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# YOUTH WORK AND TECHLASH

## What are the new challenges of digitalisation for young people?

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**Abstract**

As technology and digitalisation have become an integral part of life, particularly for young people, two opposing trends have emerged: over-reliance on technology and techlash. Over-reliance means that we have become too dependent on and uncritical users of technology. Techlash, on the other hand, refers to a critical reflection on the use of technology and a growing discontent with the privacy violations, monopolies and strategies of big technology companies, which followed the 2013 Snowden revelations and the 2016 interferences in the US presidential election. Recent critical literature sheds light on the logic of the big tech in colonising citizens' everyday life and utilising data for political and commercial purposes. Digitalisation, led by tech companies, has suddenly become a ubiquitous social and economic power reaching everywhere, including youth and youth work. While the benefits of digitalisation are apparent, the growing awareness of risks highlight the need for monitoring and regulation.

In order to mitigate some of the risks, in early 2020 the EU launched a digital strategy to promote citizens' right to their own data, transparency of Big Data, algorithms and Artificial Intelligence and their use "for the good of society".

With the emergence of digitalisation, young people have taken on the role of "early adopters" and "identity explorers". Young people and the tech companies have made good use of these roles, but there are also risks relating to youth becoming guinea pigs for technological development and risks for a successful identity search, for example, due to excessive use of social media platforms and gaming. These risks, among others, manifest themselves in digital exclusion of young people.

This paper discusses over-reliance on technology and dominance of the big tech, and argues that there is a need for young people and youth work to be more aware of the negative effects of digitalisation and of the broader social context of the strategies, interests and the power of the big tech companies. In order for young people and youth work to play a more prominent role in defending digital justice and upholding the digital rights of young people, youth work, as a value-based field of action and as an educational field, can develop critical digital literacy, align with EU digitalisation strategies, and reform its approaches to digitalisation, digital inclusion and data colonialism.

Content

## Over-reliance on technology?

Technology has become an integral part of our life. It has made life easier, more convenient, more interactive and more enjoyable. It is a crucial contributor to economic growth and to better services. Young people have been the most active users of new technology and digital instruments. Overall, there seem to be two kinds of opposing orientations when it comes to technology. On the one hand, there is over-reliance on technology and, on the other, there is a growing discontent with digitalisation (techlash), leading to questions such as: Are we too dependent on technology? Do we understand its limits and negative effects and are we prepared to meet them? How does digitalisation and the industry behind it influence our lives and are we aware of that, and have we given our consent to it?

The literature on over-reliance on technology can be roughly divided into two themes: first, the broader societal and human dimension and second, identifying the individual level signs of over-dependence on technology (symptoms of addiction). The broader questions include (Morgan 2017, Waywell 2018): Should we trust computers, knowing that they can all be hacked? Technology depends on a constant flow of electricity. What about power outage caused by natural catastrophes or simple future lack of energy? Over-reliance on technology and the internet can lead to excessive use of social media. Neuroscientists have identified social media addiction, which can largely be contributed to the dopamine-inducing social environments that social networking sites provide, creating a feeling of pleasure. Most people actively use social media, but excessive use of social media can cause unhappiness in life, anxiety, depression, severely stunted social interaction skills, negative body-image and lowered levels of empathy and compassion towards others (Hilliard J. and Parisi T. 2020; Marino et al. 2018).

Some of the signs of becoming too dependent on technology (Greenfield 2017, Kirschner 2020, Wardynski 2019) are the following:

- If the internet is down, work is over for the day – as if there were no alternative ways of working
- A feeling that without a smartphone you do not exist – addiction to smartphones is a health issue (see the smartphone compulsion test at www.virtual-addiction.com, Greenfield 2017)
- Having trouble in maintaining conversation, in keeping someone's interest, in being sensitive when interacting with someone in real life or breaking up with your boyfriend through a text message – lack of human contact has hurt your social skills, like the inability to deal face-to-face with real life situations and issues
- Losing track of time when online
- Not remembering any phone numbers (except your own)
- Not going out enough
- Obsession over the latest gadgets
- No concern for privacy

Admitting the benefits and the necessity of technology and digitalisation, particularly in the contemporary world, one still must critically reflect on their limits. The questions raised above suggest that our over-reliance on technology to solve societal problems should also provoke and inspire complementary approaches. Furthermore, the outburst of the COVID-19 pandemic in the

spring of 2020 has exponentially expanded our reliance on technology and digital tools, and places significant limitations on physical contact, raising questions about what we – in the youth and educational fields – can learn from the digital responses to COVID-19.

## What did we learn about the use of technology during COVID-19? A Finnish experience

In 2020, the COVID-19 pandemic led to the closure of schools, with 1.6 billion children having to adapt to a new way of schooling within the home environment. Youth work facilities and many leisure activities were closed. Typically, the response was to provide digital activities and services, like distance learning (schools), virtual youth services, digital opportunities for social interaction, hobbies and other activities (youth work) or virtual music concerts and digital access to cultural events and locations (culture). All this has been necessary and often innovative, but as research seems to show, there has still been an over-reliance on technology to solve the physical distancing caused by the virus, but it does not address the differences in access to technology. Globally there is a huge variety of access to the internet, computers, efficient networks and the capacity of families to support young people.

So far (autumn 2020) the immediate research is mainly focused on distance learning in schools (many still to be published): How did young people, teachers and parents experience the new situation where direct social communication was replaced by physical distance and the use of digital tools? The examples of research in this study come from Finland and should be seen as indicative. More needs to be known from other countries to assess the representativeness of the Finnish findings.

In Finland, students, teachers and parents felt that technically the change to distance learning was successful (Koski 2020). The majority of students said they successfully managed the new way of learning. Despite the overall positive results, the following problems were identified:

- Almost half of the students said they learned less in distance learning than they would normally learn in school and experienced distance learning as more difficult (Koski 2020).
- Students thought that the quality of teaching had decreased (Samok study 2020, Koski 2020, Finnish Youth Alliance et al. 2020).
- High school students (Suomen lukiolaisten liitto 2020) and those in applied sciences (Samok 2020) felt that distance learning was causing more stress.
- About 10% of students said that distance learning “was not at all a pleasant experience” (Ahtiainen et al. 2020: 42) and 8% of all students said they had daily problems with distance education (*idem*, 50).
- Students in Applied Sciences felt their well-being, coping with studies and learning motivation decreased rather than increased due to distance learning (Samok 2020).
- Social relations with peers deteriorated (Samok 2020, Finnish Youth Alliance et al. 2020, Torkkeli Arts School 2020).
- 25% of boys and 28% of girls from upper comprehensive schools (12- to 15-year-olds) said they “stayed every day too late online” (Ahtiainen et al. 2020: 39).
- Young people said there had not been enough support and advice from a reliable adult; teachers, school support staff, youth workers (Finnish Youth Alliance et al. 2020).
- Students suffered from the loss of the daily rhythm and from decreased participation in hobbies and sports (Torkkeli school study 2020).

- Learning difficulties seemed to accumulate; students learning less complained of increased workload and decreased support from teachers (Koski 2020).
- Parents criticised teachers for too little interaction with the students and for not organising activities to support peer communication and keep up the class spirit (Perander-Norrgård 2020).
- 25% of parents estimated that school went poorly compared to the time before the pandemic (Ahtiainen et al. 2020: 56).
- 70% of teachers admitted that they had individual students which they had problems with reaching, or could not reach (Finnish Teachers' Union 2020) and in another study teachers said there were 8% of students who they "did not reach at all" through distance learning (Ahtiainen et al. 2020: 27). More than half of the headmasters said that support for education in distance learning was "clearly weaker" or "weaker" during the pandemic (Ahtiainen et al. 2020: 8). The school support staff also said (nearly 30%) that support functioned "clearly weaker" or "somewhat weaker" (Ahtiainen et al. 2020: 39)
- According to teachers (Ahtiainen et al. 2020: 21) support for students in the different categories of special needs functioned "clearly worse" or "worse" (from 35% to 47% depending on the category of the special needs groups) during the pandemic.

Finland and other high-income countries in Europe have access to well-developed and advanced technology which essentially facilitates the adaptation to distance learning in education and provision of digital services in other fields during pandemic conditions. However, IT infrastructure and access to digital devices are, overall, worse in the poor and developing countries elsewhere in the world,[2] even if some countries have in the last decades made a "tiger leap" from very poor communication conditions directly to mobile technology. The variety of infrastructure of communication technology suggests that experiences from technologically advanced countries are not directly applicable to other regions. Furthermore, other factors such as the development of the educational system, social and geographic segregation, housing standards or the severity of the spread of COVID-19 has an effect on how distance learning can be organised.

In sum, even if the change to distance learning (in Finland) was, overall, smooth and successful, studies clearly indicated that the technological solutions were not enough. Additional efforts are needed to develop the quality of teaching, to cater for the well-being, connection, interaction and support of young people and to expand formal learning to non-formal learning contexts – also as a way to "balance digital with screen-free activities" (OECD 2020). The Finnish research also indicated that distance learning increased marginalisation. This is corroborated by international findings: "These research projects highlight the already present digital divide [that] young people from vulnerable or disadvantaged groups face, which has only been amplified in the wake of COVID-19 (RAY COR 2020a: 13). Instead of over-reliance on technology one must recognise its shortages and elaborate the necessary complementary measures. This has led to a new movement – techlash, challenging some of the positive narratives around technology and its infiltration into every aspect of life.

2. According to European Data Portal (2020), 826 million students globally have no access to a computer in the household, 706 million lack internet access at home and another 56 million lack coverage by mobile 3G or 4G network. Families without access to the internet experience a major disadvantage during a crisis, and this often happens in already disadvantaged homes.

## What is techlash?

Techlash is a combination of two words, "technology" and "backlash", and it describes a growing discontent with the privacy violations, monopolies and strategies of big tech. During the 1980s and 1990s, public discussion about new technology was extremely positive. Even as late as 2010, during the Indignados movement and the Arab Spring uprisings, social media was seen as a liberating medium promoting openness and democracy. In 2010, *Time* featured Mark Zuckerberg as its "Man of the Year" for connecting people. A turning point probably was 2013 when Edward Snowden revealed how US and UK security services gathered data from citizens' emails, followed by the revelations on Russian use of social media platforms to interfere with the 2016 US elections and the way Cambridge Analytica used Facebook data for political manipulation. Soon after, the term "techlash" was runner-up in the Oxford Dictionary's 2018 "word of the year". The dictionary defines the term as the "strong and widespread negative reaction to the growing power and influence that large technology companies hold". On 28 December 2019 *The Guardian* reported that "Throughout the world, you see that people are fed up and you see more and more laws popping up and it's coming to the US now." The share of Americans who believe that technology companies have a positive impact on society has dropped from 71% in 2015 to 50% in 2019 (Doherty and Kiley 2019). The public pressures to regulate the companies and the rise of critical art, literature and research have been on the increase.[3] A recent phenomenon has been an ad boycott by more than 1 000 companies including large corporations such as Unilever, Adidas, Ford, Coca-Cola, Volkswagen, Sony, Lego etc. targeted at Facebook as it has been accused of not doing enough to stop hate speech in its platforms (Wong 2020). As a result, Facebook shares dropped 8% in July 2020.

However, the development of techlash is contradictory. As the *Financial Times* writes (7 February 2020): "No matter how much bad press and regulatory scrutiny tech companies receive, they continue to make products customers want to buy." They also continue going up in the lists of world's most profitable companies. A lot of people still continue passionately and often very uncritically to use digital products. This raises a number of questions: Is there a potential that the growing discontent of the citizens will result in the creation of social movements, protests, awareness-raising campaigns or alternative action? Will it inspire new consumption preferences, or motivate political action on developing regulation and alternative strategies to make the tech companies accountable for their actions? Young people are the proportionately largest and most vulnerable (Hilliard and Parisi 2020) user group. Will young people (again) be actors of change? And what can youth work do to support young people?

3. A recent example is the Netflix document "The Social Dilemma" (2020), directed by Jeff Orlowski and written by Orlowski, Davis Coombe, and Vickie Curtis. The film explores the rise of social media and the damage it has caused to society, focusing on its exploitation of its users for financial gain through surveillance capitalism and data mining, how its design is meant to nurture an addiction, its use in politics, its effect on mental health (including the mental health of adolescents and rising teen suicide rates), and its role in spreading conspiracy theories such as Pizzagate and aiding groups such as flat-earthers.

## "Surveillance Capitalism" and "Data Colonialism" – Understanding techlash

> *"Data extraction is a basic mode for generating economic value"*
> Couldry and Mejias 2019: 115

Two recent books have looked at the profound ways that big tech corporations affect the life of individuals and society. Shoshana Zuboff, an academic from Harvard University, is the author of *The Age of Surveillance Capitalism* (2019) and media professors Nick Couldry from the London School of Economics and Ulises Mejias from the New York State University have written a book titled *The Costs of Connection* (2019). Despite their different backgrounds, they share the main elements of criticism: the dominant power of big technology corporations, their "data colonialism", extraction of data, non-transparent analysis, questionable commercial and political uses of the data and digital surveillance are "toxic for human life" (Couldry and Mejias 2019: 184). Instead we need digitalisation based on open data controlled by the users, respect for privacy of data, transparent methods of analysis which work for people and for the good in society.

The business logic of the big tech companies is as follows: 1) extracting all possible data from digital platforms and products linked to the internet; searches, e-mails, texts, photos, songs, messages, videos, locations, communication patterns, attitudes, preferences, interests, faces, emotions, illnesses, social networks, purchases, and so on; 2) analysing these data using artificial intelligence and algorithms; 3) selling the results to commercial advertising, or profiling clients for insurance companies, national security agencies, police, political groups or for governments.

The tech companies have been accused of neglecting the rights of the users to control the data gathered from them. There is also a lot of opacity around the methods of analysis which are claimed to be business secrets of the tech companies. It has been extremely difficult for individual citizens, NGOs, researchers, courts and even governments to know how the conclusions and findings of Big Data, AI and algorithms have been reached. It has not been possible to have access to the original data, to track the reliability of the analysis, or to independently replicate it.

The tech companies maintain that the individual data is anonymised, but at the same time they have been shown to de-anonymise it (Su et al. 2017). Data analysed through algorithms can be traced and targeted back to individuals and groups, and be used to influence their behaviour as consumers and citizens. Facebook among others gathers quite diverse and sensitive information like data on the emotional state of its users. In 2017 Facebook gathered data on young people's emotional state: "psychological insights" of 6.4 million high school and tertiary students and their consumption habits in Australia and New Zealand. "By monitoring posts, pictures, interactions and internet activity, Facebook can work out when young people feel 'stressed', 'defeated', 'overwhelmed', 'anxious', 'nervous', 'stupid', 'silly', 'useless' and 'failure'" (Davidson 2017). Facebook could pinpoint the exact moment at which a young person needs a "confidence boost" and is therefore most vulnerable to a specific configuration of advertising. "[The analysis] boasts detailed information on 'mood shifts' among young people based on 'internal Facebook data' [which] predict how emotions are communicated at different points during the week, matching each emotional phase with appropriate ad messaging for the maximum probability of guaranteed outcomes" (Zuboff 2019: 304-5).

Couldry and Mejias (2019: 16) use the term "datafication" to refer to the development where everything becomes data and subject to automation. A good example is the Internet of Things (IoT), with sensors everywhere around us, connected to the internet and continuously sending data to the tech company computers for analysis. The tech companies inform us that it is to provide us with "better services" and to "personalise" the services. One such product is the digital assistants: Amazon's Alexa, Apple's Siri, Facebook's M and Microsoft's Cortana. Satya Nadella, the CEO of Microsoft, describes Cortana: "It will know your context, your family, your work. It will also know your world. It will be unbounded" (Nadella 2017: 156). A recent example of this policy is conquering health and health care. In 2019 Google bought Fitbit, a fitness tracker company, "to stand by their customers, administering vital data about their heart rate, their cholesterol and how they can access the best online advice on conditions ranging from acne to Covid-19" (Inman 2020). *The Guardian* aptly titled its article on this event: "Our health is all we have. But now Google wants it too."

Digital surveillance has thus become ubiquitous. As Zuboff (2019: 202) says, we have seen a metamorphosis of the digital infrastructure "from a thing that we have to a thing that has us". She concludes that "This decade-and-a-half trajectory has taken us *from automating information flows about you, to automating you*" (Zuboff: 339).

Countries around the world use digital surveillance exceedingly to pursue their policies and to control their citizens, particularly authoritarian regimes (Freedom House Reports on Global Democracy and Freedom on the Net 2018 and 2019). China has a "social credit system" which pools information about the creditworthiness and social worth of Chinese citizens into a single digital system for monitoring and evaluation. Furthermore, being at the forefront of facial recognition systems, Jack Ma, the founder of Alibaba, says: "the political and legal system of the future … bad guys won't even be able to walk into the square" because their every movement and action will have been watched (quoted in Zuboff 2019: 166). In the USA, digital means of control are widely applied in working life ranging from "data-driven micro-management" of warehouse workers, whom the computer follows and provides with constant voice instructions, and from "remote desktop surveillance" of distance workers following their typing and behaviour through the keyboard sensors, and from the net camera to "telematic surveillance" of truck drivers, to the use of "bodily surveillance" of, for example, McDonald's staff (for more details, see Couldry and Mejias 2019: 63-66). These examples show that these automated processes not only *know* about us, they also *shape* our behaviour. Zuboff calls this "behavioural modification", but it can also mean "the gentle herding of innocent Pokémon Go players to eat, drink and purchase in the restaurants, bars, fast-food joints, shops" and other "sponsored locations" (Zuboff 2019: 8-9).

We noted earlier a growing mistrust in big tech companies (techlash), but why is it that there is so little government regulation, no public demonstrations, no anti-surveillance or "stop data colonialism" movements, no youth action?

First, everything has happened very suddenly and at an unprecedented rate. There are neither languages nor theoretical concepts to discuss the situation and the developments. It is very much like the first years of the automobile, when it was called a "horseless carriage", as people had problems with understanding it beyond established experience and language.

Second, people see the technological solutions, but do not look beyond them, as if technology is something inevitable. It seems to be difficult to grasp the sometimes-hidden business logic of tech

companies, their rhetoric, ideological manipulation and the way data colonialism is a continuation of earlier historical colonialism and a manifestation of neoliberalism and capitalism (Bridle 2018, Couldry and Mejias 2019: 83-112).

Third, since the end of the 20th century, neoliberal reduction of public regulation of private companies opened the opportunity for the tech companies to pursue data extraction without privacy regulation and to carry on opaque Big Data analyses without being held accountable (Zuboff 2019: 107-112).

Fourth, the biggest tech companies have rapidly grown very big. The American Big Five: Amazon, Apple, Google, Facebook and Microsoft and the respective Chinese giants, Baidu, Alibaba and Tencent are all, except Baidu, among the 74 largest companies in the world with Amazon and Apple among the top five (Forbes Global 500 in 2019). These companies also do "killer acquisitions", buying smaller potential competitors to stop their innovative development projects before they reach the market.[4] The influence of all the companies mentioned above is further pronounced due to their close co-operation with their respective governments. For example, between 2012 and 2016 "revolving doors" between Google and the US Federal Government were swiftly spinning as 197 people were migrating (changing jobs) between the government and the Googlesphere (Zuboff 2019: 124).

Fifth, tech companies have huge lobbying budgets. As an example, in 2018 Google used US$18 million to lobby against increased privacy legislation (Zuboff 2019).

Sixth, the tech companies "control everything from undersea cables to satellites and to the last-mile architecture that delivers internet services to individuals. They also control the environments and platforms in which data is being generated, the design and production of the devices through which data is collected, computing capacity and machine learning methods" (Couldry and Mejias 2019: 44).

In sum, the power and versatile influence of the big tech companies has made it difficult for citizens to understand what actually is going on. Instead everything appears to be something inevitable and good for all of us – easily leading to over-reliance on technology. Thus, there have not been clear incentives to engage in critical reflection and resistance.

4. Google, Apple, Microsoft, Amazon, Facebook and IBM had altogether bought 950 companies by the end of 2018 (Koski 2020).

## European digital, data and Artificial Intelligence strategies – a counter-reaction

In February 2020, the EU launched three important framework documents on digitalisation:

- Shaping Europe's Digital Future (Digital Strategy)
- European Strategy for Data
- White Paper on Artificial Intelligence.

These documents recognise the profound way that digitalisation affects our societies, comparable to the industrial revolution. Technology can "work for people, [create] a fair and competitive economy and [contribute to] an open, democratic and sustainable society" (EU Digital Strategy 2020: 3). "But the benefits arising from digital technologies do not come without risks and costs. Citizens no longer feel in control over what happens with their personal data and are increasingly overloaded by artificial solicitations of their attention" (EU Digital Strategy 2020: 2). The European Union data policies are not only based on the interests of the tech industry, but also essentially on European values, fundamental rights, common rules and the overall idea that data should be used "for the public good". This approach is strikingly different from the approach in the USA and China. The EU wants to empower citizens to "take greater control of and responsibility for their own data and identity" (EU Digital Strategy 2020: 2). One instrument is the GDPR (General Data Protection Regulation), which gives the citizen "more control over who can access and use machine-generated data, for example through stricter requirements on interfaces for real-time data access and making machine-readable formats compulsory for data from certain products and services, e.g. data coming from smart home appliances or wearables" (A European Strategy for Data 2020: 21).

A further issue identified above by Couldry and Mejias and Shuboff is the opacity, complexity and private ownership of the analysis of data like algorithms and AI. The EU White Paper on AI (2020) wants to impose a regulatory framework titled "an ecosystem of trust" to protect citizens from digital surveillance and other forms of misuse of Big Data analysis. "For example, economic actors remain fully responsible for the compliance of AI to existing rules that protect consumers, any algorithmic exploitation of consumer behaviour in violation of existing rules shall be not permitted and violations shall be accordingly punished" (EU Digital Strategy 2020: 14). It remains to be seen what kind of measures will follow the White Paper and the other EU digital strategies with their good intention that "[Technology] should work for people and be a force for good in society" (EU Digital Strategy 2020: 26).

Thus, the digital strategies of the EU recognise the key elements of the critique of Couldry and Mejias and Zuboff – the autocracy of big tech companies, data colonialism, the dubious and opaque political and commercial use of Big Data and digital surveillance, and aim at regulating the power of the tech companies. Further common elements are a demand for better privacy and that technology should be based on human rights and serve for the good of society, like empowering active citizenship, and promoting democracy, human integrity and sustainable development including mitigating global warming.

## What is specific to young people as users of digital media?

The article suggests that there are two conspicuous characteristics of today's young people's use of the digital media. The first is *a* search for immediately stimulating leisure, which drive young people to experiment with quick means to new experiences. The second characteristic is identity work through peers – posing different identities for other young people for feedback. The aim of this search is to gradually build a coherent identity.

Social media platforms and gaming provide endless opportunities for "immediately stimulating leisure" and possibilities to try out various images of oneself among peers – and to receive a quick response. In order to meet these expectations, digital media are also quickly becoming increasingly visual and experiential. To respond to the desire for stimulating leisure, social media platforms and video games have started to integrate music, concerts, sports events and movies into their offer. The most obvious recent example is *Fortnite*, which has hosted live concerts, premiered new albums by major artists, and featured content from movie directors.[5] Furthermore, young people's focus on immediacy and the present is strengthened as social media and even games can now be used with mobile phones connected to clouds. The user is not dependent on computers, laptops, tablets or even on memory drives.

Within the context of changing technology, young people are "early adopters" of technological innovations and thus guinea pigs for tech companies. Second, as "identity explorers" they are quite dependent on social media in constructing their identity. Both roles have their benefits to the growth of young people, but also pose problems and challenges for them.

The risks and negative effects can lead to digital exclusion. However, digital exclusion cannot be dealt with as a technological problem only, but as a broader societal issue. Preliminary research (Helsper 2016, Hargittai and Hsieh 2013) suggests that the same factors which cause social exclusion in general, also affect digital exclusion. Furthermore, as social exclusion in general tends to become an accumulation of interrelated difficulties, a similar process takes place in the digital world; for example, young people who lack digital skills also have suffered harassment on the internet and have life-management problems. We noticed earlier that distance learning during the COVID-19 pandemic cumulated problems to school children who already experienced difficulties at school prior to the pandemic (Ahtiainen et al. 2020: 2, Koski 2020).

### Young early adopters as "guinea pigs"

An early adopter is someone who, in addition to using the vendor's product or technology, will also provide feedback to help the vendor test and develop its product. An early adopter thus serves as a "guinea pig". Young people have been active early adopters of digital technology, social media platforms, computer games, mobile phones, their apps and so on. This is why the tech companies have been profiling and targeting their products to young people, in particular, and also see this as "user education", a long-term investment in future customer relations. The hugely successful gaming industry is a prime manifestation of this profiling. In Finland more than 90% of young people report playing computer games (Statistics Finland 2019).

5. During the pandemic, Fortnite hosted a live rap concert that attracted almost 30 million live viewers (Hall 2020).

The risks of being an early adopter include:

(1) The "horseless carriage" syndrome. When the automobile was invented, people had problems understanding it, as there was not even the language to describe it. According to Zuboff, the same is happening with digital change. There is the difficulty of recognising something you have not seen before. Zuboff talks about "the unrecognizability of the unprecedented" (Zuboff 2019: 13). In order for young people to understand gaming and social media and why they can't unplug, it would be important to know why and how they are made dependent on them. How to sensitise young people, but also adults, to the ways that the tech industry uses their data? What are the phenomena, behaviours, concepts and words through which youth work could engage with young people about the role that data colonialism, "datafication" and surveillance capitalism has on their lives?

(2) Inability to see behind technology. Digitalisation is often represented as technological development which must be good as such, which is "inevitable" and which we must adapt to. It seems to be difficult to understand that "technology is not and can never be a thing in itself, isolated from economics and society" (Zuboff 2019: 15) – in this case from the profit-making logic of the tech companies and the ways they link to governments, politics and to commercial interests. Both young people and youth workers would benefit from a critical reflection on the entire chain of digital production: Why do the tech companies collect personal data on users, classify it and sell it to third parties? Is it acceptable that users do not have control of the data that is gathered from them? Can society change the rules of digitalisation? Is everything that digitalisation has produced good? Is it good for all young people?

(3) Refusing to consider the ethical issue of being a guinea pig. Do young people (and youth workers) know that they are used as test subjects? Have they given their conscious approval of it? Is it ethical? Is all this compatible with the values of youth work? Whose task is it to be responsible for lacking compatibility – the young people themselves, the tech companies or the youth workers?

## Identity exploration through digital media

### The power of peers

Being young is about identity growth. In the early phases of growth, identity is what others think of you. Young people explore, test and mirror their identity to what peers think of them. Since Stanley Hall (1904) in the USA and, for example, Rafael Helanko (1953) in Finland, it has been demonstrated that the peer group is the key actor of identity growth of young people (see also developmental psychologists Erikson 1950 and Marcia 1966). Lopez at al. (2017: 45) say that youth "negotiate their identity and create senses of belonging, putting the acceptance and censure of others to the test, an essential mark of the process of identity construction. Youth ask themselves about what they think of themselves, how they see themselves personally and, especially, how others see them. On the basis of these questions, youth make decisions which, through a long process of trial and error, shape their identity."

Who "I" am depends on the feedback from peers. Identity development requires a response from the "others". If not, "the lights go out [and] loss of the mirror is the felt equivalence of extinction" (Zuboff 2019: 453-5). Young people need an efficient contact with their peer communities. They

have two kinds of worries: On the one hand, young people feel that without social media they miss out on things happening around them (FOMO – fear of missing out) and, on the other hand, the fear that without social media they do not have enough mirrors around them. The tech companies also know this and social media platforms are designed to create peer communities which constantly interact, comment, mirror and provide "social comparison". Furthermore, platforms like Facebook are very good at constantly involving the users; through "likes", emojis, comments, postings, newsfeed service and net series (like *Riverdale* and *Skam*). Zuboff aptly summarises: "All those outlays of genius and money are devoted to this one goal of keeping users, especially young users, plastered to the social mirror like bugs in the windshield" (Zuboff 2019: 466).

## Social media and gaming as peer learning contexts

Young people use the digital media to negotiate their identity through exploring, testing and constructing it. They create different presentations of self and interact through them with relevant communities. On the internet, there is always a "community of like-minded users" and potentially ever more friends and communities for social comparison. "With each post, image or video they upload, they have the possibility of asking themselves who they are and to try out profiles differing from those they assume in the 'real' world. They thus negotiate their identity and create a sense of belonging, putting the acceptance and censure of others to the test, an essential mark of the process of identity construction" (Lopez et al. 2017: 45).

Due to anonymity and the changing nature of the net communities there appears to be more freedom of expression. "They [net communities] enable to establish relations between peers to broach subjects they would not otherwise bring up. It thus becomes possible to share secrets and confidences difficult to express in person by doing away with physical contact, which reduces inhibitions and avoids direct value judgements" (Lopez et al. 2017: 45).

The relationships that youth construct through the internet seem to offer a feeling of freedom and autonomy that they seldom experience in other spheres of their lives and this possibly becomes a space where they can achieve greater independence. However, this paper argues that this "feeling of freedom" and "greater independence" is a relative phenomenon and increasingly challenged.

A further significant feature is the "spiral of transformation", the way young people work out and transform their digital identity into an IRL (in real life) identity (Kasza 2017). Young people can have dual identities in IRL and in the virtual platforms; they seem to able to fluently shuffle between them and use their virtual identities to develop new IRL identities.

Gaming has a strong social dimension. Finnish manuals for "gaming education" (pelikasvattajan käsikirja 2013 and renewed issue 2019) emphasise the social meaning of gaming to young people:

- It helps in *creating new friendships and constructing one's personality*. As most young people play some kind of games and belong to some of the digital communities or sub-cultures (also meeting IRL), gaming is the topic which facilitates communication among young people.
- Gamers develop *close-knit communities*.
- *Social gaming* is one of the three motivating components of gaming for players, together with achievement and immersion (identified by Nick Yee 2006).
- *"Relatedness"* is one of the basic motivations of gaming (see Przybylski A., Rigby, C. and Ryan R. 2010).

- Social dimension has become increasingly important. According to a study more than 70% of gamers played with somebody else as a co-player or as an adversary (Granic I., Lobel A. and Engels C. 2014).
- Studies on different kinds of games and the motivations to play them show that *"sociality"* is an important element (Mustonen and Korhonen 2019: 8-11). Streaming games, for example in youth centres, is a way of bringing young people together and building their social capital.

In sum, social media and gaming can be contexts for peer learning and identity construction with extended opportunities for social comparison and learning social skills. However, at this stage of the development of the digital media more needs to be known about how the identity develops and what are its positive and negative effects. Due to the overall positive experience and image of digitalisation and the fact that the negative effects are either difficult to recognise (as we noted above) or usually concern a minority of citizens, it is the negative effects which tend to be hidden.

## Addictive gaming

Studies in the effects of gaming are somewhat controversial, but many studies indicate that excessive gaming causes aggression, poor academic performance, health problems (obesity, insomnia, back pain) and addiction (Prot et al. 2014; compare also the differing assumptions within academia: Aarseth et al. 2016 vs. Griffiths et al. 2017).

An important milestone in this debate was the decision of the World Health Organization in September 2018 to add "gaming disorder" to its International Classification of Diseases (ICD-11). It is defined as a pattern of gaming behaviour ("digital-gaming" or "video-gaming") characterised by impaired control over gaming, increasing priority given to gaming over other activities to the extent that gaming takes precedence over other interests and daily activities, and continuation or escalation of gaming despite the occurrence of negative consequences. For gaming disorder to be diagnosed, the behaviour pattern must be of sufficient severity to result in significant impairment in personal, family, social, educational, occupational or other important areas of functioning and would normally have been evident for at least 12 months. National implementation of the new classification is expected to begin in 2022.

There is still some ambiguity and controversy on the exact definition and measurement of gaming disorder, but research seems to suggest that 1-5% of gamers develop the disease (the most commonly used figure is 2%) (Kuss D. J. and Griffiths 2012). For example, 90% of the 1.6 million Finnish children and young people (5-29 year olds) play digital games (Statistics Finland 2019). A gaming disorder prevalence of 2% equals to 32 000 children and young people. Furthermore, research has identified "problematic gaming" as people at risk of developing gaming disorder. Their share is estimated to lie between 8% and 12% (Kuss et al. 2012, Adiele et al. 2014, Brunborg et al. 2013, Kuuluvainen and Mustonen 2019: 43). A 10% prevalence equals to 144 000 Finnish children and young people being at a certain risk of developing gaming disorder. The scope of "gaming disorder" and "problematic gaming" deserve attention – early prevention, intervention and treatment. Furthermore, the risks of gaming also present a challenge to youth work, not least because, for example in Finland, 41% of youth workers report that they use digital games in their work with young people (Verke 2019: 15).

The gaming industry further profited from the COVID-19 pandemic in spring 2020 – it produced a spectacular 35% revenue growth and a 30% increase in players for the video games industry.[6] Additionally, it has boosted e-sports. Clearly, video and mobile games have provided entertainment, experiences and social connections for young people locked in their homes. However, we do not yet have data on the negative effects of more young people spending more time with increasingly addictive games. Due to COVID-19, there may be a price to be paid for replacing social and physical distancing – youth locked at home – with excessive gaming.

## Ubiquitous social media

Increase in social media usage is reported to induce stress as people become aware of other people's stress (Hampton et al. 2015), anxiety and lower self-esteem (Primack, B. A. and Escobar-Viera C. G. 2017). Frequent viewing of photos and selfies through social networking sites like Facebook is linked to a decrease in self-esteem and life satisfaction because users compare themselves to photos of people looking their happiest (Wang 2016). Further negative effects include inadequate sleep, bullying, FOMO ("fear of missing out"), grooming[7] and dependency, which is equal to dependency on alcohol and drugs (RSHP Study 2017).

A study on the health and well-being effects of YouTube, Facebook, Snapchat, Twitter and Instagram showed that Instagram had the most significant effect on one's well-being (RSHP Study 2017, 18). Instagram has more than 1 billion users. One can post pictures, like or dislike them or manipulate the images. The effect can be that likes can either boost self-esteem and self-expression or that dislikes, lack of likes and altered images can decrease self-esteem and possibly lead to depression. The research evidence is somewhat contradictory, but suggests that girls, in particular those with already low self-esteem, are more vulnerable to the negative effects (Lockhart 2019, RSPH Study May 2017). A further negative effect specific to Instagram is distress from unsatisfactory body image (how you feel about the way you look).

New apps and contenders keep on entering the tech market. In July 2020, a Chinese-owned app, TikTok, was the most downloaded app, with 800 million users. Users can record short videos of dancing, singing or goofing around and edit them. An essential element is adding a soundtrack and thus profiling the user, his/her online identity, as a mix of body and the sound. It has also been used to send political messages and organise political action. Contrary to Facebook it is an online space largely free of adults. An algorithm constantly provides each user with new responses and views irrespective of how often the user downloads his/her own material. Like the other social media platforms, TikTok is also addictive. We noted earlier that the search for immediately stimulating leisure is a specific character of young people's media use. The quick tempo of watching the short videos (as compared to YouTube, for example) probably responds well to this urge for immediacy and contributes to addiction. Literature (Munger 2020) has also identified censoring information and appearance of misinformation in TikTok. A widespread concern is privacy violation (data collected without the user's consent). TikTok installs browser trackers on the user's device and can collect a variety of information including the user ID, which enables TikTok to link data to user

6. The gaming industry is a big economic player. The global video game market is forecast to be three times bigger (US$159 billion in 2020) than, for example, music industry revenues (US$57 billion in 2019).
7. Online grooming is a process where someone makes contact with a child with a motive to sexually abuse them, either online or offline.

profiles in a very targeted way. According to cyberprivacy analyst David Janssen (2020), “the privacy and security risks that come with TikTok are serious.”

A Pew Research Centre survey in 2018 found that in the USA 95% of the Z-generation, the post-1996 cohort, reported being online “almost constantly” (Andersson and Jing 2018), like checking Facebook nearly 200 times a day (Zuboff 2019: 448). This is not only motivated by the need to know what is going on, but also for peer comparison: according to Dorsey (2017), 42% of young people report that social media has an effect on how others see them. 35% of young women also suffer from this comparison: “Their biggest worry online was comparing themselves and their lives with others as they are drawn into ‘constant comparison with often idealized version of the lives and bodies of others’” (Zuboff 2019: 448).

But why is it so difficult for young people to unplug? Why is life in digital “swarms” (flocks) addictive? A study conducted by the International Center for Media and the Public Agenda (ICMPA) (2019) asked 200 students at the University of Maryland, College Park to abstain from using all media for 24 hours. After the experiment, students reported the following; (1) dependency with symptoms characteristic of clinically diagnosed addiction, (2) isolation, as living without social media meant going without their friends and family, (3) inability to keep track of relevant newsfeeds, (4) boredom and distress, and (5) difficulty to manage the day without music in their ears. The study concluded that “most college students are not just unwilling, but *functionally unable* to be without their social media links to the world”.

Most young people today are linked to social media through their smartphones. Research has identified “nomophobia”, a public health problem typical of the digital age, which is caused by an excessive fear of being without access to a smartphone (Moreno-Guerrero and Belmonte 2020). Research has related it to the development of personality disorders and mental, physical, educational, and social problems (for further details and the nomophobia test, see Wei 2020). During the pandemic multiple social media websites reported a sharp increase in usage after social distancing measures were put into place. For example, Facebook’s analytics department reported an over 50% increase in overall messaging during March 2020. Without underestimating the positive uses of social media in adapting to the physical isolation of the pandemic, the possible negative effects cannot be disregarded, either.

Couldry and Mejias (2019: 110) express concerns about the way social media such as Facebook are able to construct apps and solutions which hook their young audiences to their platforms: “[Their] ability to create addiction in vulnerable audiences, reorganize reality for profit, reduce social life to *social media* life, derive value from the resources of the users, and mobilize global markets, makes it a good example of data colonialism in action”.

Based on the above, general health, educational and ethical questions may be raised: How has the increased use of computer games and social media affected digital dependency and problem use? To what extent are gaming and social media constructive educational contexts of growing up? As gaming and social media platforms are consciously designed to be highly addictive to young people, are there negative health effects related to this dependency and what is the responsibility of the gaming and social media industry? What about youth work? How can we sensitise young people to the strategies and mechanisms through which they are excessively captivated by digitalisation?

## Nature of digital exclusion

There are two sides to digital exclusion. One is that partly the problems and forms of exclusion are more or less directly attributable to technology and the business logic behind. Social media and video games are designed to be addictive and to appeal to our psychological vulnerabilities. Excessive gaming can lead to "problematic gaming" and to "gaming disorder". Constant social media use can lead to a number of health and social problems and to a difficult dependency of the media. Both can contribute to accumulation of problems both on- and offline.

The other side of digital exclusion is that it is also a result of social exclusion in the physical reality. This means that young people who are facing multiple forms of disadvantage or discrimination, such as those from lower socio-economic backgrounds, poorer neighbourhoods and with lower education indicators, are more likely to also experience the digital divide, different forms of digital exclusion, including the lower levels of media literacy, higher levels of "screen dependency", and adverse social and health effects of too intensive social media use (Siurala 2020). Considering the links between social and digital exclusion, it is clear that the policy responses to digital exclusion require the understanding of and focus on both digital technology and its related caveats, and social and policy context, multi-agency collaboration and early prevention and intervention measures for young people.

COVID-19 has led to unprecedented physical and social distancing of young people, which schools and youth work tried to compensate through digital means. Schools offered distance learning which, at least in Finland, functioned well, as a rule. However, many young people were unsatisfied with the quality of education, lacking support and suffering from social isolation. Some became marginalised. In youth work COVID-19 divided the approaches of municipal services for young people into two: outreaching youth work and digital youth work. Youth workers from the youth centres started working on the streets as soon as the centres were closed. At the same time, online activities were developed causing Pekka Mäkelä (2020), Director of Youth Services in Vantaa, to say that "digital youth work has come here to stay". According to the statistics of 10 cities in Finland, participation frequency in youth work dropped by 50% when the pandemic started. However, the proportion of digital youth work rose from a margin to 30% of the entire volume of youth services (Kanuuna Statistics 2020). Statistics and measures on outcomes are being developed. At the moment, we do not know what has happened to the quality of youth work, what kind of young people digital youth work has reached or what has been the overall reach of youth at risk.

Youth work offered digital platforms for young people to meet, chats and organised gaming (Espoo, Finland). Other cities established online talks with young people, musical events via the internet and virtual fitness workshops (Madrid). Another typical activity was online group work (Ireland). The Finnish Centre for Online Youth Work (Verke) suggested useful online activity sites and meeting places for young people and youth workers (Finland) and the EU-Council of Europe Partnership made proposals and recommendations for the use of digital tools towards social inclusion in youth work (Şerban et al. 2020). Research is still lacking on how young people experienced these opportunities and services, and on how youth at risk were reached. Already before COVID-19 "there has been little analysis of how and if digital opportunities improve the lives of marginalised young people, what risks it might bring, and what it implies for the youth policy, practice and youth

research" ((Șerban et al. 2020: 53). The same goes for the pandemic in spring 2020: at the moment (autumn 2020) there are not many research results on how the newly divided service structure (street work + digital youth work) has met young people.[8] How do they experience it? How well does it reach young people?

Youth work has a mission to promote social inclusion of young people. Despite a general over-reliance on technology, social exclusion is linked with many forms of digital exclusion, where interrelated difficulties tend to accumulate. Many of these difficulties became visible during the pandemic, as society tried to solve forced physical distancing (lockdowns and self-isolation) through technology, such as distance learning and digital platforms and services. Youth work must be sensitive to and prepared to react to harms, risks and the exclusion of young people also in the digital world.

## An emergent digital exclusion issue: Violent online radicalism and hate speech

"Youth radicalisation and the associated use of violence have become a growing issue of concern in Europe and its neighbouring regions. There has been an increase in hate speech, in the incidence of hate crimes and attacks on migrants and refugees, propaganda and violent xenophobia, as well as a rise in religious and political extremism and in terrorist attacks in Europe and its neighbouring regions" (Garcia Lopez and Pasic, 2018, Haavisto 2020: 15). The internet is not itself the cause of extremism, but it does provide an opportunity for radical groups to communicate their message, to recruit new supporters and to strengthen their internal identity and motivation. The internet has been described as "a catalyst" (Baldauf et al. 2019: 13), "a facilitator" (Neumann 2013: 1) or a "mobilisation frame" (Holt et al. 2015: 1) for radicalisation processes. According to research (Baldauf et al. 2020) other factors – such as poverty, uncertainty, individual inclination to authoritarianism and the emergence of extreme-right populism in Europe – have contributed to radicalisation and hate speech more than the internet.

However, there are certain features specific to the internet which promote radicalisation and hate speech. John Suler (2004) suggested that the exceptional amount of hate on the internet is a result of anonymity and absence of moderation – "online disinhibition", as he called it. More recently, the development of social media has led to "filter bubbles" or "echo chambers", in which internet users decide to read only certain kinds of information and news. At the same time algorithms learn the preferences of these user groups and deliver respective news to their bubbles. Trolls and other producers of fake news use the same logic. In fact, "fake news is transported considerably faster and further than true news" (Montag 2019: 28). Furthermore, social media is based on creating strong emotions: "Users become hooked on emotional stimulus, which algorithms aim (and are able) to provide on an unlimited basis. In order to incite an intense emotional reaction, the user is directed towards increasingly shocking and radical content (Haavisto 2020: 15). Thus, social media and its architecture provide a very fertile ground for accumulation of hate speech and radicalisation

8. From a recent European research (RAY-COR 2020b) we do know that 70% of youth workers said the pandemic had a major effect on their work, many had to interrupt or delay the work and a third of them said they "did not reach any of the young people they used to work with". Furthermore, 54% of young people said the pandemic had a major effect on their access to youth activities or projects.

(Holt et al. 2015).[9]

The policy reactions have ranged from moderating or removing the "obviously illegal" content to focusing on prevention, digital literacy, building positive narratives and supporting civil society action – "a digital uprising of decent people" (Guhl and Baldauf 2019: 58). Research seems to show that removal of content is not effective, raises new issues such as the limits of freedom of expression, and strengthens the identity of the extremists (Köhler and Ebner 2029: 25, Neumann 2013: 1). At worst, aggressive moderation of contents can be regarded by the extremists as a "call to arms" and can have an escalating effect (Ritzman 2018). Still, moderation and removal of hate speech have their role in policies against radicalisation and hate speech. The big tech companies have been slow to self-regulate their platforms, and recently (in 2020) many big companies have boycotted social media such as Facebook due to the lack of control over hate speech (Wong 2020).

According to a new policy approach the focus should be on (1) collaboration between policy makers (the public sector), the big tech companies, civil society and research, (2) preventive measures such as improving social cohesion, reducing poverty and marginalisation, (3) enhancing (critical) digital literacy, (4) strengthening young people's resilience and creating positive narratives, and (5) setting up targeted interventions for youth at risk of violent radicalism and for those already radicalised (see, for example, Garcia Lopez and Pasic 2018, EU Internet Forum). Clearly, youth work can contribute to most of these policy aims: there is "the need to work with young people in order to identify and address the root causes of extremism and prevent their radicalisation, as well as strengthen young people's resilience, prevent marginalisation, promote equality, emphasise alternatives and reinforce the cohesion of communities in which they live (Garcia Lopez and Pasic 2018: 6).

Looking at the existing practices and strategies of digital youth work, urgent development is needed in order to establish a coherent strategy for critical digital literacy, which goes beyond mere training digital skills and is also based on updated knowledge of online extremisms and hate speech, and understanding of opportunities for youth work to intervene and empower young people to develop alternative imaginaries to this effect. The strategy should not lose sight of the current context of the big platforms having built their own ecosystems, their gatekeeper positions and practices which might favour and even catalyse extremist action. As the internet is not only a problem but also a solution, how can youth work and technology and tech companies work together to mitigate hate speech and promote tolerance on the internet?

9. Web influence on violent radicalisation in a nutshell (Haavisto 2020, 17):
   1) The internet creates opportunities for radicalisation, but does not radicalise on its own: real world contact is almost always affiliated with violent radicalisation.
   2) The internet creates an echo chamber by enabling a conversation environment where opposing views are not accepted.
   3) The internet normalises and builds on extremist groups' rhetoric based on prejudice and intolerance that violate human rights.
   4) The internet creates an illusion of a group of like-minded people being larger than it actually is.
   5) The internet dispels and/or eliminates possible geographic challenges and differences in communicational hierarchy.

# Where do young people and youth work stand?

## Youth work as an advocate of youth

What is a youth worker, what is youth work? "[A] youth worker is a professional or volunteer youth leader who facilitates young people's learning, personal and social development and motivates and supports them in becoming autonomous, active and responsible individuals and citizens. The delivery of youth work is underpinned by the principles of voluntary and active participation of young people" (Conclusions of the Council 2019: 4). The purpose of youth work is to support the autonomy of young people to be and to become an active independent citizen. Youth work provides young people with activities through which they develop their identity and social agency, and, if they so feel, change society. The conception of "youth as an actor of social change" stems from the 1960s Student Revolution and has been seen to manifest itself in the fall of the Iron Curtain, in protests against the Vietnam war, in the Occupy movements, the Arab Spring and more recently in the massive climate change movements such as Fridays for Future. "Youth participation" and "active citizenship" have been the top priorities of youth strategies of the European Union and the Council of Europe since 1968.

Another important aim of youth work is to help young people to integrate in society, and find their educational and employment paths. A special concern has been over disadvantaged and marginalised youth, who face multiple barriers in their daily lives.

As a result, youth work has taken the role of defending and supporting young people in their problems, interests and claims. Youth participation has been the key guiding principle of Youth Organisations and municipal youth work. There are even the concepts of "autonomy of youth work" and "youth centrism" which are particularly popular in the UK (Ord 2012, Sercombe 2010). Taken to its extreme, it is the institutions – school, public youth work, governments and politicians – as well as capitalism, free markets and private companies which all oppress and manipulate youth (Belton 2014, Skott-Myhre 2009, Worrel 2014). According to this radical approach, youth work should stand unquestionably on the side of young people and, as Brian Belton says, "The task of youth work is to wage guerrilla warfare against institutions" (Belton 2014: 102-4). Even less militant youth workers maintain that "everything must start from the young person". However, young people may want many things, sometimes things created by commercial youth cultures or by business whose interest is more on profit-making than on meeting the needs of young people. In responding to what young people want, youth work should also consider the broader interests and the accompanying risks. Youth work is essentially an ethical and socially responsible educational actor.

## Young people and the digital industry

The tech industry and the business world typically regard digitalisation as a developmental opportunity: "the catalyst, enabler and engine of societal development throughout the previous decennia" (Bengtsson et al. 2014: 50) which also in the future allows for developmental possibilities in almost every sector. References to negative effects of digitalisation are exceptional. The views of

young people on digitalisation tend to be similar to those of the tech companies and business. According to survey results of the *Digitalist* magazine (2016), the majority (about 70%) of young people think that digitalisation has a positive impact on their careers and on their lives: "the results demonstrate that young people are aware of the tremendous impact that an increasingly digital area has on the potential for good that it can have on the world we live in". "The potential for bad" is not mentioned. As a result, virtually all young people are online "almost all the time".

## Youth workers line up with young people on digitalisation

In Finland, the orientation of municipal youth workers and their managers to digitalisation is very positive. According to a recent survey (Verke 2019: 11), on a scale from 1 (very negative) to 7 (very positive), the average response was 5.8 to the question "How do you relate to digitalisation?" The respondents were also given the following statement to agree or disagree (strongly, somewhat, in between): "I understand what are the societal effects of digitalisation". Almost all, 88%, agreed (strongly or somewhat) with that statement.

Youth workers seem to be in line with young people to understand existing forms of digitalisation as a necessary and positive development. They can live up to their youth work ethos and fulfil the expectations of young people in promoting their enthusiastic immersion in digital life. Raising concerns regarding the negative effects of digitalisation would mean capitulation to child protection and criticism of digitalisation would mean holding up development and surrender to Neo-Luddism[10] – which would be against young people's wishes.

## Digital youth work facing a new challenge

Finland was one of the first countries to develop digital services in youth work leading in 2004 to Netari, a popular online Youth Centre (Tuominen 2017: 25). A few years later the National Centre of Expertise for Digital Youth Work in Finland (Verke), funded by the government, was established at the Helsinki City Youth Services. The first Europe-level youth policy initiative was the Estonian EU Presidency in 2017, when the term "Smart Youth Work" was launched with examples of the Estonian Youth Work Centre, followed by EU objectives for digital youth work (European Commission 2018).

The Finnish Verke is a frontrunner of digital youth work. It is focused on advocacy, training, research and development of digital youth work (for freely downloadable publications in English, see www.verke.org). It is dedicated to "make digital youth work transparent … based on the needs of young people" (Verke 2014: 10). The published materials mostly consist of methodology of digital youth work (2014, 2017) and creating organisational and professional conditions for digital youth work (2016, 2019). Verke has been influential in producing inspiring examples of digital youth work practices and in drafting guidelines for organisational and professional development of digital youth work, as well as designing European guidelines for digital youth work.

10. Neo-Luddism or new Luddism is a philosophy opposing many forms of modern technology.

Verke, the EU expert group (2018) and the digital youth work scene echo the rhetoric of the tech industry of the historical inevitability and ubiquitous virtues of digitalisation. They also anchor themselves in the existing youth-centric youth work concept, as digital youth work is defined as "proactively using and/or addressing media and technology in youth work[:] it applies to any youth work settings, is an integral part of other forms of youth work and can be used in face-to-face situations as well as in digital environments. Digital youth work is a complementary, integrated element to any type of youth work. It is underpinned by the same ethics, values and principles as the youth work that we know" (European Commission 2018). Young people are seen as the innovative drivers: "the agile and proactive users" (InterCity Youth 2018).

However, considering the development of the big tech companies in the USA and China and the critical research (like Zuboff 2019 and Couldry and Mejias 2019) and policies (EU digital strategies 2020) that followed, digitalisation and digital youth work face distinctly new challenges. Young people have created a powerful movement against the fossil energy industry and their government partners, but will the tech industry and their government partners be similarly challenged by young people? Youth work and media literacy need a theoretical and conceptual basis, as well as practices and methods, which improve awareness of and help act on existing strategies of the tech industry and their abusive digital policies and practices.

## What should youth work do?

### Re-inventing the emancipatory potential of youth work to improve digital awareness of young people – updating critical digital literacy

Historically, the 1968 global protest against military and political repression was a youth movement, young people were important actors in the 1989 fall of the Berlin Wall and the collapse of the Iron Curtain in Europe, and in the 2011 Indignados movement, the Arab Spring and the Occupy movements. More recently since 2018 it was schoolchildren around the world who marched to stop climate change. However, data colonisation, datafication and surveillance capitalism are phenomena which are difficult to grasp, as we are "habituated" to them, they are "unprecedented" and we perceive technology and digitalisation as "inherently good" and "inevitable". Digitalisation is also multifaceted; it is at the same time indispensable and useful, but also seriously misused, harmful and "toxic to the human condition". Thus, it does not open up to youth action as easily as authoritarianism, political and military repression or the inability of governments to act on climate change. But, techlash has the potential to help young people see the other side of digitalisation.

Youth work is an established public service and a field of citizenship action run by youth organisations, activities and movements. To facilitate youth action the youth field should:

1) clearly align its policies on international and national levels with new research and strategies, like the EU digital strategy, to combat the domination of the tech industry to support user privacy, open data use and promotion of digitalisation for the "social good";
2) develop a broader framework for youth work to re-orient itself to tech industry repression; and

3) create a practice-based critical digital literacy curriculum.

## Aligning youth policy strategies with EU digital strategies

The European Commission launched its proposal for a renewed EU Youth Strategy 2019-2027 in 2018. It emphasised the importance of digital technologies in the lives of young people and as a working method of youth work, as well as the significance of digital competences of youth workers (COM (2018) 269 final: 1). The Commission's proposal was then examined by the Member States and stakeholders, including youth organisations. When the strategy was finally adopted by the Council of Ministers in November 2018, almost all references to digitalisation were removed (Council Resolution (2018/C 456/01). During the Finnish EU Presidency, the Council of Ministers adopted in 2019 Conclusions on digital youth work, again emphasising the importance of digitalisation in the field (Council Conclusions 28 November 2019). It was problematic that these strategies and political documents mentioned the risks of digitalisation, but did not go into any detail about the negative effects or the economic and societal effects of the dominance of the tech industry. The 2020 EU Digital Strategy, AI Strategy and Data Strategy (see above) brought a drastic change: the autocracy of big tech companies, data colonialism, the dubious and opaque political and commercial use of Big Data and digital surveillance should be taken seriously.

At this stage the youth field should determinedly and urgently align its digital strategies to those of the EU. European and national youth strategies need to elaborate how youth work, youth organisations and young people could become better aware of tech industry strategies, contribute to a human rights-based digitalisation and design measures to combat the negative effects of digitalisation. These strategies will give the impetus to local level youth work to empower youth workers and the young people to implement the new objectives.

## Towards a broader framework – Changing the emphasis from "youth centrism" to "encouragement to alternative imaginary"

The existing ethos of youth participation and active citizenship is based on a liberal theory of individual agency and the neo-liberal concept of (individual) capabilities. Young people are perceived as independent individuals responsible for their own actions in a free liberal democracy, in the same way as private companies operate in a free market economy. Following this, the task of youth work is to support the individual capabilities of young people to fulfil their strengths and to provide them with opportunities to be participating citizens. There is also the assumption that young people know what they need. As the youth work credo says: "Young people are the best experts on matters concerning them". In this spirit, youth work empowers young people to express themselves, it does not educate them. Youth work ethos means autonomy and self-determination of youth. The youth worker is there to help young people pursue his or her own ideas and autonomous decisions, "unambiguously on the side of the young people" (Sercombe 2010: 26). This "youth centrism" leads to the demand for the "autonomy of youth work" (to be able to defend young people against oppressive government) and to the idea of "youth worker as an advocate of youth".

However, all this works as long as young people are aware of their needs, what their life conditions are, and how they are affected by political, economic, technological and commercial structures. In

many respects, they know. Young people are surprisingly aware of the effects of climate change and the factors behind it and have become convincing political power players. On the other hand, there are phenomena like digitalisation, data colonisation, datafication, surveillance capitalism and the strategies of the big tech companies of which young people might not be that well aware – even if they are such keen and skilful users of digital devices and platforms. For example, apparently too many young people are not aware of how the tech industry is exploiting their data, guiding and manipulating them through sophisticated analysis of massive data and through collaboration with commercial and political interests, even with governments (Pew Research Centre 2019).[11] The article discussed earlier why it has been difficult to perceive these new phenomena and why particularly young people so uncritically and one-dimensionally have embraced digitalisation.

Herbert Marcuse titled the introduction of his quintessential *One Dimensional Man* (1964) "The paralysis of criticism: society without opposition". Marcuse defines advanced industrial society as a "technological universe" which is inherently based on economic and political rationality. The rationality is to stabilise society through productive growth, culture, regulated freedom and participation and safe public life. "Technology serves to institute new, more effective, and more pleasant forms of social control and social cohesion" (*idem*, 46-7). This results in a "one-dimensional" universe of thought and behaviour, in which aptitude and ability for critical thought and oppositional behaviour wither away. However, the core of Marcuse's analysis is that citizens can still imagine different realities, engage in critical thinking of the "technological rationality" and create alternative goals of practice.

In the 1960s, technology was different from technology today. Still, Marcuse's analysis can be valid 60 years later. We discussed earlier how the power and influence of big tech has created a positive digitalisation narrative, which inhibits criticism – one-dimensional universe, as Marcuse would have called it. Following Marcuse's thinking, Chetkovitch (in Stansberry et al. 2019) argues that "manipulation in politics has always been a concern, but it seems as if the scale and sophistication of manipulation through social media has taken this threat to a new level". There is an increasing amount of fake and contradictory info, weird and bizarre news which all cause people to lose their trust in media and politics (Thurow 2019). In this process citizens do not seem to develop the skills needed for democracy – ability to listen, think critically, gather data, weigh sources and empathise (Chetkovitch 2019). As a result, "instead of more-informed citizens, often people are less informed: manipulated by partisan propaganda increasingly custom-targeted to its unwitting recipients" (Berleant 2019). In his book "New Dark Age – Technology and the End of the Future" James Bridle (2018) maintains that the strategy of today's digital society seems to be the pursuit of more data, more computation, and more technology which only produces ever more morbid consequences, fuelling the fires that "tech" sets out to fight. But, like Marcuse, Bridle sees an opportunity: "the nature *and* the opportunity of the present crisis: an apparent inability to see clearly in front of us, and to act meaningfully, with agency and justice in the world – and, through acknowledging this darkness, to seek new ways of seeing by another light" (Bridle 2019: 11) – an attempt to find alternative ways of seeing and understanding the world.

Considering the context described above, youth work should address digitalisation within the broad framework of respecting users' rights on his or her data, the transparency of data and its analysis

11. According to the 2018 Pew Research Centre Survey of Facebook users, around half of Facebook users (53%) say they do not understand why certain posts are included in their news feed and others are not, and 74% say they did not know Facebook maintained the lists of their interests and traits.

and its use for the good of young people. Young people should be sensitised to their digital rights, encouraged to critical thinking of existing abusive practices and empowered to imagine different and useful ways of using data and, as Marcuse says, "to create alternative goals of practice" and as Bridle says, "to seek new ways of seeing ... and to act meaningfully, with agency and justice".

This means that, concerning digitalisation, we cannot leave young people alone, or it might not always be good to only rely on what young people want youth workers to do. Youth workers should not unconditionally support young people's digital desires and expectations, but rather question them and encourage young people to alternative imaginary of digitalisation. For example, youth work cannot establish a gaming house just because young people want to play. Such a situation is rather an opportunity for youth workers to reflect it with the young people: What are the educational aims of it? What are the risks involved and how to prepare for them? What is the alternative imaginary of standard computer games?

## Engaging youth workers to develop practice-based critical digital literacy

### *Encouragement to alternative imaginary*

Techlash indicates that people have become increasingly uncomfortable with the ways that the tech industry extracts their personal data and uses it for commercial and political purposes. Not everybody thinks that all technological and digital development is inherently good or inevitable, something beyond human control. We have already seen how digitalisation is linked with a broad array of negative effects. It creates social injustice, and threatens democracy and human rights. Neither is technological and digital development "inevitable". It is essentially a result of modern-day colonialism (Couldry and Mejias 2019) and data capitalism is orchestrated by the tech industry (Zuboff 2019). Some youth workers might say that we must facilitate young people's ways of gaming and use of social media, because that is where digital and technological development inevitably takes us. However, gaming and social media are man-made by private industry with its own profit-making interests and strategies. There are alternatives. The task of youth work is to raise the awareness of young people of the big picture of data colonialism and surveillance and to encourage them to alternative imaginary.

### *Understanding the rhetoric of the tech companies*

The big tech companies constantly gather information from users, analyse it and sell it to markets and governments. According to their own rhetoric, the information they gather is "anonymous" and is used to "personalise", "individualise" and "improve services", and to provide "free information flow for everybody". However, recent research has questioned this rhetoric.

First, it seems to be easy to de-anonymise mass datasets and re-identify individuals which algorithms have categorised (Ohm 2010, Su et al. 2017). Second, "individualisation" and "personalisation" depend to a large degree on data-gathering methods which violate privacy, like "Cayla", a doll manufactured by the biggest toy company in the USA, which discusses with children, records their replies and transmits the conversations back to the company for further analysis. The outcome is individual and personal data, which is fed back to us as marketing offers. But this does

not mean services which the users decide to be useful for them, but consumption proposals which the algorithms have decided the user needs. And the ideology of "personalisation" not only refers to commercial targeting but also to any form of targeted surveillance and control. Finally, the digitalisation credo to provide "free access to all information for everybody" is highly questionable for a number of reasons. First, because the knowledge-producing process of the tech industry is not transparent; data gathering and analysis of it by AI and algorithms is almost entirely opaque (Couldry and Mejias 2019: 124). Second, entering developing countries the tech companies behaved like historical colonisers (Bridle 2018) and became richer and more powerful, while the colonised became underdeveloped and dependent. "The users in disadvantaged countries get to consume the products but are shut out of the value-add production side of the data economy" (Weber 2017: 12). In a similar manner, Facebook wanted to bring free access to information also to developing countries introducing Free Basics, a light version of the internet. It, however, was quite slow, opened mainly to Facebook's own pages and had limited access to the whole internet. The main reason for Facebook to launch Free Basics was to have unrestraint access to new user information. In India, civic activism blocked the import of Free Basics in 2017. In the light of the above, the rhetoric of "free access to information" of the tech companies rather appears as a set of euphemisms.

How can we reach beyond the mainstream digitalisation rhetoric? Minna Saariketo (2017: 42) talks about critical technology education, which "is an approach that challenges mainstream ideas of digital education as solely adapting to existing technology and equipping people with skills needed in order to use technology effectively (to enhance economic growth)". She continues: "instead of assuming digital and technology to be neutral concepts or something that can be harnessed to fulfil the needs of education or the economy, the focus should shift to how technology alters perception and thinking" (ibid.: 42). She wants critical media education to answer questions such as: "What kind of power structures does technology construct and maintain? Who benefits from technology? What kind of values does technology create and how does it alter the existing ones? What is the logic of software solutions? How do search engines and algorithms work and organise information?" (ibid.: 42-3 and Saariketo 2018). To broaden the understanding of digitalisation and technological change it is useful to learn to question and criticise, because technology is not necessarily natural, neutral or self-evident. "Questioning what concepts like *free*, *friend, link, like, community, share, collaboration, smart* and *open* actually represent in the digital context, might result in a more conscious and knowing mode of engagement … they might be applied in alternative ways that seek to counter hegemonic discourse" (Pancrazio 2016: 172). These are difficult questions and challenging tasks for digital literacy. However, youth work has great potential to apply learning through practice in the variety of digital projects that can be carried out in youth work. Youth workers are remarkably skilled to engage young people in a digital media practice, create a reflective dialogue with them and make them act. Media education is not only needed for young people, but also for youth workers.

### *Do young people know how they are targeted and exploited?*

Why focus on young people? They are not the only age group which is targeted by tech companies. Four reasons are worth mentioning for why young people should be sensitised to these effects. First, young people are the most active internet users; 95% of young people use the internet daily (Serban A. M. et al. 2020: 17). Second, young people are the most vulnerable users due to, for example, the fact that their brains and social skills still are developing (Hilliard et al. 2020). Third,

youth researchers, ever since Stanley Hall in 1904, have emphasised that peer relations are extremely important for young people. However, "social media is designed to engage and hold people of all ages, but it is principally moulded to the psychological structure of the adolescence and emerging adulthood, when one is naturally oriented towards the 'others', especially toward the reward of group recognition, acceptance, belonging, and inclusion" (Zuboff 2019: 449). Fourth, even if young people are often assumed to have admirable digital skills, a study (ECDL Foundation 2015: 1) indicates that "young people do not inherently possess the skills for safe and effective use of technologies, and skills acquired informally are likely to be incomplete" and vary within countries and across Europe.

It is not only clicks and searches which are used to gather data from the user, it is everything in the online milieu: e-mails, texts, photos, songs, messages, videos, locations, communication patterns, attitudes, preferences, interests, faces, emotions, illnesses, social networks, purchases and so on. Google, Facebook and others continuously develop new devices and sensors to feed their supercomputers, algorithms and AI; self-driving cars, smartphones, clothes, books, videos, robots, microchips, drones, cameras, televisions, watches, household devices, health and location apps, etc. Considering that 96% of 10- to 24-year-old Finns (Statistics Finland 2019) use WhatsApp, the question is "how many of them know that Facebook [owns WhatsApp and] stores user information for further analyses" (Couldry and Mejias 2019: 11)? In the USA, 74% of users did not know Facebook maintained a list of their ad preferences (Pew Research Centre 2019). Other popular apps among young people include health-monitoring: Couldry and Mejias report (2019: 174) – a study of 12 apps and 2 wearable devices which transmitted their information to 76 different third companies – something that the users might not be aware of.

The ubiquitous tracking of the tech industry extends everywhere in our lives: "I felt like I'm being followed by my own phone. It's scary" (Fox 2009). This has raised the issue of "minimal integrity of self" (Couldry and Mejias 2019: 161-82). There cannot be autonomy of the self, a space for personal reflection and action, if digital colonialism tracks us everywhere and keeps herding us. Rather, "our autonomy is being reconfigured by data practices" (*idem*: 168). This should be a question of life and death to youth work and youth policy. Political documents such as youth acts, youth policy recommendations, resolutions, charters and youth policy programmes and strategies emphasise youth autonomy, youth participation, listening to the voice of young people and supporting the personal growth and development of young people. The youth field should be seriously concerned about young people's digital privacy and their "minimal integrity of self".

### *Can young people control their digital life?*

It is clear that digitalisation with its increased peer communication platforms offers young people new possibilities for developing their identity, typically engaging in presenting oneself through social media and elaborating feedback from peers. Many of these online arenas are in constant change. How to perform self in front of your virtual peers, friends, fans, likers and followers in Facebook, YouTube, Instagram, Twitter, WhatsApp, Snapchat and the like? How can you make best use of this "presentational culture of the social media"? How can you avoid its negative effects?

It is in the interest of the companies to make young people dependent on their devices, platforms and services, and the companies are very good at it. However, there is a growing field of actors developing pedagogical and therapeutic measures to deal with the different types of digital

dependency, such as controlling problematic and excessive gaming or social media attendance. It would also be important for all those working with young people to engage young people themselves into discussions like: How can we understand the strategies and mechanisms of digital corporations to create dependency? How can we become better aware of and control risk behaviour?

Furthermore, there is educational work to be done with young people to discuss with them about how their privacy is violated, how the tech companies extract knowledge from them, how that information is processed and used, how that information is used to "tune", "herd", "condition" and "modify" their behaviour and thinking (see Zuboff 2019: 292-327)? What can the alternatives be?

### *Why is it so difficult to perceive digitalisation differently?*

> *"You must be on Facebook, or you do not exist"*
> Shoshana Zuboff 2019: 341

Young people tend to be comfortable and satisfied with digitalisation – the way the tech industry prefers them to be. But Marcuse (1964: 3) reminds us that "A comfortable, smooth, reasonable, democratic *unfreedom* prevails in advanced industrial civilization". We are made to have a distorted view of a digitalised society. Zuboff says we are "cornered" and "habituated" to accept a very narrow area of what we can criticise. Digitalisation has produced – for young people in particular – attractive opportunities for leisure (like gaming) and for identity development (like social media platforms). Why should young people complain? The underlying logic of the tech industry is to offer us something we cannot resist in exchange for unlimited access to our user data. We see the benefits of GPS technology to such an extent that we decide to ignore the endless use of our location data for commercial and political surveillance purposes – we have become "cornered". Our datafied social relations have become an economic system and as Couldry and Mejias (2019: 117) claim that "the social world gets hollowed out as a site of critical agency". At the same time the tech companies, sued by public administration for their extraction policies, pursue evasive and delaying tactics which lead the public sector finally to give up or to the tech companies simply paying the fines – and to continue as if nothing happened.

A further source of confusion is that governments have suddenly realised that the future competitive edge of their national economy is digital networks and the companies that manage them. This is clearly seen in the way China, the USA and other countries fight over big tech companies and their products, such as Huawei, or apps like TikTok or WeChat. For an individual using their Huawei phone or a young person watching videos through TikTok, it is very difficult to understand the complex political and economic interests and the power play of the tech companies and governments.[12]

12. It seems that tech companies which wish to expand globally to new markets have to "retreat or decentralize". "Retreat" was the only option for Facebook to cancel its Free Basics network in India due to critical civic activism. "Decentralisation" was the reaction of the China-based TikTok after Donald Trump started to criticise it in 2020. TikTok tried to decentralise itself from its Chinese owner Bytedance and the Chinese authorities through nominating a former director of Disneyland as the CEO of its US activities and arguing that its data centres were situated outside China, independent and out of reach of the Chinese authorities.

This difficulty to comprehend the dynamics of digitalisation calls for at least following action. First, to understand these processes, there is a need for more research and discussion on political and business strategies around digitalisation. The critical research discussed in this paper serve as a good start. Second, political action, such as the recent EU digital strategy (2020), raise the awareness of issues which should be addressed. Third, media education or critical digital literacy should extend beyond learning technical media skills to understanding the broader context of digitalisation.

There are complicated power relations, strategies and processes which favour a one-dimensional attitude at digitalisation. It is a challenge in working with young people to help them perceive how and why they are "cornered" and "habituated". Given the right impetus and an open atmosphere, young people are more competent to be unprejudiced, critical and creative in comparison to the often-cemented views of adults. Techlash keeps on expanding. According to a 2018 survey (Doherty and Kylie 2019) the majority of Americans (84%) now say that they feel they have very little or no control over the data collected about them by the government and more than half of the respondents wanted more regulation and protection of data privacy.

## Discussion – Suggestions for youth work to act on data colonialism

The core of data colonisation according to Couldry and Mejias (2019) is that user information is extracted without consent, in the same way that colonial powers extracted land, property and the people from the Americas, Africa and Asia. The data became used to manage people's behaviour, as consumers, as workers and as citizens. Data established data relations, which became synonymous with human relations regulated and governed by tech companies, businesses and collaborating governments. Data relations should and can be liberated from colonialism, and youth work can have a role to play in this process.

Colonised indigenous people have long been fighting for their freedom and rights against the dominant cultures of their colonisers. The research and methodologies of indigenous people might provide an inspiration to youth work which aims at working with young people experiencing data colonialism. Linda Tuhiwai Smith (2012: 143-61) has listed 25 decolonising methodologies, which have a direct relevance to youth work and research. The five key elements of Smith are: promoting alternative imaginary; critical analysis; documenting reflection; strengthening an alternative identity; and defence of digital rights.

*Alternative imaginary* for Smith means "envisioning" and in youth work encouraging young people to imagine different visions of digitalisation; dreaming of new ways of applying user data, imagining other than commercial application of data, creating new kinds of collectivities around and beyond data, articulating ways of retaining control over data and developing worldviews and strategies that resist datafication. Alternative imaginary also means "reframing" digitalisation; reflecting the interests and motivations of big tech companies which frame young people's addiction to social media and gaming. A feature specific to young people is creativity, which should be used to strengthen "envisioning". Thus, young people should become active agents in media projects to utilise their creativity. There is also a parallel need for (action) research which would create young people opportunities for alternative reflection and action (titled by Smith as "Intervening").

*Critical analysis* according to Smith is essentially a "new reading" of colonialism. In the case of digitalisation one should analyse the assumptions and processes that have created today's digital world of young people. Has digitalisation made young people "one-dimensional"; to what extent have their creativity and cultures been replaced by externally induced digital life? How do the digital platforms for young people guide them? For example, Andra Siibak (2019) argues that every young person follows a YouTuber, who have become opinion leaders and role models for present-day youth. Are the YouTubers manipulating their fans, or does/should the audience of YouTubers critically affect the way their role models appear?

Smith calls "remembering" the need of colonised people to understand how they have been mistreated. Following this argument and applying it to data colonialism, young people should recount their negative experiences of data appropriation within the digital realm to better understand techlash. Furthermore, it is worth uncovering politics and practices of gendering, for example by looking at why gaming is a masculine practice, and does it strengthen gender-based norms, assumptions, practices and discrimination? Why is it that particularly girls with already low self-esteem are most vulnerable to the negative effects of social media (Lockhart 2019, RSPH Study May 2017)? On the other hand, can research describe youth action that has been able to question digital colonisation?

*Documenting reflection.* Smith (2012) argues that for indigenous people to liberate themselves from colonisation, they begin, facilitated by participatory research, internal reflection which itself already is a form of resistance. Smith calls this "sharing". This reflection is further recounted as "testimonies", storytelling" and "writing", as a way of using their own words to document their experiences with colonialisation and associated mistreatments.

Applying this principle to data colonialism, participatory research can also be applied with young people dominated by the unfettered marketing logic of the tech industry to facilitate their reflection, collective awareness of and resistance to the one-sided data gathering, analyses and commercial use of data. To ensure that young people's voices are heard, youth workers should encourage them to give testimonies on, for example, how a critical media project has helped them understand something new about digitalisation. Young people could also rewrite the dominant digitalisation rhetoric using their own critical wording and insight – elaborating alternative narratives.

*Strengthening alternative identity*. Alternative imaginary and collective reflection, as outlined above, create conditions for a new collective vision, but some form of organisation and continuity is also needed. One organisational form to pursue innovative solutions and strategies, and to sustain reflection and information sharing, is networking (also raised by Smith 2012). As to digitally critical young people, there has to be a cognisant and shared reason for networking. Possible themes of networking could be around ethical and socially responsible uses of digitalisation, arts and activism against digital exploitation and surveillance or digital means for climate change.

*Defence of digital rights.* Formerly colonised people have fought and continue to fight for the rights they have lost. Smith lists projects of "claiming", "restoring", "returning" and "protecting" those old rights. How has data colonisation affected the rights and forms of well-being which young people used to have before digitalisation? There is the legal dispute of "right to privacy": do the tech companies and Big Data have the right to gather data from users without their consent? The

interpretation of this right seems to be different in Europe, where it should not be allowed according to the European Union, and in the USA, where it has been interpreted to be "a right of corporate free speech" (Couldry and Mejias 2019: 178). In addition to being a legal dispute, it is also a philosophical dispute: amidst the social media messages, engagement in computer games and under commercial and social surveillance, have young people lost their free social space and their right to the "minimal integrity of the self"? If the ubiquitous tech companies "know all about your world", is there still any space left for the "autonomy of young people"?

Digital media has brought totally new dimensions in the social relations and communication of young people. However, it has also raised issues regarding the loss of other social arenas, which should be "protected" or "restored".

## Conclusions

Digitalisation appears as a positive narrative of modernity's belief in science, progress and convergence. To simplify, it tells a success story of economic growth, expansion of knowledge, smart services, linking people, digital leisure opportunities, such as unlimited access to music and movies, games and art. It is also seen as a global factor to reduce inequality and poverty, to mitigate climate change and to gradually increase democracy. Techlash has questioned this paradigm and critical authors have contributed to another narrative. According to this narrative, again to simplify, economic growth has conspicuously benefited a few tech giants. At a global level, digitalisation resembles colonialism, with profit based on data received from us, often without our consent, through opaque processes, and often sold to third parties, including markets and authoritarian regimes. Poverty and inequality are still very much present and democracy is in retreat.

There is an expansion of information; tech companies have gathered exponentially more information than ever before. James Bridle (2018) suggests that the more information we produce about the world, the less we are able to understand it, which brings about further negative effects of digitalisation. More computational power will only lead to more problems and to an increased complexity, ambiguity and uncertainty. According to Bridle (2018), the only way out is to accept the complications and the ambiguity, and search for a new way of seeing things, a new narrative.

Narratives are different interpretations – and through their own logic, facts and explanations – legitimate descriptions of things. This article has aimed to enrich the discussion of youth work and digitalisation from a viewpoint of an alternative, critical narrative. In youth work, this critical narrative should lead to the following reflections.

*Critical digital literacy*

Media researcher Luciana Pancrazio (2016) says that we either focus on understanding the media through access and technical mastery of it or through ethical and theoretical analyses. The current form of digital education in youth work is the former. Typically, it consists of two approaches. One is called "design turn" with emphasis on learning to code and the maker movement. "The overarching focus of coding and maker movement is on the creation of 'new' things, while along the way learning skills of mastery and critique" (Pancrazio 2016: 167). The limitation is that the underlying ideology of the digital contexts is left unquestioned. The other approach is learning the technical skills. The key basis for youth work has been the widely used EU guide DigComp (Vuorikari

et al. 2016), which comprises five general technical competences to master digital means, its communication, content creation, safety and problem solving. However, it does not include the broader theoretical skills of critique.

Thus, from the viewpoint of the critical narrative, youth work should adopt an ambitious and broad critical digital literacy approach, which builds on the awareness of the tech industry strategies and measures of data colonisation, and on alternative human rights based digital imaginary. Of course, this does not mean that youth work should abandon learning technical skills. Pancrazio (2016) is in favour of critical digital literacy which links three different types of digital learning: (1), the technical competences; (2), the theoretical skills; and (3), putting the user, the young people and their cultural context and ways of using the media as the subject, not the object of media education. For example, how can we use digital media to create positive trajectories through working with disadvantaged youth, building on their strengths and interests, in various activities such as gaming?

This is also a challenge to youth worker training and education in general. Youth worker education has been evaluated (Brooker 2014) to be too oriented on practice and methodology, neglecting the broader theoretical skills of youth workers. Youth worker education curricula should provide enough space for critical digital literacy and focus on understanding the theoretical and societal context of digitalisation. Education authorities and the youth field, including international organisations, should start elaborating a curriculum of critical digital literacy for youth workers with a data bank of respective educational practices.[13]

*Changing focus from leisure provision to educational opportunities*

Sometimes youth workers seem to be divided into pedagogically opposing groups; to "leisure providers" and to "educationalists". There is a strong tradition in youth work to provide leisure activities for young people, at their own request. Educationalists, on the other hand, see themselves as adults who support young people's growth through conscious educational work. The former highlights the importance of "youth centrism" and criticises educationalists for forcing adult educational ideas upon young people. The critical narrative of digitalisation argues that the majority of today's youth need conscious educational support to become aware, to think critically about and to act on data colonialism, surveillance and the negative effects of digitalisation. In this sense youth work should rethink a change from "youth centrism" – to just fulfil the wishes of young people – into youth work which also emphasises guidance, education and encouragement of young people to alternative imaginary and action.[14]

*Aligning action*

Critical media research is sceptical of piecemeal solutions to the problems of digitalisation. As an example, Jaron Lanier comes up with straightforward solutions in his book *Ten Arguments for*

13. This could be linked with the Finnish EU Presidency Conclusions of the Council and of the Representatives of the Governments of the Member States meeting within the Council on education and training of youth workers (2019/C 412/03).

14. Interestingly, a recent Erasmus+ funded European study in five countries asked young people to tell their story on what was "the most significant change that occurred for you" in youth work (Ord et al. 2018). It revealed, for example in the case of Finland, that the most frequently mentioned positive experience in youth work was that it provided "learning opportunities" such as finding one's identity, learning social skills, agency, life-management and work-related skills. For young people themselves youth work was a learning context.

*Deleting Your Social Media Accounts Right Now* (2018). Couldry and Mejias (2019: 192) call this "boutique" resistance. They think it is difficult to resist data colonialism through isolated individual actions. Such a piece-by-piece approach is not efficient, because tech companies are too powerful. Thus, critical researchers favour a broad collective approach: "… we need a way to tie together the isolated acts of resistance and technical fixes we have criticised so far and organise them into a larger project for dismantling data colonialism by collectively acquiring knowledge about its manifold manifestations and the alternatives they suppress" (Couldry and Mejias 2019: 207).

The youth field does not, at the moment, have a Europe-level strategy on digitalisation as the EU Youth Strategy 2019-2027 adopted by the Council of Europe only mentions digitalisation. There are some attempts at discussing youth work response to digitalisations, such as the EU expert group document (2018), but, overall, the field has responded to digitalisation through isolated local projects and actions and not collectively. Following the above recommendation of Couldry and Mejias to establish a collective response, two actions seem most urgent. First, the EU Youth Strategy should be updated and complemented by a European digital youth work strategy, also to safeguard the access of digital youth work to European funding mechanisms, notably Erasmus+. Second, European national youth policies should urgently align its strategies with those of European Union, in particular, with *Shaping Europe's Digital Future, European Strategy for Data and White Paper on Artificial Intelligence* (2020).

*Youth movement to humanise digitalisation?*

The South European Indignados movement, the Arab Spring and the varieties of Occupy movements were originally sparked off by moral indignation to democracy deficit and inspired by Stephane Hessel's 2010 book "Indignez-Vouz!". Techlash calls for indignant citizens and professionals who want to restore democracy in digitalisation "… especially indignant young people who act in the knowledge that effectiveness without autonomy is not effective and dependency-induced compliance is not a social contract" (Zuboff 2019: 522-3). Perhaps there will be a Greta Thunberg who inspires young people to act for a human and democratic digitalisation.

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