Liebig und den Bruedern Schlagintwit in der Bayerische Staatsbibliothek, Bibliothecae Monacensis*. Vol. 10, Part 2. Wiesbaden: Harrassowitz.

- Butz, David A.O. 1987. "Adapting Meltwater Supply to Meet Irrigation Demand in High Mountain Agricultural Communities: The Example of Hopar Villages, Pakistan." In *Proceedings 44th Eastern Snow Conference*, edited J. Lewis. Fredricton, New Brunswick.
- Butz, David A.O. 1987. "Irrigation Agriculture in High Mountain Communities: The Example of Hopar Villages, Pakistan." Master's thesis, Wilfrid Laurier University, Canada.
- Butz, David A. O. 1989. "The Agricultural Use of Meltwater in Hopar Settlement, Pakistan." *Annals of Glaciology* 13:35-39.
- Butz, David A.O. 1993. "Developing Sustainable Communities: Community Development and Modernity in Shimshal, Pakistan." Ph.D. dissertation, McMaster University, Canada.
- Butz, David A.O. 1994. "A Note on Crop Distribution and Micro-Environmental Conditions in Holshal and Ghoshushal Villages, Pakistan." *Mountain Research and Development* 14: 89-97.
- Butz, David A.O. 1995. "Legitimizing Porter Regulation in an Indigenous Mountain Community in Northern Pakistan." *Environment and Planning D: Society and Space* 13: in press.
- Butz, David A.O. 1995. "Sustaining Indigenous Communities: Symbolic and Instrumental Dimensions of Pastoral Resource Use in Shimshal, Northern Pakistan." *The Canadian Geographer* 39: in press.
- Butz, David A.O. 1995. "The Meltwater Irrigation System at Hopar Settlement, North Pakistan." *Pakistan Journal of Environmental Research* 1: in press.
- Cacopardo, Alberto and Augusto Cacopardo. 1985. "The Kalasha (Pakistan) Winter Solstice Festival." *Ethnology* 28:317-329.
- Cacopardo, Augusto. 1991. "The Other Kalasha: A Survey of Kalashamun-Speaking People in Southern Chitral." *East and West* 41:273-310.
- Census of India. 1912. *Census of India 1911: Kashmir*, compiled by Matin-uz-Zaman Khan. Vol. 20, nos. 1 and 2. Lucknow: Newul Kishore Press.
- Census of India. 1921. *Kashmir*, Vol. 22, nos. 1 and 2, compiled by Chaudri Khushi Mohammed. Lahore: Government Press.
- Census of India. 1933. *Census of India 1931: Jammu and Kashmir*, Vol. 24, nos. 1 and 2, compiled by Rai Bahadur Pt. Anant Ram and Pt. Hira Nand Ram. Jammu: J. Sharma.
- Census of India. 1941. *Jammu and Kashmir*, Vol. 22, compiled by Captain R.G. Wreford. Jammu: Ranbir Government Press.
- Census of India. 1961. *Jammu and Kashmir. District Census Handbook 4: Ladakh District*, compiled by M.H. Kamili. Srinagar: Government of Jammu and Kashmir.
- Census of India. 1971. *Jammu and Kashmir. District Census Handbook 10: Ladakh District*, Series 8, compiled under the direction of J.N. Zutshi. Srinagar: Government of Jammu and Kashmir.

- Census of India. 1981. *Jammu and Kashmir*, Series 8, parts 1 and 2 compiled by A.H. Khan. Srinagar: State Government Press.
- Charles, Christian. 1981. "Hommes et Glaciers de la Vallée de la Hunza (Karakorum-Pakistan)." *Revue de Géographie Alpine* 69:607-615.
- Charles, Christian. 1985. "La Vallée de Hunza Karakoram." Ph.D. dissertation, Institute of Geography, University of Grenoble.
- Chaudhry, A.A. 1991. "The Promised Land." In *International Workshop on the Management Planning of Khunjerab National Park, Proceedings June 7-16, 1989*, edited by B.G. Bell, 45-48. Washington, D.C.: U.S. National Park Service, Office of International Affairs.
- Clarke, Graham, E. 1977. "Who Were the Dards? A Review of the Ethnographic Literature of the North-Western Himalaya." *Kailash* 5:323-356.
- Clarke, R.T. 1901. *Assessment Report of the Kargil Tehsil of Baltistan*. Lahore: Gulab Singh.
- Crook, J. H. 1980. "Social Change in Indian Tibet." *Social Science Information* 19:139-166.
- Crook, J. H. and S. J. Crook. 1988. "Tibetan Polyandry: Problems of Adaptation and Fitness." In *Human Reproductive Behaviour: A Darwinian Perspective*, edited by L. Betzig, M. Bergerhoff-Mulder, and P. Turke. Cambridge: Cambridge University Press.
- Crook, J. H. and Low, J. In press. *The Yogins of Ladakh*. London: Simon and Schuster.
- Crook, J. H. and Shakya, T. 1983. "Six Families of Leh." In *Recent Research on Ladakh*, Shriftenreihe Internationales Asienforum, Vol. 1, edited by D. Kantowsky and R. Sander. Munich: Weltforum.
- Dargyay, Eva K. 1982. *Tibetan Village Communities*. Warminster: Aris and Phillips.
- Dargyay, Eva K. and Ulrich Gruber. 1980. *Ladakh: Innenansicht eines Landes*. Cologne: Diederichs.
- Darling, G. 1979. "Merit Feasting among the Kalash Kafirs of Northwest Pakistan." Ph.D. dissertation, University of British Columbia.
- Datta, Chaman Lal. 1970. "The Significance of Shawl-Wool Trade in Western Himalayan Politics." *Bengal Past and Present* 89:16-28.
- Davis, William Morris, Ellsworth Huntington, and Rafael Pumpelly. 1905. *A Journey Across Turkestan, Etc.* 1903. Carnegie Institute Publication 26, 21-119. Washington, D.C.: Carnegie Institute.
- Day, Sophie. 1990. "Ordering Spirits: The Initiation of Village Oracles in Ladakh." *Wissenschaftsgeschichte und Gegenwaertige Forschungen in Nordwest-Indien* 206-222. Dresden: Staatliches Museum fuer Volkerkunde.
- Dendaletche, C. and Patrick Kaplanian, eds. 1985. *Ladakh Himalaya Occidental: Ethnologie, Ecologie*, Acta Biologica Montana 5. Pau: Centre Pyrénéen de Biologie et Anthropologie des Montagnes.

- Dollfus, Pascale. 1983. "La Maison et l'Organisation de l'Éspace Domestique au Ladakh." *Mémoire de Maitrise en Ethnologie*. Université de Paris, Nanterre.
- Drew, Frederic. 1971. *The Northern Barrier of India: A Popular Account*. 1877. Reprint. Jammu: Light and Life.
- Drew, Frederic. 1976. *The Jummoo and Kashmir Territories: A Geographical Account*. 1875. Reprint. Graz: Akademische Druck und Verlagsanstalt.
- Drew, Frederic. 1980. *The Jammu and Kashmir Territories*. 1875. Reprint. Karachi: Oxford.
- Drew, Frederic. 1977. *The Jummoo and Kashmir Territories: A Geographical Account*. 1875. Reprint. New Delhi: Cosmo.
- Duncanson, Dennis. 1991. "Karakoram Highway and Silk Road: The Society's 1990 Tour." *Asian Affairs* 22: 54-67.
- Dutreuil de Rhins, J-L. 1898. *Mission Scientifique dans la Haute Asie, 1890-1895*, 3 vols., edited by F. Grenard. Paris: Ernest Leroux.
- Frembgen, Juergen. 1985. *Zentrale Gewalt in Nager (Karakorum)*, Beitrage zur Sudasianforschung, no. 103. Stuttgart: Franz Steiner.
- Frembgen, Juergen. 1986. "Oekonomiker Wandel in Nager (Nordpakistan)." *Zeitschrift fuer Ethnologie* 10: 281-286, 111-14.
- Friedl, W. 1983. *Gesellschaft, Wirtschaft und Materielle Kultur in Zangskar (Ladakh)*. Sankt Augustin: VGH Wissenschaftsverlag.
- Friedrich, Adolf. 1955-56. "Wissenschaftliches Tagebuch der Deutschen Hindukusch-Expedition 1955-56." Unpublished manuscript.
- Ganzenmueller, Konrad. 1980. "Die Bevoelkerung in dem Centralzug des Nordwestlichen Himalaja." *Globus* 38:59-63; 74-80.
- Gazetteer of Kashmir and Ladakh*. 1974a. 1890. Reprint. New Delhi: Vick/Vivek.
- Gazetteer of Kashmir and Ladakh*. 1974b. 1907. Reprint. New Delhi: Vick/Vivek.
- Gazetteer of Kashmir and Ladakh: Compiled under the Direction of the Quarter-Master General in India*. 1890. Calcutta: Superintendent of Government Printing.
- Gazetteer of Kashmir and Ladakh: Together with Routes in the Territories of the Maharaja of Jamu and Kashmir*. 1991. 1890. Reprint. Calcutta: Gang-e-Meel Publications.
- Glavind Sperber, Birgitte. 1991. "Nature in Kalasha Perceptions of Life and Ecological Problems." In *Asian Perceptions of Nature, Nordic Proceedings in Asian Studies*, no. 3, edited by Ole Bruun and Arne Kalland, 110-130. Oslo: Nordic Institute of Asian Studies.
- Goldstein, M.C., P. Tsarong, and C.M. Beall. 1983. "High Altitude Hypoxia, Culture, and Human Fecundity/Fertility: A Comparative Study." *American Anthropologist* 85:28-49.

- Grimshaw, Anna. 1983. "Celibacy, Religion and Economic Activity in a Monastic Community in Ladakh." In *Recent Research in Ladakh*, Schriftenreihe Internationales Asienforum, Vol. 1, edited by Detlef Kantowsky and Reinhard Sander, 121-134. Munich: Weltforum.
- Grimshaw, Anna. 1984. "Rizong: A Monastic Community in Ladakh." Ph.D. dissertation, Cambridge University.
- Grist, Nicola. 1990. "Land Tax, Labour and Household Organisation in Ladakh." In *Wissenschaftsgeschichte und Gegenwaertige Forschungen in Nordwest-Indien*, Dresdner Tagungsberichte Vol. 2, edited by L. Icke-Schwalbe and G. Meier. Dresden: Staatliches Museum fuer Voelkerkunde.
- Grist, Nicola. 1993. "Muslim Kindship and Marriage in Ladakh." In *Anthropology of Tibet and the Himalaya*, pp. 80-92. Zürich: Ethnological Museum of the University of Zürich.
- Groetzbach, Erwin F. "Man and the Environment in the West Himalaya and Karakorum (Pakistan)." *Universitas* 32:17-26.
- Groetzbach, Erwin F. 1984. "Bagrot: Beharrung und Wandel Einer Peripheren Talschaft im Karakorum." *Die Erde* 115:305-321.
- Grotzbach, E. 1984. "Mobility of Labour in High Mountains and the Socio-economic Integration of Peripheral Areas." *Mountain Research and Development* 4:229-235.
- Gruber, Ulrich. 1983. "Man and his Natural Environment in Ladakh." In *Recent Research in Ladakh*, Schriftenreihe Internationales Asienforum, Vol. 1, edited by Detlef Kantowsky and Reinhard Sander. Munich: Weltforum Verlag.
- Hamid, S. Shahid. 1992. "Karakoram and Hunza." *Asian Affairs* 23: 13-19.
- Henze, Paul B. 1986. "Crossroads of High Asia." *Central Asian Survey* 5:121-135.
- Hewitt, Farida. "A Gendered Ecology of a High Mountain Community." Master's thesis, Department of Geography, University of Waterloo, Waterloo, Ontario.
- Hewitt, Farida. 1989. "Woman's Work, Woman's Place: The Gendered Life-World of a High Mountain Community in Northern Pakistan." *Mountain Research and Development* 9:335-352.
- Hewitt, Farida. 1991. "Women in the Landscape: A Karakorum Village before 'Development'." Ph.D. dissertation, Department of Geography, University of Waterloo, Waterloo, Ontario.
- Hussein, Maliha H., H. W. Khan, Z. Alam, and T. Husain. 1986. "An Evaluation of Irrigation Projects Undertaken by AKRSP in the Gilgit District of Northern Pakistan." Gilgit: Aga Khan Rural Support Programme.
- Icke-Schwalbe, L. and Meier, G., eds. 1990. *Wissenschaftsgeschichte und Gegenwaertige Forschungen in Nordwest-Indien*, Dresdner Tagungsberichte Vol. 2. Dresden: Staatliches Museum fuer Voelkerkunde.

- International Union for Conservation of Nature. 1986. *The Nature of Pakistan: A Guide to Conservation and Development Issues*. No. 1. Karachi: IUCN.
- Jest, Corneille and Stein, Joseph A. 1977. "Dynamics of Development and Tradition." In *Himalaya: Écologie, Ethnologie*, Colloques Internationaux du Centre National de la Recherche Scientifique, 343-350. Paris: Editions du National de la Recherche Scientifique.
- Jest, Corneille. 1975. "Images du Ladakh: Une Région de Culture Tibétaine Face au Développement." *Objets et Mondes* 15:93-98.
- Jettmar, Karl. 1976. "Die Ismaeliten Nordpakistans." *Indo Asia* 18:333-338.
- Jettmar, Karl. 1978. "Tibeter in Pakistan: Die Balti." *Indo Asia* 20:246-254.
- Jettmar, Karl. 1979. "Bolor—A Contribution to the Political and Ethnic Geography of Northern Pakistan." *Journal of Central Asia* 2:39-70.
- Jettmar, Karl, ed. 1986. *The Religions of the Hindukush: The Religion of the Kafirs*. Vol. 1. Warminster: Aris and Phillips.
- Jettmar, Karl, ed. 1989. *Antiquities of Northern Pakistan: Reports and Studies*. Vol. 1. Mainz: Philipp von Zabern.
- Jones, Schuyler and Peter Parkes. 1984. "Ethnographic Notes on Clan/Lin-
age Houses in the Hindukush and "Clan Temples" and Descent Group Structure among the Kalasha (Kalash Kafirs) of Chitral." In *Proceedings of the Sixth International Symposium on Asian Studies*. Hong Kong: Asian Research Service.
- Joldan, E. 1985. *Harvest Festival of Buddhist Dards of Ladakh*. Srinagar: Kapoor Brothers.
- Kantowsky, D. and Sander, R. eds. 1983. *Recent Research on Ladakh*, Schriftenreihe Internationals Asienforum, Vol. 1. Munich: Weltforum Verlag.
- Kaplanian, Patrick. 1981. *Les Ladakhis du Cashemire*. Paris: Hachette.
- Kaplanian, Patrick. 1982. "Le Ladakh: Évolution Politique Recente." *L'Afrique et l'Asie Modernes* 135:12-22.
- Kaul, Omkar N. and Ruth Laila Schmidt. 1983. "Dardistan Revised: An Examination of the Relationship between Kashmiri and Shina." In *Aspects of Kashmiri Linguistics*, edited by Omkar N. Kaul and Peter E. Hook. New Delhi: Sagar.
- Khan, Al-Hai Maulvi Hashmatullah. 1980. "Baltistan: Research Translation." Islamabad: Lok Virsa.
- Klimov, G.A., et.al. 1970. *Jazyk Burusaski*. Moscow: Akademi a Nauk.
- Knudsen, Are J. 1991. "Traditional Use Rights Versus Conservation: A Management Problem in the Khunjerab National Park (Pakistan)." Report to the International Union for Conservation of Nature. Karachi: IUCN-Pakistan.
- Knudsen, Are J. 1992. "Household Viability and Adaptability in a North Pakistan Mountain Village in Transition." Master's thesis. Bergen: Department of Social Anthropology.

- Knudsen, Are J. 1995. "Cows, Fairies and Diviners: Resource Management and Cosmology in a Shi'i community in Northern Pakistan." In *Knowledge and Development*, edited by I. Amundsen, 213-238. Tromsø: The University of Tromsø.
- Knudsen, Are J. 1995. "State Intervention and Community Protest: Nature Conservation in Hunza, North Pakistan." In *Asian Perceptions of Nature: A Critical Approach*, edited by Ole Bruun and Arne Kalland, 103-125. Richmond: Curzon Press.
- Koerner, H. 1982. "Die Brueder Schlagintweit, etc." In *Der Weg zum Dach der Welt*, edited by C.C. Mueller and W. Raunig, 62-75. Innsbruck: Penguin.
- Kolmas, Josef. 1982. *Ferdinand Stoliczka (1838-1874): The Life and Work of the Czech Explorer in India and High Asia*. Vienna: Arbeitskreis fuer Tibetische und Buddhistische Studien, Universitaet Wien.
- Kreutzmann, Hermann. 1986. "A Note on Yak-Keeping in Hunza, Northern Areas of Pakistan." *Production Pastorale et Société* 19(Autumn):99-106.
- Lawrence, Walter R. 1973. *Kashmir and Jammu: Imperial Gazetteer of India: Provincial Series*. 1901. Reprint. Lahore: Sang-e-Meel.
- Leitner, Gotlieb W. 1889. *Dardistan in 1866-1886 and 1893: The Hunza and Nagyr Handbook*. Woking, England: Oriental University Institute.
- Leitner, G. Wilhelm. 1978. *Dardistan in 1866, 1886 and 1893*. 1894. Reprint. New Delhi: Manjusri.
- Loeffler, Reinhold. 1964. "Soziale Stratifikation im Suedlichen Hindukusch und Karakorum." Ph.D. dissertation, Mainz.
- Loeffler, Reinhold. 1983. "Lur Hunting lore and the Culture-History of the Shin." In *Ethnologie und Geschichte: Festschrift fuer Karl Jettmar*, edited by Peter Snoy, 399-409. Weisbaden: Franz Steiner.
- Lorimer, David L. R. 1935-38. *The Burushaski Language*, ISLK I-III Series 19. Oslo: Institutet fur Sammenlignende Kulturforking.
- Lorimer, David L. R. 1958. *The Wakhi Language*. London: School of Oriental and African Studies.
- Lorimer, Emily O. 1939. *Language Hunting in the Karakoram*. London: Allen and Unwin.
- MacDonald, Alexander W. 1982. "Ladakh." In *Les Royaumes de l'Himalaya*, edited by Alexander W. Macdonald, 26-65. Paris: Collection Orientale de l'Imprimerie Nationale.
- MacDonald, Kenneth I. 1989. "Impacts of Glacier-related Landslides on the Settlement at Hopar, Karakoram Himalaya." *Annals of Glaciology* 13:185-188.
- Morgenstierne, G. 1965. "Notes on Kalasha." *Norsk Tidsskrift for Sprogvidenskap* 20:183-283.
- Mueller-Stellrecht, Irmtraud. 1973. *Feste in Dardistan: Darstellung und Kulturgeschichtliche Analyse*. Wiesbaden: Steiner.

- Mueller-Stellrecht, Irmtraud. 1978. *Hunza und China (1761-1891)*. Wiesbaden: Franz Steiner.
- Mueller-Stellrecht, Irmtraud. 1980. *Materialien zuer Ethnographie von Dardistan (Pakistan)*. Vol. 2. "Gilgit: Chitral and Yasin." Stuttgart: Steiner.
- Mueller-Stellrecht, Irmtraud. 1981. "Life Patterns of Hunza." *Journal of Central Asia* 4:51-58.
- Nissel, Heinz. 1977. "Ladakh, eine Landeskundliche Skizze." *Erdkunde* 31:138-146.
- Oestrich, K. 1906. "Die Taeler des Nordwestlichen Himalaya." *Petermanns Geographische Mitteilungen* 155:1-33.
- Osmaston, Henry A. 1990. "Environmental Determinism and Economic Possibilism in Ladakh." In *Wissenschaftsgeschichte und Gegenwaertige Forschungen in Nordwest-Indien*, Dresdner Tagungsberichte Vol. 2, edited by L. Icke-Schwalbe and G. Meier. Dresden: Staatliches Museum fuer Voelkerkunde.
- Page, John and Norberg-Hodge, Helena. 1984. *The Ladakh Project Report*. Leh: Ladakh Ecological Development Group.
- Parkin, Robert. 1987. "Kin Classification in the Karakoram." *Man* 22:157-170.
- Phuntsog, Stobdan. 1985. "A Survey of Source Material for the Historical Geography of Ladakh." *Acta Biologica Montana* 5:69-73.
- Phylactou, M. 1989. "Household Organisation and Marriage in Ladakh, Indian Himalaya." Ph.D. dissertation, London School of Economics and Political Science.
- Puri, Balraj. 1963. "A Policy for Ladakh." *Economic Weekly (Bombay)* 15:1147-1149.
- Rahul, Ram. 1961-62. "Kashmiri Muslims in Tibet." *International Studies (Bombay)* 3:181-183.
- Rangan, K. 1987. *Balti Phonetic Reader: CIIL Phonetic Reader Series-17*. Delhi: Central Institute of Indian Languages.
- Read, A. F. C. 1932. *Balti Grammar*. London: Royal Asiatic Society.
- Read, A. F. C. 1933. "Balti Proverbs." *Bulletin of the School of Oriental Studies* 7:499-502.
- Rizvi, Janet. 1985. "Ladakh: A Planner's Dream." *Urban India* 2/4:31-32.
- Rodgers, W. A. 1992. "Biosphere Reserves in the Indian Himalayas." In *Proceedings of the High Altitude Ecology Workshop, 3-5 July, 1990*, Technical Report no. 1, edited by G. S. Rawat, G. S. Panwar, J. L. Fox, and R. S. Chundawat. Dehra Dun: Wildlife Institute of India.
- Sagaster, Klaus. 1984. "The Kings of Baltistan and other Kings: Some Remarks on Balti Folk Literature." *Journal of Central Asia* 7:49-55.
- Schlagintweit, Robert. 1866. "Comparative Hypsometrical and Physical Tableau of High Asia, the Andes and the Alps." *Journal of the Asiatic Society of Bengal*, Vol. 35, Part 2.

- Schmidt, Ruth Laila and Mohammed Zarin. 1984. *Kohistani to Kashmiri: An Annotated Bibliography of Dardic Languages*. Patiala: Institute of Language Studies.
- Siddiq, Wahif. 1991. *A Lower Ladakhi Version of the Gling-Royal-Lham-Kesar*. Cambridge: Harvard University Press.
- Snellgrove, David L. and Tadeusz Skorupski. 1977. *The Cultural Heritage of Ladakh*. Vol. 1. Warmister: Aris and Phillips.
- Snellgrove, David L. and Tadeusz Skorupski, and Philip Denwood. 1980. *The Cultural Heritage of Ladakh*. Vol. 2. Warmister: Aris and Phillips.
- Snoy, P. 1975. "Bagrot: Eine Dardische Talshaft im Karakorum." In *Bergvoelker im Hindukusch und Karakorum*, Vol. 2, edited by K. Jettmar. Graz: Akademische drueck und Verlagsanstalt.
- Snoy, Peter. 1974. "Last Pagans of the Hindu Kush." *Natural History* 68:520-529.
- Sohnen, Renate. 1981. "On the Stak Version of the Kesar Epic in Baltistan." *Zentralasiatische Studien* 15:491-511.
- Sohnen, Renate. 1983. "On Reflections of Historical Events in Balti Folk Songs." In *Ethnologie und Geschichte Festschrift fuer Karl Jettmar*, edited by Peter Snoy, 582-401. Wiesbaden: Franz Steiner
- Sohnen, Renate. 1984. "Treasures of Literary and Musical Tradition in Baltistan." *Journal of Central Asia* 7(2):39-44.
- Staley, John. 1969. "Economy and Society in the High Mountains of Pakistan." *Modern Asian Studies* 3:225-243.
- Tsering, Norboo and Keith Ball. 1988. "High Altitude Pulmonary Oedema [HAPO] in the Himalayas: a Preventable Condition." *The Practitioner* 232: 557-560.
- Walravens, Hartmut. 1992. "The Moravian Mission and its Research on the Language and Culture of Western Tibet." *Oriens Extremus* 35:159-169.
- Wegge, Per. 1989. "Assessment of Khunjerab National Park and Environs." Gland: IUCN.
- Wegge, Per. 1989. "Khunjerab National Park in Pakistan: A Case Study of Constraints to Proper Conservation Management." In *Proceedings of Conservation of Mammals in Developing Countries*, edited by P. Wegge and J. Thornback. Rome: Fifth Theriological Congress.

Guidebooks

- Artou. 1982. *Ladakh, Zanskar pour Voyageurs, Alpinistes et Amoureux de la Culture Tibétaine*. Geneva: Editions Olizane.
- Chabloz, P. and Cremieu, N. 1986. *Randonnée Zanskar et Ladakh*. Geneva: Editions Olizane.

- Chopra, P.N. 1980. *Ladakh*. New Delhi: S. Chand.
- Duke, J. 1910. *Kashmir and Jammu: A Guide for Visitors*, 2nd ed. Simla: Thacker, Spink.
- Goodwin, P. 1950. "Baltistan: Northern Gateway of Kashmir." *Geographical Magazine* 22:350-360.
- Mordecai, D. 1966. *The Himalaya: An Illustrated Summary of the World's Highest Mountain Ranges*. Calcutta: Daw Sen.
- Nevé, Arthur. 1923. *The Tourist's Guide to Kashmir, Ladakh, Skardo, etc.* Lahore: Civil and Military Gazette Press.
- Pervez, A. K. 1986. *Karakorum*. Milan: Arnoldo Mandadori.
- Schettler, Margret and Rolf Schettler. 1981. *Kashmire, Ladakh und Zanskar*. Essen: Globetrotter.
- Schettler, Margret and Rolf Schettler. 1981. *Kashmire, Ladakh und Zanskar*. Translation. South Yarra, Victoria: Lonely Planet.
- Shaw, Isobel. 1993. *Pakistan Trekking Guide: Himalaya, Karakoram and Hindu Kush*. Hong Kong: Odyssey.
- Sircar, S. Joydeep. 1979. *Himalayan Handbook*. Calcutta: The Author.
- Swift, Hugh. 1990. *Trekking in Pakistan and India*. San Francisco: Sierra Club Books.
- Swift, Hugh. 1982. *The Trekkers' Guide to the Himalaya and Karakorum*. London: Hodder and Stoughton.

International Conflict

- Ahmad, Zahiruddin. 1968. "New Light on the Tibet-Ladakh-Mughal War of 1679-1684." *East and West* 18:340-361.
- Anonymous. 1951. "The Sinkiang-Hunza Frontier." *Journal of the Royal Central Asian Society* 38:73-81.
- Basu, B.K. 1965. "India's Frontier Problems in the Nineteenth and Twentieth Centuries: Historical Background." *Quarterly Review of Historical Studies* 5:30-36.
- Birdwood, Lord. 1952. "The Asian Frontiers of Kashmir." *Journal of the Royal Central Asian Society* 39:241-245.
- Carrasco, Pedro. 1959. *Land and Polity in Tibet*. Seattle: University of Washington Press.
- Chakravarti, P.C. 1971. *The Evolution of India's Northern Borders*. Bombay: Asia Publishing House.
- Charak, Sukhdeva Singh. 1978. *Indian Conquest of the Himalayan Territories: Military Exploits of General Zorawar Singh Dogra*. Jammu: Ajaya Prakashan.
- Datta, Chaman Lal. 1972. *Ladakh and Western Himalayan Politics, 1819-1848: The Dogra Conquest of Ladakh, Baltistan and West Tibet and Reactions of Other Powers*. New Delhi: Munshiram Manoharlal.

- Datta, Chaman Lal. 1984. *General Zorawar Singh: His Life and Achievements in Ladakh, Baltistan and Tibet*. New Delhi: Deep and Deep.
- Durand, Algernon. 1974. *The Making of a Frontier*. 1899. Reprint. Graz: Akademische Druck und Verlagsanstalt.
- Durand, Algernon. 1977. *The Making of a Frontier. Five Years' Experiences and Adventures in Gilgit, Hunza, Nagar, Chitral and the Eastern Hindu-Kush*. 1899. Reprint. Karachi: Oxford.
- Fisher, Margaret W. and Leo E. Rose. 1962. "Ladakh and the Sino-Indian Border Crisis." *Asian Survey* 2:22-37.
- Fisher, Margaret W., Leo E. Rose, and Robert A. Huttenback. 1963. *Himalayan Battleground: Sino-Indian Rivalry in Ladakh*. New York: Praeger.
- Gillard, David. 1977. *The Struggle for Asia 1828-1914: A Study in British and Russian Imperialism*. London: Methuen.
- Girdlestone, Charles. 1874. *Memorandum on Cashmere and Some Adjacent Countries*. Calcutta: Foreign Department Press.
- Hassnain, Fida Mohammad. 1974. *British Policy towards Kashmir (1846-1921) (Kashmir in Anglo-Russian Politics)*. New Delhi: Sterling.
- Hassnain, Fida Mohammad. 1978. *Gilgit: The Northern Gate of India*. New Delhi: Sterling.
- Holdich, T. 1910. *The Gates of India (Being a Historical Narrative)*. London: Longmans.
- Hopkirk, Peter. 1990. *The Great Game: On Secret Service in High Asia*. London: John Murray.
- Huttenback, Robert A. 1961. "Gulab Singh and the Creation of the Dogra State of Jammu, Kashmir, and Ladakh." *Journal of Asian Studies* 20:477-488.
- Huttenback, Robert A. 1968. "Kashmir as an Imperial Factor During the Reign of Gulab Singh (1846-1857)." *Journal of Asian History* 2:138-145.
- Huttenback, Robert A. 1973. "The Emasculation of a Princely State: The Case of Kashmir." *Journal of Asian History* 7:1-29.
- Keay, J. 1979. *The Gilgit Game: The Explorers of the Western Himalayas, 1865-95*. Oxford: Oxford University Press.
- Kumar, Mahajan S. 1966. *Debacle in Baltistan*. New Delhi.
- Lamb, Alastair. 1964. "The Sino-Pakistan Boundary Agreement of 2 March 1963." *Australian Outlook* 18:299-313.
- Lamb, Alastair. 1966. *Crisis in Kashmir: 1947-1966*. London: Routledge and Kegan Paul.
- Lamb, Alastair. 1967. "Pakistani Kashmir since the 1965 War." *Journal of the Royal Central Asian Society* 54:151-155.
- Lamb, Alastair. 1969. *Britain and Chinese Central Asia: The Road to Lhasa 1767-1905*. London: Routledge.

- Lamb, Alastair. 1973. *The Sino-Indian Border in Ladakh*. Canberra: Australian National University.
- Lamb, Alastair. 1992. *Kashmir: A Disputed Legacy 1846-1990*. Karachi: Oxford University Press.
- Marshall, Julie G. 1977. *Britain and Tibet, 1765-1947: The Background to the India-China Border Dispute. A Select Annotated Bibliography*. Bundoora: LaTrobe University.
- Maxwell, Neville. 1970. *India's China War*. London: Cape.
- Morgan, Gerald. 1981. *Anglo-Russian Rivalry in Central Asia: 1810-1895*. London: Frank Cass.
- Osmaston, Henry A. 1990. "The Kashmir Problem." *Geographical Magazine* 62:16:21.
- Parmu, Radha Krishan. 1969. *Muslim Rule in Kashmir: 1320-1819*. Delhi: People's Publishing House.
- Parmu, Radha Krishan. 1977. *A History of Sikh Rule in Kashmir: 1819-1946*. Srinagar: Government Press.
- Schweinfurth, Ulrich. 1962. "Ladakh: Das Streitobjekt Zwischen Indien und China." *Aussenpolitik* 13:626-629.
- Shashi Bhushan. 1978. *Karakoram Road: Dominationistic Conspiracy of China in Kashmir*. New Delhi: Secretariat of Congress Socialist Forum.
- Sidky, M.H. 1976. "The China Factor in Indo-Pakistani Relations." *Asian Survey* 16:965-980.
- Warikoo, Kulbushan. 1989. *Central Asia and Kashmir: A Study in the Context of Anglo-Russian Rivalry*. New Delhi: Gian.
- Wirsing, Robert. 1994. *India, Pakistan and the Kashmir Dispute*. New York: St. Martin's.
- Woodman, Dorothy. 1969. *Himalayan Frontiers: A Political Review of British, Chinese, Indian and Russian Rivalries*. New York: Praeger.
- Yapp, Malcolm A. 1987. "British Perceptions of the Russian Threat to India." *Modern Asian Studies* 21: 647-665.

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Related Bibliographic Materials

- Aschoff, Juergen C. 1991. *Tibet, Nepal und der Kulturraum der Himalaja*. Dietikon: Garuda.
- Barth, Fredrik. *Indus and Swat Kohistan: An Ethnographic Survey*. Oslo: Universitetes Ethnografiske Museum.
- Cai, G., Y. Liu, and B. O'Gara. 1989. "Observations of Large Mammals in the Qaidam Basin and its Peripheral Mountainous Areas in the People's Republic of China." *Canadian Journal of Zoology* 68:2021-2024.
- Dilawar, Khan. 1977. *Northern Areas: A Select Bibliography*. Islamabad.
- Elphinstone, Mountstuart. 1843. *An Account of the Kingdom of Caubul and Its Dependencies...etc.* 2 vols., 3rd. ed. London: Longmans.
- Fuerer-Haimendorf, C. von. 1975. *Himalayan Traders*. London: John Murray.
- Goldstein, Melvyn C. 1971. "The Balance between Centralization and Decentralization in the Traditional Tibetan Political System." *Central Asiatic Journal* 15:170-182.
- Goldstein, Melvyn C. 1973. "The Circulation of Estates in Tibet: Reincarnation, Land and Politics." *Journal of Asian Studies* 32:445-455.
- Goldstein, Melvyn C. 1976. "Fraternal Polyandry and Fertility in a High Himalayan Valley in N.W. Nepal." *Human Ecology* 4:223-233.
- Goldstein, Melvyn C., C.M. Beall, and R.P. Cincotta. 1990. "Traditional Nomadic Pastoralism and Ecological Conservation on Tibet's Northern Plateau." *National Geographic Research* 6:139-156.
- Goldstein, Melvyn C. and Paljor Tsarong. 1985. "Tibetan Buddhist Monasticism: Social, Psychological and Cultural Implications." *Tibet Journal* 10:14-31.
- Goldstein, Melvyn C., Paljor Tsarong, and Cynthia M. Beall. 1983. "High Altitude Hypoxia, Culture and Human Fecundity/Fertility: A Comparative Study." *American Anthropologist* 85:28-50.
- Green, Michael J. B. 1990. *IUCN Directory of South Asia Protected Areas*. Gland: IUCN.
- Green, Michael J. B. 1993. *Nature Reserves of the Himalaya and the Mountains of Central Asia*. Gland: IUCN.
- Grenard, F. 1904. *Tibet: The Country and its Inhabitants*. London: Hutchison.
- Grousset, R. 1970. *The Empire of the Steppes: A History of Central Asia*. New Brunswick: Rutgers University Press.

- Jackson, R. and G. Ahlborn. 1984. "A Preliminary Habitat Suitability Model for the Snow Leopard, *Panthera uncia*, in West Nepal." *International Pedigree Book of Snow Leopards* 4:43-52.
- Jackson, Roderick M. 1991. "A Wildlife Survey of the Qomolangma Nature Preserve, Tibetan Autonomous Region, People's Republic of China." Franklin, WV: Woodlands Mountain Institute.
- Miller, D.J., D. J. Bedunah, D.H. Pletscher, and R. M. Jackson. 1992. "From Open Range to Fences: Changes in the Range-Livestock Industry on the Tibetan Plateau and Implications for Development Planning and Wildlife Conservation." In *Proceedings of the 1992 International Rangeland Development Symposium 11 February 1992*, edited by G. Perrier. Spokane, Washington.
- Miller, Daniel J. 1986. "High Elevation Grasslands of Nepal." *Rangelands* 8:112-114.
- Roche, Andre. 1965. *Karakorum Himalaya: Sommets de 7000*. Paris: Editions Victor Attinger.
- Shahrani, M. Nazif Mohib. 1978. "The Retention of Pastoralism among the Kirghiz of the Afghan Pamirs." In *Himalayan Anthropology: The Indo-Tibetan Interface*, edited by James F. Fisher. The Hague: Mouton.
- Shahrani, M. Nazif Mohib. 1979. *The Kirghiz and Wakhi of Afghanistan: Adaptation to Closed Frontiers*. Seattle: University of Washington Press.
- Slavin, Terry. 1991. "Survival in a Vertical Desert." *Tomorrow: The Global Environmental Magazine* 1:42-53.
- Taylor-Ide, Daniel. 1995. "Mountains, Nations, Parks and Conservation: A Case Study of the Mt. Everest Area." In *Mountains at Risk: Current Issues in Environmental Studies*, edited by N. J. R. Allan, 257-276. New Delhi: Manohar.
- Thorsell, James and Jeremy Harrison. 1994. "National Parks and Nature Reserves in Mountain Environments." In *Mountains at Risk: Current Issues in Environmental Studies*, edited by N. J. R. Allan, 276-312. New Delhi: Manohar.
- Wegge, Per. 1976. "Himalayan Shikar Reserves: Surveys and Management Proposals." FAO NEP/72/002, Field Doc. 5. Kathmandu and Rome: UN/FAO.

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