

Technology Transfer and Dependencies: Media Narratives in Post-Colonial India

Aastha Thakur*

Abstract

India's unique position in the global geopolitics is shaped not only by its recurrent tensions with its immediate neighbours- Pakistan and China, which sometimes lead to armed conflict but also by its strategic engagement with the Global North. Technology Transfer from the Global North, particularly in the form of weapons, has emerged as a central aspect of India's efforts to protect its national interests. These transfers raise essential concerns related to sovereignty and neo-imperialist tendencies. With the rapid spread of Information and Communication Technologies (ICTs) around the world, both mainstream and social media now play a significant role in shaping perceptions of such technology transfers. In this context, it becomes crucial to study the nature of these technology transfers and their media representations to uncover different kinds of prevalent narratives.

This paper engages with three questions. First, how has the technology transfer to India unfolded in the postcolonial period under globalisation? Second, in what ways have these technology transfers led to the production of neo-imperialist tendencies? Third, what narratives are being constructed by the mainstream and social media in India around such technology transfer, especially in the context of India's relations with Pakistan and China? For this paper, technology transfer refers to the transfer of technology to enhance a nation-state's military capacity. The inquiry draws on Wallerstein's World System Theory to understand the imperialistic undercurrents and power differentials in the technology transfers. Stuart Hall's theory of media representation is utilised to analyse how media construct narratives around these technology transfers.

The inquiry utilises secondary sources of data, including Indian newspaper articles, televised debates, and social media platforms such as independent YouTube channels (not affiliated with mainstream media houses), Twitter threads, and online blogs. Critical discourse analysis is employed to analyse

*M.A. (Sociology), Jawaharlal Nehru University, New Delhi, India, aastha95thakur19@gmail.com

the data, focusing on the words, metaphors, and rhetoric used to describe these technology transfers. The study argues that technology transfer from the Global North has entrenched India in core-periphery dynamics, which reflects the legacy of British imperialism. Furthermore, there exist differences in the narratives constructed in mainstream and social media. Mainstream media presents these technology transfers as evidence of national prowess and competitiveness in military strength vis-a-vis Pakistan and China. In contrast, social media produces a fragmented narrative ranging from hyper-nationalist celebrations to critiques of the dependency these transfers create for India.

Keywords: Technology Transfer, World System Theory, Media Representation Theory, Critical Discourse Analysis

India's unique position in the global geopolitics is shaped not only by its recurrent tensions with its immediate neighbours- Pakistan and China, which sometimes lead to armed conflict but also by its strategic engagement with the Global North. Technology Transfer from the Global North, particularly in the form of weapons, has become central to India's efforts to protect its national interests. These transfers raise essential concerns related to sovereignty and neo-imperialist tendencies. With the rapid spread of Information and Communication Technologies (ICTs) worldwide, both mainstream and social media now play a significant role in shaping perceptions of such technology transfers. In this context, it becomes crucial to study the nature of these technology transfers and their media representations to uncover different kinds of prevalent narratives.

Technology has, since the very beginning, played a crucial role in transforming humanity across different time periods. Be it the discovery of fire (striking *chakmak* stones together), the wheel, the steam engine, airplanes, Information-Communication technologies, and now Artificial Intelligence, all were intertwined in a particular context of time and space. Each one of them had been able to make such a huge impact on the trajectory of the world because of their ability to move through spaces and overtake their foundations. Anyone who had control of technology had the power in their hands to shape the world to their interests and vision. This is specifically true if one looks at the history of 'modern technology'. Modern technology stands for the new wave of technology that manifested in the aftermath of the dual phenomena of the Enlightenment and the Scientific Revolution. It was in this time period only that the gap between science and technology narrowed quite a lot. This marked the beginning of a phase where technology began to be developed based on the insights of scientific principles. This wave of 'modern technology' also got introduced to India as well through the European conquest (read colonialism). At that time, technology transfer to India from Imperialist powers was motivated by their own political-economic interests. Post-independence, India did not have much technological prowess. This led it to look for support in newly emerged world powers like the United States of America and the Union of Soviet Socialist Republics. Since then, India has managed to considerably reduce its dependence on foreign assistance. However, dependence continues to exist in the domain of technology transfer. For

this paper, technology transfer refers to the transfer of technology to enhance a nation-state's military capacity. The inquiry draws on Wallerstein's World System Theory to understand the imperialistic undercurrents and power differentials in the technology transfers. Stuart Hall's theory of media representation is utilized to analyze how media construct narratives around these technology transfers.

The inquiry utilises secondary sources of data, including Indian newspaper articles, televised debates, and social media platforms such as independent YouTube channels (not affiliated with mainstream media houses), Twitter threads, and online blogs. Critical discourse analysis is employed to analyse the data, focusing on the words, metaphors, and rhetoric used to describe these technology transfers. The study argues that technology transfer from the Global North has entrenched India in core-periphery dynamics, which reflects the legacy of British imperialism. Furthermore, there are differences in the narratives constructed in mainstream and social media. Mainstream media presents these technology transfers as evidence of national prowess and competitiveness in military strength vis-à-vis Pakistan and China. In contrast, social media produces a fragmented narrative ranging from hyper-nationalist celebrations to critiques of the dependency these transfers create for India.

Theoretical and Conceptual Framework

Wallerstein's World System Theory

Wallerstein draws heavily from Marxian concepts of capital, division of labour, exploitation, unequal exchange, etc. It conceptualizes the whole world as a 'social system' concerning the research, application, and transference of productive and basic technology; the financial mechanisms; and world trade operations (Reyes, 2001, pp. 9-10). WST sees the capitalistic relationships between countries across the globe and gives three types of positions that a country can occupy in those networks: core, periphery, and semi-periphery. The core is a reference to economically and politically well-developed states that historically have controlled vast resources through centralized control centres (Korllos, 1991, p. 130). The periphery are the labor-intensive nation-states whose labor is largely exploited and exist in a state of dependency (Korllos, 1991). Semi-peripheral states are located on Wallerstein's continuum midway between a core state and a periphery state. They are partially developed and less subject to manipulation by the core states (Korllos, 1991). Smith (1993) extends the WST analysis to technology. He argues that differential control of technology and capacity for technological innovation are defining traits of the subordination and dependency in contemporary non-core countries, even when those nations are newly industrialized or semi-peripheral (Smith, 1993, p. 193).

Stuart Hall's Theory of Representations

In this paper, narratives produced by different types of media are understood through Hall's theory of representation. Hall (2020) argues that the event in itself has no meaning unless

it is 'represented'. By representing, he meant the 'communication about the event', i.e., how the event is being communicated to others (language, signs, or images). Media not simply talk about event after the event has happened rather, the event is being imparted meaning simultaneously when media represents it. The media representations are their own form of 'constructions'. Thus, Hall's theory gives a distinct view that any event/phenomenon does not have an inherent meaning to it. Instead, the 'meanings' that people come to associate with such events are the constitutive ones at the time of representation.

Technology

According to Schatzberg (2018), technology is the set of practices humans use to transform the material world, practices involved in creating and using material things (p. 2). It is a product of human intervention on the natural world. He gives examples of stone tools, woven baskets, and other artefacts. His conceptualization also applies to the material practices that emerged in the aftermath of the scientific revolution of the 17th century. Technology has evolved in a continuous manner. No 'modern' technology was built on tabula rasa. All new improvements were built on the prior existing material things. His definition is also compatible with the etymology of the term 'technology'. Technology is made of two root words: *techne* (Greek origin) and *logos* (Greek origin). Thus, going by this, technology seems to give a sense of a system of knowledge that deals with material things. Most often, technology is used interchangeably with applied science. However, there are differences between the two with regard to the differences in motivation, skills, and intensity of engagement with materials (Gardner, 1995, p. 2). The term technology is mistranslated from the German term 'technik'¹ (Feibleman, 1961, p. 11). Because of this, technology came to be misunderstood as material things. Thus, from there technology came to represent both a system of knowledge and material things for which human intervention is a prerequisite. By World War II, three main meanings of *technology* had become established in scholarly discourse: *technology* as industrial arts, as applied science, and as technique (Feibleman, 1961, p. 13). He recognized that technology is always rooted in cultural context, as the people who make it or use it are deeply shaped by the norms, values, and availability of natural resources found in their time-space. For the purpose of this paper, by technology we mean the 'technology' that came up in the aftermath of the Enlightenment period and the Scientific Revolution.

In this paper, the terms 'modern technology' and 'technology' will be used interchangeably. Going by Schatzberg's (2018) conceptualization, technology, here, stands not only for tangible material artefacts but also the know-how of developing and using these material artefacts. Technology, here, is strictly limited to arms or weapons technology.

Research Questions

1. How has technology transfer to India unfolded in the postcolonial period under globalization?
2. In what ways have these technology transfers led to the production of neo-imperialist tendencies?

3. What narratives are being constructed by the mainstream and social media in India around such technology transfer, especially in the context of India's relations with Pakistan and China?

Data and Methods

This inquiry is qualitative in nature and makes use of relevant secondary sources. such as journal articles, newspaper articles, review papers, book chapters, reports of (government and non-government) think tanks, etc. For understanding 'representations' of technology transfer through traditional media, prime-time TV channels like Republic TV, India TV, and AajTak, and newspaper articles from The Hindu, The Times of India, and Hindustan Times are studied. In order to study narratives represented in social media, subreddits, and YouTube channels (not owned by media news channels) are analyzed. Critical Discourse Analysis method is utilized for analyzing the secondary literature.

Analysis and Discussion

Technology Transfer During Post-independence

British conquest of India led to the introduction of new weapons that transformed the warfare landscape. Some notable weapons introduced by the British were the Maxim Gun (the world's first automatic gun), Enfield Rifle, Webley Revolver, the Martini-Henry Rifle, the mountain artillery, the Brown Bess musket, etc. (TOI Lifestyle Desk, 2024). However, this introduction was also not divorced from colonial interests. Satia (2018) argues that 'guns' were at the heart of the European colonization project. India, before the advent of the British, had flourishing arms manufacturing industries. From the Mughals to other kingdoms of Malabar to Bihar, all possessed state foundries and arsenals. European observers also praised the sophisticated Indian designs of Golconda muskets and Wootz steel swords. Once they set their hold in Indian territory, made every effort to strangle local gun manufacture. They blocked Indian access to British gun-making knowledge. Strong prohibitions were put on arms manufacturing. Local manufacturers were limited to repair work. The indigenous technologies of arm making were sidelined. Colonial officials in particular feared that if Indian would acquire knowledge of improved weapons manufacturing, they would soon become Masters of the former (Satia, 2018). The British gave access to 'European weapons' only when they felt that political-economic benefits far outweighed the risks. For instance, the East India Company used arms to obtain trading concessions. In another instance, the British sold guns to Hyder Ali of Mysore as he was fighting the common enemy, the Marathas (Satia, 2018). Thus, there was no genuine knowledge sharing.

Technology transfer to India in the post-independence period can broadly be divided further into two-time frames: from 1947-1991 and the other is from 1991-present. 1991 marks the cut-off point as it denotes the year in which Liberalization, Privatization and Globalization Reforms (LPG Reforms) were introduced in India. The post-LPG reforms period was marked by the opening of the Indian market for global players. This has led to an increase in foreign presence in India in

terms of industry collaboration, outsourcing, foreign investment, and technology transfer. Although India has also made efforts to increase its manufacturing sector but the results remain slow. Post 1991, India saw itself deeply embroiled in the opportunities and risks of global capitalistic flows.

Post-Second World War, the locus of power shifted from Europe to the United States of America (USA) and the Union of Soviet Socialist Republics (USSR, split into Russia and nineteen other countries post-1991). Till 1991, the struggle for asserting dominance in the 'new' global order continued between the USA and the USSR. They still wanted to exercise control over the territories in the rest of the world directly or indirectly. This becomes clearly visible when one considers the instances of interference the USA and USSR pursued in the internal affairs of countries like Vietnam, Afghanistan, Pakistan, Cuba, the Korean peninsula, the Middle East, etc. They masked their political-economic interests under the garb of bringing either 'liberation' or 'democracy' to these countries. In order to spread their influence, they also formed strategic alliances like the North Atlantic Treaty Organization (NATO) and the Warsaw Pact. However, even in those times, there were newly independent 'former' colonies who did not want to get caught up in this power struggle and wanted to forge their own path towards development. India was one among such countries. But it did not stop the new powers from making attempts to control India and its policies.

After independence, British colonizers left the scene². But independence did not eliminate foreign influence in the territory. India had the desire to pursue its own path post-independence. This could be gauged from the fact that India, along with other countries that were former colonies, established the Non-Aligned Movement (NAM). However, this step could not materialize fully due to the practical constraints that India found itself in. The long, exploitative, and oppressive colonial rule left a huge dent in the Indian economy. The agriculture sector was in total ruins as a result of British policies. The share of the population dependent on agriculture was substantially large. The manufacturing sector was only in name. The infrastructure was in shambles. There was mass illiteracy. Colonial rulers never pursued the goal of mass education. Their only objective was to produce workers who could help them out in administering the large territory of Colonial India. On the eve of independence, India neither had that many industries nor the 'skilled' people who could become part of the manufacturing sector. In addition, establishing these sectors from scratch also needed huge financial investment. India's experience as a former colony had taught it the dangers of depending completely on foreign powers. It was clear from the very beginning that India needed to become self-sufficient. However, the road to 'self-sufficiency' was not going to be easy due to the above-mentioned reasons. India, stripped of its own economic model, had to look for a foreign economic model for inspiration. Thus, even without wanting, the circumstances forced India to seek foreign support to embark on the 'path of development'.

Nationalist leadership of those times saw hope in 'modern science and technology'. India's first Prime Minister, Pandit Jawaharlal Nehru, saw in the dams, power plants, etc.- a product of modern science and technology the 'Temples of Modern India' (Arnold, 2013, p. 368). As established

before, most of the Indian population was illiterate, unskilled, and dependent on agriculture. There was a need to make the agriculture sector productive. Land reforms were undertaken. After the first five-year plan, the agriculture sector did grow, but the growth was not enough to make India self-sufficient in food production. The decades of the 1950s and 1960s were quite tough as there was a consistent threat of famine. In the 1960s, India was embroiled in two significant wars with its neighboring countries- China (1962) and Pakistan (1965).

Western technical know-how (designs, models, techniques) became the ultimate to be imitated. This was highly visible in infrastructure that India built after independence. The indigenous interests were abandoned in pursuit of emulating the so-called 'developed' countries. In order to meet growing energy requirements, iron and steel plants were built with assistance from the United Kingdom (Durgapur Steel Plant, 1950), West Germany (Rourkela Steel Plant, 1959), Russia (Bhilai Steel Plant, 1959), etc.

According to the SIPRI report (2024), India was the biggest importer of arms in the world from 2019-23 (Peri, 2024). To understand this trend, one has to go back to India's past. A newly independent India faced a hostile neighbor, Pakistan. In the coming decades of the 1950s, 1960s, and 1970s, India was at war with its two neighboring countries- Pakistan and China. It became increasingly conscious of having strong defense forces, especially after the humiliating defeat of 1962. Today, India boasts arms trade deals with countries like the USA, France, Germany, Russia, etc. With the USA, India has three defence cooperation agreements: the Logistics Exchange Memorandum of Agreement (LEMOA), Communications, Compatibility and Security Agreement (COMCASA), and the Industrial Security Agreement (ISA) (Bureau of Political-Military Affairs, 2025). Among them, ISA was meant for sharing classified information between defense industries. Not much has been achieved on this front due to mutual suspicion and bureaucratic delays. India's role in this defense cooperation is majorly of providing assembling services and providing 'facilities' (Levesques, 2023). India has procured fully manufactured **P-8I maritime patrol aircraft, Apache and Chinook helicopters from the USA. There is no capacity building in the innovation, research, and development side. P-8I was completely made in the USA by Boeing.** India is simply getting fully built submarines. Moreover, all these defense technologies are more than a decade old. Another aspect is access to military facilities for refueling and logistics purposes (Guyer, 2023). India has strategic geopolitical interests in the Indian Ocean. Having access to USA military facilities does nothing for India practically. However, on the other hand, the USA gains a lot from it. As it is interested in countering the influence of China in the region, access to the Indian Ocean will aid the USA for surveillance purposes. Thus, even though the wording of the cooperation presents them as mutually beneficial but deeper look reveals asymmetrical benefits. On similar lines, weapons deals with Russia (Brahmos, S-400) and France (Rafael) are, although worded as 'partnership', there is no parity between India and the other country when one carefully analyses the 'operational' terms and conditions of these agreements (Gupta, 2025). For instance, there is this clause of 'transfer of technology'. A surface-level understanding of this phrase might

give a misguided notion that the support is being provided in terms of capacity building to India. But that is far from the truth. The transfer positions India merely as a passive recipient of the technical know-how and expert assistance from the supplier country, and that too on the terms and conditions in favour of the supplier country. India never becomes the 'owner' of the technology. Not only does the first-time purchase of weapons cost India huge money, but also the subsequent upgradation and innovation can only be done with the permission of the supplier country. The technical know-how cannot be utilized to build a version of these weapons at home.

Foreign assistance in terms of financial investment and outsourcing proved instrumental in getting India back on its feet to some extent. Indian companies got into contracts with their foreign counterparts, bringing sophisticated technology into the country. But this also had its negatives. The kind of technology that India got was 'sophisticated' only in reference to the colonial technological setup it inherited from Britain. But compared to the level of technological advancement of 'supplier countries', these technologies had become obsolete. The 'supplier countries' were in favor of these kinds of technology transfer as it was a good way for them to get rid of old technology and, at the same time, it helped them recover the cost by selling it to countries like India. Another aspect of these transfers is that the transfer of technology is not equal to the transfer of intellectual property Rights. The rights remain with the supplying firms in the Western countries. India cannot undertake any form of research and development projects with these technologies. It will be considered a violation of the agreement. Any changes to be made must be discussed and have to be approved by the 'supplier' firm and the 'country administration'. Thus, India, as a beneficiary of 'technology transfer', is limited to the role of assembler and deployer. The terms and conditions of these technology transfers do not give India much scope to become 'self-sufficient'. From the world-system theory perspective, even though today India has become part of the global market, in terms of technology (discussed above), India continues to be peripheral. India is not the originator of these technologies. It does not have the power to set up rules and regulations regarding them. As mentioned above, Western countries still enjoy authority in matters concerning who gets them, how to use them, what updates to introduce, etc. These transfers are not fostering independent innovation among Indian people but giving them a quick and sub-par fix for their needs.

Media Representations of Technology Transfers in Post-Colonial India

There is also a significant difference in the way arms/weapons deals between India and other developed countries is 'represented in traditional media and social media. The point to be kept in mind is that India is still a country with a considerable digital divide. Thus, not every voice gets the opportunity to get into the social media domain expressing their views. Nonetheless, our concern here is limited to understanding the way 'representations' differ across media platforms.

Traditional media like TV News Channels (Republic TV, Aaj Tak, India TV, etc.) and newspapers (Times of India, The Hindu, Hindustan Times) are unilinear in their way of representation. In the case of TV News Channels, the arms deal is communicated as a matter of

pride on account of increasing the 'military power' of India. The nationalist currents are quite clearly visible. The deal is seen as testifying to the greater influence of India in geopolitical matters. Interestingly, the need for such arrangements is always positioned as for the purpose of 'defence'. The rhetoric draws attention to the vulnerable and attack-prone northern border and coastline of India. The weapons involved are praised for their ability to cause 'maximum damage to the enemy forces', or their ability to stop the other powerful advanced weapons of enemy forces. Frequent mention is made of the threat posed by Pakistan and China (Aaj Tak, 2018; Aaj Tak, 2025).

A comparison is often drawn between the military capacities of India to Pakistan and China to strengthen the discourse among the people that making this arms deal makes us 'safe' against the attack by troublesome neighbors (Aaj Tak HD, 2021). Frequent statements made are '*dragon gya dar*', '*ab China ki khair nhi*', '*Pakistan ko muh tod jawab*', which are common occurrences. Similarly, newspaper articles also propound such narratives. Here also, the rationale for doing such arms deals is increasing the military prowess of our immediate neighbours (Pakistan and China). Another most frequent mention is made of the strong defense capabilities needed to secure the borders (in the north and the south).

None of the traditional media talks about the 'dependency' created by such technology transfer. Instead, the word 'indigenous' is used to convey that such partnerships are aiding India's vision of self-reliance. The newspaper articles covering the weapons deal specifically talk about the aspects of the agreement that are primarily focused on India. For example, 'Transfer of technology' is described as contributing to capacity building for the 'Make in India' initiative (Pandit, 2025). Indigenization is explained as the domestic production of parts of the weapons and then also getting assembled indigenously. One should ask whether the manufacture of parts/components and assembling them domestically advances India's weapon technology prowess, as the intellectual design, production pattern, and innovation continue to come from the supplier country. However, careful reading of these articles reveal that they often do not clarify what 'indigenous' means in the arms deal context. In addition, transfer of technology clauses often have terms and conditions that heavily favor the supplier country.

One does not find that an arms deal leads to making India self-sufficient in weapon technology. Instead, even a small modification in the already bought weapons often requires the upgraded parts to be given by the supplier country. Any innovation in the weapon can not be introduced without 'permission' of the supplier country. Moreover, the actual 'transfer' is limited to the transfer of technical know-how on how to assemble the parts in India. This 'transfer' is in itself an economic deal where India usually buys the 'weapons'. This does not lead to India owning the technology. The weapons are still intellectual property of the supplier country, where more often than not they strictly exercise control over the design and production of the weapon even if the assembly is supposed to happen in India. But such recognition is absent from traditional media. In contrast to one-way (would not be exaggeration if called top-to-bottom representation constituted by traditional media) discourse, social media provides a space for two-way engagement where

people can interact with the views shown. Not only that, they get to actively scrutinize the 'communication' being relayed on such public platforms. For instance, in the subreddit 'r/Indian Defense', one could find different posts about Brahmos. As of today, the latest post is 6 days old (minimum year-old posts are also available there). The posts touch upon diverse topics related to Brahmos ranging from 'in context of peaceful neighbour (referring to Pakistan)', 'on features of Brahmos', 'questioning the limitations of Brahmos', 'popularity of Brahmos', 'Russia's role in developing Brahmos' etc (barath_s., 2025; killa_kuma, 2025; Live-Bird 8999, 2022; Pranav339, 2018; Psychological-Iron81, 2021; WonFont, 2025; WorkOk4177, 2023).

In the same subreddit, there is a post titled '75% of BrahMos components are made in India' (a one-month-old post but now deleted) (Barath_S., 2025). The responses to the post are quite rich in the sense that the claim of indigenization is not merely accepted at the surface level. Instead, people interacting have engaged in uncovering the 'indigenous' aspect of BrahMos and how far it holds water in practical operationalization. But the discussion also goes on to unrelated areas like the capacity of DRDO, Tejas, etc. Interestingly, the subsequent responses hyperlink other sources of information to substantiate what they are arguing for. Here, the consensus is being created through open discussion, which is missing in traditional media. The reason being that on Reddit, anonymity positions people interacting with the post in a par where each one can put their views on the platform. Whereas in traditional media there is a visible power dynamic. The news channels and newspapers are not accountable to people in a way that the way they give meaning to an event does not put them in a position where they need to seek agreement of their representation from people. They simply 'represent', thus subtly pushing a narrative on to the common sense of the recipient. The people are not seen as active agents by traditional media. There is also a sense of dynamism in social media discourse. A few months- or years-old post might still be getting engagement from the people. Thus, the discourse on social media is not only dialogic but also evolves through time with subsequent development. In that way, one could see the discourse evolved here. Diverse 'representations' of technology transfer can be seen.

Conclusion

From the above discussion, it becomes quite evident that technology transfer since colonial times has been used to establish dominance over the other parts of the world. The project of colonialism had arranged the countries across the world in unequal power relations. In the case of India, British colonizers brought numerous kinds of technologies to the territory. However, they destroyed the indigenous technology of the land- the technology that was developed in accordance with the environment, geomorphology, and atmospheric conditions. Instead, modern technology was introduced with policies that were guided by the logic of colonialism. After gaining independence, the locus of power shifted from Europe to the USA and the USSR (this stayed that way till 1991). India, in its attempt to seek support on its journey to gain what was lost after two

hundred years of exploitation by the British, turned to the USA and USSR, France, Germany, etc. On the surface, the technology transfer post-1947 period was presented as a gesture of 'goodwill'; support for rebuilding the former colonies.

But a deeper analysis through World System Theory (WST) of these transfers reveals the hidden motives of Western developed countries. The transferred technology was more often than not in the 'obsolete' category for the Western countries. No latest technology transfers happened. No research and development endeavours were undertaken for technology development in India. India was allowed to become a mere 'assembler' and 'deployer' of the technology. These technology transfers did not include transfer of Intellectual Property Rights. In addition, these technologies followed the Western notion of development that is not compatible with the goal of sustainability. International organizations like the World Bank, International Monetary Fund, etc., in the name of the Structural Adjustment Programme (SAP) are pushing the Western model of development down the throat of other countries. In the name of 'green technologies', these Western countries have created demand for the clean technologies that are being developed by their own companies.

All this technology transfer has integrated India more strongly in the web of capitalistic relations that span across the globe. However, India is merely a participant and a receiver of the rules of the game. It is not the one calling the shots and making decisions about the rules, regulations, and policies of that global capitalistic system. If one has to use World System Theory terminology, then he/she can say that during the colonial period, India was at the periphery. Post-1947 situation has improved considerably but on large scale, India continues to oscillate between periphery and semi-periphery whereas the west continues to be the core. This paper made an attempt to analyse the nature of technology transfer from the West to India through the WST lens across one type of technology- weapons. This inquiry is limited only to India. In addition, the analysis of media representations may be engaged deeply with across diverse forms of social media like twitter, instagram, online blogs etc. Future research might focus on contributing in these directions.

Notes:

¹ To know more about the history of concept of technology refer to Feibleman, 1961, pp. 6-13 (mentioned in references)

² In addition to British, Dutch, Portuguese and French also tried to set up their colonies in India. However, only Britishers were successful in establishing and controlling majority part of Indian territory for long two-hundred plus years.

References

Aaj Tak. (2018, October 6). *Modi-Putin की S-400 Missile System की यारी, US, China और Pakistan पर भारी | दस्तक* [Video File]. Youtube. <https://www.youtube.com/watch?v=IQv5A-gar1s>

Aaj Tak HD. (2021, December 21). *छुश्मन से मुकाबले को तैयार S 400 MISSILE DEFENCE SYSTEM | Russian Missile | Indian Army | Latest*. [Video File]. Youtube. <https://www.youtube.com/watch?v=LfHppdqjMx0>

Aaj Tak. (2025, January 4). AAJTAK 2 | S-400 को लेकर RUSSIA के जबाब से PAKISTAN - CHINA में हडकम्प! INDIA में जश्न | AT2 [Video File]. Youtube. <https://www.youtube.com/watch?v=qgmhuy0Vkzs>

Arnold, D. (2013). Nehruvian science and postcolonial India. *Isis*, 104(2), 360-370.

[barath_s]. (2025, October). 75% of BrahMos components are made in India [Reddit post]. https://www.reddit.com/r/IndianDefense/comments/1npz0jr/75_of_brahmos_components_are_made_in_india/

[brahmos/r/IndianDefense]. (2014, Jul 22). <https://www.reddit.com/r/IndianDefense/search?q=brahmos&cld=ee36247d-8619-4241-a9dd-9d73c4e1fa50&ild=88eb1e81-aa29-4fc4-a88b-6a1705e0c088>

Bureau of Political-Military Affairs. (2025, January 20). U.S. Security Cooperation With India. US department of State. <https://www.state.gov/u-s-security-cooperation-with-india/>

[Electronic_Cause_796]. (2025, May 5). Brahmos has become a nightmare for our piecefool western neighbour. [Reddit post]. https://www.reddit.com/r/IndianDefense/comments/1nymnkg/brahmos_has_become_a_nightmare_for_our_piecefool/

Feibleman, J.K. (1961). Pure Science, Applied Science, Technology, Engineering: An Attempt at Definitions. *Technology and Culture*, 2 (4), 305-317. <http://www.jstor.org/stable/3100886>

[Fdsn]. (2025, October). 75% of BrahMos components are made in India [Reddit post]. https://www.reddit.com/r/IndianDefense/comments/1npz0jr/75_of_brahmos_components_are_made_in_india/ (HYPERLINKS)

Gardner, P. (1995). The relationship between technology and science: some historical and philosophical reflections. *International Journal of Technology and Design Education*, 5, 1-33. 10.1007/BF00763650

Gupta, S. (2025, October 6). India, Russia in talks to acquire 5 more S-400 air defence systems. Hindustan Times. https://www.hindustantimes.com/india-news/india-russia-in-talks-to-acquire-5-more-s-400-air-defence-systems-101759713801091.html#google_vignette

Guyer, J. (2023, June 23). Why the US is selling India so many weapons. Vox. <https://www.vox.com/world-politics/2023/6/23/23770369/modi-india-weapons-arms-deal-drones-jet-engines>

Hall, S. (2020). The work of representation. In *The applied theatre reader* (pp. 74-76). Routledge.

IndiaTV News English. (2020, July 28). First Squadron Of Rafale Jets To Reach July 29; How Can India's New Secret Weapon Counter China-Pak? [Video File]. Youtube. <https://www.youtube.com/watch?v=-A0UkkVdjuY>

IndiaTV News English. (2020, July 27). India All Set To Give Befitting Reply To China; IAF To Induct 5 Rafale Jets On July 29 [Video File]. Youtube.

- https://www.youtube.com/watch?v=jvtiMgPZ_a8
 [killa_kuma]. (2025, October). *75% of BrahMos components are made in India* [Reddit post].
https://www.reddit.com/r/IndianDefense/comments/1npz0jr/75_of_brahmos_components_are_made_in_india/
 Korllos, T. S. (1991). World-system Its Nature and Implications for Social Theory. *International Social Science Review*, 66(3), 128–138. <http://www.jstor.org/stable/41882001>
 Levesques, A. (2023, July 20). US–India defence and technology cooperation. IISS. <https://www.iiss.org/sv/online-analysis/online-analysis/2023/07/us-india-defence-and-technology-cooperation/>
 [Live-Bird8999]. (2022, February 26). *BrahMosMissile's 800 km Range Confirmed; Entire Pakistan Within India's Strike Capability*. [Reddit post].
https://www.reddit.com/r/IndianDefense/comments/1kg4hw4/brahmosmissiles_800_km_range_confirmed_entire/
 Ministry of Defense. (2025, March 7). *Ministry of Defence signs \$ 248 million Deal for procurement of engines for T-72 Tanks for Indian Army*. PIB. https://www.pib.gov.in/PressReleasePage.aspx?PRID=2109146#:~:text=Press%20Release:Press%20Information%20Bureau,****
 Pandit, R. (2025, August 6). *MoD clears big arms deals, including BrahMos, armed drones, worth Rs 67000 cr*. Times of India. <https://timesofindia.indiatimes.com/india/mod-clears-big-arms-deals-including-brahmos-armed-drones-worth-rs-67000cr/articleshow/123127687.cms>
 PTI. (2020, September 3). *India, Russia finalise AK-47 203 rifles deal*. Times of India. http://timesofindia.indiatimes.com/articleshow/77912313.cms?utm_source=contentofinterest&utm_medium=text&utm_campaign=cppst
 Peri, D. (2024, March 13). *India world's top arms importer between 2019-23: SIPRI*. *The Hindu*. <https://www.thehindu.com/news/national/india-worlds-top-arms-importer-between-2019-23-sipri/article67943114.ece>
 [pranav339]. (2018, December 22). *Brahmos Founder & CEO explaining the maneuverability & anti jamming capabilities of Brahmos in it's terminal phase*. [Reddit post]. https://www.reddit.com/r/IndianDefense/comments/1lc6j79/brahmos_founder_ceo_explaining_the/
 [Psychological-Iron81]. (2021, January 27). *Are we relying too much on BrahMos?* [Reddit post]. https://www.reddit.com/r/IndianDefense/comments/1n0vbh4/are_we_relying_too_much_on_brahmos/
 Republic World. (2025, August 19). *India May Be First to Fly France's Upgraded Rafale* [Video File]. Youtube. https://www.youtube.com/watch?v=G_9L1nz_UJE
 Reyes, G. E. (2001). Four main theories of development: modernization, dependency, world-systems, and globalization. University of Pittsburgh. <https://pdfs.semanticscholar.org/e36b/27f7b884e8b5a94d15c1382b99c8416af2ff.pdf>
 Satia, P. (2018). *Guns and British Empire*. Aeon. Accessed on (2025, April 7) Available at <https://southeast.asia.stanford.edu/publications/guns-and-british-empire>
 Schatzberg, E. (2018). *Technology: A critical history of concept*. The University of Chicago

Press.

Smith, D. A. (1993). *Technology and the Modern World-System: Some Reflections*. *Science, Technology, & Human Values*, 18(2), 186–195. doi:10.1177/016224399301800204

TOI Lifestyle Desk. (2024, May 16). Rare weapons introduced by Britishers in India. *TOI*. <https://timesofindia.indiatimes.com/etimes/trending/rare-weapons-introduced-by-britishers-in-india/photostory/108539577.cms?picid=108539590>

Wallerstein, I. (2004). *World-Systems Analysis: An Introduction*. Duke University Press.

[WonFont]. (2025, June 30). First batch of BrahMos missiles produced at the BrahMos Aerospace plant in Lucknow. [Reddit post]. https://www.reddit.com/r/IndianDefense/comments/1o9s48s/first_batch_of_brahmos_missiles_produced_at_the/

[WorkOk4177]. (2023, August 12). Why doesn't Russia use Brahmos Missiles? [Reddit post]. https://www.reddit.com/r/IndianDefense/comments/1o94xdd/why_doesnt_russia_use_brahmos_missiles/