DIGITAL COLONIALISM & THE INTERNET AS A TOOL OF CULTURAL HEGEMONY

The explosion of usage of the Internet over the last 15 years has brought with it numerous benefits to populations of the global south – for instance by making communications easier, faster and cheaper and vastly increasing access to information.

However, the flip side to this is the increasing economic, cultural and social hegemony exercised through the Internet by the Global North over Southern countries. This is for numerous reasons – related to economics, cultural and social aspects as well as due to the technical architecture of the Internet.

(i) The Internet is primarily an English based medium[1] with a majority of programs, applications and services provided in a language alien to a large proportion of the world. Statistics indicate that about 60% of all web content is in English while only about 10-15% of the human population speaks the language. This denies access to large swathes of the global population and exacerbates the digital divide.

While there are estimated to be over 6,000 surviving languages in the world at present, most of them may disappear as English takes over most of world's media and content.

(ii) The Internet, due to its systems of governance, has become a tool for the unchecked spread of the neo-liberal ideology – turning citizens of the global south into nothing but commodities to be exploited.

(a) Due to models of business established in the online economic sphere, users are seen as nothing but commodities – corporations, without providing any reward and often without their knowledge, harvest the data of global citizens. The lack of regulation of the online space has lead to the creation of massive monopolies of global North based MNCs (such as Google, Facebook and so on) which hoover up the data of global citizens in order to generate profits for themselves. Users have become "products" to be sold to advertising agencies. It is worth noting that every user of Facebook was deemed to be worth $4.84 in advertisements per year (at the time of the IPO).[2]

It is also of concern that global south countries tend to lack large numbers of programmers and developers of software. Software products are made in the global north and sold to citizens of the global south – irrespective of whether they are appropriate to them or even required.

For instance, Nigeria, one of the more technically advanced countries in Africa, imports 90% of all software used in the country. The local production of software is reduced to add-ons or extensions creation for mainstream packaged software. The 100+ IT companies in Nigeria mainly engage in integration, maintenance and customization services for commercial packaged software for public institutions, banks, energy and telecom companies.[3]

The resources poured into creating useless applications and software rather than socially productive tools is a direct consequence of this commodification of users.

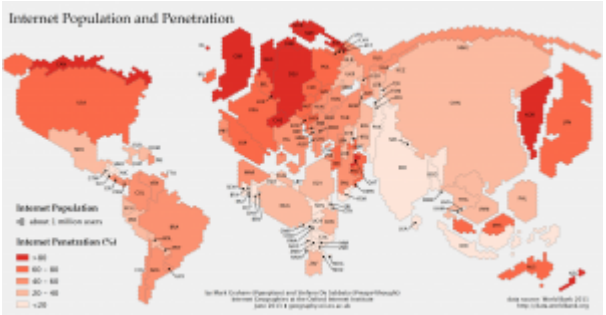
(b) There is an ongoing effort to ensure that the entire knowledge of the world is privatized – preferably of course, in the hands of the global North. The imposition of restrictive IP norms – for instance through trade treaties such as TRIPS and more recently the TPP, ensures that the global north will continue to own the source of the greatest value add in today's knowledge based economies.

While manufacturing and other processes are outsourced to global south countries, knowledge continues to be monopolized by the global north – leading to a net flow of revenues away from the global south and an increased pauperization of southern countries.

As an example, note that only around 10% of applications for the registration of intellectual property (IP) rights in Africa are made by African citizens or residents.[4] "Both anecdotal accounts by African IP agents and WIPO statistics on IP activity in Africa show that more than 90% of applications for registration of IP rights in Africa are by foreign IP applicants"[5]

(iii) Lack of capacity and infrastructure in the global south (digital divide, digital productivity gap)

(a) Access to the Internet continues to be a problem in the Global South as the map below demonstrates.

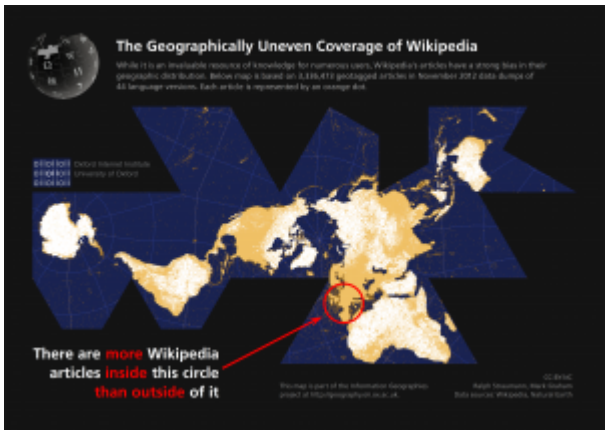


(source: http://cdn.theatlantic.com/newsroom/img/posts/InternetPopulation2011_HexCartogram_v6_2_LD.png)

A direct consequence of this is that the online content created by and from the Global South (and particularly by marginalized communities) is also proportionately low. The Internet allows those with time and money to control a large proportion of the discourse thereby favouring the first world and elite classes.

This map shows the global distribution of geo-located entities described in Freebase, a collaborative knowledge base that defines itself as "an open shared database of the world's knowledge". Note the lack of content from/on the Global South. (Source: http://geography.oii.ox.ac.uk/?page=geographic-knowledge-freebase)

For instance, the whole continent of Africa contains only about 2.6% of the world's geotagged Wikipedia articles despite having 14% of the world's population and 20% of the world's land. "This uneven distribution of knowledge carries with it the danger of spatial solipsism for the people who live inside one of Wikipedia's focal regions....In the global context of today's digital knowledge economies, these digital absences are likely to have very material effects and consequences."[6]



This map points out the highly uneven spatial distribution of (geotagged) Wikipedia articles in 44 language versions of the encyclopaedia. Slightly more than half of the global total of 3,336,473 articles are about places, events and people inside the red circle on the map, occupying only about 2.5% of the world's land area. (Source: http://geography.oii.ox.ac.uk/?page=the-geographically-uneven-coverage-of-wikipedia)

One of the most pernicious consequences of this gap in content creation is the control over and

re-writing of history – particularly that of marginalized and poorer sections of the world population. The global south can be users of Internet services, knowledge, software and hardware, but will not be its creators. As an example, archival processes in the First World are more organized / better equipped, they can therefore record African or Latin American history (usually through a paternalistic stand point – often falling into the trap of utilizing an educator v. native narrative). While there are increasingly more attempts at telling and preserving the Global South narrative, due to problems such as finance and education, such attempts will always pale in comparison to what the Global North can accomplish.

(b) An oft-ignored aspect of the digital divide is what some scholars term the 'digital productivity gap'. In short this thesis demonstrates that advanced digital content creation is highly correlated to education, which is shown further dependent on socio-economic status. This means that a member of the elite classes is far more likely to utilize the Internet productively than a poorer or more disadvantaged person. This again relates to how users in the global south are far less likely to generate high quality content or to utilize such content productively as opposed to citizens of the global north (who in general have higher levels of education, income and other determinants of social economic status).

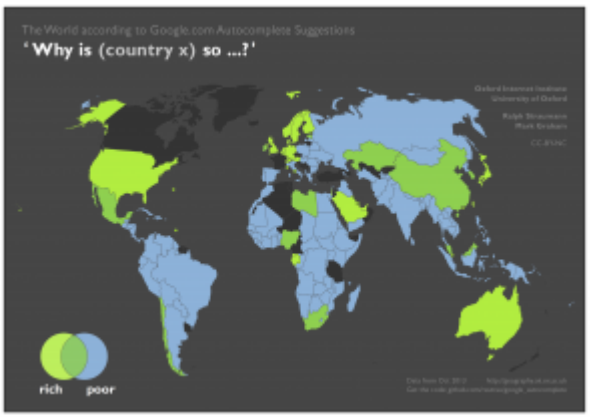
(iv) Technical and financial architecture:

(a) Given the existing architecture of the Internet, it costs the same to send a data packet around the world as it does to your next door neighbor – this reduces the barriers to long distance data flow thereby enabling content to be beamed into the global South from the global North. As we have seen, most content is generated in the global North – this can have huge negative effects on local cultures.

(b) The Internet payment model is based on the user pays principle. This ensures that while users from the global south barely contribute any content to the Internet, they pay to access content created by the global North.

(c) Search algorithms are monopolized and controlled by corporations from the Global North. As these are kept confidential (and usually protected through copyright or other methods) there is no way of knowing or analyzing exactly how search biases operate – however the existence of such biases is well known. Search algorithms directly affect how users access information. Personalisation – towards which there is an increasing trend uses earlier or historical interactions to serve content to you. This could lead to an increasing chance of 'friendly world syndrome', when you live in a 'filter bubble' and see the world through rose-tinted glasses. In such an environment, content about issues like homelessness or climate change can't compete with goofy viral videos, celebrity news, and kittens. This personalization that we see everywhere on the Internet today has in fact been compared to censorship. Instead of a government censoring the information that you are allowed to see, there are only a few big companies making those sorts of decisions. An example is the access to information on Hurricane Sandy which hit a large part

of the North American coastline. In late 2012. A large proportion of media and content, as made accessible through the Internet, focuses purely on the effects of the hurricane on New York, completely ignoring Haiti, Jamaica and Cuba, which were all equally, if not worse affected.[7]



This map show what properties Google Autocomplete associates with countries when one asks the question "why is (country x) so ...". These results offer a window into how Google, and the preferences of millions of Internet users, can actively shape the knowledge we obtain about different parts of the world. (source: http://geography.oii.ox.ac.uk/?page=the-world-through-the-eyes-of-a-search-algorithm)

(d) Most traditional media outlets depend on advertising revenue to ensure their profitability. However, as more and more content moves online, again to the benefit of global north based monopolies, this directly affects the revenues that smaller and traditional sources of information can rely on. This pattern can be viewed quite clearly in the table below:

Market share of the main internet portals
Share of global internet ad expenditure (%)

	2006	2007	2008	2009	2010
Google	34.9	40.3	42.5	41.9	44.1
Microsoft	8.1	7.9	4.2	4.0	4.0
Yahoo!	18.7	14.9	11.7	9.6	8.3
AOL	6.3	5.5	4.2	2.2	1.5
Facebook	0.2	0.4	0.6	1.4	3.1
Total	68.1	68.9	63.2	59.2	61.0

(source: http://mediatel.co.uk/newsline/2011/12/05/quadrennial-events-to-help-ad-market-grow-in-2012-despite-economic-troubles/)

This negatively impacts diversity of sources of information in both the online and offline spaces.

(e) The ability of global MNCs to operate free of sovereign control in certain spheres is well established. By basing themselves in tax havens for instance, companies can avoid having to pay taxes to states where they conduct their business. Further, global north based corporations, pay taxes largely in the global north despite providing services equally to citizens of the global south. Ebay for instance, will pay its taxes on its transactions in the US – irrespective of whether a purchase has taken place entirely between two global south based citizens. This quite clearly leads to a loss of revenues for global south governments (which would tax traditional over the counter transactions), which could utilize these funds to enhance infrastructure, capacity development and so on.

In order to ensure that the Internet is used as a tool for enhanced connectivity, democratization, transparency and equitable cultural exchange it is essential that present systems be revisited and rebuilt so as to ensure the voice of the Global South is not drowned out in the global discourse.

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[1] http://en.wikipedia.org/wiki/List_of_languages_by_total_number_of_speakers http://www.factshunt.com/2014/01/world-wide-internet-usage-facts-and.html http://jacopochiapparino.com/me/2013/02/03/internationalisation-and-localisation/

[2] http://techcrunch.com/2012/04/23/your-are-worth-4-84/

[3] http://www.siliconafrica.com/digital-colonization/ cited from UNCTAD, Information Economy Report, 2012, available at http://unctad.org/en/PublicationsLibrary/ier2012_en.pdf

[4] http://zine.openrightsgroup.org/features/2013/digital-colonialism

[5] http://afro-ip.blogspot.co.uk/2012/10/moyo-furthers-debate-on-paipo_31.html

[6] http://www.theatlanticcities.com/technology/2014/02/there-are-more-wikipedia-articles-about-one-part-world-rest-it-combined/8486/

[7] http://www.guardian.co.uk/commentisfree/2012/nov/02/hurricane-sandy-hit-caribbean-media