

A graphic novel that brings to life Francis Buchanan's survey of South India

A Journey into the Furnace of History: The Dying Embers of Ancient Iron-Smelting in India by Dr. Sashi Sivramkrishna retrace the journey of the Scottish physician, botanist and surveyor

Updated – April 30, 2025 01:07 pm IST – Bengaluru



PREETI ZACHARIAH



An excerpt from the novel *A Journey into the Furnace of History: The Dying Embers of Ancient Iron-Smelting in India*. | Photo Credit: SPECIAL ARRANGEMENT

Dr. Sashi Sivramkrishna's recently published graphic novel, *A Journey into the Furnace of History: The Dying Embers of Ancient Iron-Smelting in India*, has an origin story that spans nearly two decades. The kernel for this book, which documents Sashi's own attempts to retrace the journey of the Scottish physician, botanist and surveyor Francis

Buchanan through the erstwhile Mysore State, emerged in the early 2000s when he was working on a documentary on the curse of Talakadu.



Dr. Sashi Sivramkrishna | Photo Credit: SPECIAL ARRANGEMENT

“It is an interesting story about the Mysore Maharajas combined with two natural phenomena,” says the Bengaluru-based economist and the chairman of the Foundation to Aid Industrial Recovery (FAIR), a not-for-profit society that focuses on helping the country’s under-managed sectors. This 400-year-old curse, which is believed to have been uttered by Queen Alamelamma, the queen of the once-strong but now crumbling Vijayanagara Empire, when the Wadiyars dethroned her husband and took over Mysore, had three parts to it: Talakadu would become a desert, the river Malangi would turn into a whirlpool, and the Mysore Kings would bear no heirs.

Although he is someone who “could not believe that curses come true...I am quite a rationalist”, he thought of investigating this story, going into the project with an open mind. “Wherever we went, in Mysore and places around it, people generally believed in it,” he recalls. And while there appeared to be some anecdotal evidence, with many of the Mysore rulers failing to beget heirs and having to adopt, “it all seemed very confusing,” says Sashi, who researched the subject, with a colleague, for a year and a half, “getting stuck along the way, because there was very little evidence about all this.”

This graphic novel is a visual journey into the research carried out at the Foundation to Aid Industrial Recovery (FAIR) on traditional iron and steel smelting in India. It repositions iron smelting and the smelter at the centre of a revised narrative of pre- and early-colonial environmental history. In a medieval war economy, the smelter shared a relationship of mutual interdependence with the feudal state as a provider of critical raw material for weapon manufacture. This, however, changed with the advent of the colonial state; interdependence giving way to competition over resources. It is through a multilayered perspective of environmental, military and political history intertwined with the anthropology of iron smelting that we propose a revisionist view of proto-industrial development in India.



POINT OF VIEW

VISUAL NARRATIVES & DOCUMENTATION



"From fire and anvil was wrought the iron that shaped empires and forged the future, but at the cost of forests laid low to feed the furnaces with charcoal, leaving scars upon the earth."

Meet Buchanan

In 2005, as part of his research, Sashi visited the library of the Mythic Society on Bengaluru's Nrupathunga Road, looking through some references, when he came across Buchanan's three-volume survey titled *A Journey from Madras through the Countries of Mysore, Canara, and Malabar*, published in 1807. Buchanan, who became a medical officer with the British East India Company in 1794, had been commissioned to survey South India in 1800, following the death of Tipu Sultan and the British's decisive victory over the Kingdom of Mysore. While going through the survey, he discovered this. "Buchanan had visited Malangi, and he does talk about some curse and states that Talakadu was covered in sand," says Sashi, who went on to make a film about the curse in 2005. "That was my introduction to Buchanan."



An excerpt from the graphic novel. | Photo Credit: SPECIAL ARRANGEMENT

Sashi then found himself delving deeper into Buchanan's work, becoming increasingly fascinated by this survey. "Normally, when you look at history, it is about battles and wars," he says. "But here, Buchanan touches upon people and the day-to-day life in these places. He talks about farmers, agricultural labourers, people weaving blankets, things we don't usually learn as part of our history education." That is when he decided that he wanted to trace Buchanan's journey, travelling back and forth, between Bengaluru and the places chronicled in Journey from Madras through the Countries of Mysore, Canara, and Malabar, trying to understand whether the occupations Buchanan had described continued to exist and in what form.



Channarayanaadurga discussion with the blacksmith. | Photo Credit: SPECIAL ARRANGEMENT

Iron smelting

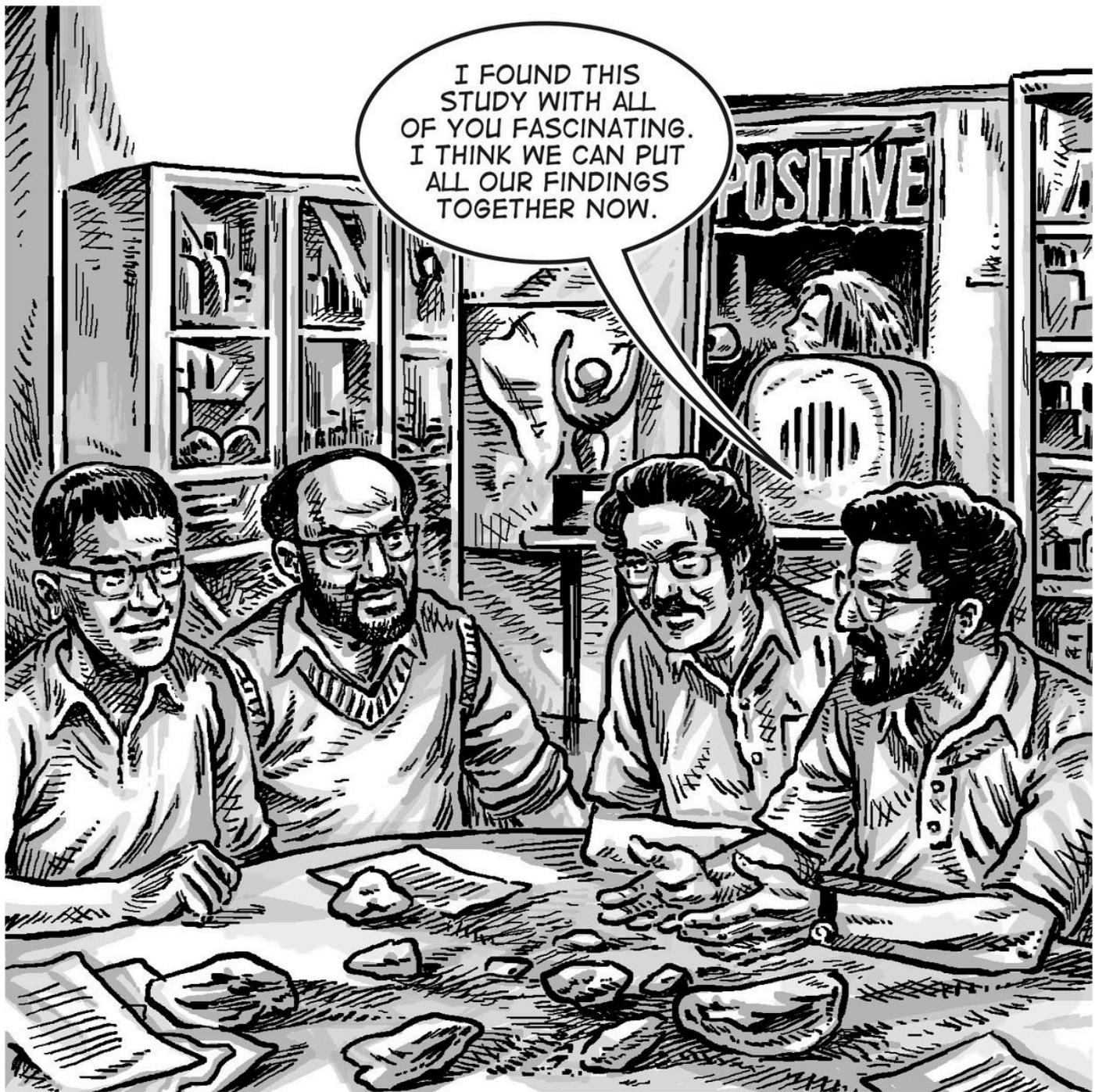
As Sashi, accompanied by other researchers, travelled to places such as Channarayana Durga, Yelladakere, Chikkanayakanahalli and Gattipura, and talked to the people who inhabited them, they became deeply intrigued by one of the occupations described by Buchanan: iron-smelting. In South India, where iron has been smelted since at least 2000 BCE, going by artefacts at very early iron age sites, they couldn't help but wonder why the traditional craft of smelting has largely disappeared, says Sashi, who worked with Mahadev Nayak, Amalendu Jyotishi and GJ Lingaraj on this project. "We met people who told us that smelting would happen even in the 1930s and 40s; they remember their grandfathers doing it," he says, adding that, in India, there is usually a certain continuity of tradition, with things rarely disappearing completely. "So I started looking for answers to why and when iron smelting disappears from this region," says Sashi, who was involved in this research till 2010 and has published it in several academic journals, including *Environment and History* and *Economic and Political Weekly*.

To make his research more accessible and to document his own journey, in 2022, he thought of putting it together into a graphic novel, which eventually became *A Journey into the Furnace of History*, beautifully illustrated by the Kolkata-based illustrator and a graphic novelist himself, Harsho Mohan Chattoraj. "I got in touch with a friend in Kolkata who introduced me to Harsho, a renowned artist in this space," he says. They worked together, with Sashi sending him old pictures, and Harsho slowly creating them, panel by panel, he recalls. "I wrote the whole script, having an idea of what it needed to be, panel by panel. I could visualise the novel because I come from a documentary space," he says of the 210-panel-long novel, which took about two years to create and was officially released in 2024.

A complex history

A Journey into the Furnace of History not only captures Sashi's journey through the region but also offers insights into Buchanan's thoughts, perspectives and experiences, and examines the craft, tradition and legacy of iron-smelting. Starting with a description of an encounter with a blacksmith, Marappa, who takes Sashi and his colleagues to an iron-smelting site a little outside Channarayana Durga, the book touches on other fascinating insights about this tradition, including how Tipu Sultan's ongoing battle with the British upped demand for iron, how tribes like the Asur and Agaria played a massive role in the development of this technology, the origin of the famous Wootz steel or ukku and the surprising relationship between smelting and deforestation.

"From these findings, a larger narrative of iron smelting evolved," states the book's introduction, pointing out that Indian environmental history has missed the scale and importance of proto-industrial development in South India, viewing medieval economies as agrarian, consisting of self-sufficient villages. And yet, the centrality of a war economy in the feudal period and the need for arms and ammunition were too large to be brushed aside, continues the introduction, which goes on to argue that there is a need to rethink our environmental history by "integrating military and metallurgical history, with elements of anthropology, economics and sociology."



Making charcoal

Since iron smelting requires larger amounts of wood to make charcoal, the fuel for the activity, it leads to excessive deforestation, says Sashi, who believes that while many environmental historians attribute the destruction of forests in India to a colonial enterprise, connected to the advent of railways, the reality is a bit more complicated. “Typically, environmental history is not connected to iron and steel, but imagine armies of 50-100,000, carrying a sword, shield...elephants with armour... canons,” he says, pointing out that even making a small canon would require 1000-1500 tonnes of wood to make.

In Sashi's opinion, there is a desperate need to connect the environment, the military, the social and the political history of the nation, and to reach a larger audience, which the graphic novel attempts to do. "We can write technical or academic papers and get them published, but how many people are interested in reading them?" he asks.

Graphic novels, on the other hand, are well suited to convey research and are also very accessible, in his opinion. Besides, he admits, he has personally always loved graphic novels. "I grew up on comics..Superman, Batman, Tintin. Even my knowledge of Indian history started with comics," he says. "Comics have always been able to communicate with me, so I thought if I made one, I could communicate with others."

To know more about the graphic novel or to get a hard copy, log in to the FAIR India website <https://www.thefairindia.org/>

Published - April 30, 2025 09:00 am IST