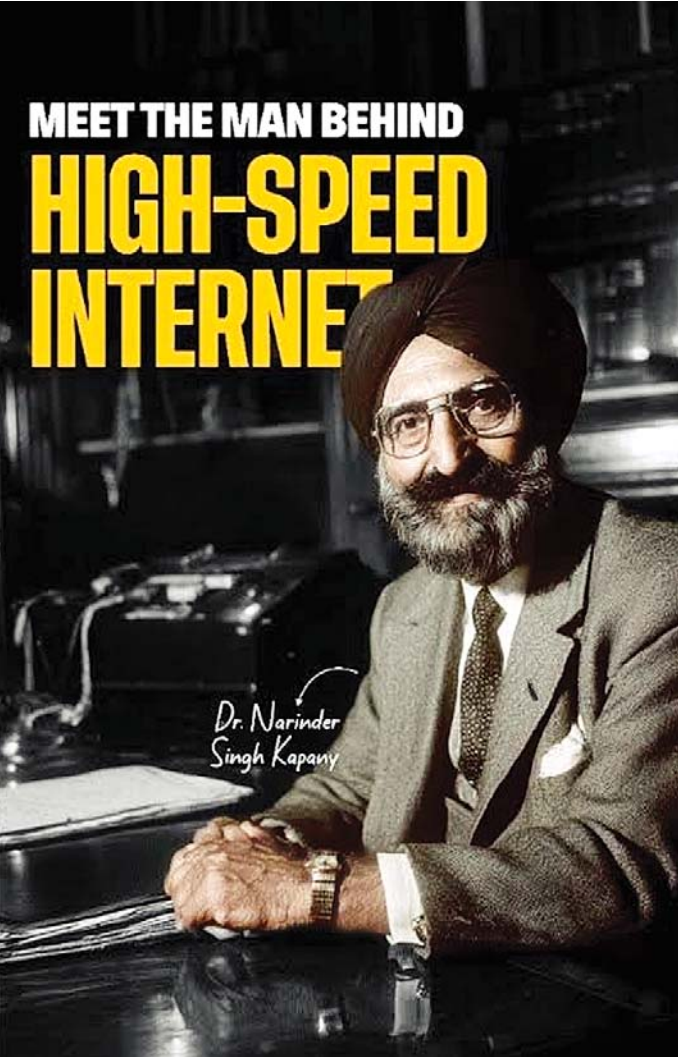


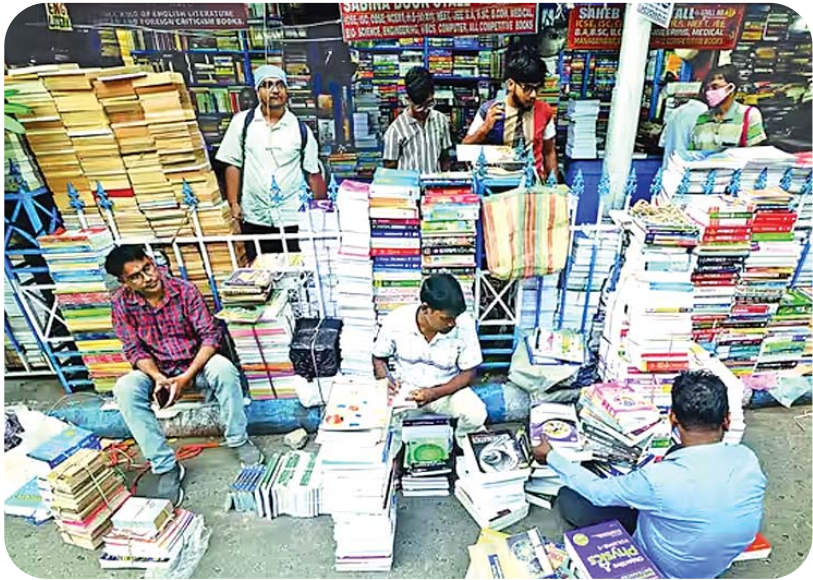
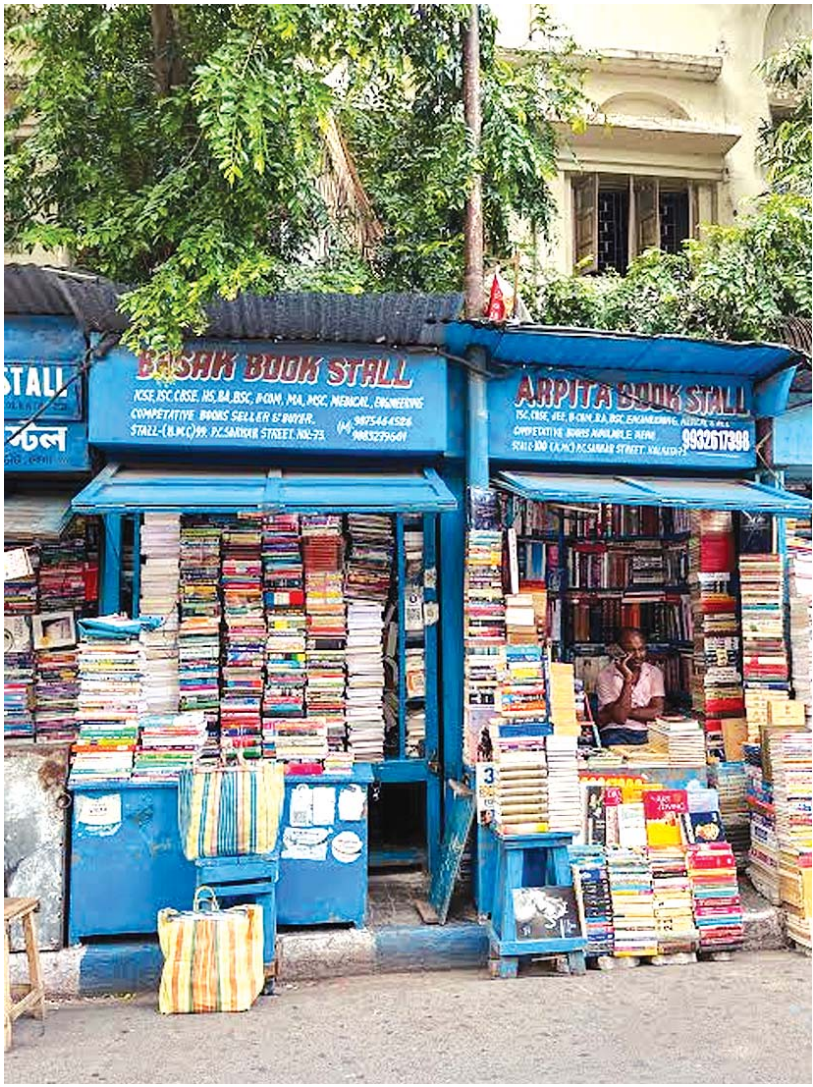
#NARINDER SINGH KAPANY

The Forgotten Pioneer of Fibre Optics

He questioned this idea: if light travels straight, why can't it be made to bend? This simple question would shape his life's work



The story of Narinder Singh Kapany is one of brilliance, missed opportunities, and global impact. Often called the "Father of Fibre Optics," Kapany's work laid the foundation for technologies that power today's internet, medical imaging, and modern communications. Kapany was born in 1926 in Dehradun into a Sikh family with a strong cultural lineage. From an early age, he displayed curiosity about science. As a student, he was taught that light travels in straight lines, but he questioned this idea: if light travels straight, why can't it be made to bend? This simple question would shape his life's work. After completing his early education in India, Kapany moved to London for higher studies. He pursued a PhD where he began working on the concept of guiding light through transparent materials. This led him to explore the principle of Total Internal Reflection, a phenomenon where light reflects entirely within a medium instead of passing through it. One major challenge at the time was that when optical fibres touched each other, light would leak out, making transmission inefficient. Kapany's key innovation was introducing cladding, a protective outer layer around the fibre that prevented light from escaping. This breakthrough made it possible to transmit light over distances with minimal loss. His research was groundbreaking and was published in leading journals, including Nature, bringing him international recognition. However, despite his success abroad, Kapany wanted to return to India and contribute to its scientific development. At the time, Jawaharlal Nehru had a vision of building a strong scientific ecosystem in the country. Kapany even wrote to authorities, seeking opportunities. Yet, due to bureaucratic delays and red tape, no concrete position materialized. The lack of timely support meant India missed the chance to retain one of its most promising scientific minds. Kapany eventually moved to the United States, joining the University of Rochester, where he continued his pioneering research. Later, he became part of the emerging innovation culture of Silicon Valley, founding companies and holding over 100 patents in optics and photonics. Although Kapany's work made fibre optics possible, the Nobel Prize in Physics in 2009 went to Charles Kao, who optimized fibre optics for long-distance communication. Kao's contributions were crucial in reducing signal loss, enabling practical global telecommunications. Still, many believe Kapany's foundational work deserved wider recognition. Beyond science, Kapany was deeply committed to culture and community. He founded the Sikh Foundation and established the first Sikh art gallery in San Francisco, helping preserve and promote Sikh heritage globally. Kapany passed away in 2020, leaving behind a legacy that quietly powers the modern world. In recognition of his immense contributions, he was posthumously awarded the Padma Vibhushan, one of India's highest civilian honors. His life is both inspiring and instructive, a reminder of how curiosity can change the world, and how nations must nurture talent before it finds recognition elsewhere.



Bulbul Joshi

There are places in a city that are merely locations, and then, there are places that become a part of its soul. College Street in Kolkata is one such place. Known affectionately as Boi Para, or the "Book Colony," it is not just a street lined with bookshops. It is a living world of books, ideas, conversations, memories and people. For generations, students, teachers, writers, intellectuals and book lovers have walked along its crowded pavements in search of knowledge and, often, in search of something they did not even know



they were looking for. It's a street that is so much more than just a thoroughfare, think of it as a cultural artery pulsating with literary fervour. The world's largest book market, and Asia's largest second-hand book locality, Boi Para, (which translates to "Book Town" in Bengali), is a vibrant and historic street in Central Kolkata, India. Spanning 900 meters, it stretches from Bidhan Sarani Road to Bowbazar, intersecting MG Road and Surya Sen Street. This iconic street is a melting pot of intellectual activity, bustling bookstores, and architectural marvels.

Geoffrey Moorhouse made an interesting observation about College Street. He wrote that one could wander through many of its shops and discover one genuine and

But College Street is made special not only by its books. It is made special by its people. The booksellers know their trade and their collections intimately. Their small shops often appear overflowing with books, with volumes stacked on tables, shelves and pavements. To an outsider, it may seem chaotic. To a regular visitor, however, there is a strange order in that chaos.

College Street A Beauty That Needs No Makeover

#BOI PARA



pleasurable old edition after another. The booksellers, he noticed, were quite happy with a visitor's company and conversation about books even after realizing that no sale was going to be made. They were perhaps the only tradesmen in the city who would leave you alone if that was what you preferred. For Moorhouse, these booksellers and their world were part of a climate inseparable from Calcutta.

That observation captures the special character of College Street. It is a place where commerce and culture exist side by side. A person may enter a shop looking for a textbook and leave with an old novel. Someone may arrive in search of a particular author and spend an hour browsing through piles of forgotten books. A student may bargain over the price of a second-hand book, while a collector searches patiently for a rare edition. The pleasure is not merely in buying books; it is in discovering them.

College Street has long been associated with education and intellectual life. With institutions such as Presidency College and the University of Calcutta nearby, the area became a natural meeting place for students, teachers and thinkers. Over the years, its bookshops and publishing houses transformed it into one of the most famous literary neighbourhoods in India.

If it's printed, it's probably here

College Street boasts the title of being the biggest book market in the world. Visitors flock here like bees to honey, drawn by an extensive collection of books. From brand new editions and second hand finds to rare archives and even regular textbooks, it's highly likely that any book ever printed would be found here.

But College Street is made special not only by its books. It is made special by its people. The booksellers know their trade and their collections intimately. Their small shops often appear overflowing with books, with volumes stacked on tables, shelves and pavements. To an outsider, it may seem chaotic. To a regular visitor, however, there is a strange order in that chaos.

And then there is the Indian Coffee House, where generations of students, writers, artists and intellectuals have gathered over cups of coffee. Conversations, arguments, dreams and ideas have filled its tables. The culture of adda, the leisurely exchange of thoughts and opinions, is deeply connected with the spirit of College Street.

Many people think that College Street needs an image makeover. Perhaps, they look at its old buildings, crowded pavements, traffic and piles of books and imagine that the

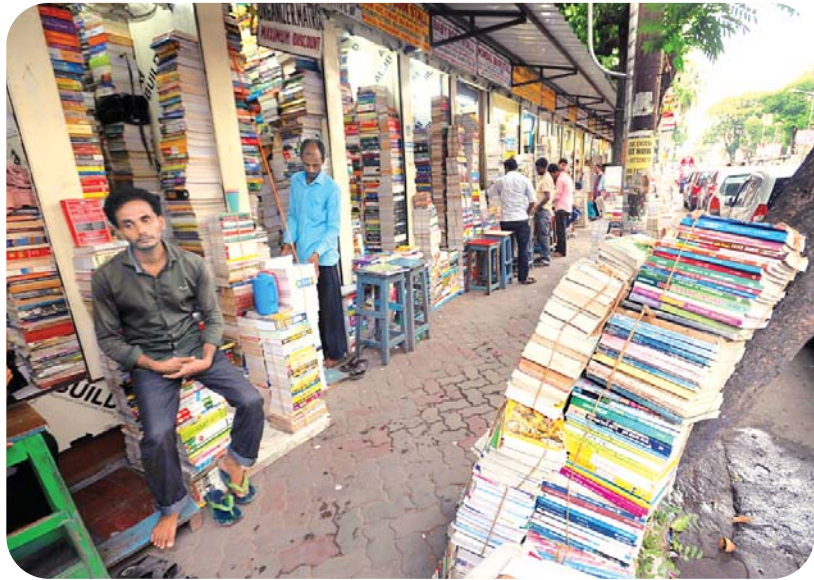
area would be better if it were cleaner, more modern and more polished.

I don't think so. Beautiful things don't need makeover

The beauty of College Street lies precisely in the fact that it does not look manufactured. It has wrinkles, scars and imperfections, but those imperfections are records of its life. Its old bookshops are not simply commercial establishments; they are repositories of memory. Its piles of second-hand books are not merely clutter; they are treasures waiting to be discovered.

Of course, College Street deserves care. Better cleanliness, safer pavements, improved facilities and protection of its historic character would certainly make the experience better for everyone. But improvement should not mean erasing its identity. The aim should not be to transform College Street into another fashionable commercial district. It should be to preserve what makes it unique while allowing it to grow naturally.

In an age when books can be ordered with a click and information can be found instantly on a screen, the experience of walking through a book market has become even more precious. There is something deeply human about picking up an old book, turning its yellowed pages and wondering about the



hands that held it before you. That is what College Street offers, the possibility of surprise. You may find the book you came looking for, or you may discover a book you never knew existed. You may meet a bookseller who knows the history of a particular author, or you may become part of a conversation with complete strangers.

College Street is therefore more than a marketplace. It is a state of mind. It represents a culture of reading, discussion, curiosity and discovery that cannot be created simply by renovating buildings or repainting walls.

Cities inevitably change. Buildings are renovated, shops disappear and new technologies transform the way people live. But some places deserve to retain their imper-

fections because those imperfections are part of their identity.

College Street is one such place. So, does College Street really need an image makeover?

No. Let it remain a little crowded, a little chaotic, a little dusty and gloriously old-fashioned. Let the books continue to spill onto the pavements. Let the booksellers continue to talk to readers. Let students bargain, collectors browse and strangers discover unexpected treasures.

College Street does not need to be made beautiful. Beautiful things don't need makeup.

rajeshsharma104@gmail.com



#GHAR AAJA GHIR AAYE

The Rift That Changed Hindi Film Music

"Lata, you will sing in my next film." With those words, one of Indian cinema's most celebrated musical partnerships was restored

In the history of Hindi cinema, few partnerships have produced as many timeless melodies as that of Sachin Dev Burman (S. D. Burman) and Lata Mangeshkar. Their collaboration created songs that continue to define the golden era of Indian music. Burman once expressed the depth of his admiration by saying that all he needed to create a masterpiece was a harmonium and Lata's voice. Yet, despite their extraordinary musical bond, the two legendary artists did not work together for nearly four years after a disagreement that became one of Bollywood's most talked-about stories.

The disagreement is often linked to the recording of "Pag Thumak Chala" from the 1958 film *Sitaron Se Aage*. After the recording, S. D. Burman reportedly felt that the song could be improved and wanted it to be recorded again. By then, Lata Mangeshkar's schedule was packed with concerts and recordings, making it difficult to arrange another session. Accounts differ on exactly what happened next, but the misunderstanding grew into a professional rift. Burman believed that Lata had become difficult to work with, while Lata had her own perspective on the incident. Whatever the reason, the result was that one of Hindi cinema's greatest composer-singer partnerships came to a halt.

For the next four years, S. D. Burman worked with other talented singers, while Lata Mangeshkar continued to dominate the playback singing industry. Although both enjoyed tremendous success independently, music lovers felt the absence of a partnership that had produced unforgettable classics. The reunion came through an unexpected source, Rahul Dev Burman (R. D. Burman) as he prepared for his debut as an



independent music director with the film *Chhote Nawab* (1961), he approached Lata Mangeshkar to sing his first composition. Respecting the young composer's talent and believing that music should always come before personal differences, Lata agreed.

The song was "Ghar Aaja Ghir Aaye." During the rehearsals, S. D. Burman was also present. The meeting became a turning point. Putting the past behind him, Burman warmly blessed Lata and is said to have told her, "Lata, you will

sing in my next film." With those words, one of Indian cinema's most celebrated musical partnerships was restored.

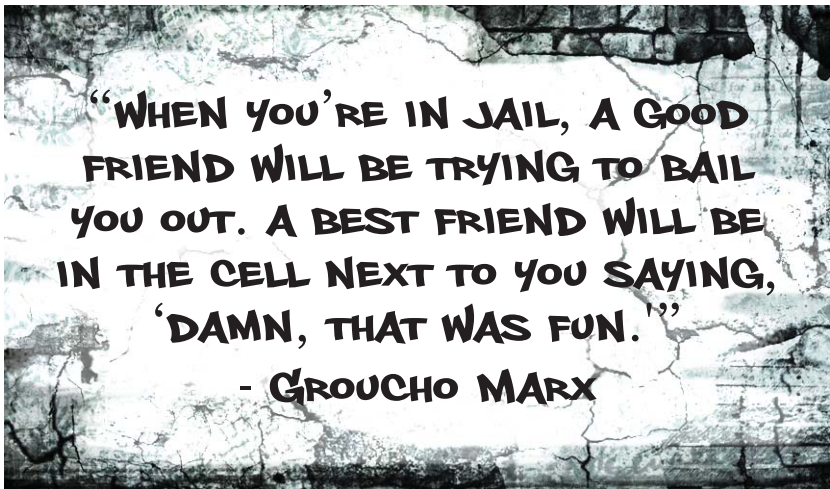
That promise was soon fulfilled. S. D. Burman's next major project introduced another future legend, Gulzar, who made his debut as a lyricist with the hauntingly beautiful song "Mora Gora Ang Lai Le" from *Bandini* (1963), sung by Lata Mangeshkar. The song marked not only Gulzar's arrival but also the successful return of the Burman-Lata collaboration.

Their renewed partnership reached even greater heights with films such as *Guide* (1965). Interestingly, Burman is said to have revisited the musical ideas that had once contributed to their disagreement. Elements associated with the earlier composition eventually found new life in "Saiyan Beiman," demonstrating how great composers often reshape and refine melodies rather than abandon them. Whether entirely intentional or not, it symbolized how music had triumphed over misunderstanding.

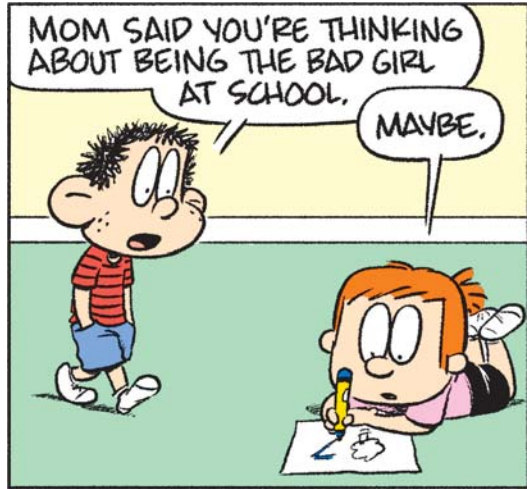
The story of Chhote Nawab carries another fascinating legacy. The film featured the song "Ghar Aaja Ghir Aaye," but it is also remembered for a fantasy sequence in which an old man is transformed into a child. That child actor later grew up to become singer-songwriter Lucky Ali, adding another remarkable footnote to the film's place in Indian cinema.

The temporary separation between S. D. Burman and Lata Mangeshkar could have ended one of the greatest collaborations in Indian music. Instead, it became a reminder that artistic differences can be overcome when mutual respect and a shared love for music prevail. Their reunion enriched Hindi cinema with songs that remain treasured decades later, proving that some musical partnerships are simply destined to endure.

THE WALL



BABY BLUES



ZITS



By Rick Kirkman & Jerry Scott

By Jerry Scott & Jim Borgman