

The Lines of Fire: A History of Cartographic Conflict

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Abstract

This article examines the origins and enduring consequences of cartographic boundaries in the Indian subcontinent, many of which were drawn hastily by the British without consideration of ethnic, cultural, or demographic realities. It highlights how treaties such as Gandamak, Durand, and Sagauli, and lines including the Radcliffe, Johnson, McMahon, Pemberton, and others created lasting disputes that continue to fuel instability. The analysis traces the transformation of these boundaries into contentious frontiers such as the Line of Control, Line of Actual Control, and Actual Ground Position Line, underscoring their role in regional crises with Pakistan, China, Nepal, and Myanmar. The article also emphasises how porous borders have been exploited by non-state actors, intensifying insecurity. While India has strengthened border management through infrastructure and security initiatives, the article argues that only diplomacy, confidence-building, and pragmatic cooperation can transform these divisive lines into instruments of peace and shared regional prosperity.

Introduction

The Indian subcontinent in the pre-British era encompassed the present-day territories of Afghanistan, Pakistan, India, Nepal, Bangladesh, and Myanmar. The political delimitation commenced after the second Anglo-Afghan War in 1879, when the British

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signed the Treaty of Gandamak and made the Afghan territory an official protectorate of the British Empire. In 1893, they signed the Durand Line Treaty, which established the present-day official boundary between Pakistan and Afghanistan, thereby, starting the massive battle of lines. The Indian dominion came under British rule post-1818 with the defeat of the Marathas in the third Anglo-Maratha War. In the subsequent period, the British drew boundaries separating Pakistan, Nepal, Myanmar, Bhutan, Tibet and Bangladesh (erstwhile East Pakistan), without giving any considered thought or straightening out any earlier disputes or controversies, thus, straddling India with major political and diplomatic crises. The massive exercise of delimiting the provinces was done cartographically on the map, thereby, creating what could be called as 'Cartographical Confusion'. The British just drew the lines through the continent without understanding the demographic spread, ethnicities, and social and cultural dynamics.

Geography of the Cartographic Conflict

The Radcliffe Line.¹ The present border between India and Pakistan is by far the most contentious border. Sir Cyril Radcliffe was given just about five weeks to decide on the boundary dividing Punjab and Bengal on Muslim and non-Muslim factors. The rough border was already drawn by Lord Wavell, the outgoing Viceroy, in Feb 1947. Radcliffe was to study, recommend, and finalise the boundary within five weeks. He neither had prior experience on the Indian continent nor understanding of the people and their ethnicity. The Radcliffe Line, which was to become the International Border (IB) between India and Pakistan, was always shrouded in mystery in its implementation, process for demarcation, and final announcement. The Radcliffe Line fell short in Gujarat while demarcating the maritime boundary. It left the water channel Banganga, which we know today as the Sir Creek Channel. The Channel, per se, was demarcated as per the Thalweg Principle.² Sir Creek still figures in the list of disputed agendas.

The Johnson Line.³ The present-day Indo-China border is contentious and disputed. The McMahon Line is the so-called final version of the line dividing India and China after many versions that came over time. It all started when a civil servant, WH Johnson, proposed the 'Johnson Line' in 1865, which included Aksai Chin within the Indian borders. Sir John Ardagh proposed a boundary

line along the crest of the Kunlun Mountains north of the Yarkand River. A modification to the Ardagh Line, called the 'Johnson-Ardagh Line', was proposed. The Macartney–MacDonald Line preceded the earlier line as proposed by the Britishers between the state of Jammu and Kashmir and Xinjiang, Tibet representing the watershed between the Indus and Yarkand and Karakash rivers. The Chinese government never gave any response to the proposal. The Indian government believed that, and subsequently, British India reverted to its traditional boundary, the Johnson–Ardagh Line. India, after independence, accepted the Johnson Line as the de facto boundary between India and China, which was not accepted by the Chinese.



The McMahon Line.⁵ The line was supposed to have been the boundary between India and Tibet. The agreement was signed between the representatives of India, Tibet, and China in Shimla in 1914. The line was named after Henry McMahon, who signed on behalf of the British government and Lonchen Shatra, a Tibetan representative. The Chinese neither signed the agreement nor accept the line, as, according to China, Tibet is not a sovereign state and has no right to sign the agreement. India, however, accepts the line as a de facto border.



Map 2: The McMahon Line⁶

Source: Eurasian Times (This line in Italics, non-bold)

The Pemberton Line.⁷ A lesser-known line, less disputed until recently. This is the official border between India and Myanmar. The border was first defined after the Treaty of Yan Dabo in 1826. The border was redefined in 1834, when Kabaw Valley was given to Myanmar (then Burma), and they relinquished control of Assam and Manipur. This delimited line was termed as ‘Pemberton Line’, named after a British Commissioner. Burma became a separate colony of the British in 1937 and gained independence in 1948. The countries also agreed to establish a Free Movement Regime (FMR) to facilitate the common ethnic people to intermingle with each other across the IB without visa rules being applied.

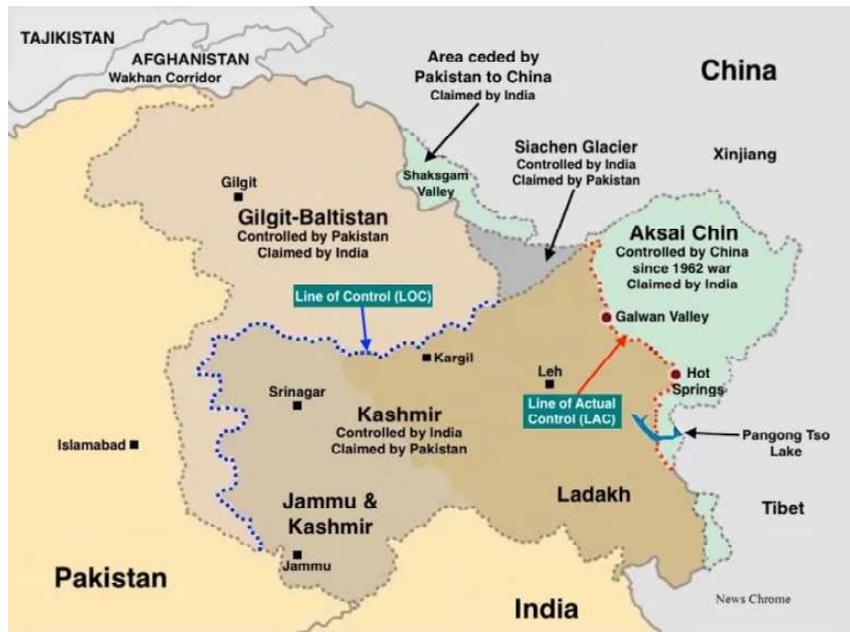
The Treaty of Sagauli.⁸ After the Anglo–Nepalese war, the treaty was signed in 1816. The area included, practically, present-day Nepal. This border was delimited and forms the basis of the present-day border between India and Nepal. The existing territorial disputes between the two, over the Kalapani territory, Lipulekh, Limpiyadhura, and Susta continue.

Line of Actual Control (LAC). This line loosely follows the watershed between India and China along the McMahon Line. This was first proposed by Chinese Premier Zhou Enlai in 1959 but was rejected by former Indian Prime Minister (PM) Jawaharlal. However, this term came to be used after the 1962 Indo–China War as the de facto control line post-war for the entire length of the border with China, from the contentious Johnson-MacDonald Line to the McMahon Line in the east up to Dichu in Arunachal Pradesh.

Line of Control (LoC). Pakistan launched Operation Gulmarg in Oct 1947 to annex the state, as they felt they had been given a raw deal in the Radcliffe Award. The rest is history. The hostilities came to an end through a United Nations (UN)-brokered ceasefire in Jan 1949. The Cease Fire Line (CFL) was thus born.

Actual Ground Position Line (AGPL). The CFL became defunct post the Shimla Agreement, and the LoC serves as the military demarcation between India and Pakistan. The LoC terminates at a map reference point called NJ 9842 in the Ladakh region. As per the Karachi agreement of 1949, signed by the military representatives of both sides, the CFL line terminated at a point NJ 9842, and the agreement is clear to say the line shall run northwards to the Indo-China border. Here lies the Siachen glacier, which became the bone of contention later due to the interpretation of run northwards.

China-Pakistan Treaty of 1963. Pakistan, taking advantage of the 1962 conflict, signed a treaty to cede a portion of the disputed territory to China. A portion of the areas claimed by Pakistan post delimitation of CFL and then the LoC, called Pakistan Occupied Kashmir, was exchanged with the Chinese illegally when Shaksgam Valley was handed over to China.



Map 3: Line of Actual Control and Line of Control⁹

Source: Vision IAS (This line in Italics, non-bold)

Cartographic and Demographic Fault Lines

The British held a vast area under them in the landmass of the Indian subcontinent, spanning from Afghanistan to Myanmar and Tibet to Sri Lanka. The land borders are on fire, a legacy of departing Britishers. The situation in the pre-1947 period and post-World War II (WW II) was tumultuous and overbearing for the British. The Crown believed that it was high time that the colonies be set free. It was getting difficult to manage the provinces.

The Britishers were in the Indian subcontinent for more than 200 years but did not, probably, have an intimate knowledge of ethnicity and demographic patterns. They would have done extensive studies, but understanding the communities eluded them. The decision on the division of India in the period post-WW II was taken hastily. The idea of partitioning had been with the British since the beginning of the century. 1905 saw the partition of Bengal and the same for Punjab, which was considered in 1908. By 1945, the idea of Pakistan was taking root. It was initially mooted in 1933 by Rehmat Ali in London. The Indian Independence Act of 1947¹⁰ got its royal assent on 18 Jul 1947. In Feb 1947,

Mountbatten was appointed the Viceroy of India. The date of Jun 1948, the slated date for Independence, was advanced by Mountbatten to 15 Aug 1947, thereby, giving Radcliffe just about five weeks to draw a line on the map with which he was not familiar, nor was he familiar with the subcontinent. The line was drawn without considering the sensitivities of the local communities. Durand divided the Pashtuns and the Punjabis in the newly created Afghanistan and the Northwest Frontier Province. Radcliffe did no better. He did not address the existing boundary issues with China, Tibet, and Myanmar and accepted them as the de facto border with India, China, Tibet, and Myanmar while drawing the Radcliffe Line. Therefore, he inadvertently created multiple conflict zones.

The land mass, which was so interconnected ethnically with centuries of civilisational history, was divided with a line on the map. The conditions and the situation were getting unwieldy for the Britishers, with political battlegrounds drawn up. Demand for separate states for Muslims was picking up momentum. The regional issue was taxing on Britain's finances, more so just after the WW II. The British government made the decision, probably, on the following:

- Taxing on the budget.
- The British administration felt unable to manage the worsening political situation in the subcontinent.
- Rebuilding Britain was the priority.
- Unfinished border issue with China and Tibet without considering the status of the Johnson Line, MacDonald Line, and their later modifications.
- The decision on the princely states was kept open to be decided on independence. The local and regional dynamics were too complicated, and they probably wanted to avoid getting involved in it.

As if this was not enough, there were ambiguous and open-ended provisions in the Indian Independence Act 1947. The act was preceded by then PM of England Clement Attlee's announcement in Feb 1947 and the Mountbatten Plan of Jun 1947. A few other situational events, probably, also played a greater role in advancing the date from Jun 1948.

- The poor showing of the Muslim League in the 1937 provincial elections.¹¹
- Moves by anti-partition groups are gaining prominence.
- Increasing fervour for a separate Muslim state spearheaded by Jinnah.
- Knowledge of Jinnah's illness (probably).

The Burning Lines

After the ratification of the Radcliffe Award on 17 Aug 1947, both the new countries erupted in mayhem; it was a dark chapter in the history of both countries. Pakistan did not accept the line on many counts. Especially, Kashmir was the bone of contention. They decided to sort the matter out militarily. This was the start point of the birth of lines, the IB drawn by Radcliffe, followed by the CFL on termination of hostilities in 1949, later being ratified and accepted as the LoC in the Shimla Agreement, again with an ambiguous term that gave birth to AGPL past NJ 9842.

The issue of the Johnson and MacDonald and Macartney Line was untouched. The McMahon Line was not discussed. Disputed issues were kept to be decided by India, as ironically, all these issues fell into India's lap upon partition in the form of 565 princely states.

Today, the lines are still burning even after 75 years of independence. It was felt that there needed to be a focused approach to border management at the highest level, considering the burning borders. Several initiatives have been undertaken to include the construction of fences, floodlighting, roads, border outposts, company operating bases and deployment of technological solutions along India's border with Pakistan, Bangladesh, China, Nepal, Bhutan, and Myanmar.

Unfortunately, the border area development was relegated due to a misguided perception about developing the border areas, and these areas did not see much infrastructure development. Lately, in the last decade, the development of infrastructure is seeing the light of day. Surface communication has been developed, which gives an added advantage to the forces to move to the border areas in a shorter time frame, apart from the fact that the administration of these areas has also improved. However,

the situation along all the lines is still not so stable. The IB sector is somewhat peaceful in the western sector along the Rajasthan and Gujarat border till the start of Sir Creek. However, to prevent illegal migration and smuggling, a fence was constructed all along the IB and the LoC sector as an anti-infiltration obstacle system. The LAC is still smarting under disputes and perceptual differences. There have been the Dokalam and Galwan incidents, with the latter still in a stand-off mode despite about 29 rounds of talks. AGPL is, as of now, quiet with the ceasefire holding on since 2003.

LAC in the central and eastern sectors is disputed, with both sides holding on to their perceptions. The IB sector with Myanmar or the Pemberton line in Nagaland and Manipur is again on fire with non-state actors and Indian insurgent groups using the porous borders and provisions of the FMR to promote militancy and terrorism in the states of Assam, Nagaland, Manipur. The decision was taken in Feb 2024 to fence the Nagaland and Manipur, Arunachal, and Mizoram borders with Myanmar to prevent illegal migration and anti-state activities in the region. The move has been resisted by all the states, citing ethnic affinity.

Demystifying the Lines

Today, India is dealing with the unfinished agenda of partition. New Delhi is fighting a battle of lines, which include the LoC, AGPL, Johnson Line, MacDonald Line, McMohan Line, LAC, Nepal, Chumbi Valley and Dokalam, Arunachal Pradesh and its sensitive and disputed areas, Pemberton Line, and open borders of Nagaland and Manipur, and finally the Galwan imbroglio. It is war all around, and India has been dealing with it for the last 75 years. The porous nature of the country's land borders has been misused by non-state actors and powers who want instability in the region. The porosity of the northern borders and the need to strengthen it, ironically, was highlighted way back in the 1950s by the first Home Minister of India, Sardar Vallabhbhai Patel.¹² The extract of the letter highlighting the important issue is given below:

- It is, of course, impossible to be exhaustive in setting out all these problems. I am, however, giving below some of the problems which, in my opinion, require early solutions and around which we have to build our administrative or military policies and measures to implement them.

- A military and intelligence appreciation of the Chinese threat to India, both on the frontier and to internal security.
- An examination of military position and such redistribution of our forces as might be necessary, particularly with the idea of guarding important routes or areas which are likely to be the subject of dispute.
- An appraisal of the strength of our forces and, if necessary, reconsideration of our retrenchment plans for the army in light of the new threat.
- A long-term consideration of our defence needs. My own feeling is that, unless we assure our supplies of arms, ammunition, and armour, we would be making our defence perpetually weak and we would not be able to stand up to the double threat of difficulties both from the west and north-west and north and north-east.
- The question of China's entry into the UN. In view of the rebuff which China has given us and the method which it has followed in dealing with Tibet, I am doubtful whether we can advocate its claim any longer. There would probably be a threat in the UN virtually to outlaw China, in view of its active participation in the Korean war. We must determine our attitude on this question also.
- The political and administrative steps which we should take to strengthen our northern and north-eastern frontier. This would include the whole of the border, i.e., Nepal, Bhutan, Sikkim, Darjeeling, and the tribal territory in Assam.
- Measures of internal security in the border areas as well as the states flanking those areas, such as Uttar Pradesh, Bihar, Bengal, and Assam.
- Improvement of our communication, road, rail, air, and wireless, in these areas and with the frontier outposts.
- The future of our mission at Lhasa and the trade posts at Gyantse and Yatung, and the forces which we have in operation in Tibet to guard the trade routes.
- The policy in regard to the McMahon Line.

Recommendations for Resolving Border Issues

To ensure long-term stability and effective border management, the following measures are proposed:

- Diplomatic engagement and confidence-building arrangements in a time-bound manner.
- Developing the border infrastructure in terms of connectivity, both surface and communication.
- Open border areas for tourism, especially in Arunachal Pradesh and Ladakh.
- Strengthening the security apparatus using technology.
- Border Area Development Projects (BADP) under the BADP scheme are to be speeded up.
- Provide free move facilities through modified FMR¹³ along the Indo-Myanmar border.
- Fence the border, i.e., the IB sector with Myanmar and Bangladesh.
- Resolve issues through talks.

Conclusion

The lines are here to stay. The boundary issues are too complicated, muddled up with historical baggage and perceptual viewpoints. India has shown resolve and strength to deal with the problem maturely, diplomatically, and militarily. It has become a barometer of India's political maturity. Resolving the complex border disputes is crucial for regional peace and progress. These lines, drawn historically without local understanding, fuel animosity, divert vital resources towards defence, and hinder economic cooperation. A future of shared prosperity in South Asia hinges on sustained diplomatic dialogue, mutual respect for sovereignty, and a commitment to finding pragmatic, lasting solutions that transform these contested lines into bridges of understanding. The cartographical conflict continues.

Endnotes

¹ Vikram Bhalla, "On This Day, 76 Years Ago, a Man Who Never Visited India Drew Radcliffe Line That Divided India and Pakistan," *Times of India*, accessed 17 Aug 2025, <https://timesofindia.indiatimes.com/india/on-this-day-76-years-ago-a-man-who-never-visited-india-drew-radcliffe-line-that-divided-india-and-pakistan/articleshow/102797312.cms>

² “Thalweg”, *Merriam-Webster.com Dictionary*, accessed 15 Aug 2025, <https://www.merriamwebster.com/dictionary/thalweg>

³ Maroof Raza, “Looking for Common Ground on the Borderline,” *The Tribune*, January 16, 2025, accessed 15 Aug 2025, <https://www.tribuneindia.com/news/comment/looking-for-common-ground-on-the-borderline-156910/>

⁴ Ipsita Chakravarty, “How British Ambiguity About Frontier Between India and China Paved Way for a Post-Colonial Conflict,” *Scroll.in*, June 27, 2020, accessed August 15, 2025, <https://scroll.in/article/965502/how-british-ambiguity-about-frontier-between-india-and-china-paved-way-for-a-post-colonial-conflict>

⁵ Muskan Gupta, “McMahon Line: 3 Interesting Facts, History & Origin,” *Chegg India*, accessed August 8, 2025, <https://www.cheggindia.com/generalknowledge/mcmahon-line/>

⁶ Image, *Eurasian Times*, accessed 07 Aug 2025, <https://www.eurasiantimes.com>

⁷ Sanjeev Chopra, “India-Myanmar Share an Imperfect, Complex History: Insurgency, Drug Trade Led to Permit System,” *The Print*, February 6, 2024, <https://theprint.in/opinion/india-myanmar-share-an-imperfect-complex-history-insurgency-drug-trade-led-to-permit-system/1955337/>

⁸ Kumari, Priyanka, and Ramanek Kushwaha, “Sugauli Treaty 1816”, *International Journal of History*, Jun 2019, accessed 08 Aug 2025, <https://doi.org/10.22271/27069109.2019.v1.i1a.42>

⁹ Priyanka Kumari and Ramanek Kushwaha, “Sugauli Treaty 1816,” *International Journal of History*, Jun 2019, accessed 08 Aug 2025, <https://doi.org/10.22271/27069109.2019.v1.i1a.42>

¹⁰ “The Indian Independence Act 1947,” *UK Public General Acts (Geo. VI, 10 & 11 Geo. 6)*, accessed 09 Aug 2025, <https://www.legislation.gov.uk/ukpga/Geo6/10-11/30>

¹¹ “Indian Councils Act, 1909” (UK Public General Acts, 8 Edw. 8 & 1 Geo. 5, c. 26), accessed 10 Aug 2025, <https://www.legislation.gov.uk/ukpga/Geo5and1Edw8/26/2/contents/enacted>

¹² “Sardar Patel’s Letter to Prime Minister Jawaharlal Nehru (7 November 1950).” *Friends of Tibet*, accessed 10 Aug 2025. <https://www.friendsoftibet.org/sardarpatel.html>

¹³ Maj Gen V S Ranade. (Retd), “Unquiet Frontiers: Fencing of Myanmar Border,” *Bharat Shakti*, April 10, 2024, <https://bharatshakti.in/unquiet-frontiers-fencing-of-myanmar-border>.