HS7.301 Science, Technology and Society

Assignment 3

Use Langdon Winner's ideas to analyze the nature of EVMs (Electronic Voting Machines). Use various debates (and controversies) surrounding EVMs in India.

Word Limit: 1000-1200 words

Ans:

In his article "Do Artifacts Have Politics?" Langdon Winner discusses the politics of technology and how design, features, and specific aspects of technology can assert certain actors' authority over others. He explains how technologies embody specific values, interests, and perspectives and are "socially and politically embedded". And as a result, the society's political system influences the technologies produced within a society, and the technology, in turn, shapes the political system. In a nutshell, Winner argued that every technology might be neutral in design, but it becomes political once it enters a political society and leads to various consequences.

The term "politics of technology" can refer to various possible contexts. It may represent the politics within the technology, the politics of technological change or the politics of technological choice. Politics within technology explains how political facts shape technology, and politics of technological change explains how technological changes and technological determinism can be affected by political actors. The politics of technological choice explains how political actors may affect technological decisions. Apart from these, the politics of technology also raised concerns if technology was developed with particular social and political implications, how the technology produced various intended or unintended socio-political implications, or whether any specific section of society enjoys numerous benefits from the technology.

Using the politics of technology and Winner's ideas, we will analyze the nature of Electronic Voting Machines (EVMs) in India and discuss the debates and controversies around them. India is the world's largest democracy, and a free and fair election is an elementary exercise to uphold the values of democracy. With more than 900 million eligible voters and every vote holding a critical value to change the verdict, it would be hectic to conduct elections with a traditional ballot paper system as counting votes would be subject to human error. Therefore automation of the counting of votes was necessary. As a result, EVMs were designed by two professors at IIT Bombay and were first used in the Kerala assembly elections in 1982. After a series of prototype testing and extensive field trials, the Election Commission devised and designed the EVMs in partnership with two Public Sector companies, Bharat Electronics Ltd., Bangalore, and Electronic Corporation of India Ltd., Hyderabad.

The first EVM were relatively simple machines that recorded and counted the votes simultaneously without any additional feature. EVMs were brought protected at a voting site and opened in front of the public, and any vote cannot be recorded after the voting time, i.e. once the EVMs are sealed. Also, the results are showcased using a control unit which provides information on the number of votes cast, the number of candidates and the number of votes each candidate received. Therefore we can conclude that the EVM was apolitical in design.

However, one of the most critical remarks presented by Langdon Winner underlines how technologies can be apolitical. Still, they tend to become political once they enter the political diaspora of a society. And since the late 1990s, the use of EVMs for elections has increased exponentially, and the debate around the nature of the technology has raised many eyebrows. Some contend that EVMs are more reliable and fair than traditional paper ballot voting methods, while others argue that EVMs are prone to manipulation and fraud. One of the most contentious issues is the claim that EVMs may be tampered with or hacked. Multiple allegations of EVMs failing or being tampered with have raised questions about the machines' dependability.

Transparency, verifiability and secrecy are the three pillars of free and fair elections, and any polling technology needs to pass all three tests to claim its legitimacy. In the paper ballot voting system, a voter can confirm if his selection is registered, the voting happens in secrecy, and his vote is counted in front of a representative. And apart from transparency and verifiability, secrecy is the third aspect of a free and fair

election. Now, if we consider the technology of an EVM, any individual can not verify if their vote is recorded appropriately as per their wish. Although the total number of votes cast can be verified, one can not verify whether the vote recorded went to the desired candidate as the machine may be subjected to hacking, tampering and malfunction. EVMs also fall short of providing confidentiality to the voters in a particular booth. In the traditional ballot system, all the votes from different booths were combined, and anyone could not look for any voting trend preference or pattern linked to any specific area. In contrast, the EVM provides this information that allows the identification of voting trends that make the marginalized population subjected to political pressure.

Another point of contention regarding EVMs is the claim that they are being used to manipulate elections. Multiple allegations of EVMs being used to alter election outcomes have raised worries about the process's impartiality. Since the machines are not networked, they don't access the internet or any operating system and act as simple machines to record the votes. Therefore, the EVMs can not be tempered without physical access to the machine. One such practice surfaced when a BJP polling agent pressed buttons for voters in Faridabad in the 2019 general elections. However, another aspect of tempering with the machine is the transportation of the machine from the voting booths to the election commission office. One common malpractice is replacing the actual EVMs with other EVMs to produce desired results. In the recent Madhya Pradesh state assembly elections, the number of individuals who voted and the number of votes in the EVM did not match in 204 out of 230 constituencies. Moreover, EVMs have also been a source of contention because they are not utilized in all Indian elections. Some opponents say that EVMs offer parties that can exploit them an unfair edge, while others argue that EVMs are required to maintain the fairness of elections.

Now, we can say that EVM is one of those apolitical technologies that became political after entering the diaspora of the voting system. Many claim that we should go back to ballot voting, but there were an equal number of malfunctions and polarization in earlier methods. And as Langdon Winner argued, any technology may become political, but it rests with the population on how to implement it. The political use of the EVMs does not reside with the algorithms it runs on. However, instead, it is a result of the intervention of various political actors, which is aptly said as the society's political system influences the technologies produced within a society, and the technology, in turn, shapes the political system by various means like polarization of elections.

References:

1. Winner, Langdon. "Do Artifacts Have Politics?" Daedalus, vol. 109, no. 1, 1980, pp. 121–36, http://www.jstor.org/stable/20024652
2. https://ecisveep.nic.in/faq/evm/who-has-the-devised-the-evms-r190/
3. https://scroll.in/latest/923363/lok-sabha-elections-ec-orders-re-polling-in-faridabadbooth-takes-action-against-errant-officials
4. Why EVMs Must Go, G Sampat, https://www.thehindu.com/opinion/op-ed/whyevms-must-go/article62110340.ece