Colonialism and Protectionism in the Field of Software

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With the end of World War II and African Independence Movement 50s to 1990s, traditional colonialism seems to become a thing of past in a lot of people's minds. However, while rapid development of technology has brought the trend of globalzation，it also led to a new kind of colonization, technology colonization. In the field of software，technology colonization also exists and is more irresistible and concealed. The government of developing country should adopt appropriate protectionism if it wants to develop domestic software industry.

Software colonialism exists and is more irresistible and concealed than traditional colonization. Software is very different from traditional technology. No matter how traditional technology develops，it will have a physical entity. A lot of restrictions like transportation cost，the salaries of oversea branchand custom duties will lead to imported hi-tech products be expensive in developing area。Local companies can still product cheap alternatives to occupy the middle and lower end of the market. However，the virtual software industry is different. Its cost is mainly in the development, the offline cost is almost zero. Take regional pricing policy in Steam platform for example，diffrent countries are divided into high-priced and low-priced regions. Game developers only need to guarantee a positive net profit in high-priced regions such as The United States and Europe, then they can sell their games in developing countries at rock-bottom price to cultivate the loyalty of users. As a result, it is nealrly impossible for local game industries to develop, or just survive in the form of indie games. Even worse is human capital flight, because local companies could not develop, programmers will tend to continue their careers in developed countries, which make software colonialism more serious. As In 2015,15.58 million people who were born in India were settled in the other countries. [1] Although there are many skillful and talented programmers in India, a lot of them can only do outsourced jobs from developed countries,

The government of developing country should adopt appropriate protectionism if it is willing to develop domestic software industry. The first thing to point out is that protectionism is a double-edged sword which has its own negative effects. With protectionism, citizens will lose the authority to buy better products and companies will also lack vatality because there is no competetion. But as mentioned above，there is no middle and lower end of the market in the field of software. If government cannot offer protection for software company at start-up stage，the big companies like Google and Amazon will defeat them easily，then local programmers have to go abroard or do the lowest level of outsourced jobs. Another important reason is that though the open source spirit is the core of programmer community, software companies have other positions than profit. In June 11, 2020, the US military has banned two Chinese universities from using MATLAB because of trade war, which is a widely used academic mathematical analysis tool. Students and professors cannot legally use this software to generate data in papers [2]. Put aside the political debate because that's not what this article is about. It is important to realize that when developed countries try to forbid their softwares which you have got used to, a weak local software industry makes it almost impossible to resist effectively.

To conclude, Software colonialism exists and is hard to resist. Unless adopting appropriate protectionism, developed countries will dump their mature software in low price and destroy local software industry in developing area. The human capital flight will make the situation worse. And when there is a conflict, the developed country will ban opponents from using their technology. The destroyed local software industry will be the fatal injuiryat that time.

[1] [Amit Maurya](https://medium.com/@amitmaurya11042000?source=post_page-----f4dd67c3156f----------------------). 2018. “Human Capital Flight and its effects on India’s Growth”. Last modified 11 Nov 2018. <https://medium.com/@amitmaurya11042000/human-capital-flight-and-its-effects-on-indias-growth-f4dd67c3156f>

[2] [JOHN HAYWARD](https://www.breitbart.com/author/john-hayward/). 2020. "U.S. Military Ban Locks Chinese Universities out of Major Science and Engineering System" Last modified 12 Jun 2020. <https://www.breitbart.com/national-security/2020/06/12/u-s-military-ban-locks-chinese-universities-out-of-major-science-engineering-system/>