

### 3 statements

#### **Information literacy. The traditional role of libraries in teaching basic techniques for evaluation of info is irrelevant in a world of algorithms**

Humans, including librarians, have already lost the battle against machines. Humans and their skills are simply not enough against algorithms/bots/...

Examples:

1. deep fakes (impossible to distinguish from real persons)
2. fake news on Facebook (fake news = money; will Facebook keep their algorithms that spread fake news under control if this will make them loose money - fake news is attractive)

The point is: it's not about machines against humans. It's about what do we humans want to achieve with the machines and our algorithms. The problem is that information and technology are currently dominated by big tech, companies such as Google, Facebook etc.

So the problem is not machines, the problem is not algorithms. The problem is the lack of democratization, the lack of accountability and the lack of transparency. Without transparency, there will be no ethical algorithms. Without transparency and accountability, algorithms will have the ethics and the bias of those who program the algorithms and their employers...

Algorithms are able to generate and disseminate fake news, but they can also help human beings to detect and fight fake news. Despite the effectiveness of algorithms (83% of accuracy), old-fashioned fact-checking by journalists will still be required to combat fake news. AI could filter the information for fact-checkers to verify, according to Horne (<https://spectrum.ieee.org/tech-talk/robotics/artificial-intelligence/ai-misinformation-fake-news>).

Information literacy, and information skills are more important than ever, and libraries definitely have a role in teaching these skills, and in giving access to reliable information. But we librarians also need to update our skills and familiarize ourselves with data science, algorithms etc.

And let's not forget, and this has even become clearer during the pandemic, basic internet connectivity is still an issue for many citizens from around the world.

#### **Before the internet, access to a large variety of information resources was monopolized by libraries. The internet has now replaced libraries**

Before the internet, access to large amounts and a diversity of information was only possible through libraries. The avalanche of information on a daily basis, through social media and what have you, have become hard to deal with. Many people a family and a job simply don't have the time to process all information.

So people rely on filters. These filters, the windows through which we look at reality, are our family and friends who share information through whatsapp, Facebook, TikTok etc. The problem with these platforms is that they are not neutral, their objective is to make us feel good, to make us keep clicking and keep us and make us come back to their ecosystem.

And here we have the central concept of trust. Since the amounts of info are so huge, people have no other option than relying on people or institutions they trust. People rely on their family, friends who share with them info through whatsapp, twitter etc. People trust info that comes from institutions such as libraries, United Nations etc. Information has a strong emotional dimension.

The result of this is that people organize themselves in clusters of people of organizations they trust. And social media reinforce these clusters of people who have similar ideas, by feeding them with even more ideas that tend to strengthen their beliefs.

This is a problem. And this is why we need institutions such as libraries that have no intention and no commercial interests to keep people in their ecosystem, to provide people only with information that strenghten their beliefs. More than ever we need people and institutions that provide access to a large variety of reliable information, with different perspectives, in a neutral and unbiased manner.

### **There is something fundamentally wrong with the internet, social media, and how we use these extremely powerful channels to disseminate science and reliable information**

The visibility of reliable info on the internet is much lower than the visibility of fake news and facts. Many high quality scientific articles and data sets, many of which are the result of public funding, are behind pay walls, which make the results of publicly funded research inaccessible and invisible to citizens. Many citizens simply cannot afford paying 25, 30, 50 dollars for each scientific article they want to read.

The role of libraries is to negotiate better deals with commercial publishers, to make quality information that is produced with tax payers' money affordable and accessible for all. Libraries believe that output from publicly funded research (publications, datasets etc.) should be open and free to all. We're not there yet, but we're making good progress. Latin America has been one of the leaders in this global movement to Open Access, which is increasingly becoming the standard also in other regions.

Libraries also have a role in fixing the lack of equality, inclusion and diversity in scholarly communication. It is simply not acceptable that high quality research from a researcher in Brazil, Argentina, Mexico, Uganda... or any country outside the global north has less visibility than

Traditional scholarly communication is also a source of inequality: centre vs periphery. Cf. the famous example of a researcher from Uganda who first published his article with a university from Uganda as his affiliation and was rejected, and then with Oxford as his affiliation and was accepted.

Or the other example where researchers from tropical countries publish more about western than tropical diseases because it gives them more chances to publish in highly ranked journals, and to move forward in their academic careers.

### **In what world do we want to live? In a machine centred world, or a human centred world?**

Cf. Toronto: smart city vs human centred, sustainable city

Technology should be a vehicle to achieve the goals we agree on as humanity: the SDG's

Which life after pandemic? A life that improves the lives of mega companies, or people's lives?

Cf smart clothes:: the level of stress because of excessive control this will generate, is tremendous. It's not because we can technologically do this, that we have to do this

We need to keep control over our lives and decide for ourselves what helps us to have more human centered sustainable lives. Technology is just a vehicle not an objective

With fake news this is the same. Fake news on the scale we currently know it, is only possible because we allow algorithms to take over our lives, decide for us, instead ourselves using algorithms to make our lives better

In the end it's about empowering people. It's about empowering people to become digital citizens instead of just digital consumers. And this is what libraries do, every day.