

Securing the heights: The vertical dimension of the Siachen conflict between India and Pakistan in the Eastern Karakoram



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ABSTRACT

The Siachen conflict between India and Pakistan is often referred to as the coldest war, or, the endless war atop the roof of the world. The high altitude and extreme climate create a hostile environment that has caused by far the most casualties and imposed tremendous costs on both sides. This environmental setting is usually only cited to underline the absurdity of this more than 30 year old conflict. We, however, argue that rather than being a constraint upon the conflict, the terrain itself is central to the genesis and continuation of the conflict. Further, the vertical dimension is the focus of contestation and the site where mountaineering practices, cartographic imagination and military logic intersect. The inaccessibility imposed by the terrain also implies that far from being a frozen conflict there is a temporal dynamism, as improvements in technology and logistics alter the possibility of maintaining the *status quo*.

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Introduction

The military conflict between India and Pakistan in the vicinity of the Siachen glacier is now more than thirty years old. In 1984, Operation Meghdoot launched by India used helicopters to drop soldiers onto the Siachen glacier to preempt its occupation by Pakistan. Given that India and Pakistan have fought several wars, this particular conflict would not be unusual, if it wasn't for its location. In the wider geopolitical context, this area lies at the world's only nuclear trijunction, where the overlapping boundary claims of three nuclear powers, China, India and Pakistan, converge. The positions occupied by the soldiers are at heights of up to 6700 m (Tahir-Kheli & Biringer, 1998) and in temperatures that can reach minus 50 °C. It is a logistical challenge to supply the soldiers, which in India's case can only be done using helicopters. Pakistani positions are closer to the road heads, but the final stretch can only be covered using porters and mules.

In spite of the horrifying cost in terms of human lives and logistics, this conflict has remained in a stalemate even after numerous diplomatic efforts, including thirteen rounds of bilateral negotiations over the last three decades. It has become a permanent war, taking on the character of what Sidaway (2001, 2008) calls a “banal geopolitics”. This term describes the state of general popular acceptance that the Siachen conflict has entered, where this war has become unremarkable and everyday, and only rarely forces its way back into public awareness.

In April 2012, the conflict regained attention when a huge avalanche hit a Pakistani army camp at Gayari (also spelled Gyari or Ghyari), killing around 140 people, mostly soldiers (Shaheen, 2012; Walsh, 2012). There were impassioned pleas for peace and a withdrawal from the area, even from key actors like the Pakistani Army Chief and Prime Minister (Walsh, 2012). The hope of progress on negotiations did not last long in spite of public support, (Khan, 2012) mostly because of the strong opposition of the Indian Army to any peace moves (Swami, 2014).

Media coverage of this conflict has often tended to focus on the futility of fighting in the extreme environment where the soldiers are stationed (Bearak, 1999; Fedarko, 2003; McGirk & Adiga, 2005; Moore, 1993). Natural conditions are deadlier for soldiers than enemy action, and cause their physiology to progressively deteriorate, so that they must be rotated periodically. Even then, they

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often end up spending as long as six months at a time at these altitudes. Additionally, attention has been drawn to the uselessness of the territory whose control is ostensibly the rationale of this conflict. For instance, India and Pakistan have been compared to “two bald men fighting over a comb” (Cohen, 1999). Hyperbole about the senselessness of this conflict, trivialises a three decades old conflict that continues to have very real effects on the lives, bodies and security of people in two nations. Secondly, it makes implicit assumptions about the correct, presumably western forms of geopolitics in which militarised conflicts are about acquisition of (useful) territory.

“What else but burning hatred could drive men to battle over an alien, airless wilderness, so high and forbidding that even skilled mountain climbers spoke of it with awe and fear? Yet the Indians and Pakistanis had been fighting over this icy massif for a decade, and showed no sign of relenting. It was madness on a grand, militarized scale”

Margolis, 2000, p. 119.

This example (see also Bearak, 1999; Cohen, 1999; MacDonald, 2007) neatly fits the trope in which the rationality of peace, so obvious to the Western mind, is always belied by the emotional irrationality of the Oriental (Said, 1979, p. 48). As Tuathail and Agnew (1992) have argued, actors within powerful institutions of the hegemon state, define the “central drama of international politics in particularistic ways” (Tuathail and Agnew, 1992, p. 195), which then become the lens through which even localised regional conflicts are seen.

In recognition of these problems with many analyses of the Siachen conflict, we have tried to avoid the most obvious lines of inquiry. We eschew an examination of the relative rationality of India and Pakistan as geopolitical actors, and dispute the idea that the people of either country are especially passionate about war. We also believe that the case for peace has been made very well, and there is a broad recognition of the necessity to end the conflict, though the means to achieve this are contested. In an attempt to engage more meaningfully with this case, we call into question the idea that this conflict would “make sense” in a more hospitable environmental setting.

We instead place it in its political and equally importantly, topographical context to identify why this dispute exists *where* it does. We proceed by offering a short chronological overview (Fig. 1) to identify important elements in the development of the conflict. We also bring in a discussion of the Dolomites front during World War I as an example of a conflict in similar extreme topography, but in a European (“western”) setting. The specific elements of high altitude warfare, also called *Gebirgskrieg*, developed at this time, are a forerunner of contemporary military tactics. Our use of this term is intended to historically situate the emergence of a particular kind of warfare; identify the strategies that emerged in this particular kind of terrain and thereby point to the strategic and tactical continuity with Siachen. After identifying important and overlooked aspects of the conflict we place it alongside recent discussions of the vertical dimension in political geography. The present article complements those by discussing a high altitude war where air-power and the human body are at their vertical limits.

This article is based upon a critical analysis of publicly available documents, news reports and secondary literature, with an emphasis on primary accounts of direct participants in the Siachen conflict. As the source material is at times highly biased, we have endeavoured to offer a balanced reading. We used satellite imagery and historical maps to illustrate the spatial dimension and to uncover the contribution of cartography to the conflict. A major

limitation we faced was the lack of access to classified and restricted documents. We were also unable to visit the area for direct observation. Despite the lack of access to previously unknown primary data, we believe a new theoretical framework can produce a deeper understanding of this conflict.

Verticality, war and geopolitics

The historical development of the Siachen conflict shows that verticality has been an intimate element at all stages. In a discussion of military landscapes that is especially relevant to the present case, Woodward (2014, p. 41) identifies three conceptualisations of landscape as being material, representational and experiential. The material aspect of the area relates to the patterning and morphology of the terrain; the representational aspect relates to the landscape as text or image and the third experiential aspect relates to the way we engage with landscapes physically and emotionally. Siachen as a material landscape affects military strategy, the emplacement of soldiers, and constrains actions. The representational aspect of landscape can be seen most directly when it comes to cartography and the imaginary lines that stand for the reality of power exercised over space. But, there are numerous other ways in which this landscape is read as a pristine wilderness, a strategic gateway or a military prize, and as Forsyth (2014) point out it is also a space for camouflage and militarized disappearance. The experiential aspects include the actual physical experience of presence on the glacier, but equally the vicarious emotional experience of this landscape as a national symbol, or an environmental disaster (Nüsser & Baghel, 2014).

Verticality modulates these properties of the landscape in four specific ways. First by making it attractive to mountaineers; second by complicating its cartographic representation; third, by making the heights key to military success; and fourth, due to the physiological effects of such high altitudes which lead to the notion of heroism *against* nature. These aspects however are not separate but shape each other. For mountaineers, a difference of a few meters in height might have a disproportionate effect on the perceived accomplishment as it might differentiate a “seven-thousander” from an “eight-thousander”. For the army it might mean an altitudinal limit on supply chains. Experientially high altitude imposes a loss of oxygen, low temperature and new threats to the human body.

The Siachen conflict contains many elements like territoriality (Raffestin & Butler, 2012), boundary claims (Paasi, 1999, 2009), border disputes (Newman, 2006; Toft, 2014) and borderlands (van Schendel, 2002) that are prominent research topics in political geography. Recently, the role of the vertical dimension has received increasing attention (Adey, 2013; Bridge, 2013; Elden, 2013a, 2013b) which can be extended to the present discussion. This attention has emerged from a focus on the military role of the air and the sea in geopolitics, thus leading to the idea of volume, which also includes sub-surface structures like tunnels (Elden, 2013b). One important aspect these discussions overlook is the human experience of these volumes, instead projecting a kind of empty space inhabited by machines, sometimes occupied by humans. The Siachen conflict materialises this volume by focusing on embodied human presence in the vertical, where oxygen availability decreases with altitude, where the human body reaches its limits, and where helicopters exceed their flight envelope. One of the most explicit examinations of the vertical terrain of warfare, including its strategic and symbolic aspects comes in the work of Eyal Weizman (2002; 2007). However, the groundedness and materiality of military presence in the vertical dimension, that he describes, is something that has not been appreciated enough, perhaps because much of the discussion of volume and

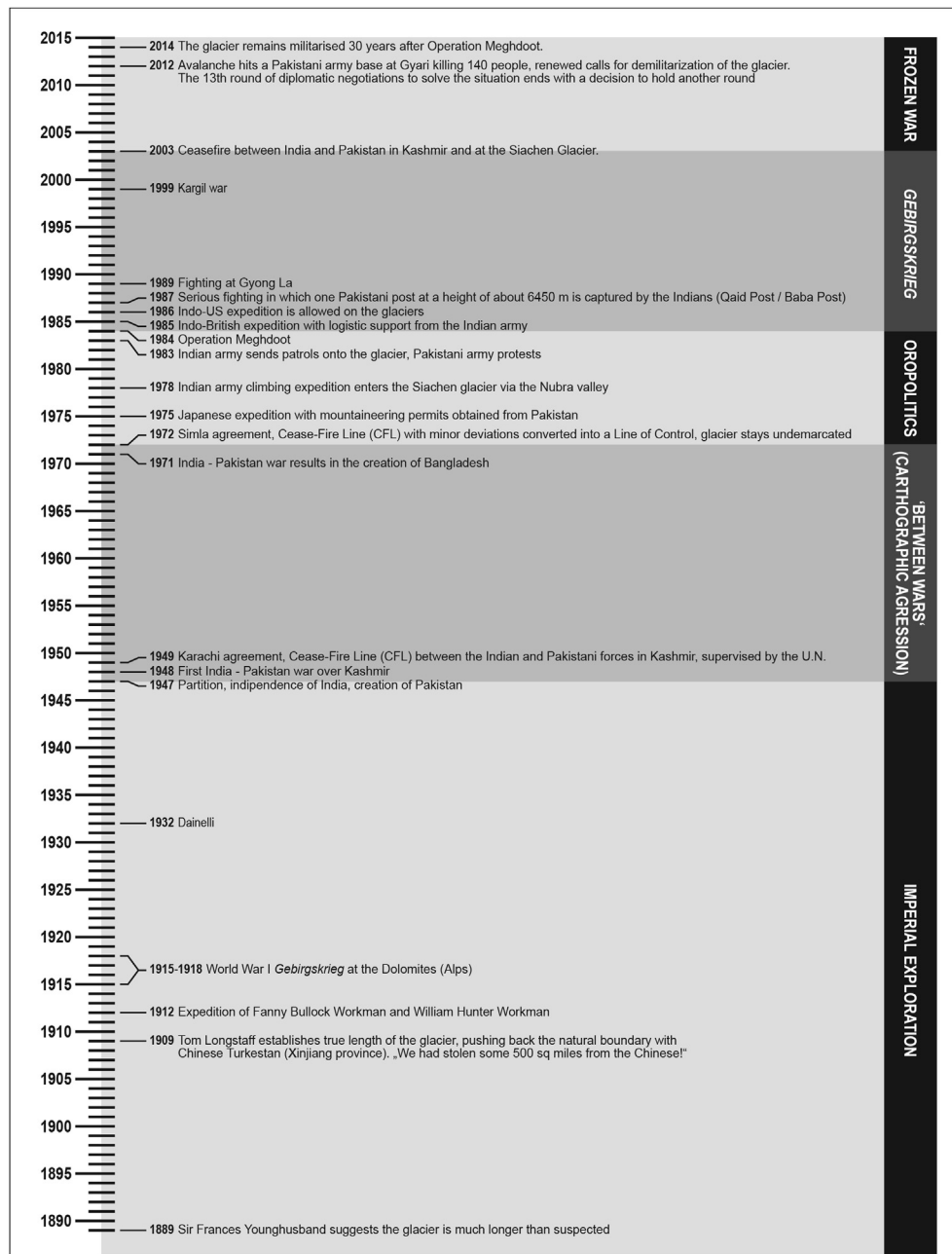


Fig. 1. A chronology of the Siachen conflict.

verticality has emerged from a study of aerial warfare. By placing the Siachen conflict in the historical military tradition of *Gebirgskrieg*, we discuss a kind of *land* warfare in which the vertical has always been of primary importance. Our use of “secure the heights” in the title is not only an allusion to the military imperative of *Gebirgskrieg* but also a call to attention for another kind of verticality.

In this paper we examine the role of the vertical dimension in the Siachen conflict in three ways. Firstly, it makes cartographic representation ambiguous and difficult. This attribute also marks the different ways in which the landscape is imagined as icy wasteland, desolate heights, strategically important or heroic summits. Secondly, we examine how verticality shapes practices in this landscape. These practices relate to both climbing and military strategy. Thirdly, there is the experiential aspect of this militarised

landscape. The altitude creates a third enemy for both armies as well as for climbers. This lends a heroic aspect to this experience, in the sense that mere presence at these heights is by itself seen as sufficient proof of heroism.

Seen in its vertical dimension, the conflict becomes even if not more rational, certainly less ambiguous. This has consequences for exploring the impact of verticality in political geography in general, which goes beyond a characterisation of Siachen of a two-dimensional war being fought at a height; to identifying the centrality of this height to the continuance of the conflict. The conflict might seem to be restricted in terms of spatial movement, however the temporal dimension cannot be lost sight of either (Flint, 2010). For the Indians every day they hold on to the glacier becomes easier, due to technological advances, new weapon systems and rising defence expenditure; and in their understanding the

disparity in economic growth between India and Pakistan makes the financial burden steadily more difficult for Pakistan to bear.²

By focussing on the vertical dimension we identify shared elements with conflicts that are far separated in space and time. This focus on commonalities offers a way out of the cultural exceptionalism, informed by orientalist ideas about South Asia that has been applied to this conflict. Further, this also means that the Siachen conflict itself is not an oddity but can supplement current discussions of the vertical dimension in other contexts. The evolving nature of *Gebirgskrieg* suggests that war in extreme environments is not necessarily a relic of the past, but possibly also presages wars of the future.

We now offer a short historical background of the Siachen area in order to highlight its continued geopolitical importance from the time of its “discovery” during British rule.

Colonial exploration: between science and geopolitics

Thomas Longstaff conclusively established the location and extent of the Siachen glacier in 1909, and determined that its length was at least 70 km. This implied that it pierced what was till then supposed to be the main axis of the Karakoram, and it lay further north. The geopolitical consequence of this was that the Indus – Yarkand water parting, and therefore the “natural boundary” between Chinese Turkestan (present day Xinjiang province of China) and the British empire (present day India and Pakistan) was now estimated to lie along a line drawn from K2 to Teram Kangri and then the Karakoram Pass³ (Longstaff, 1910). Longstaff exulted: “we had stolen some 500 square miles from the Yarkand river system of Chinese Turkestan, and joined it to the waters of the Indus and the Kingdom of Kashmir” (Longstaff, 1950, p. 192). This incident shows one of the most important aspects of the Siachen glacier — its function in establishing a “natural boundary”.

The Workman couple explored the glacier in its full extent, and paid considerable attention to the etymology of local names for physical features in the area, establishing many of the toponyms used today (Workman, 1914). They identified the name Siachen as deriving from the wild roses (*Rosa webbiana*) growing near the snout. There were subsequent scientific expeditions, the most prominent of them being one led by De Filippi in 1912–13 and another carried out by Dainelli in 1929. The latter faced serious problems in organising supplies for his four month expedition on the glacier (Dainelli, 1932), foreshadowing the logistic difficulty of deploying troops to the area. Scientific research carried on in the area sporadically. As part of the International Geophysical Year (1957–58), the Geological Survey of India studied several glaciers in the Karakoram, including Siachen (Verghese, 1962, p. 153). A research expedition from the Imperial College, led by Shipton, approached the area via Pakistan in 1957 (Miller, 1958).

The Superintendent of Frontier Surveys in British India warned against attempting to control this area, stating:

“[T]he vast wilderness of snow-clad mountains which encloses them, intersected by narrow valleys buried beneath overhanging masses of cliff and crag (too narrow to do more than support a scanty and hardy population of mountaineers), is too difficult of access, and too remote from civilised centres, to be a source of anything but periodical embarrassment”

Holdich, 1905, p. 103.

The perspicacity of this comment in relation to the complete absence of natural resources, its use as a mountaineering arena and the difficulty of military control of Siachen, was borne out by subsequent developments.

Cartography as aggression?

Tellis (1997) argues that following the partition of British India in 1947, the successor states of India and Pakistan, were both left unhappy for different reasons:

“India viewed Partition as unnecessary and tragic, but *essentially complete*. Pakistan viewed Partition as inevitable and necessary, but *fundamentally incomplete* because Kashmir, a Muslim majority state, remained with India”

Tellis, 1997, p. 8; emphases added.

This led to several Pakistani attempts to alter the situation through military actions in Kashmir (in 1948, 1965 and 1999) and ongoing sub-conventional warfare through support of insurgency (Fair, 2014; Paul, 2014). The disputed borders of the two countries were sought to be settled through the Simla agreement in 1972⁴ through the creation of the “Line of Control” (LoC). It stated “neither side shall seek to alter [the LoC] unilaterally, irrespective of mutual differences and legal interpretations”.

The LoC was itself based upon the positions that existed following the end of hostilities between India and Pakistan in December 1971. With minor deviations, it was identical to the U.N. monitored Ceasefire Line (CFL) created through the Karachi agreement⁵ following the first war over Kashmir in 1948. The demarcation based on ground surveys was conducted up to the grid point NJ9842 (Fig. 2) and the CFL was to run “thence north to the glaciers” (Karachi Agreement, 1949, p. 280). The line was not delineated further because it was solely intended to mark ceasefire positions, and point NJ9842 was chosen arbitrarily as it formed the corner of the map closest to the northernmost presence of troops when fighting ended in 1948 (Raghavan, 2002, p. 22).

Further, the regional topography made it difficult to conduct ground surveys. Combined with the ostensibly provisional nature of the CFL and the seeming impossibility of war on the glaciers produced a no man's land. The same combination of cartographic difficulty and military logic produced through this topography meant that even after the CFL was converted to the LoC, the line was still left undemarcated beyond the northernmost grid-point.

However, cartographers elsewhere could not abide the gap in the boundary created by this arbitrary point, and extended it in different directions to connect it to the China–Pakistan border. One example of this was an aviation map issued to US Air Force pilots, which extended the boundary to the Northeast in a straight line from point NJ9842 to the Karakoram pass (Defense Mapping Agency, 1983). This placed the previously undemarcated area around the Siachen glacier, including a major Indian military base at Dzingrulma within the territory of Pakistan. Other derivative maps followed this line, so that it became a cartographic convention to connect point NJ9842 to the Karakoram Pass, thereby representing the area as Pakistani territory (Wirsing, 1995, pp 78–83).

In this unpopulated region, boundary claims are tenuous and maps and atlases, even inaccurate ones, are often used to support them (Lamb, 1964). Therefore the Indians saw this not just an inaccurate representation of ground reality, but instead a way of obtaining control of the area by stealth, a kind of cartographic aggression. Kunal Verma narrates that he obtained one such map from a French backpacker in 1981, but on observing the representation of the India–Pakistan border on this map, an Indian Army officer quickly sent it up the chain of command until eventually the Army Chief, Defence Minister and even the Prime Minister had seen it (Verma & Williams, 2010, pp. 44–46). According to the Pakistani General in charge of the area, they became aware of Indian presence in the area at the same time through a report in the *National*

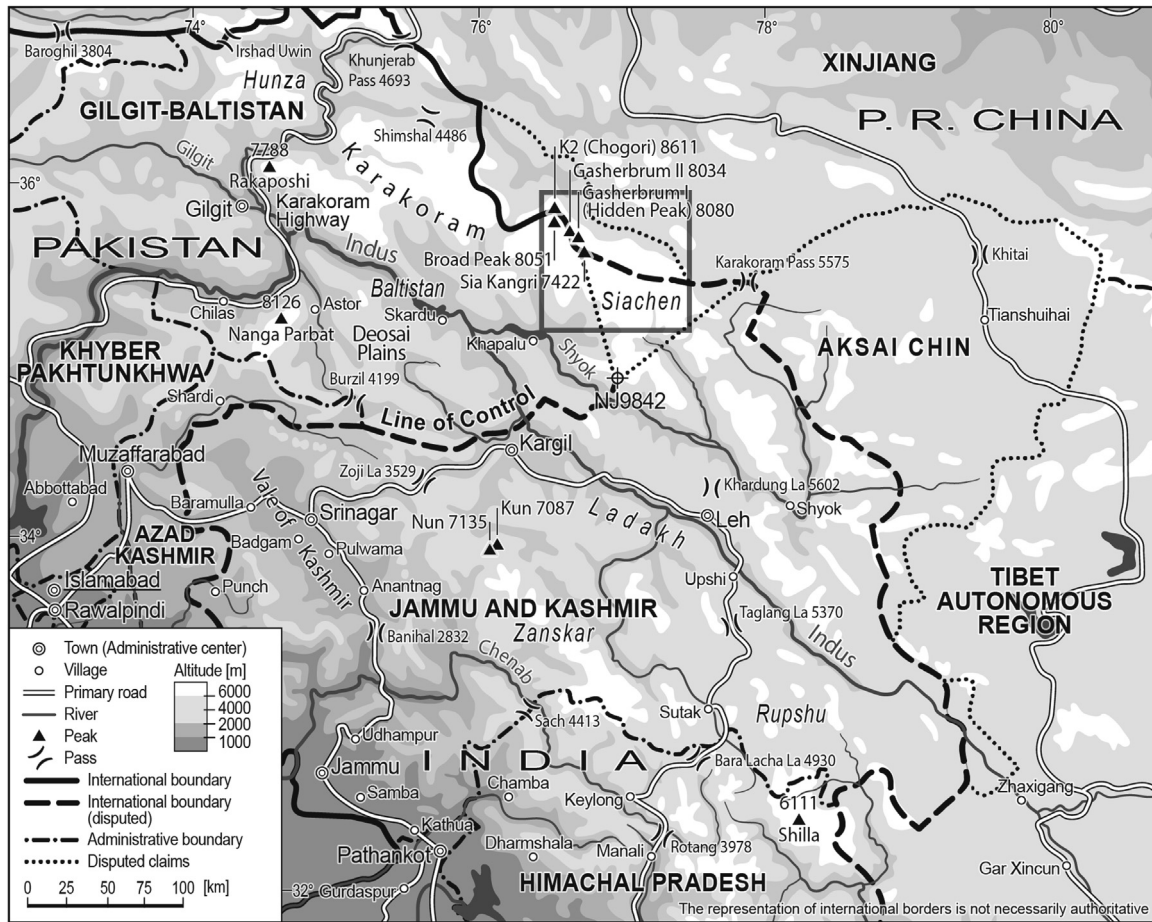


Fig. 2. The location of the Siachen glacier showing the physical terrain, overlapping boundary claims, and de facto borders of India, Pakistan and China. The grey square marks the area covered by the satellite image in Fig. 3.

Geographic magazine reporting on an Indian mountaineering expedition (Khan, 2001, p. 224).

As per the China–Pakistan border agreement of 1963,⁶ the boundary in the area near the Siachen glacier runs along:

“the top of the Broad Peak, the top of the Gasherbrum Mountain (8068), Indirakoli Pass [sic] (named on the Chinese map only) and the top of the Teram Kangri Peak, and reaches its south-eastern extremity at the Karakoram Pass” (Bureau of Intelligence and Research, 1968, see Fig. 3).

Importantly, China signed this agreement with Pakistan as the party in control of the area, and Article VI of the agreement states that following a settlement of the Kashmir dispute, negotiations will be reopened if the sovereignty of the area is with India (Bureau of Intelligence and Research, 1968, see also Lamb, 1964). The control of Siachen area by India places the status of Pakistan as the party in control of the area in question, by shifting the presumed India–Pakistan–China trijunction from the Karakoram pass, almost 100 km to the west, near Indira Col. Secondly, if a settlement of the India–Pakistan boundary is reached by extending the LoC up to Indira Col, it would require China to renegotiate this section of the boundary with India. This complex three-way cartographic contest makes Siachen even more intractable, due to the contradiction it creates between cartographic representation and actual control (Fig. 2).

Quite apart from such strategic considerations, and perhaps surpassing it in importance, is the special role that cartography plays in the imagination of the Indian nation itself. After

eschewing ethnic, linguistic and religious bases for identity, if not the sole then certainly the most important determinant of Indian identity is a clearly demarcated space called India. According to Krishna (1994, p. 508), having these boundaries threatened evokes a postcolonial anxiety of being suspended in a status between “former colony” and “not-yet-nation”, which he calls “cartographic anxiety”. Winichakul (1997) speaks of the “geobody” as a creation of, and a condition for the existence of the modern nation. Discussing how the progressive fixing of a boundary on land made the creation of Siam as a nation possible, that author describes how the outline of the map becomes a stand-in for the nation itself, and a “floating signifier” that is always recognisable as a shared national symbol.

In India the outline map has tremendous emotional resonance as *Bharat Mata* (Mother India), that is exploited in political posters, public media and nationalist discourse (Ramaswamy, 2002). Tiny Pakistani postage stamps carried outline maps with Kashmir explicitly labelled as disputed territory, and the Northern Areas (renamed Gilgit-Baltistan in 2009) shown as part of the national territory. Indian outline maps always include the province of Jammu and Kashmir and various disputed boundaries are drawn to the full extent of the Indian claim. This can also explain why some boundaries, such as that with China are always spoken of in terms of a national betrayal (Gerwin & Bergmann, 2012; van Schendel, 2007). This further means that even a cartographic error in a foreign map (Defense Mapping Agency, 1983) can still be experienced as an attack on the geo-body of India itself. One reason for this is the origin of many post-colonial states in the practices of

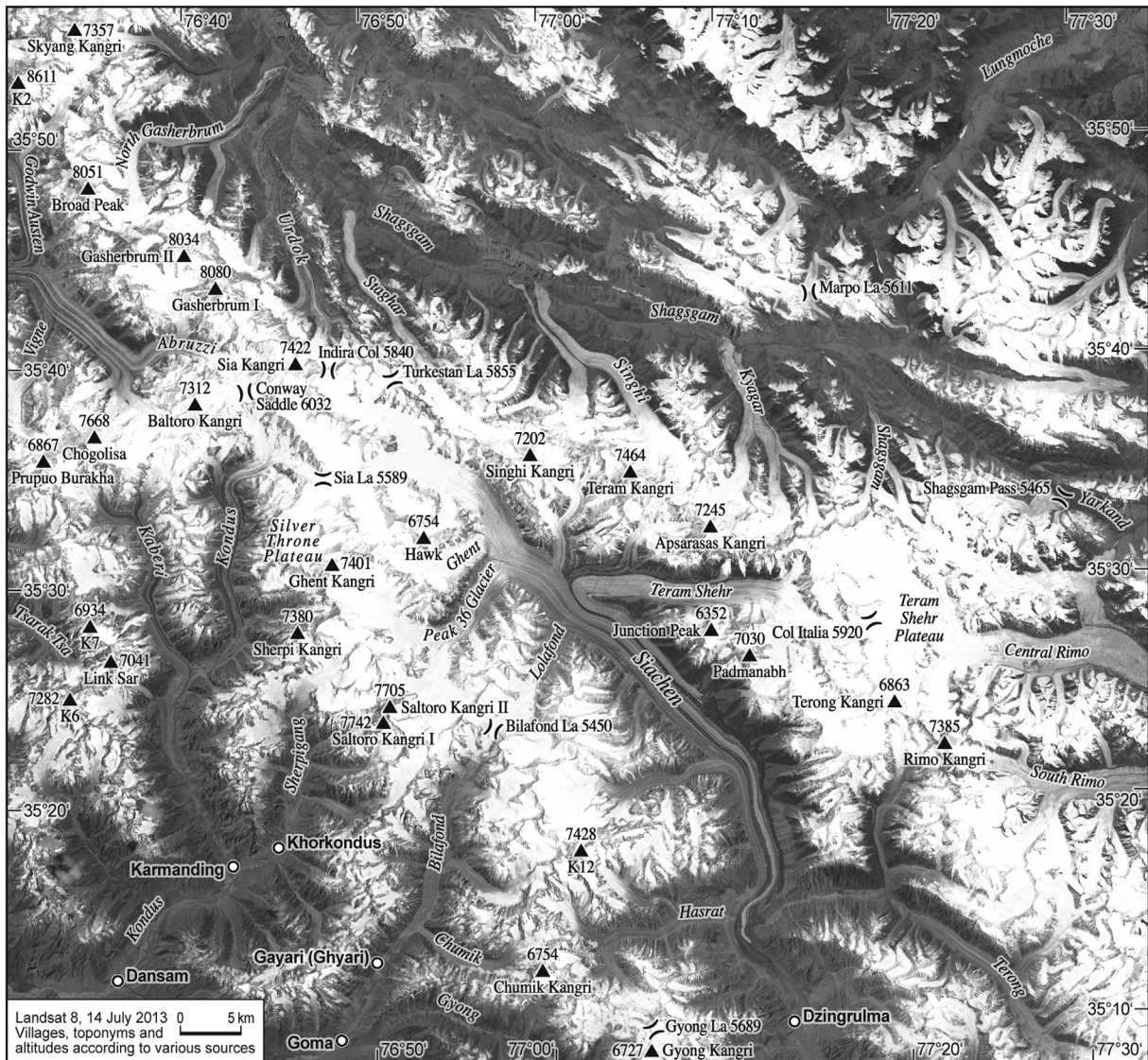


Fig. 3. Satellite image with toponyms, altitudes and villages of area surrounding Siachen glacier. The 71 km long glacier runs diagonally from top left at Indira Col to its snout near Dzingrulma, the last Indian military camp. The Indian Army positions run along the Salto ridge, west of the glacier, along a line connecting Indira Col, Sia La, Bilafond La and Gyong La. The Pakistan Army has camps at Goma and Gyari and access over the Baltoro glacier to the Conway Saddle and glaciers in the southwestern part. The area controlled by China is located north of the ridge from K2 to the Teram Shehr plateau.

colonial boundary-making, as in the case of the Radcliffe line that produced the modern states India and Pakistan, and led to the displacement of millions of people. The continued historical trauma of this partition can be gauged from the metaphors of vivisection, dismemberment and amputation in which it is spoken of (Chatterji, 1999).

Traditionally, the role of both the cartographic anxiety and that of the geo-body were manifested in the repeated mantra, “India is one from Kashmir to Kanyakumari”. However in 1988, in the highly symbolic Independence Day speech, the Indian Prime Minister, Rajiv Gandhi subtly changed this to “India is one, from Karakoram to Kanyakumari” (Kapadia, 2010, p. 100). Siachen had now become part of the Indian cartographic imagination.

Oropolitics: showing the flag on mountaintops

The Karakoram Range, running over a length of around 500 km, forms an extreme high mountain environment. In mountaineering terms it is the area with one of the highest density of high peaks in

the world; 4 of the 14 peaks higher than 8000 m, K2, Gasherbrum I and II, and Broad Peak are located at the uppermost portion of the Baltoro glacier in Baltistan, controlled by Pakistan. At 71.4 km, the Indian controlled Siachen glacier is the second longest glacier outside the polar regions (based on satellite data from 2013, see Fig. 3).

The relative inaccessibility of the Karakoram Range till the 1960s, limited the number of climbers in the area. The construction of the Karakoram Highway (KKH) connecting Pakistan and China via the Khunjerab Pass in the western Karakoram was completed in 1978. This access to a little known region, brought in not just trekkers and climbers, but also film makers whose works aroused further interest in a broader audience (Poncar, 1978). This and the existence of a number of challenging peaks led to a surge in the number of climbers (Isserman & Weaver, 2010; Kreutzmann, 1991). The increased interest of climbers in this area also arose from the fact that all 14 peaks above 8000 m had been climbed by 1964, so that numerous challenging “seven-thousanders” in this area suddenly became desirable for them. Yet

another factor was that in 1974 Pakistan lifted the ban on foreign mountaineering expeditions to the Eastern Karakoram that had existed since 1961. The availability of new roads, and the waiver of royalties on several mountains only increased the number of climbers (Wirsing, 1995, p. 78). Partly due to the conflict itself, the area around Siachen has the largest number of unclimbed peaks in the world, of which the Saltoro Kangri II (7705 m) is the highest (Kapadia, 2010, p. 209).

There is a close link between mountaineering and militarisation of the Siachen glacier (Kapadia, 1999), which has been called “Oropolitics” (Sircar, 1984). However, the present mix of military interests, geographical knowledge, climbing and geopolitics is not new. After the Government of India began accepting proposals for mountaineering in the Himalayas in the 1890s, the geopolitical implications of sending climbers to the Karakoram region placed mountaineers and the colonial government at cross purposes. On the one hand, there was the idea of British explorers serving as representatives of the British Empire in the borderlands, thereby bringing back geographical knowledge and marking out the British frontier and beyond. At the same time, there was the fear of mountaineering expeditions creating diplomatic difficulties with Afghanistan or China (Hansen, 1996). This suggests that mountaineering in areas with disputed claims has never exclusively been a sport, but has had the ancillary function of symbolically enacting border claims, explicitly in case of expeditions by army soldiers, and implicitly through the giving out of climbing permits.

As early as October 1984, barely 6 months after acquiring control over the area, mountaineering teams were invited to go on a joint Indo-British expedition to the area. The first such expedition took place in 1985, receiving logistical support from the Indian army (Venables & Wilkinson, 1986) and included a scientific component (Osmaston, 1986). One member of this expedition, Stephen Venables, had just the year before travelled royalty free in the Eastern Karakoram from the Pakistani side (Venables, 1985), which illustrates the way mountaineers served to enact boundary claims.

The combination of cartographic representation of the area with military mountaineering expeditions, and questions of the right of granting access to what had previously been a tacit no man's land led to the next stage of active militarisation of the area.

Operation Meghdoot: securing the heights

Meghadūta (cloud messenger) is a Sanskrit poem written (c. 400 CE) by Kālidāsa, considered one of the greatest Indian poets, about a message of love carried by a cloud to the Himalayas. This poem served as the code-name of the military operation launched by India to gain control over the ridges adjacent to the Siachen glacier. There was dark humour in the choice of the code-name, as *Operation Meghdoot*, launched on 13 April 1984, consisted of Indian air force helicopters carrying assault troops to the area to obtain control of key ridges and passes. Pakistan had also planned *Operation Ababeel*⁷ to capture the same ridges, but the Indians came to know of it and moved first. The attack of the Pakistanis was unsuccessful as by then the Indians already held the commanding positions on the passes (Musharraf, 2007, pp 68–69).

Even though it has been presented at times as the first military incursion into the area, there had been military activity prior to this. The Indian air force first landed helicopters on the glacier in 1978 (Ministry of Defence, 2014). The Indian army moved a large number of troops on foot to the base of the Siachen glacier in 1983, and they had been trained for several weeks to be able to fight there (Indian Army, 2014). The Indian General in charge of the operation, acknowledged that he had been one of a small group of influential officers who had begun lobbying for an aggressive Indian policy on Siachen already in the late 1970s. However he stated that operation

was intended to be just a show of force, and not the permanent occupation that it later became (Wirsing, 1995, pp. 208–209).

The initial plan was to deploy troops to three passes on the Saltoro range that controlled access to the Siachen glacier, from north to south, Sia La, Bilafond La and Gyong La (Fig. 3). However, after these positions were secured, the two armies began to compete to gain higher ground nearby.

The belief that if one side did not capture a height then the other would, led to the militarisation of the entire ridge-line. This rapidly increased the number of troops required by the Indian army to hold the commanding positions, and made the logistics of the operation even more complex. This large deployment combined with a sophisticated logistic chain created the fear that India might attack the Northern Areas (since 2009 called Gilgit-Baltistan) territory of Pakistan, which ended up escalating the number of Pakistani soldiers in turn (Raghavan, 2002, pp 41–43).

In spite of previous training, the extreme cold and high altitude produced very high casualty figures. Of the 29 Indian soldiers who landed at Bilafond La, one had to be immediately evacuated. Another soldier died on the second day of High Altitude Pulmonary Edema (HAPE), and 21 of the remaining suffered frost bites (Gokhale, 2014). Many of the medical conditions that developed at such high altitude could not even be diagnosed at first, and it was only after 1986 that some of the conditions and ways of dealing with them became known (Anand, 2001). The Pakistani army termed the psychological effect of fighting at high altitude “Siachen syndrome”, describing the progressive change in personality of its soldiers at such extreme altitudes from normal to selfish, then introverted and finally irrational (Ali, 1991, p. 12).

India had been conducting research on high altitude mountain warfare since its defeat in the 1962 war against China, much of which was fought in the Himalayas. As part of this a 200 bed hospital specialised in high altitude medicine, which is today the main hospital supporting Indian troops on Siachen, had been set up in Leh shortly thereafter (Bewoor, 1968). The “High Altitude Warfare School” was established at the same time and created a large cadre of well trained military mountaineers. This also meant that Indian climbing expeditions almost always included army officers (Sircar, 1984; Raghavan, 2002, p. 32). This military presence in fact was one reason why Pakistan was extremely suspicious of Indian mountaineering expeditions that had entered the Siachen area (Khan, 2001, p. 224). Another reason India was willing to station troops around the year, unlike Pakistan, was that it already had soldiers with experience in the extreme conditions of Antarctica.⁸ The preparations for the first year round occupation of the Indian Antarctic research station, Dakshin Gangotri, began in December 1983, with the construction and scientific team primarily consisting of people drawn from the Indian army (Stewart, 2011, p. 384). These same officers were subsequently in charge of organising the training and logistics for the year-round occupation of the Siachen glacier (Sharma, 2001, pp. 209–303).

As early as 1993, the hot war initiated by Operation Meghdoot began to become a frozen conflict. Wirsing (1995) quotes a general of the Indian army summing up the military situation at that time:

“Environmental casualties ... were down dramatically – by 90 percent – to a rate less, than that of an ordinary military unit elsewhere in the country ... there were no fighting related casualties. The economic costs of Siachen were routinely inflated by the media; India ... could bear them indefinitely” (Wirsing, 1995, p. 214, emphases in original).

A total of 846 Indian soldiers have died in the conflict between 1984 and 2012 according to official figures (Ministry of Defence,

2012). However, the casualties have varied over the years and other estimates are that the Indian army lost around 30 soldiers per year till 2003, when a ceasefire began, after which fatalities reduced to around 10 deaths per year, and subsequently to 4 per year (Pabby, 2008). This significant reduction in number of casualties is one reason the Indian Army did not feel compelled to withdraw from the glacier (Thapar, 2006).

This complacency of the Indian Army regarding the stalemate was challenged by the Pakistan Army in the Kargil War in 1999, which took place along the LoC. The possible strategic rationale for this was:

“A Pakistani nuclear capability would paralyze not only the Indian nuclear decision, but also Indian conventional forces, and a bold Pakistani strike to liberate Kashmir might go unchallenged if Indian leadership was indecisive (Cohen, 1984, p. 153)”.

Pakistan had become overtly nuclear in 1998; and at the time of this conflict, India was being run by a minority caretaker government, conditions that fit the above scenario.

The Kargil War was planned to be a “reverse Siachen” so that the Pakistan Army would occupy high mountain positions along the LoC while they were vacated during the winter, preempting the Indian Army’s reoccupation (Tufail, 2009). Although this would be a violation of the Simla Agreement of 1972, in the Pakistani perspective, India had already violated it by militarising the Siachen area. Pakistan claimed to have no control over the fighters, alleging that they were Kashmiri freedom fighters. The use of heavy artillery and identity documents on the corpses of these fighters, made this very unlikely. A taped conversation between the General in charge of the area, and the Pakistan Army Chief, (later President) General Musharraf incontrovertibly established that the fighters were Pakistani soldiers (Swami, 1999, p. 33).

An official Indian government report on the Kargil conflict also noted the aspect of this attack being *Operation Meghdoot* in reverse, but interestingly proposed a response diametrically opposed to that on Siachen:

“[India] must not fall into the trap of *Siachenisation* of the Kargil heights and similar unheld, unpopulated ‘gaps’ in the High Himalaya along the entire length of the Northern Border” (quoted in Nair, 2009, p. 37, emphasis added).

This conclusion perfectly illustrates the dilemma of preemptive occupation of heights and the logistical problems created as a result of this.

***Gebirgskrieg*: military logic from the dolomites to the Karakoram**

Almost a century earlier, a different part of the world had been the site of the highest war. The Dolomites mountain range was the location of the Alpine front between Italy and Austria–Hungary between 1915 and 1918 during World War I which was at the time called the highest war. There are striking similarities between Siachen and the Dolomites. Even though battles in Siachen have been fought at higher altitudes as compared to the Alpine front, it was in a comparable topographical setting. Additionally, unlike the present day, soldiers then were equipped only with woollen coats and scarves, making their experience considerably worse (Thompson, 2009, p. 203). The methods of mountain warfare that developed at the time (von Lichem, 1981, p. 139–142) are similar to those used in Siachen, with the emphasis continuing to be on occupation of heights by small units. Pakistani officers and soldiers

underwent training in mountain warfare in Germany, France and Italy, and international instructors also visited Pakistan to offer training (Cloughley, 2000, p. 291), so there is at the very least, an indirect influence of the Dolomites experience on Siachen.

The war was notable for the large number of deaths due to the conditions created by the physical environment. Heavy snowfall in December 1916 triggered avalanches all along the Dolomites front, causing the death of 10,000 soldiers (Thompson, 2009, p. 204). Other more conservative estimates for the Alpine front suggest at least 6000 soldiers died in one week alone, and at least 60,000 soldiers died due to avalanches over a period of three and a half years (von Lichem, 1983, p. 56). Thompson (2009, p. 204) succinctly states, “... the elements were a third army, one that would kill them all, given a chance”.

The similarities between Siachen and the Dolomites suggest the value of taking the perspective of *Gebirgskrieg*, the unique logic of mountain warfare. The lessons that can be drawn from these are firstly the importance of holding heights, the impossibility of victory and the static nature of the front. The example of the Dolomites suggests that the “frozen” conflict is frozen precisely because of the specific military nature of this conflict. The crucial importance of heights and persistence in the face of natural hazards in this case suggests that the maintenance of the *status quo* is the only achievable military objective, for both sides. Also, the resolution of this conflict is unlikely to be due to victory or a successful offensive, but only as a corollary of other developments. As for instance in case of the WW I, the end of the war by treaty eventually led to the closure of the front.

A senior General of the Indian Army evocatively describes the military strategy in this conflict:

“The Saltoro, consequently, became an example of the ‘hold every height’ doctrine, a linear chessboard of two rows. Each player needed to occupy and defend all his squares, while trying to thwart the other’s moves. The chessboard was different in each square. Loss of a square was unacceptable and the Pakistanis were seeking to impose just that situation on the Indian forces” (Raghavan, 2002, pp. 77–78).

When compared to the *Gebirgskrieg* tactics from the Dolomites, what was new in terms of mountain warfare was the extensive use of helicopters to support positions at high altitudes, and small forward observation units, whose main function was to direct artillery fire. This naturally magnifies the importance of controlling eminent positions (Raghavan, 2002, p. 96). Even one observation post at a height can make a big difference and disrupt logistics of the other side. This is yet another reason why the armies are so hesitant to withdraw from the highest positions, even though the soldiers are placed at the limits of human physiological and psychological endurance.

The draw of heights in military contests is not solely due to practical reasons, the capture of peaks also serves an important symbolic function in terms of demonstrating complete dominance over the territory. In this sense *Gebirgskrieg* is not just warfare in the mountains, but it is characterised by a war *for* mountain peaks. In the Siachen conflict, the best example is that of an observation post on the Saltoro ridge at a height of 6400 m, overlooking Bilafond La. This position was occupied in April 1987 by a team of Pakistani commandos using ropes and ladders to climb a vertical cliff without being observed by the Indians (Hussain, 2012). The prestige of the post was such that it was named “Quaid Post” after Mohammad Ali Jinnah, considered the founder of Pakistan. On the other side, an Indian General called it “unacceptable militarily and an embarrassment politically” (Raghavan, 2002, p. 88). The first Indian attempt to capture this post failed, but in the second

attempt some soldiers made it to the top and the post was captured (Raghavan, 2002). An interesting aspect of this operation is that it was called “Rajiv”, after the Army officer who died leading the first attack. After the capture of the post it was named “Bana Post” after the Indian soldier who led the successful charge and later received the highest military award for it. This set a precedent and various Indian Army post are known by the first names of soldiers to honour and personalise masculine bravery on the mountaintops.

A counterattack by the Pakistanis failed to recapture this post, and the associated loss of lives brought it to the attention of the press, discomfiting the Pakistan Army (Khan, 2001, p. 228). In September 1987, another attempt to capture a position on the Salto ridge by attacking at Bilafond La failed, and caused the death of more than 150 Pakistani soldiers (Kapadia, 2010, pp. 133–135). The symbolic aspect of *Gebirgskrieg* becomes obvious in the domestic aftermath of this loss, when the Pakistani politician Benazir Bhutto took out a march in Pakistan carrying bangles on a plate for Pakistani Generals, taunting them “wear these bangles if you cannot fight on the Siachen” (Kapadia, 1998, p. 25). At the time Pakistan was under military rule and “wearing bangles” was a cultural signifier for the loss of masculinity and bravery of the dictator General Zia, and of the entire Pakistan Army leadership. In 1988 General Zia died in a plane crash, and Bhutto was elected as the Prime Minister, shortly after which she visited army posts near the Siachen glacier, and even created a fund for “the widows, the orphans and the physically handicapped of Siachen” (Bhutto, 1989).

The symbolic importance of holding the heights can also be seen in the case of the Dolomite front for the Col di Lana (2462 m). From 1915 to 16 Italian troops repeatedly attempted to dislodge Austrian troops from its summit. It is estimated that around 18,000 Italian soldiers and a similar number of Austrians died on this mountain in these attempts (Keller, 2009, p. 263). Eventually, the Italians captured the peak after mining under the Austrian positions (Anonymous, 1916; Thompson, 2009). The resulting explosion was so large that it permanently disfigured the summit, leaving behind a massive dual crater. This was no isolated incident; the symbolic importance of removing enemy presence from the peaks (regardless of military necessity) was such that this tactic was used 34 times on the mountain fronts of Tirol alone (Ilyés, 2010, p. 228). Another example is the ascent of Elbrus (5642 m) in August 1942, during WW II. In the Battle of the Caucasus, a mountaineering team of German soldiers climbed this mountain to plant the German flag as a way of asserting a symbolic victory, even though the ascent served no practical military purpose (Bauer, 1976). In turn, a team of soldiers of the Soviet Union was sent to make the difficult ascent in April 1943, in order to remove the German flag from the summit and reclaim it by flying their own flag (Anonymous, 1943).

Banal geopolitics: heroes, martyrs and bureaucrats

Although thirteen rounds of diplomatic negotiations on Siachen have taken place between India and Pakistan, the issue remains unresolved. This is partly because of the military logic of *Gebirgskrieg* coming up against the political desire for a settlement. General J.J. Singh of the Indian Army was widely credited with wrecking a round of negotiations over Siachen, by stating the army's opposition to it in public (Wikileaks, 2006). Taking a public stance in opposition to civil policy was until then something unheard of in the Indian case; usually discontent with government actions was kept private and the Indian Army followed the political directions given to it (Ray, 2008, pp. 141–142). The rationale for this opposition given by General Singh was:

“In 2005, my first year as chief, we suffered just two fatalities, way lower than a similar formation in a peace-time location in the plains would on average ... There was, simply no reason to give up this position of advantage unless the AGPL [Actual Ground Position Line] was authenticated. If Pakistan did not authenticate the AGPL, it could cross it again — and we'd have to send up our boys to die” (Swami, 2014).

The next serious chance for resolution came following the remarks of the Pakistani Prime Minister and Chief of Army in the aftermath of the Gyari avalanche of April 2012. This was followed by a statement by the Defence Minister in the Indian parliament that the government was pursuing “meaningful talks” on Siachen. Just two weeks later, the cover story in the leading English magazine in India asked, “Could the PM gift away to Pakistan what Army has won?” (Sawant & Aroor, 2012). While refusing to take a public position this time, the Indian Army had hit the “panic button” (Sawant & Aroor, 2012) and quoted retired Generals, and “leaks” about the views of the serving chief, on the importance of holding on to the heights in Siachen. The article included allegations that the Prime Minister was willing to sell out the strategic heights in return for a Nobel peace prize. Any chances of a political resolution from the Indian side were effectively finished from then on.

This episode not only brings out the unusual lengths to which the Indian Army was willing to go to avoid withdrawing from its positions in Siachen, but also its ability to influence this decision points to the changing civil-military relations in India. Siddiqua (2011) ascribes this change, amongst others, to the emergence of an aggressive domestic public and diaspora; the involvement of the Indian Army in internal security and the increasing ignorance of Indian politicians in military matters, due to which they are dependent on the Army for advice. The aversion of politicians to negative publicity provides the Army another way to maneuver for influence through direct appeals to the domestic public. Dasgupta (2001) however proffers an overlooked dynamic that is equally, if not more relevant, which is the changing balance between the Army and the bureaucracy. The subservience of the Indian Army to political control has been exercised through civilian bureaucracy, and traditionally it has had much more influence compared to the Army. However, due to the emotive appeal of Siachen, the Army managed to break out of this inferior role to gain unprecedented access to the political leadership. The defining moment of this change is perhaps when the Defence Minister sent three bureaucrats to Siachen for “familiarisation with the conditions” under which the Army operated, as punishment for blocking their request for snowmobiles (Joshi, 1998; Popham, 1998). Following this, equipment was never denied to troops at Siachen, “but this exceptionalism remained limited to Siachen” (Thapar, 2014).

As this is not the only conflict the Indian and Pakistani armies are participating in, and other deployments can be much more dangerous, the special appeal of Siachen requires examination. As an example, the counter-insurgency duties of the Pakistan Army in Waziristan or that of the Indian Army in Kashmir, are much more dangerous for the average soldier, with a higher number and proportion of fatalities. Considering other examples of public adulation, as for instance in case of the Kargil conflict, the celebration of heroism was temporary, and the soldiers who continue to be deployed at the LoC since then do not evoke quite the same level of passion. A retired General brings out the banal geopolitics around the conflict:

“The ongoing conflict in Siachen has become embedded in the Indian public consciousness as a symbol of national will and determination to succeed against all odds. Siachen has acquired

a sanctity of its own, which is part folklore, part military legend, part mythology, and a substantial measure of national pride" (Raghavan, 2002, p. 2).

Much of the heroism ascribed to the soldiers of both armies stationed in the Siachen region, is because of the extreme topography and physical environment that place them at the limits of human endurance. Even issues related to their clothing and equipment rapidly become politicised national issues in India (Dixit, 2009; Popham, 1998). Popular television series in Pakistan valorise soldiers in Siachen as performing a sacred defence of their "state-under-siege (Rajput, 2005) and a Pakistan Army officer writes of those dying in Siachen as being specially chosen by the Prophet (Ali, 1991).

Periodic statements on territorial inviolability can be seen within the rituals of banal nationalism as part of what Billig (1995, p. 96) calls the "rhetorical reaffirmation of the national topography". An excellent illustration of the way the discrete symbols of "banal nationalism" are brought together to produce a "banal geopolitics" can be seen in a popular performance of the Indian national anthem near the Siachen glacier (Anand, 2014). This video produced by the Indian Army, shows the entire apparatus that supports the Indian positions: logistics helicopters lined up in a row; artillery pieces used by the Indian Army; officers and soldiers in camouflage and climbing gear, roped together to avoid falling into crevasses; and a solitary soldier unfurling an outsized flag on a high ridge in slow motion while snow gusts around him.

Interestingly, a video released only a few days following the Gyari avalanche by the public relations branch of the *Pakistan Armed Forces* (2012), sought to reframe the disaster within a "standard narrative" of martyrdom. Beginning with a soldier saying goodbye to his mother, it shows soldiers training, praying next to the national flag, playing cricket on a glacier, learning about battlefield positions. They are told to be alert about only two things: the weather and the enemy, however a death due to *either* of them is to be embraced as martyrdom. This is followed by the closing image of an advancing avalanche. In contrast with nuanced debate within Pakistani media which included questions about the "senseless deaths" of soldiers and the very rationale for their deployment (e.g. Gauhar, 2014; Shah, 2012); this framing banalises their deaths as a sort of "everyday martyrdom". A recent visit by India's Prime Minister Modi to mark the festival of Diwali with a visit to troops at the Siachen glacier, on the way to inspect flood damage in Kashmir (Pandit, 2014), can be seen as completing the restoration of banality to this conflict.

The relation of affect and the vertical can be seen in multiple practices that are involved in human presence at such heights and at such places. What is *felt* at this height is an inseparable mixture of the physiological response to the environmental conditions and emotional response to a military landscape. A soldier at this height may be feeling feel cold, brave, exhausted, bored, scared, light headed, depressed, perhaps unknowingly in the throes of a cerebral oedema or a frost bite. The physiological aspect of emotion is here especially prominent. The mountaineer's presence is naturally also inexplicable without an inclusion of affect – why go to the summit at all? The mountaineers' and soldiers' feelings that are produced through their embodied presence, also offer a pointer to the disembodied presence of politicians, citizens, family at these heights which they experience vicariously as wonder, pride, envy or fear. The altitude of this landscape is key to the emotional experience of it; had Siachen not been located at the vertical limits of the human physiology, the affect would have been much less significant.

Although there has been a broad acceptance of the need to disengage the two armies and demilitarise the glacier in diplomatic

negotiations, the stumbling block is recording the existing positions of the Indian side. The proposed demarcation line called the 'Actual Ground Position Line' (AGPL) follows Indian positions on the Saltoro ridge. The Indian side, especially the Indian Army, argues it is necessary to mark the positions they have tenaciously held on to at tremendous cost, to prevent Pakistan from occupying the heights as soon as they are vacated. The Pakistani side refuses to do this as any points marked on the ground might give Indians a legal claim to an area they have occupied in violation of the Simla Agreement. There are Indian claims that this refusal is due to the fact that marking the positions would expose the Pakistan Army to ridicule by showing that they have never fought on the glacier. A General of the Indian Army makes this stance very clear by pointedly referring to the *Saltoro* conflict to emphasise that the armies are facing each other at the Saltoro Ridge and not on the Siachen glacier (Raghavan, 2002).

The official legal justification for the alignment of the AGPL, apart from the brute fact of its military reality, is given as the necessity to follow the watershed principle in marking the boundary, keeping in mind the Karachi Agreement's statement of the CFL running "thence North to the glaciers". The watershed line running North from point NJ9842 to the Indira Col is almost identical to the currently held Indian positions on the Saltoro Ridge. A retired Indian Army officer questions this logic, as the CFL also called for a separation of at least 500 yards between the ground positions of the two armies. This separation would require the Indian Army to move down from the heights, even if the AGPL is marked along the Saltoro Ridge, and take away their advantage over Pakistani positions below. That author calls the AGPL legally indefensible as the LoC runs across several ridges elsewhere, without any mention of the watershed principle whatsoever (Nair, 2009). The tortuous justifications are in many ways reminiscent of the justification for holding on to Golan heights by Israel as the necessity for "defensible borders" (Allon, 1976).

There have been several proposed solutions that emanated from non-governmental actors and Track II diplomacy. All of these are based on a sequence of disengagement, demilitarisation and monitoring followed by alternative use of the vacated area. Some of the most carefully researched proposals were produced at the Sandia Labs, with the input of retired army officers and diplomats from both India and Pakistan. One such proposal was for the creation of a Siachen Science Centre (SSC), that would serve as an international high altitude research centre, thereby replacing military troops with the presence of scientific research teams (Biringier, 1998). The legal precedent for this would be the Antarctic Treaty of 1959 which would offer the basis for complete demilitarisation, international scientific presence and suspension of all territorial claims. A later derivation on this formula, emphasised joint monitoring of the demilitarised zone by India and Pakistan, with the SSC as a possible extra (Tahir-Kheli & Biringier, 1998).

The Siachen Peace Park (SPP) is an idea about creating a trans-boundary peace park, especially to restore the environmental integrity of the area which had been severely degraded by the amount of garbage and military supplies created by the occupation of the glacier. This solution would allow both countries to withdraw honourably, without allegations of defeat; it would not prejudice the position of either country on Kashmir and it would stop further degradation of the area (Ali, 2002). This proposal was pushed forward largely by mountaineers familiar with the area, and was preceded by a joint India–Pakistan expedition to climb the Mönch in the Swiss Alps. In India, this proposal faced hostility from the bureaucracy, though the reaction of the army was sympathetic (Kapadia, 2004). The establishment of trans-boundary protected areas is indeed a common response to interstate military disputes, however the evidence suggests that they are less likely to be set up

in conflicts such as Siachen, which resulted in fatalities (Barquet, Lujala, & Rød, 2014).

Conclusion

An Indian General states, “we have become specialists at high-altitude fighting – probably the best in the world ... We can tolerate the harsh elements. We have made livable conditions” (Bearak, 1999). An overlooked aspect of the Siachen conflict is its function as a laboratory and training ground for high altitude warfare for the Indian Army. Indeed the infrastructure, training and strategies currently used by it began development following defeat against the Chinese army in the Himalayas in 1962 (Bewoor, 1968). The disputed Himalayan border with China has acquired renewed military significance for the Indian Army, and it is in the process of adding two mountain divisions, more than 20,000 soldiers, to this border. Further, this rapid increase follows a 37 year long freeze on adding troops to this border (Datta, 2010). This is part of the Indian Army's plan to create a “mountain strike corps” specifically dedicated to high altitude warfare against China (Pandit, 2011). In this context of *Gebirgskrieg*, Siachen is now better understood as a training ground for future war in a vertical terrain, rather than a quaint military holdover from a bygone era.

From the Indian side there are no signs that it intends to move away from the glacier, especially from the Indian Army, whose soldiers face the brunt of the physical environment. To the contrary, it appears that true to the military logic of retaining heights, it is actually settling in rather than packing up. An example of this is the laying down of kerosene pipelines over the Siachen glacier to supply soldiers stationed at advance posts. According to a statement in the Indian parliament in 1999, a total of 290 km of pipeline was planned, of which 74 km had been completed by then (Raghavan, 2002). India is also planning to extend its road network to Siachen by 2022 (Gilani, 2011) to match current Pakistani capabilities.

Technological advances introduce a temporal dynamic in the conflict, by enhancing the ability of an army to continue its presence, in an otherwise mostly static battlefield. As early as 2004, the then Indian President, who was previously a senior defence scientist, advocated the use of unmanned aerial vehicles (UAV) in Siachen and recently some UAVs, likely of Indian origin, have indeed been observed over Pakistani positions (Gauhar, 2014). However these are likely to be limited to reconnaissance because currently helicopters are primarily used for logistics, which cannot be replicated by drones. Additionally, the local environment makes flying extremely difficult, and a pilot in a remote location might find it even more difficult to maneuver an aircraft. New types of shelters with solar panels and wind turbines; new types of space heating devices and oxygen enriched shelters have been developed for “improved habitability” and “sustainable deployment” at high altitudes (Salhan, Sharma, Chauhan, & Oza, 2014). These technologies are key to supporting the military rationale of indefinitely securing the heights. The use of geospatial technologies including handheld GPS, mapping of crevasses and avalanche hazards using ground penetrating radar, remote sensing, etc. all help produce a three-dimensional digital representation of the battlefield. This can then be used in the simulation of terrain, placement of combat units and changes in logistics (Shridharan, Kumar, & Pundir, 2013). The use of longer range missiles, and precision guided munitions is difficult due to the topography, and is also unlikely due to the danger of nuclear escalation.

Contrary to the idea that this conflict does not make sense because of where it is, we have argued that *this* conflict makes

sense only *here*. An examination of the ways in which the verticality of this space influences affect, representation and military logic offers a way of avoiding the trap of environmental determinism in understanding the present conflict. Further, this study also reveals the multiple ways in which space mediates the tension between banal geopolitics and exceptionalism. Considering its location at the trijunction of conflicting boundary claims of three nuclear powers, a better understanding of this conflict in all its dimensions is not only essential, but also urgent.

Conflict of interest

None declared.

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Endnotes

² In 1988 India spent 4 times as much on defence as Pakistan, in 2012 it spent 6.27 times as much. As a percentage of GDP the spending declined from 3.6% to 2.5% for India and from 6.4% to 3% for Pakistan in the same period (Stockholm International Peace Research Institute).

³ This is almost the exact alignment of the boundary demarcated in the China–Pakistan border agreement of 1963.

⁴ Agreement between the Government of India and the Government of the Islamic Republic of Pakistan on Bilateral Relations, Simla, 2 July 1972. Ministry of External Affairs, Government of India [http://www.mea.gov.in/bilateral-documents.htm? dtl/5541/Simla+Agreement](http://www.mea.gov.in/bilateral-documents.htm?dtl/5541/Simla+Agreement).

⁵ Agreement between Military Representatives of India and Pakistan Regarding the Establishment of a Ceasefire Line in the State of Jammu and Kashmir, Karachi, 27 July 1949, U.N.T.S. Vol. 81, No. 1076, pp. 273–284.

⁶ “Agreement between the Government of the People's Republic of China and the Government of Pakistan on the boundary between China's Sinkiang and the contiguous areas, the defence of which is under actual control of Pakistan”, signed in Peking, March 2, 1963 available at <http://www.law.fsu.edu/library/collection/limitsinseas/IBS085.pdf>.

⁷ Literally, a flight of swallows. The name is derived from an incident narrated in the *Quran* (Surah 105) in which a flock of birds drops stones to destroy an invading army.

⁸ There is no evidence that this experience included military training, which would be a violation of the Antarctic Treaty System, but the familiarity with extreme weather conditions was instrumental in the occupation of Siachen.

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