

# TOOL USING, TECHNOCRACY AND TECHNOLOGY; CRITICAL REVIEW OF NEIL POSTMAN'S BOOK TECHNOLOGY. THE SURRENDER OF CULTURE TO TECHNOLOGY

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**Ключевые слова:** использование средств, технократия, технополия, Google, медицинская технология, машина Тьюринга, машина Бэббиджа, MIT, LOGO, IQ тест

*The article studies late Neil Postman's book "Technopoly" and relates it to the ideas of the present day researchers about the usage of technology nowadays. Postman doesn't criticize the technology, but gives rather valuable insights of the emergence of the technopoly. Though the book was published on the threshold of the Internet emergence, it can be connected to the present day writings of notable writers as Nicholas Carr and present day prospective researchers.*

*Maqola mualliflari Nil Postmenning "Texnopolya" nomli kitobini o'rganib chiqib, undagi qarashlarni hozirgi zamon olimlarining texnologiyadan foydalanish haqidagi fikrlari bilan bog'laydilar. Postmen texnologiyani tanqid qilmaydi, aksincha texnopoloyaning vujudga kelishi haqida qimmatli ma'lumotlarni keltiradi. Garchi kitob Internet paydo bo'lishi arafasida nashrdan chiqqan bo'lsa-da, uni Nikolas Karr kabi zamonamizning taniqli yozuvchilari va olimlarining ishlari bilan bog'lasa bo'ladi.*

*В статье рассмотрена книга Нила Постмэна "Технополия" и взгляды автора книги связаны с идеями современных исследователей об использовании технологии в нынешнее время. Постмэн не критикует технологию, а дает весьма ценную информацию о появлении технополии. Хотя книга была опубликована на пороге появления интернета, она может быть связана с трудами известных писателей, как Николас Карр и других перспективных исследователей.*

*An eternal fear: the fear that a new technological achievement could abolish or destroy something that we consider precious, fruitful, something that represents for us a value in itself, and a deeply spiritual one.*

*Umberto Eco (Carr, The Shallows, 2011, p.178)*

Neil Postman's "Technopoly" took us to a different level of thinking and comprehending the technology. As a staunch supporter of technology in all spheres of life, we agree with most of his ideas and refute some of them. We agree with Postman that technology can be your close

friend and at the same time your biggest enemy [5,xii] but it depends on us if we want an enemy or a friend. And Postman is not against the technology. What he wants to say is that "...uncontrolled growth of technology destroys the vital sources of our humanity. It undermines certain mental processes and social relations..." So, what is Technopoly? Or what is American Technopoly, since according to Postman, only American culture has become a Technopoly.

According to the author there are two stages before Technopoly. They are *tool using* and *technocracy*. We will discuss all three *Cultures* [5,22] one by one. But before the two aspects we have *technophiles*. The beginning chapter of the book brings the brilliant story by Plato in his book "Phaedrus", where King Thamus argues with Theuth – God of inventions that the latter's invention of "Writing" can be disastrous for the people, in the sense that it can make people forgetful, because they will rely on writing and forget and about memorizing things. But Theuth is a one-eyed prophet and sees only what technology can *do* and cannot imagine what technology will *undo* [5,22] Postman calls them – technophiles – who gaze at technology as a lover does on his beloved, seeing it as without blemish and entertaining no apprehension for the future (p.5) But, one can only wonder what would happen without writing?!

Tool using culture, (XVII century) according to Postman, were largely invented to do two things: to solve specific and urgent problems of physical life, such as in the use of waterpower, windmills...or to serve the symbolic world of art, politics, myth, ritual and religion, as in the construction of castles....[5,23] Tool using culture sophisticated technology [5,25] And tool using has brought technocracy, where the former plays the main role in the world of culture. Here Postman gives excellent examples of Da Vinci (submarine secret), Kepler (sun and planets), Galileo (telescope) and Francis Bacon (scientific method) who, according to Postman was the first man of the technocratic age [5,35]As Postman says "Industrial revolution of the XIX Century, which was the fruit of Baconian Science, was the only hope for poor"[5,38]

Continuing the topic of tool using, Postman brings the replacement of some tools stated by Farley Mowat in "The People of the Deer" [5,28] and it reminds us of the emergence of TV in the Samoan Island [7,155] It emerged and lasted for some time and was replaced by different technology.

In a technocracy – a society only loosely controlled by social custom and religious tradition and driven by the impulse to invent – an "unseen hand" will eliminate the incompetent and reward those who produce cheaply and well the goods that people want [5,41] But technopoly eliminates the thought – namely technological and traditional [5,48] It is totalitarian technocracy. According to Postman in technopoly the technical calculations is in all respects superior to human judgment [5,51] And the basic principle of technopoly is that it thinks for us [5,52]

Here, Postman blew our mind with his idea about the statistics and measurement. But first we have to define the term "information". According to Postman in Technopoly, we are driven to fill our lives with the quest to "access" information. He goes on that the world has never been confronted with information glut and has hardly time to reflect on its consequences. [5,61] Information is dangerous when it has no place to go, when there is no theory to which it applies, no pattern in which it fits, when there is no higher purpose that it serves. But we slightly disagree with the author, because any type of information has its audience. For example we may not be interested in the diameter of hockey field and what is the statistics of the 1<sup>st</sup> minute goal scoring in World Soccer tournament. But for the person who is doing research on this topic, the information can be crucial. There is no bad information; there is audience for any type of information. Again, the users choose the information, the technology provides us with it and it is we, who choose what information to take.

Postman argues, that people's intelligence, love, mental health, creativity and sexual attraction is being measured by numbers, as if numbers bring the magic [5,94] He further states that the significant magic directs our attention to the wrong place. We think Google CEO Eric Schmidt will respectively disagree, since Carr in his book "What the Internet is doing to our brain" quotes him saying "The Company is founded around science of measurement. It is striving to systematize everything it does. We try to be very data driven, and quantify everything". And according to Google executive Marissa Mayer "We live in a world of numbers" [2] And Carr does mention Postman in his book saying "Google doesn't believe that the affairs are best by experts. It believes that those affairs are best guided by software algorithm....[5,152]" And we didn't find what kind of alternative does Postman bring?! The researcher relies on numbers...

Another important arguable idea of Postman is the usage of technology in Medical Sphere. According to Postman (besides his heavy criticism of American medicine and doctors) doctors are heavily relied on Technology. They use different types of technology to cure the patient. They forgot traditional ways of talking and interviewing the patient. [5]. But we can argue (and majority of people agree with us) that Medical technology has saved millions of lives. The same stethoscope invention by Laennec in 1816 is being used until now! You go to any hospital, look at any picture of a doctor; you will mostly see the doctor, a nurse with stethoscope around his/her neck. The author's point is that the modern physician estranged from his own judgment [5,101], the culture itself – it's courts, its bureaucracies, its insurance – is organized to support technological treatment [5,102]. In other words, computer technology is ruling people.

Speaking about computer technology (Chapter 7), Postman brings amazing ideas about Turing machine [5,110], arithmetical calculations machine of Babbage [5,109] and Weizenbaum's statement that a) their (computers') uses are infinitely various and b) ...commonly integrated into the structure of other machines....hard to isolate specific ideas promoted by computer technology. Postman also brings the LOGO invention by Papert, where he states that the teachers were doing great without the introduction of LOGO. It reminds us of Larry Cuban's idea of traditional teacher. The author reiterates that the introduction of computer culture is resulting to the loss of human skills and traditions. And we also want to add that Agalianios et al., article [1], says that the failure of LOGO can also be connected due to the politicizing LOGO (fight between MIT and others) and it resembles me of Ivan Krylov's (1769-1844) poem "Swan , Pike and Crawfish" where each of them pulled the load to its own side but couldn't move it. There is also somehow contradicting tendency about the merits and demerits of the computer technology in class. Papanastaiou et al., [3] also mentioned that it was not the computer itself has a positive or negative effect on the science achievement of students, but the way which computers they use.....and it depends on the educational software [3,325]

On the concluding chapters, Postman states that if we want to change the path that we are on, we must become "Loving Resistant Fighter". A resistant fighter understands that technology must never be accepted as part of the natural order of things, that every technology – from an IQ test, to an automobile.....is a product of a particular economic and political context .....that may or may not be life-enhancing and ....require scrutiny, criticism, and control. [5,185] His thoughts about economic contexts remind us of Petrina [4] where he discusses about Pressey's automated teacher and how it turned out to be commercial rather than educational. Postman finished the book with a brilliant thought, stating "I am proposing, as a beginning, a curriculum in which all subjects are presented as a stage in humanity's historical development: in which the philosophies of science, of history, of language, of technology, and of religion are taught: and in which there is a strong emphasis on classical forms of artistic expression."

**Conclusion**

So, Postman discusses very important issues in his book. Some of his ideas may not coincide with XXI century ideas (Medical Technology, teaching history for all the science courses, [5,189], but overall the book features very alarming issues and we got an imminent pleasure and lots of new ideas from the author. It is also noteworthy to mention that Postman unfortunately passed away before the large scale emergence of Internet and social media such as Twitter, Facebook, Instagram, LinkedIn, Pinterest and so on. We can only guess his thoughts about the online education and Internet and his overview of iPhones and Drones! Unfortunately, we will never know....

### **Bibliography**

1. **Agalianos A, Whitty G, Noss R** . The Social Shaping of Logo, Social Studies of Science, Vol. 36, No. 2, 2006- pp. 241-267.
2. **Carr, Nicholas** .The Shallows: What the Internet is Doing to our Brains, W. W. Norton & Company, USA, 2011
3. **Papanastasiou E. C., Zembulas M., Vrasidas Ch** .Can computer Use Hurt Science Achievement? The USA Results from PISA, Journal of Science Education and technology, Vol. 12, No. 3, 2003- pp. 325 – 332.
4. **Petrina, S** Sidney Pressey and the Automation of Education, 1924-1934; Technology and Culture, Vol. 45, No. 2, 2004 .- pp. 305-330.
5. **Postman, Neil**. Technopoly: The Surrender of Culture to Technology, Vintage; 1<sup>st</sup> Edition, USA, 1993
6. Russian Universe: Understanding Russia with native Russian Speakers, Swan, Pike and Crawfish, by Ivan Krylov <http://russianuniverse.org/2014/04/06/ivan-krylovs-fable-swan-pike-and-crawfish/>
7. **Thomas M. R** .The Rise and Decline of an Educational Technology: Television in American Samoa, Educational Communication and Technology, Vol. 28, No. 3, 1980- pp. 155-167.