Indian Armed Forces: In Service of the Country
Indo-Pak Conflict of 1965: Prelude

India's military debacle in 1962 had exposed its vulnerability and had also brought down its international standing in the developing world. A year and a half later, Nehru passed away on May 27, 1964 leaving behind a huge political vacuum. It was perceived by Pakistan as a signal for the onset of political instability and turmoil in India and therefore the most opportune time for the military takeover of Jammu and Kashmir.

Pakistan had joined two U.S. led military pacts viz. the South-East Asia Treaty Organization and the Central Treaty Organization in the 1950s. Both were intended to be a bulwark against the Soviet Union. By entering into a military pact with the United States, Pakistan was able to modernize its armed forces rather quickly as compared to India.

Before launching military operations in Jammu and Kashmir, Pakistan, though confident of its military superiority, wanted to test India's military preparedness but at a place far away from Jammu and Kashmir. It also wanted to assess the performance of American weapons, specially the Patton tank, in actual war.

The area chosen by Pakistan for testing waters was Gujarat's Rann of Kutch which is partly marshy land and the rest a saline desert. A creek known as the 'Sir Creek' marks the border between the two countries. Pakistan attacked the Rann of Kutch with a division strength comprising of a squadron of Patton tanks and artillery in April 1965 in 'Operation Desert Hawk'. India was caught completely unawares.
because of its failure to monitor Pakistan's troop movements in Sind province.

**Sir Creek Map**

According to Arjun Subramaniam: “The provocation for the skirmish has a two-sided explanation. While the Indian Army tentatively moved its posts forward towards a small border hamlet called Kanjarkot to oppose what it believed was Pakistani encroachment into Indian territory north of the 24th Parallel, the Pakistani side claimed that their armed action was to evict Indian troops from a new post called the Sardar Post. This they claimed was in Pakistani territory as per historical legacies that had seen agreements signed by the Maharaja of Kutch ceding that territory to Sindhi cattle grazers in the nineteenth century.”

Pakistan army cleverly bypassed the Sardar post and Vigokot post, which were effectively mined and well-defended, and moved towards Dharamsala, a small town located 30 km inside Indian territory. India hurriedly deployed two brigades to stop the advance of the Pakistani army and there were some fierce battles but the Indian army was not prepared for the Patton tanks and artillery fire. Consequently, Pakistan army fared much better in all engagements and held its ground. The situation caused much anger in Delhi and the government of India declared that if Pakistan did not pull back, a widespread military action would be launched forthwith. It was the last thing Pakistan wanted at that time as that would have completely jeopardized its preparation for the main objective of grabbing Jammu and Kashmir through armed invasion later in the year. Therefore, taking note of India’s threat of opening more warfronts and also in view of the international community’s disapproval of Pakistan’s aggression, the latter pulled back and agreed to a ceasefire and truce with India over the Rann of Kutch on June 6, 1965. The ceasefire agreement stipulated thus, ‘Restoration of territorial status-quo on the Gujarat-West Pakistan border as on January 1, 1965, troop withdrawal within seven days and constitution of an international tribunal within two months should the two countries fail to reach a negotiated settlement.’

The ceasefire and the truce caused a feeling of disappointment in Pakistan. It was felt that a great opportunity had been lost of giving India a bloody nose by capturing its territory. On the Indian side too there was a feeling of resentment. The opposition parties, particularly the Jan Sangh, were of the view that the truce should not be accepted and that a retaliation was called for. This was easier said than done because India’s Southern Army Command was not in a position to go on the offensive for want of preparation.

**Vigokot Post**

Operation Desert Hawk was a success as far as Pakistan was concerned. Its military objective of assessing the ground realities had been achieved. It convinced Pak leadership of the tactical, operational and technological superiority of the Pakistan army which impelled them more than anything else to strike in Kashmir. The ground was set for Operation Gibraltar and Grand Slam.

**Reference:**

India's Wars: A military history: 1947-1971 by Arjun Subramaniam

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**What Nehru said….**

It has always to be remembered that every act of retaliation in one country or the other leads to a worsening of the situation and to greater danger to minority elements from the majority because passions are aroused. We get caught ever deeper in that vicious circle without being able to succour those who look to us for help. The only way to get out of that circle is not to do anything which is wrong both in principle and in its practical effects and which worsens the situation on the other side. Above all, it is essential that when such critical situations face us, we should remain calm and not allow ourselves to be rushed by the passion of the moment which does no good to anybody, least of all to ourselves.

*From a letter to Chief Ministers, dated 16 February, 1950.*
Chromosphere and Corona: The upper atmospheres of the Sun

The photosphere, the topmost visible region of the sun was discussed in the May edition of the newsletter (The Sun Explained). In the late 19th and early 20th centuries, astronomers realized that the photosphere was actually one of the three atmospheric layers of the sun, the other two being the chromosphere and corona.

The thickness of the photosphere is estimated to be about 300 km which is 0.0001% of the radius of the Sun and therefore its diameter is taken to be the diameter of the Sun. The photosphere contains hot and electrically charged hydrogen gas. This absorbs most of the light passing through it and one can only see about a few hundred kilometres through it. In comparison, even though the Earth's atmosphere at sea level is 10,000 times denser, yet one can see its surface from the Moon.

Right above the photosphere lies the second layer of the atmosphere of the Sun called the chromosphere, the sphere of colour (Chroma means colour in Greek). It extends from about 3000 km to about 5000 km above the photosphere. The chromosphere is even thinner than the photosphere, which has a density almost 10,000 times less than that of the chromosphere.

This thin atmosphere is normally not visible. It has only been observed during the total solar eclipse. Just after the moon has blocked the photosphere completely behind it, a bright reddish-pink glow of the chromosphere becomes visible. This lasts for less than a second before the moon completely covers it.

The temperatures in the chromosphere may go up to about 3700° C but it gets hotter as it extends away from the sun and increases to 7700° C at the higher level. The chromosphere is not a uniform sphere.

High resolution pictures of the chromosphere taken during the solar eclipse show a fine structure that looks like blades of grass growing upwards. These are called solar spicules or simply spicules.

Chromosphere during the total solar eclipse of 1999

Credit: Thomas Harriot

Astronomers have been successfully observing the chromosphere by creating artificial eclipses. These observations are made using specialised equipment, called coronagraphs placed at the observatories at high altitude and under extremely clear sky conditions.

The first coronagraph was made by French astronomer Bernard Lyot (1897-1952) in 1930 and installed at Pic du Midi Observatory (at an altitude of 2877 meters) in the French Pyrenees on 12 July 1931. He also made the first cinematographic movie of solar prominences.

Closer to the photosphere, the temperatures in the chromosphere may go up to about 3700° C but it gets hotter as it extends away from the sun and increases to 7700° C at the higher level. The chromosphere is not a uniform sphere.

High resolution pictures of the chromosphere taken during the solar eclipse show a fine structure that looks like blades of grass growing upwards. These are called solar spicules or simply spicules.

Solar spicules

Credit: Scott McIntosh, Bart De Pontieu, Viggo Hansteen and Karel Schrijver/UCAR.

Solar spicules were discovered in 1877 by Father Angelo Secchi of the Observatory of Roman Collegium in Rome. He was an Italian Catholic priest, astronomer and director of the observatory at the Pontifical Gregorian University (then called the Roman College) for 28 years. He was also one of the first scientists to state authoritatively that the Sun is a star.
Spicules are actually plasma jets. Plasma in physics is the state of the material that are conductors of electricity. These spicules are about 500 kms in diameter and move upwards at a velocity of 20 kms and last for about 15 minutes.

The third and outermost atmosphere of the sun is called the corona, originating from the Latin meaning 'crown', which, in turn, was derived from the ancient Greek korone, meaning 'garland' or 'wreath'. This name for the outermost atmosphere of the sun was coined by Spanish astronomer José Joaquín de Ferrer. He had successfully observed two total solar eclipses, one from Cuba in 1803 and the other from New York State in 1806. He used the word 'corona' for the bright ring observable during a total solar eclipse.

Corona is the best feature of any total solar eclipse. People have travelled across the globe just to observe the solar corona during a total solar eclipse.

Early observers thought that the corona is a part of the moon and is only visible during a total solar eclipse. Its features were, however, correctly recognized in 1724 by Giacomo Filippo Maraldi (1665-1729), a French-Italian astronomer and mathematician.

French astronomer Pierre Janssen (1824-1907) after observing the total solar eclipses between 1871 and 1887 concluded that the general shape of the solar corona changes with the sunspot cycle (discussed in the June 2021 issue of the newsletter).

He discovered that the solar corona is uniformly distributed during the solar minima. But, during the solar maxima period, the corona is strongly stretched along the equatorial plane of the sun and there is less corona in the polar region.

Janssen is also recognized for his discovery of the photographic revolver, which helped in clicking multiple photographs in quick succession.

Observations of the solar corona revealed that it is much hotter than the photosphere, its temperature being almost 1 to 3 million degrees.

A natural question that comes to one’s mind is that if the corona is indeed so hot, then why is it not seen during daytime?

This could be because its density is 100 billion times less than that of the photosphere, and it produces about one-millionth as much visible light.

What exactly makes the corona so hot has not been understood clearly. This is a major subject of scientific research and debate among solar physicists. However, the general line of thinking is that induction due to the Sun’s magnetic field and magnetohydrodynamic (moving electrically charged fluid) waves causes this solar phenomenon. It is almost similar to the mechanism of the induction stove in our kitchen.
The state of Chhattisgarh is popular for its rich heritage and culture which is immersed in a plethora of exciting folk dance forms. This is due to the large number of tribes that reside here in harmonious camaraderie. Most of the folk dance forms of Chhattisgarh are performed either as a part of rituals in reverence to local deities or to celebrate the changing of seasons.

Some popular folk dances of Chhattisgarh are:

**Saila Dance**: This folk dance is usually performed before the auspicious festival of Diwali by the men of the Baiga tribe. A group of young dancers go to each house of the village dancing to a musical beat. As a token of gratitude, the villagers give paddy to all those who participate in the dance. The dancers have small sticks in their hands and while dancing this stick is struck next to the stick of the person who is dancing next to him. As they dance, the dancers move in circles in clockwise and anti-clockwise direction.

**Karma Dance**: This dance is typically performed by tribal groups like the Gonds, Baigas and Oraons in Chhattisgarh. It signifies the end of the cold winter and the arrival of spring. Both men and women of the villages participate in the Karma dance. Karam, a holy tree which is worshipped by tribes of Chhattisgarh, has significant ritualistic importance in this dance form. There is even a lead singer in the team of performers for the Karma dance. This tribal dance form is a true unexplored beauty of the region.

**Sua Nacha**: Sua Geet refers to songs sung and performed by women in Chhattisgarh celebrating the time of harvest. Women sing songs using the metaphor of the parrot (Sua) to symbolise their inner worlds. This was a tradition largely performed by Gond adivasis earlier, but is now popular across communities in Chhattisgarh, and seen to represent a regional performative form. The dancers sing and move in a circle, with a symbolic parrot in the centre and are joined by boisterous applause from the audience. Though a bit simple, but the fun, energy and zest with the dance is enough to make this a popular folk dance of Chhattisgarh.
A native of Kolhapur in Maharashtra, Vinayak Masoji was born on 24 January 1897 into a devout Christian family, his father Reverend Shivram Masoji being the pastor of the local church.

In 1919, Masoji enrolled at Sir J. J. School of Art, Mumbai to undergo his academic training and studied there for two years. The art school had the reputation of being the best in the academic disciplines of sculpture and realistic oil painting. Gladstone Solomon was then the Principal while art teachers of high calibre including A. X. Trindade, Agaskar and Rao Bahadur Dhurandhar taught at the school.

Inspired by the ideals of Gurudev Rabindranath Tagore and his newly founded ashram school, Shantiniketan, Masoji yearned to be part of the school, to observe Indian art traditions at close quarters. Masoji gained admission in Shantiniketan at the peak of its halcyon days and adapted fairly quickly to the radically different atmosphere of the ashram. By this time the Bengal Revivalist movement under the leadership of its founder Abanindranath Tagore and his extremely talented pupil Nandalal Bose had already validated its position as the 'nationalist' language of painting.

Desirous to be a part of the nationalist wave, Masoji made conscious efforts to make himself comfortable in the soil of Bengal. For the straightforward, rugged young man from Kolhapur, Shantiniketan was a dream come true. Moreover the Gurudev's towering and awe inspiring presence filled every nook and corner of the place and it was not long before Masoji with his humble, unaffected ways, won the confidence and affection of Rabindranath Tagore.

It was here that Masoji was introduced to the aesthetic possibilities of the graphic medium of woodcut.

Masoji in his lifetime also produced a considerable number of drawings. These included pen and ink sketches of flora and fauna and studies of his immediate surroundings at Shantiniketan. His lines, at times thin and delicate and on other occasions bold and assured, veered more towards the decorative than the academic. An elegant drawing of the Gurudev seated in his study is particularly noteworthy as are the large format drawings of Mahatma Gandhi in sepia and black ink.

Masoji devoted considerable time to painting landscapes. Much like his drawings, the landscapes vary from the small postcard format to large full imperial works. Especially poetic are the miniature format landscapes in pen and ink, capturing with equal ease the shimmering effects of water and the magnificence of cloud laden skies. The miniature landscape format particularly proved useful during his extensive treks to the Himalayas, as also his travels to Gaya, Rajgir, Lucknow and various other places.

Vinayak Masoji passed away on April 29, 1977. The Art Gallery had exhibited this great artist's works as a part of the Indian Masters' Retrospective in 2006-07.
22. Red Fort Complex

The Red Fort Complex was built as the palace fort of Shahjahanabad – the new capital of the fifth Mughal Emperor of India. It is adjacent to an older fort, Salimgarh, built by Islam Shah Suri in 1546, with which it forms the Red Fort Complex. The private apartments consist of a row of pavilions connected by a continuous water channel, known as the Nahr-i-Behisht (Stream of Paradise). The Red Fort is considered to represent the zenith of Mughal creativity which, under Shah Jahan, was brought to a new level of refinement. Each pavilion reveals architectural elements typical of the Mughal style, reflecting a fusion of Persian, Timurid and Hindu traditions. This innovative planning and architectural style, including the garden design, strongly influenced later buildings and gardens in Rajasthan, Delhi and Agra.

A very interesting fact regarding the construction of the Red Fort is that it was started and completed on the same day of the same month (April 16, 1639 to April 16, 1648). It took exactly nine years to build this massive fort. Red sandstone was used extensively to build the fort leading to its popular name.

The strong walls of the fort are about 2.41 kms long. The two main gateways of this fort are Lahore Gate on the west and Delhi Gate on the south. The main entrance is the Lahore Gate. The western gateway is bordered by the arcaded apartments leading to the palaces known as the Chatta Bazaar popularly known as Meena Bazaar in the Mughal times, the shopping paradise for the ladies.

Diwan-i-Aam (Hall of public audience) is a rectangular hall, three aisles deep, with a fascia of nine arches. It originally had a courtyard in the front and was luxuriously ornamented with gold and silver stucco work. This is where the Mughal emperor used to hold public meetings.

Diwan-i-Khaas (Hall of private audience) is a highly ornamented pillared courtyard engraved with many precious stones. It was made for meetings with court members, dignitaries and nobilities. Its marble dice is said to have supported the famous peacock throne taken away by Persian invader Nadir Shah.

Moti Masjid was built later in 1659 by emperor Aurangzeb. Its structure is that of a three-domed mosque carved in white marble.

Further reading at Nehru Centre Library:
Libraries and Pandemics

In 1918, World War I was coming to a close and widespread changes were afoot. Countries were limping back to normal and households were barely surviving. As if this was not enough, a pandemic, better known as the Spanish Flu, swept the globe, killing millions worldwide.

This is when libraries played an extraordinary role. In the western world, many helped people stay informed, entertained and cared for as they disseminated information and resources, and brought their collections to the doorsteps of the neighbouring communities. Till the pandemic struck, public library collections had largely focused on classic literature. However, thanks in part to post-war librarianship during the pandemic, a shift occurred towards useful information and attention was paid to readers' interests and needs.

The pandemic shut down many libraries temporarily. Some in U.S.A. and Europe had existing policies for dealing with quarantined patrons after smaller outbreaks, but very few were prepared for a disease outbreak on such a large scale. International health guidelines from 1921 drafted in the wake of the Spanish Flu explicitly noted the importance of social distancing and closing public spaces. Masks were mandated as compulsory face wear.

At the time, medical research held that paper materials including books and newspapers would harbour contagions from touch and librarians were forced, rather pained to destroy books after they were returned from flu-afflicted homes. Later, though, there was a better understanding when research proved that paper and books were not reliable conductors of the virus. This period also saw the growth of work-from-home schedules.

The 21st century is more technologically advanced. When the COVID-19 pandemic struck, e-book circulation increased dramatically, distance education, online resources and data updation became absolutely necessary for all libraries, big or small. But, in both cases, whether it was the Spanish Flu or COVID-19, librarians were given the impossible task of serving the public without any physical interaction. Only time will tell what, if any, core values will change in the ongoing efforts to connect communities with information.